



# Proceedings

The 9<sup>th</sup> National and International Research  
Conference 2026: NIRC IX 2026

“Artificial Intelligence and Sustainable Transformation”

15 February 2026

Buriram Rajabhat University



## Advisory Board

Associate Professor Dr. Siranee Chutopama  
Associate Professor Dr. Supattra Rakkarnsil  
Assistant Professor Dr. Thiti Panya – in

## Editorial Board

Assistant Professor Dr. Pallapaleart Charoenvanich  
Assistant Professor Dr. Prachya Chumwaengwapi  
Assistant Professor Naviya Chutopama  
Lecturer Dr. Wipada Thongthamsiri  
Lecturer Dr. Chalermkit Kengkaew

## External Reviewers

Professor Dr. R.Michal Smith  
Professor Dr. Will Barratt  
University,  
Professor Dr. Leslie Barratt

Associate Professor Dr. Chatkhane Pearkao

Associate Professor Dr. Vissanu Zumitzavan

Associate Professor Dr. Guo Ying

Associate Professor Dr. Tingting Zhuang

Associate Professor Ma Jun

Associate Professor Dr. Acting Capt. Awirut Thotham

Assistant Professor Warissara Panthonglang

Assistant Professor Dr. Sayam Chungprakhon

Assistant Professor Dr. Sasinut Pongnil  
Assistant Professor Dr. Khomkrich Kharin

Assistant Professor Saiphone KHTSAIGNO

Dr. Thongthiane VATHANAVONG

Niagra University, USA  
Roi Et Rajabhat  
Thailand

Roi Et Rajabhat University,  
Thailand

Khon Kaen University,  
Thailand

Khon Kaen University,  
Thailand

Sichuan Conservatory of  
Music, People's Republic of  
China

Sichuan Conservatory of  
Music,  
People's Republic of China  
Sichuan Conservatory of  
Music, People's Republic of  
China

College of Music,  
Mahasarakham University,  
Thailand

Nakhon Ratchasima  
Rajabhat University, Thailand  
Mahasarakham University,  
Thailand

Naresuan University, Thailand  
College of Music,  
Mahasarakham University,  
Thailand

Souphanouvong University,  
LAO, PDR.

Souphanouvong University,  
LAO, PDR.

### Internal Reviewers

Associate Professor Dr. Nawamin Prachanant

Associate Professor Dr. Akkarapon Nuemaihom

Assistant Professor Dr. Akachai Teerapuksiri

Assistant Professor Dr. Thiti Panya – in

Assistant Professor Dr. Rungnapa Moendee

Assistant Professor Dr. Pallapa Lertcharoenwanich

Assistant Professor Dr. Surachai Piyanukool  
University,

Buriram Rajabhat University,  
Thailand

Buriram Rajabhat University,  
Thailand

Buriram Rajabhat University,  
Thailand

Buriram Rajabhat University,  
Thailand

Buriram Rajabhat University,  
Thailand

Buriram Rajabhat University,  
Thailand

Buriram Rajabhat

Thailand





## Message from the President

### The 9 th National and International Academic Conference

### Theme: “Artificial Intelligence for Sustainable Transformation”



Buriram Rajabhat University has long upheld its mission as a university for local development. Amid rapid global changes, the University recognizes the crucial role of Artificial Intelligence (AI) as a key mechanism for driving transformation in education, research, innovation, and community development toward sustainability in all dimensions.

The University places strong emphasis on integrating collaboration across all sectors, including affiliated colleges and faculties such as the Faculty of Education, Faculty of Humanities and Social Sciences, Faculty of Agricultural Technology, Faculty of Science, Faculty of Industrial Technology, Faculty of Management Science, and Faculty of Nursing as well as research and development institutes and the Office of Academic Services. In addition, cooperation extends to national and international networks to advance the University’s missions in education management, research, academic services, and the preservation and promotion of arts and culture through the creative application of artificial intelligence in ways that are appropriate and responsive to the local and community context.

The organization of the 9th National and International Academic Conference under the theme “Artificial Intelligence for Sustainable Transformation” reflects the University’s vision of employing AI as a vital tool to enhance the quality of learning, strengthen research capacity, support evidence-based policy decision-making, and generate solutions to social, economic, and environmental challenges. This is undertaken with due consideration of ethics, responsibility, and equity, in alignment with the Sustainable Development Goals (SDGs). The conference serves as an important platform for the exchange of knowledge, experiences, and innovative perspectives on artificial intelligence and sustainability, leading to the development of research and practical applications that generate tangible benefits for society and local communities.

On this occasion, I would like to express my sincere appreciation to all distinguished keynote speakers, scholars, faculty members, staff, students, and partners from all sectors for their cooperation, dedication, and support in driving the University’s missions with commitment and perseverance to create a strong foundation of knowledge and innovation toward sustainable development. Finally, I wish the implementation of all academic activities under the theme “Artificial Intelligence for Sustainable Transformation” great success in achieving the stated objectives and in contributing lasting benefits to local communities, the nation, and the global society in a sustainable manner.



Associate Professor Dr. Siranee Chutopama  
President of Buriram Rajabhat University

## **The 9<sup>th</sup> National and International Research Conference 2026: NIRC IX 2026**

### **“Artificial Intelligence and Sustainable Transformation”**

**15<sup>th</sup> February 2026, Buriram Rajabhat University**

#### **Rationale**

Buriram Rajabhat University, as a university committed to local development, has continuously fulfilled its core missions for over 50 years with a strong commitment to producing graduates of high quality in accordance with academic and professional standards. The University also generates knowledge through research, innovation, and creative works to support sustainable community and local development. In recognition of this role, Buriram Rajabhat University has been designated as an area-based and community-based university in alignment with national higher education policies.

Under the “Reinventing University” framework, which aims to transform Thailand’s higher education system, Buriram Rajabhat University has clearly expressed its intention to reposition itself as a key mechanism in supporting the achievement of the Sustainable Development Goals (SDGs). The University is also preparing for evaluation under the Times Higher Education (THE) ranking system, which emphasizes the role of higher education institutions as drivers of social development at both local and global levels.

To achieve these goals and respond to the policies of the Ministry of Higher Education, Science, Research and Innovation, Buriram Rajabhat University therefore organizes the 9<sup>th</sup> National and International Research Conference under the theme “Artificial Intelligence and Sustainable Transformation” in the fiscal year 2026.

This conference provides an academic platform for researchers, scholars, faculty members, students, educational institutions, and public and private organizations from Thailand and abroad to present research papers, inventions, innovations, creative works, and research-based products. It also promotes the exchange of knowledge, experiences, and best practices in conducting research for genuine local and community development. Furthermore, the conference enhances the dissemination of research outcomes at national and international levels and strengthens academic collaboration networks, contributing to sustainable development for society and the nation. Accordingly, this conference is organized with the following objectives.

1. To provide a platform for faculty members, researchers, and students from Rajabhat Universities and other educational institutions, both domestic and international, to present high-quality research and exchange best practices for enhancing the quality of education in Thailand.
2. To disseminate research, creative works, and innovations produced by faculty members, staff, students, and researchers from Rajabhat Universities and other educational institutions at national and international levels.
3. To promote learning activities that enhance the quality and standards of research, creative works, and innovations, enabling their application for sustainable development of local communities, society, and the nation.
4. To connect high-quality research from Thailand and abroad with target user groups for academic, policy, social, and community applications at both national and international levels.

#### **Conference Format**

The conference is conducted in the following formats:

## 1. Academic Conference

- 1.1 Keynote speeches are delivered by distinguished national and international experts.
- 1.2 Presentations are conducted in both on-site and online formats at national and international levels.

### 1.2.1 Oral Presentation

### 1.2.2 Poster Presentation

The research papers and academic articles cover six thematic areas as follows:

1. Education
2. Humanities and Social Sciences
3. Science and Technology
4. Health Science
5. Business Administration
6. Area-Based Research

- 1.3 Exhibition presentations are organized in an on-site format.

## Date and Venue

The conference is held on 15 February 2026 at Buriram Rajabhat University, Nai Mueang Subdistrict, Mueang District, Buriram Province, Thailand.

The opening ceremony and keynote address take place at the Vichcha Arthasat Auditorium, followed by featured speeches and exhibition presentations at designated venues within the university.

## Important Dates of the Conference

| No | Activity                                                                      | Data                               |
|----|-------------------------------------------------------------------------------|------------------------------------|
| 1  | Conference announcement                                                       | 20 October 2025 – 15 February 2026 |
| 2  | Participant registration                                                      | 15 November 2025 – 15 January 2026 |
| 3  | Full paper submission and registration payment                                | 15 November 2025 – 15 January 2026 |
| 4  | Announcement of Accepted Papers for Conference Presentation                   | 23 January 2026                    |
| 5  | Submission of Revised Full Papers to the Editorial Committee                  | 30 January 2026                    |
| 6  | PowerPoint file submission (Oral presentation)                                | 4 February 2026                    |
| 7  | Conference date                                                               | 15 February 2026                   |
| 8  | Final revised paper submission for publication                                | 22 February 2026                   |
| 9  | Publication of Full Papers in the Conference Proceedings (Online Proceedings) | 22 March 2026                      |

## Notes:

Research papers or academic articles submitted by graduate students must receive prior approval from their thesis or independent study advisors, and the advisors' names must be included in the submitted papers.

\*\*The editorial committee of the conference proceedings will publish accepted papers in the conference proceedings, and the published papers are searchable in the Google Scholar database

## Supporting Organizations



Office of the Permanent Secretary, Ministry of Higher Education, Science, Research and Innovation; the Thai Supervisory Association; the Professional Researchers Association; and international institutions that have academic cooperation with Buriram Rajabhat University, namely:

1. Warmadewa University, Indonesia
2. Savannakhet Teacher Training College, Lao People's Democratic Republic
3. Amasya University, Turkey
4. Niagara University, USA
5. Akdeniz University, Turkey
6. Souphanouvong University, Lao PDR
7. Savannakhet University, Lao PDR
8. Higher Education, Ministry of Education and Sports (MES), Lao PDR
9. National University of Laos, Lao PDR
10. Champasak University, Lao PDR
11. Hue University of Foreign Languages, Vietnam
12. Altai State Pedagogical University
13. Xi'an University of Architecture and Technology Huaqing College

### **Expected Outcomes**

1. There are faculty members, researchers, students, and the general public, both Thai and international, participating in the conference in a total of no fewer than 89 papers, consisting of at least 45 national-level papers and 44 international-level papers.

Participants in the conference gain knowledge that can be applied to the development of research, academic work, and quality of life, and academic collaboration is established between Rajabhat Universities and networks of educational institutions both domestically and internationally.

2. Research outputs, creative works, and innovations are produced and delivered to end users for application in national development, contributing to stability and sustainability.

3. High-quality research outputs are disseminated and published in the conference proceedings, national academic journals, academic journals of Buriram Rajabhat University approved by the University Council, and international journals that participate as publication outlets.

### **Project Coordinators**

The Graduate School, Faculty of Humanities and Social Sciences, Faculty of Education, Faculty of Science, Faculty of Agricultural Technology, Faculty of Industrial Technology, Faculty of Management Science, Faculty of Nursing, International Affairs Office, and the Research and Development Institute, Buriram Rajabhat University.

### **Participants Application**

Interested participants who wish to present their research papers may apply at: <https://nirc.bru.ac.th>

### **Registration for Paper Presentation**

Participants may pay the registration fees at the following rates:

#### **1. International Conference**

3,500 THB for on-site paper presentation

3,200 THB for online paper presentation

#### **2. National Conference**



2,500 THB for on-site paper presentation

2,200 THB for online paper presentation

### **3. For authors presenting papers at both national and international levels and publishing in journals**

800 THB for paper presentation and journal publication, excluding journal publication fees, which are charged according to the respective journal's rate.

**Notes:** For papers with more than one author, only one author is required to register as the presenter. Registration fees are non-refundable under any circumstances, including cases where the presenter does not present the paper, does not attend the conference, or is disqualified from presenting the paper. This is because the registration fees are used to compensate peer reviewers and to cover conference management expenses.

### **4. Registration Payment**

#### **4.1 Cash Payment**

Payment may be made in cash together with the application form at Buriram Rajabhat University. Please contact the Office of the Dean, Graduate School (8th Floor, 50th Anniversary Commemorative Building), Buriram Rajabhat University, No. 439 Jira Road, Mueang District, Buriram Province, Thailand.

#### **4.2 Electronic Bank Transfer**

**Account Name:** Buriram Rajabhat University (National and International Research Conference 2026) (Savings Account)

**Bank:** BANK FOR AGRICULTURE AND AGRICULTURAL COOPERATIVES, SADET NIWAT ROAD BRANCH

**Account Number:** 020251100402

**Swift Code:** BAABTHBK

**Bank Address:** Bank for Agriculture and Agricultural Cooperatives, No. 1 Sadet Niwat Road, Nai Mueang Subdistrict, Mueang District, Buriram Province 31000, Thailand

**Note:** After completing the bank transfer, please upload a copy of the transfer receipt at: <https://nirc.bru.ac.th>

### **Preparation of Research Manuscripts**

Details of research manuscript preparation are available at <https://nirc.bru.ac.th>  
Presenters must prepare their manuscripts strictly in accordance with the prescribed format.

### **Announcement of Selected Papers for Presentation**

The announcement of selected papers for research presentation is made on 27 January 2026. Presenters must revise their papers in accordance with the recommendations of the peer reviewers and submit the revised full papers for presentation to the editorial committee of the conference proceedings by 22 February 2026.

**Note:** The revised full papers, after being presented and revised in accordance with the reviewers' recommendations, are published in the Online Proceedings and are searchable in the Google research database on 22 March 2026. Authors must present their papers in person according to the scheduled date and time of the conference. The presented and published papers may be used as part of graduation requirements in accordance with the announcement of the Office of the Permanent Secretary, Ministry of Higher Education, Science, Research and Innovation (MHESI).

## Review Process

The committee of qualified experts of Buriram Rajabhat University reserves the right to review and proceed in accordance with the announcement of Buriram Rajabhat University on the criteria for reviewing research papers and academic articles for publication in national and international academic conferences, as well as the order of Buriram Rajabhat University on the appointment of the editorial committee for the proceedings of the 9th National and International Research Conference 2026, as follows:

1. Consideration of the selection of presentation tracks and types of presentation.
2. Consideration of the selection of research papers to be presented at the conference and published in the conference proceedings.
3. Consideration of disqualification of research paper presentation in the following cases:
  - 3.1 Abstracts, research papers, and posters do not conform to the prescribed forms or formats, or revisions are not made in accordance with the reviewers' recommendations.
  - 3.2 Registration and payment of registration fees are late and/or incomplete.
4. The decision of the committee of qualified experts is final.

## Further Information

Information can be obtained at <https://nirc.bru.ac.th> and on Facebook: Graduate School, Buriram Rajabhat University. For further details, please contact the Graduate School, Buriram Rajabhat University,

Office of the Dean, Graduate School. Telephone: +66 44 611221 ext. 7401, 7402  
Mobile: +66 86 468 1656

|                                           |                            |
|-------------------------------------------|----------------------------|
| Asst. Prof. Dr. Thiti Panya-in            | Telephone: +66 88 377 5826 |
| Asst. Prof. Dr. Pallapa Lertcharoenwanich | Telephone: +66 82 446 9547 |
| Dr. Chaleamkit Kengkaew                   | Telephone: +66 84 167 5908 |
| Dr. Wipada Thongthamsiri                  | Telephone: +66 83 127 8800 |
| Asst. Prof. Naviya Chutopama              | Telephone: +66 85 102 9823 |
| Asst. Prof. Dr. Pruchya Chumvangvapee     | Telephone: +66 88 563 5656 |
| Miss Napawan Janpanich                    | Telephone: +66 93 106 9947 |
| Mrs. Prakai Sirisamran                    | Telephone: +66 89 482 4362 |
| Miss Titirat Deeyiengyang                 | Telephone: +66 61 691 4651 |
| Mr. Thretases Netrathip                   | Telephone: +66 83 721 9291 |

## Conference Evaluation

1. The evaluation is conducted by counting the number of research presenters, the number of papers accepted for publication, and the number of participants in the activities.
2. A satisfaction questionnaire (Google Form) is used to collect feedback from project participants

## Conference Implementation Report

1. The Dean of the Graduate School reports the results of the conference implementation upon completion of the project according to the planned schedule to the Graduate School Executive Committee, the Graduate Studies Committee, the University Executive Committee, and the Academic Council.
2. The President of Buriram Rajabhat University or a designated representative reports the results of the conference implementation to the University Council of Buriram Rajabhat University.
3. The Dean of the Graduate School reports the results to the institutions participating as co-hosts of the conference



**The 9<sup>th</sup> National and International Research Conference 2026: NIRC IX 2026**  
**“Artificial Intelligence and Sustainable Transformation”**

Date: 15 February 2026

Venue: Witcha Attasat Meeting Hall, Buriram Rajabhat University, Thailand

\*\*\*\*\*

**15 February 2026**

- |                       |                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 08.00 - 09.00 a.m.    | Registration in front of Witcha Attasart Meeting Hall                                                                                                                                                                                                                                                                                                                                                        |
| 09.00 – 09.30 a.m.    | A Ceremony of Mourning in Tribute to Her Majesty Queen Sirikit, The Queen Mother, observed by standing in silence for 93 seconds. Opening ceremony conducted by Dr. Punpermsak Aruni, Assistant Permanent Secretary, Ministry of Higher Education, Science, Research and Innovation; Reported speech conducted by Associate Professor Dr. Siranee Chutopama, Acting President of Buriram Rajabhat University |
| 09.30 – 09.45 a.m.    | Welcoming Performance                                                                                                                                                                                                                                                                                                                                                                                        |
| 09.45 – 10.00 a.m.    | Plaque Presentation Ceremony for Co-Hosting to institutions co-hosting the conference and presentation of souvenirs                                                                                                                                                                                                                                                                                          |
| 10.00 a.m.–12.00 p.m. | Keynote addresses: “Artificial Intelligence and Sustainable Transformation” by Dr. Thepchai Supnithi, President of the Artificial Intelligence Association of Thailand at Witcha Attasart Meeting Hall                                                                                                                                                                                                       |
| 10.00 a.m.–12.00 p.m. | Keynote addresses “How Artificial Intelligence can support and transform language education” by Professor Dr. Rob Waring from Thammasat University at Fuangfah Meeting Room, Building 15, 15th Floor                                                                                                                                                                                                         |
| 12.00 - 01.00 p.m.    | Lunch break                                                                                                                                                                                                                                                                                                                                                                                                  |
| 01.00 – 01.30 p.m.    | Opening ceremony for poster presentation at Witcha Attasart Meeting Hall by Associate Professor Dr. Siranee Chutopama, Acting President of Buriram Rajabhat University                                                                                                                                                                                                                                       |
| 01.30 - 05.30 p.m.    | National and international poster presentation at Witcha Attasart Meeting Hall and national and international oral presentations at Building 15                                                                                                                                                                                                                                                              |

**N.B.:** The schedule is subject to change as appropriate.



## TABLE OF CONTENTS

|                                                                                                                                                               | Page |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| Smart Solutions for Sustainable Farming<br><i>Ahmet Ozkan and Ilhan Cagiran</i>                                                                               | 1    |
| The Current Status of Kunqu Opera Singing in the Jiangsu Kunqu Opera Troupe<br><i>Cai Jing</i>                                                                | 2    |
| The Current Situation and Existing Problems in the Teaching of Ancient Poetry Singing among Undergraduates at Xichang University<br><i>Cao Shuyuan</i>        | 10   |
| Educational Resources Administration to Promote Sports Excellence of Henan Sport University, People's Republic of China<br><i>Cao Youkang</i>                 | 16   |
| A Synthesis of the Teaching and Learning Context of Western String Instruments in Rajabhat Universities in Northeastern Thailand<br><i>Chavalit Chaingam</i>  | 23   |
| Components and Current State of Creative Leadership among Student Cadres at Chongqing Municipal Universities, People's Republic of China<br><i>Chen Weiqi</i> | 35   |
| The Teaching of Chinese National Opera Tenor Singing to Undergraduate Voice Majors at Geely University<br><i>Cheng Shaopeng</i>                               | 49   |
| An Evaluation of the Current Status and Challenges of Interdisciplinary Music Teaching at Chengdu Arts and Sports Middle School<br><i>Gou Mengyao</i>         | 53   |
| An Investigation of the Situation and Issues in Undergraduate Vocal Performance of “Yu Song” at Zhengzhou Shengda University<br><i>Guo Jia</i>                | 60   |
| The Current Situation of Piano Accompaniment Courses and an Exploration of Optimization Strategies<br><i>Hai Yu</i>                                           | 67   |
| A Study on Key Elements of the Management Model for College Student Social Service Activities in Nan'an District, Chongqing, China<br><i>He Zurun</i>         | 75   |

## TABLE OF CONTENTS (Cont)

|                                                                                                                                                                                                                                | Page |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| An Investigation of the Conditions and Problems of Soprano Singing Techniques in the Chinese Original Opera Practice Manual for Master's Degree Students at the Peking University Academy of Opera, People's Republic of China |      |
| <i>Hong Ye</i>                                                                                                                                                                                                                 | 90   |
| An Analysis of the Vocal Techniques and Musical Interpretation Required for Performing Huang Zi's Art Song "Dian Jiang Chun Fu Deng Lou"                                                                                       |      |
| <i>Hu Minjie</i>                                                                                                                                                                                                               | 100  |
| English Reading Challenges among Chinese University Students: A Thematic Synthesis and Implications for Technology-Enhanced Task-Based Reading Instruction                                                                     |      |
| <i>Jiang Hongyuan</i>                                                                                                                                                                                                          | 106  |
| An Investigation of the Current Status of the Vocal Work "Zang Hua Yin" in the Chorus at Luzhou School for the Elderly                                                                                                         |      |
| <i>Jiang Sheng</i>                                                                                                                                                                                                             | 117  |
| Developing Learning Outcomes by Using the Flipped Classroom Teaching Method in College Planning Course for First-Year College Students                                                                                         |      |
| <i>Jinbiao Chen</i>                                                                                                                                                                                                            | 122  |
| Current Status and Desired State of Savannakhet University's Transformation into an Innovation and Entrepreneurial University                                                                                                  |      |
| <i>Katika Rajboutra et al.</i>                                                                                                                                                                                                 | 129  |
| The Guidelines for the Solution of Drug Use Problems for Education Officials and Teachers in Educational Institutions Savannakhet Province                                                                                     |      |
| <i>Keopasong SIHALATH et al.</i>                                                                                                                                                                                               | 140  |
| A Study of the Current Situation of Guzheng Teaching of "Qianzhong Fu" at Zhenning Experimental School                                                                                                                         |      |
| <i>Li Hongxing</i>                                                                                                                                                                                                             | 150  |
| The Current Situation and Countermeasures of Educational Resource Management by Administrators in Secondary Vocational Schools in Guangzhou, People's Republic of China                                                        |      |
| <i>Li Liang</i>                                                                                                                                                                                                                | 156  |
| Guidelines for personnel management to promote the performance of support personnel at Hebei Academy of Fine Arts, People's Republic of China                                                                                  |      |
| <i>Liu Chendong</i>                                                                                                                                                                                                            | 163  |

## TABLE OF CONTENTS (Cont)

|                                                                                                                                                                                        | Page |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| English Writing Abilities of Chinese University Students in Chuxiong Normal University, Yunnan Province, People's Republic of China                                                    |      |
| <i>Li Xiaoyan</i>                                                                                                                                                                      | 170  |
| The Current Situation and Operational Guidelines of Teaching Management in the Artificial Intelligence Era at Anyang Institute of Technology, Anyang City, Henan Province              |      |
| <i>Lou Yanli</i>                                                                                                                                                                       | 178  |
| The Current Status of Bel Canto Singing in Undergraduate Teaching of Chinese Art Songs in the First Half of the 20th Century: A Case Study of Xi'an Conservatory of Music              |      |
| <i>Ma Jing</i>                                                                                                                                                                         | 186  |
| An Investigation of the Learning Context and Performance Practices of Mozart's Tenor Concert Arias among Undergraduates at Xi'an Conservatory of Music, China                          |      |
| <i>Ma Linrui</i>                                                                                                                                                                       | 195  |
| The Composition Model of Participatory Sports Affairs Management in Higher Vocational Colleges in Puyang City, Henan Province, People's Republic of China                              |      |
| <i>Ma Nan</i>                                                                                                                                                                          | 203  |
| Gender and Spending Levels as Factors of Customer Satisfaction: Evidence from Thai Restaurants in Chongqing, China                                                                     |      |
| <i>Mingye Lu and Pankaewta Lakkanawanit</i>                                                                                                                                            | 218  |
| The Vocal Teaching of "Shanxi Folk Song Performance" for Undergraduate Vocal Music Students in China: Based on the Cultural Development and Current Status of Shanxi Folk Song Culture |      |
| <i>Qiao Liangdong</i>                                                                                                                                                                  | 225  |
| A Study of the History and Characteristics of "Xibeifeng" Music between 1980-1989                                                                                                      |      |
| <i>Ren Yifei</i>                                                                                                                                                                       | 234  |
| The Development of Achievement In Job-seeking through Cooperative Learning with Jigsaw Teaching Techniques in the Employment Guidance Course for Third-year College Students           |      |
| <i>Shaoyong Chen</i>                                                                                                                                                                   | 245  |



## TABLE OF CONTENTS (Cont)

|                                                                                                                                                                                                                 | Page |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| An Analysis of Competency Elements of Grassroots Administrative Staff in Vocational Colleges in Zhengzhou, Henan Province, China                                                                                |      |
| <i>Shi Huanhuan</i>                                                                                                                                                                                             | 255  |
| An Investigation of the Learning Background of Undergraduate Students in the Department of Music at Shaanxi University of Science and Technology in Learning and Singing Chinese Classical Poetry and Art Songs |      |
| <i>Su Qi</i>                                                                                                                                                                                                    | 266  |
| An Investigation of Pitch Organization Teaching for Undergraduate Composition Majors in the People's Republic of China                                                                                          |      |
| <i>Wang Anjun</i>                                                                                                                                                                                               | 271  |
| Analyze the musical form and technical characteristics of Zhu Di's performance in the Shaanxi music style through "Qinchuan Shuhuai"                                                                            |      |
| <i>Wang Kai</i>                                                                                                                                                                                                 | 279  |
| The Current Situation and Problems of Chinese Folk Vocal Music at the Sichuan Conservatory of Music                                                                                                             |      |
| <i>Wang Yani</i>                                                                                                                                                                                                | 285  |
| An Analysis of the Vocal Technique Features and Stylistic Elements of the Popular Song "An Xiang"                                                                                                               |      |
| <i>Wang Yibo</i>                                                                                                                                                                                                | 293  |
| A Study of Wang Zhixin's Teaching Process of Ethnic Vocal Music in Guangdong Province                                                                                                                           |      |
| <i>Wang Zhenhao</i>                                                                                                                                                                                             | 300  |
| Effects of Problem-Based Learning Management on Health Promotion for Grade 4-6 Students at Samakkhi Meechai Witthaya School, Mueang District, Buriram Province                                                  |      |
| <i>Wiangping Taweepoon</i>                                                                                                                                                                                      | 305  |
| Current state, Ideal state, and Developmental Needs of Academic Leadership among Novice Teachers in Basic Education Schools in Yan'an, Shaanxi Province, People's Republic of China                             |      |
| <i>Wu Rui</i>                                                                                                                                                                                                   | 314  |
| The Teaching of Singing for Third - Grade Primary School Students Using the Kodaly Method in Xingyi City Guizhou Province                                                                                       |      |
| <i>Wu You</i>                                                                                                                                                                                                   | 326  |

## TABLE OF CONTENTS (Cont)

|                                                                                                                                                               | Page |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| Guidelines for internal supervision in primary schools under the jurisdiction of Chongzuo Municipality, Guangxi Autonomous Region, People's Republic of China |      |
| <i>Wu Zhaoliang</i>                                                                                                                                           | 332  |
| The Integration of Teaching Model for Chinese Minzu Music and Interactive Electronic Music                                                                    |      |
| <i>Xiao Dingwen</i>                                                                                                                                           | 338  |
| Exploring the Role of Parental Support and Attitude in English Learning Achievement Among Chinese Primary School Students (Grades 3–6)                        |      |
| <i>Xiao Fei</i>                                                                                                                                               | 345  |
| The Current Situation of Piano Improvisational Accompaniment among Junior High School Music Teachers in Fuzhou, China                                         |      |
| <i>Yan Linwei</i>                                                                                                                                             | 355  |
| The Investigation of the Chinese Vocal Music Works Singing Teaching for Undergraduate Vocal Major Students at the Sichuan Conservatory of Music               |      |
| <i>Ye Cheng</i>                                                                                                                                               | 359  |
| The Current Teaching Situation of the Folk Violin Piece Xinjiang Zhichun at Chenzhong Experimental School in Zhengzhou, China                                 |      |
| <i>Zhang Yi</i>                                                                                                                                               | 366  |
| Research on Instructional Leadership of Middle School Administrators in Pu'er City, Yunnan Province                                                           |      |
| <i>Zhang Yurong</i>                                                                                                                                           | 372  |
| The Current Teaching Situation and Existing Problems of Ancient Poetry Art Songs at Leshan Normal University                                                  |      |
| <i>Zhao Wanying</i>                                                                                                                                           | 380  |
| Development of clinical nursing practice guideline for critical ill patient in prehospital care <sup>1</sup>                                                  |      |
| <i>Pornpian Wachirachiaranon</i>                                                                                                                              | 385  |



## Smart Solutions for Sustainable Farming

Ahmet OZKAN<sup>1,3</sup> & M. Ilhan CAGIRGAN<sup>2,3</sup>

<sup>3</sup>Department of Field Crops, Faculty of Agriculture, Akdeniz University, Antalya, Türkiye

### Abstract

Today's rapid technological advancements are transforming artificial intelligence from a mere computational tool into a predictable, adaptable, and applicable collective digital intelligence for big data. This transformation is having an impact on many sectors, most notably in healthcare for disease diagnosis, in the financial sector for risk and credit assessment processes, and in media and entertainment for content analysis. The agricultural sector is also increasingly benefiting from this transformation; applications such as drone-assisted surveillance systems, smart irrigation, and fertigation automation are becoming widespread. However, many of these technologies still offer fragmented solutions and fail to provide sufficient integration between field and academic knowledge.

As a requirement of a BSc in Agriculture, the first author was interested in developing tools and applications to move beyond classical farming methods. It is clear that effective water resource management, productivity analysis, plant health monitoring, and decision-making processes based on accurate timing are not adequately supported by traditional methods. This leads to both resource waste and makes agricultural production more vulnerable to climate change. However, a large part of these problems can be addressed more effectively and sustainably with artificial intelligence and data-driven approaches. With this awareness, individual research and the development of small projects have been initiated. As a result of these efforts, the platform [aitarim.com.tr](http://aitarim.com.tr) was developed. This platform is based on the graduation project in partial fulfillment of the requirements for a BSc degree. This site was established to share what is needed on-farm, to offer small digital solutions, and also to document the development process during the course of the study. It includes innovative applications such as AI-supported irrigation recommendations, plant analysis, yield calculations, an AI-based plant variety query and selection system, and Florra, a voice assistant. This is not just a webpage and an application; it is a space that bridges the gap between agriculture and technology.

In conclusion, [aitarim.com.tr](http://aitarim.com.tr) demonstrates that the yield increase may be achieved at the intersection of artificial intelligence, soil, and seeds is not accidental, but a result of a data-driven engineering approach. This project serves as a concrete example of the critical role that young agricultural engineers can play in shaping the future of digital agriculture. Keywords: Artificial Intelligence, Sustainable Agriculture, Digital Transformation, Plant Analysis, Decision Support Systems

## The Current Situation of Kunqu Opera Singing in Jiangsu Kunqu Opera Troupe

Jing Cai<sup>1\*</sup>, Chao Kanwicha<sup>2</sup>, and Chalermkit Kengkaew<sup>3</sup>

<sup>1\*</sup>Ph.D. Student in Music Education, Faculty of Education, Buriram Rajabhat University, Thailand.

Email: 660427093017@bru.ac.th

<sup>2</sup> Major Advisor, Music Education, Faculty of Education, Buriram Rajabhat University, Thailand

E-mail: chao@bru.ac.th

<sup>3</sup>Co-advisor, Music Education, Faculty of Education, Buriram Rajabhat University, Thailand

E-mail: chalermkit.kk@bru.ac.th

Asterisk denoting the corresponding author

### Abstract

This study investigates the current situation of Kunqu opera singing in the Jiangsu Kunqu Opera Troupe, with particular attention to vocal training practices and performance-related vocal challenges under contemporary professional conditions. A qualitative research approach was adopted, utilizing semi-structured interviews with seven professional Kunqu performers from different transmission generations, complemented by non-intrusive rehearsal and live performance observation. A focused literature review informed the analytical framework.

Findings indicate that Kunqu vocal training continues to rely predominantly on experience-based pedagogical models characterized by oral transmission, teacher demonstration, and embodied imitation. While this traditional approach effectively preserves Kunqu's refined timbre, precise articulation, and close integration of sound and text, it provides limited explicit guidance regarding vocal mechanisms and long-term vocal load management. Performers commonly reported vocal fatigue during intensive rehearsal periods, instability in sustaining extended phrases, and increased vocal tension when adapting to large theatrical spaces.

The study suggests that traditional pedagogical practices remain essential for maintaining stylistic authenticity, yet face increasing functional pressures under contemporary performance demands. By documenting these dynamics within a professional troupe context, this research contributes to a clearer understanding of the structural relationship between traditional vocal transmission and modern performance environments.

**Keywords:** Kunqu opera singing; traditional vocal pedagogy; vocal fatigue; performance conditions; qualitative study



## Introduction

Professional Kunqu performers are required to maintain refined timbre, subtle ornamentation, precise diction, and sustained expressive continuity under demanding performance conditions. In contemporary professional troupes such as the Jiangsu Kunqu Opera Troupe, performers are frequently exposed to intensive rehearsal schedules and continuous stage practice, which place increasing demands on vocal endurance and long-term vocal stability (Liu, 2015, pp. 28–31).

Existing studies indicate that traditional Chinese opera vocal training, including Kunqu singing, has long relied on experience-based pedagogical models characterized by oral instruction, personal demonstration, and embodied imitation. While this approach plays a crucial role in preserving stylistic authenticity and aesthetic continuity, scholars have pointed out that it often lacks systematic explanation of vocal mechanisms and long-term vocal management strategies (Guo, 2015, pp. 41–44 & Yang, 2016, pp. 52–55).

Research in traditional vocal pedagogy further suggests that performers trained primarily through imitation may acquire effective singing habits without fully understanding the physiological principles underlying vocal production. This pedagogical characteristic has been described as a mode of “practice without explicit explanation,” which limits singers’ ability to diagnose vocal fatigue and adjust technique under changing performance conditions (Guo, 2015, pp. 43–44).

From the perspective of vocal physiology, efficient singing depends on the coordinated interaction of respiration, phonation, resonance, and articulation systems. Empirical studies demonstrate that inappropriate breathing patterns and unstable laryngeal positioning can significantly increase vocal load, leading to fatigue, instability, and reduced vocal efficiency, especially during high-intensity performance (Song, 2017, pp. 62–66). These physiological findings help explain why professional opera performers may encounter vocal difficulties as performance demands increase with age and career duration (Zhao, 2013, pp. 18–22).

Observations and interviews with performers from the Jiangsu Kunqu Opera Troupe reveal similar challenges in professional practice, including vocal fatigue during intensive rehearsal periods, instability in sustained phrases, and difficulties in maintaining vocal consistency in large theatrical spaces. These issues indicate a growing need to re-examine Kunqu vocalization practices through a scientific and pedagogical lens grounded in vocal physiology and performance studies (Xu, 2018, pp. 74–78).

## Research Objective

To study the current situation of Kunqu Opera Singing in Jiangsu Kunqu Opera Troupe

## Methodology

This study adopts a qualitative research approach to examine the current vocalization practices and vocal challenges of professional Kunqu performers at the Jiangsu Kunqu Opera Troupe. As Kunqu vocalization is primarily transmitted through embodied practice, oral instruction, and long-term performance experience, qualitative methods are particularly suitable for capturing performers’ lived experiences, practical knowledge, and performance-based challenges within professional contexts.

The research design is grounded in a qualitative framework. Data collection was conducted through semi-structured interviews and observation of rehearsals and live performances. In addition, a focused literature review was undertaken to establish the theoretical and analytical framework of the study and to inform the design of interview questions and analytical categories. Together, these components form a triangulated research design that enhances analytical reliability and contextual depth.

### **Literature Review and Research Design Preparation**

Prior to data collection, a focused literature review was conducted to establish the theoretical and research context of this study. The review examined scholarship on Kunqu singing aesthetics, traditional Chinese opera vocal pedagogy, vocal physiology, and comparative studies of Chinese opera singing and Bel Canto techniques. This body of literature provided a conceptual foundation for understanding both the stylistic specificity of Kunqu vocalization and the physiological principles underlying vocal production.

Rather than serving as a data collection method, the literature review functioned as a preparatory component of the research design. It informed the formulation of interview questions, clarified key analytical dimensions related to vocal training and performance practice, and ensured that subsequent qualitative analysis was theoretically grounded.

In parallel, preliminary fieldwork was carried out through initial contact with performers at the Jiangsu Kunqu Opera Troupe. This preparatory stage helped refine the research focus and ensured that the investigation remained closely connected to actual professional practice rather than abstract theoretical assumptions.

### **Semi-Structured Interviews**

Primary data were collected through semi-structured interviews with professional Kunqu performers from different transmission generations at the Jiangsu Kunqu Opera Troupe. Based on the lineage of Kunqu opera and current stage practice, the interviewees included performers from the second, fourth, and fifth transmission generations, totaling seven participants.

Semi-structured interviews were selected to allow performers to articulate their vocal experiences in their own terms while ensuring consistency across key thematic areas. The interviews explored performers' vocal experiences across both training and professional performance contexts, with particular attention to the following themes.

### **Current Vocalization Practices in Kunqu Performance**

This theme focused on performers' daily vocal training routines, rehearsal practices, and performance preparation methods. Interviewees were invited to describe how vocal techniques are learned, adjusted, and maintained within the traditional Kunqu training framework.

### **Common Vocal Challenges in Professional Performance**

Interview questions addressed vocal difficulties encountered in professional practice, including vocal fatigue, instability during register transitions, limitations in vocal endurance, and challenges arising from large theatrical spaces or intensive touring schedules.

### **Perceptions of Vocal Sustainability and Long-Term Vocal Health**

This theme explored performers' awareness of vocal health management, recovery strategies, and perceived causes of vocal decline over time. Particular attention was given to how traditional training approaches address—or fail to address—issues of long-term vocal sustainability.

### **Observation of Rehearsals and Performances**

In addition to interviews, non-intrusive observation was conducted during rehearsals and live performances. Observations focused on vocal behavior under different performance conditions, including extended singing passages, physically and emotionally demanding scenes, and performances without amplification.

Field notes were systematically recorded to supplement interview data. This observational material enabled comparison between performers' verbal accounts and their actual vocal practices on stage, thereby strengthening the credibility of the findings through methodological triangulation.

## Data Analysis

All interview recordings were transcribed verbatim and analyzed using thematic analysis. Recurrent themes related to vocal training practices, performance conditions, and vocal challenges were identified and systematically categorized. Observational data were used to triangulate interview findings and to enrich interpretation of performers' reported experiences.

The analysis was informed by theoretical perspectives from vocal pedagogy and vocal physiology, while remaining firmly grounded in the aesthetic and stylistic framework of Kunqu opera. Rather than imposing external vocal standards, this study interprets vocal issues as they emerge within professional Kunqu performance practice.

## Results

### Current Vocalization Practices in Professional Kunqu Performance

#### Experience-Based Training and Oral Transmission

Interview data indicate that Kunqu vocal training remains primarily grounded in a traditional master-apprentice system. Vocal knowledge is transmitted mainly through oral instruction, teacher demonstration, and repeated imitation. Performers reported learning vocal techniques through embodied experience rather than through explicit explanation of vocal mechanisms.

Core concepts such as qi chen dantian (sinking the breath), ti qiang (lifting the cavity), and tuo qi (supporting the breath) were frequently mentioned in interviews. These concepts are typically conveyed through metaphor and sensory awareness, guiding performers to internalize vocal habits through practice.

Several interviewees noted that while this approach supports stylistic consistency, it offers limited reference points for identifying specific vocal difficulties or adjusting technique under changing performance conditions.

#### Aesthetic Priorities in Kunqu Singing

Interviewees consistently described Kunqu singing as requiring refined timbre, precise articulation, and smooth melodic continuity. Performers emphasized maintaining a "light but sustained" vocal quality and continuous breath flow, particularly in lyrical passages.

Observations during rehearsals and performances confirmed that performers devote sustained attention to diction clarity and expressive nuance. These aesthetic priorities require stable vocal coordination, especially during extended scenes and full-length productions.

#### Common Vocal Challenges in Professional Practice

##### Vocal Fatigue during Intensive Performance Periods

Multiple interviewees reported experiencing vocal fatigue during periods of intensive rehearsal, touring, or consecutive performances. Reported symptoms included dryness, reduced flexibility, and slower recovery following performances. Observational data suggest that these issues were more apparent in large venues and unamplified performance settings.

##### Instability in Sustaining Long Phrases and Register Transitions

Interview data indicate that performers frequently encounter difficulty maintaining stable breath support during long melodic lines and densely ornamented passages. Challenges were also reported in managing register transitions, particularly under



heightened expressive intensity. Several performers described situations in which vocal capacity did not fully support expressive intention.

#### Increased Vocal Effort in Large Performance Spaces

Interviews and observations suggest that adaptation to large theatrical spaces often leads performers to increase vocal effort to achieve sufficient projection. This adjustment was associated with increased laryngeal tension and changes in timbre, which were noted as inconsistent with preferred Kunqu vocal qualities.

#### Generational Perspectives on Vocal Experience

Comparative analysis suggests differences in vocal experience across transmission generations. Interview data indicate that younger performers often reported uncertainty regarding vocal health management, while more experienced performers reported accumulated vocal strain over extended careers. Despite these differences, performers across generations expressed concern regarding the ability to maintain vocal condition over time.

#### Summary of Findings

The findings indicate that professional Kunqu performers at the Jiangsu Kunqu Opera Troupe rely primarily on experience-based training methods that support stylistic consistency. At the same time, interview and observational data reveal recurring vocal challenges related to fatigue, stability, and performance conditions. These findings document the current state of professional Kunqu vocal practice and provide an empirical description of vocal demands within contemporary performance contexts.

## Discussion and Conclusion

This section interprets and synthesizes the findings concerning vocalization practices and vocal challenges among professional Kunqu performers at the Jiangsu Kunqu Opera Troupe. Drawing on interview data and field observations, it examines how traditional training models operate under contemporary performance conditions and considers their implications for professional Kunqu vocal practice.

### Discussion

The findings indicate that Kunqu vocal training at the Jiangsu Kunqu Opera Troupe remains predominantly grounded in a traditional master–apprentice model characterized by oral instruction, personal demonstration, and embodied imitation. Interview data show that performers widely value this approach for its effectiveness in transmitting Kunqu’s refined vocal aesthetics, including subtle timbre, precise articulation, and the close integration of sound, text, and melody. Such embodied learning continues to play a central role in maintaining stylistic authenticity and expressive nuance.

At the same time, the results reveal limitations of this traditional model under contemporary professional demands. Performers across transmission generations reported vocal fatigue, reduced endurance, and instability during periods of intensive rehearsal, touring, or consecutive performances. Difficulties were particularly evident in sustaining long melodic phrases, managing register transitions, and adapting to large theatrical spaces without amplification. These findings suggest that while traditional pedagogy effectively shapes vocal style, it offers limited systematic support for managing vocal function under prolonged physical and acoustic pressure.

From a functional perspective, the reported vocal difficulties appear closely related to challenges in coordinating respiration, phonation, resonance, and articulation during performance. Interview data indicate that some performers rely on increased physical effort—such as stronger breath pressure or elevated laryngeal tension—to achieve sufficient projection in large venues. Although these compensatory adjustments may be effective in



the short term, they are frequently associated with vocal strain, changes in timbre, and slower recovery. This pattern reflects a broader reliance on experience-based regulation in the absence of explicit conceptual tools for vocal self-adjustment.

Overall, the discussion highlights a structural gap between traditional experience-based vocal transmission and the functional demands of contemporary professional performance.

### **Conclusion**

Based on qualitative analysis of interviews and field observations, this study concludes that professional Kunqu performers at the Jiangsu Kunqu Opera Troupe maintain high levels of stylistic discipline and aesthetic consistency through traditional vocal training practices. These practices remain essential for preserving Kunqu's vocal identity and expressive conventions.

However, the findings also demonstrate that contemporary performance contexts place increasing demands on vocal endurance, stability, and adaptability. Common challenges—including vocal fatigue, instability in sustained singing, and difficulty adjusting to large performance spaces—are not fully addressed within the existing pedagogical framework. These challenges appear to be related less to insufficient training effort than to limitations in functional vocal awareness and long-term vocal management.

The study further indicates that performers across generations share a strong commitment to preserving Kunqu's core vocal characteristics while expressing concern about vocal sustainability over extended professional careers. Importantly, the findings suggest that the central issue is not a conflict between tradition and scientific understanding, but the absence of effective integration between traditional pedagogy and functional vocal awareness.

In conclusion, this study provides an empirically grounded account of the current situation of professional Kunqu vocal practice and clarifies key factors shaping vocal challenges in contemporary performance contexts.

### **Suggestions**

Based on interview findings and performance observations at the Jiangsu Kunqu Opera Troupe, this study proposes several targeted suggestions to address vocal challenges in professional Kunqu practice while preserving its traditional aesthetic identity.

It is recommended to enhance performers' basic vocal awareness within the traditional master-apprentice training system. While oral transmission and embodied imitation remain central to Kunqu pedagogy, introducing concise explanations of breath coordination, vocal efficiency, and fatigue management may help performers better understand and regulate their vocal sensations during high-intensity rehearsals and performances.

Selectively incorporating scientifically informed vocal principles may support vocal stability and endurance. Modern Kunqu performers frequently face demanding performance conditions, including long productions, intensive touring schedules, and large theater acoustics. Adapted guidance on breath support, resonance coordination, and efficient phonation—aligned with Kunqu vocal aesthetics—can help reduce excessive laryngeal tension and improve vocal comfort without altering stylistic features.

Greater attention should be given to long-term vocal health management. Interview data suggest that some performers experience cumulative vocal fatigue or decline over time. Establishing basic mechanisms for vocal monitoring, recovery guidance, and structured rest may contribute to sustainable vocal development and extend professional longevity.

Finally, any methodological adaptation must respect clear stylistic boundaries. External vocal concepts, including those derived from Bel Canto pedagogy, should be applied selectively and functionally rather than stylistically. Timbre quality, articulation patterns, and expressive taste remain defining elements of Kunqu singing. The goal of adaptation is not stylistic transformation, but the enhancement of vocal stability, comfort, and efficiency within Kunqu's established artistic framework.

## Acknowledgement

The author would like to express sincere gratitude to Chao Kanwicha and Chalermkit Kengkaew, Faculty of Education, Buriram Rajabhat University, Thailand, for their academic supervision and valuable guidance throughout the research process. The author also gratefully acknowledges the support of the Jiangsu Kunqu Opera Troupe for granting access to rehearsals and performances, and extends sincere thanks to the professional Kunqu performers who participated in the interviews and generously shared their experiences.

## References

- Chen, Hongru. (2018). Analysis and reference of Kunqu opera singing art. *Chinese Opera*, (6), 72–76.
- Du, Yaxiong. (2014). Using words to guide melody: A new exploration in vocal pedagogy. *Journal of Music Education*, (9), 33–37.
- Guo, Kejian. (2015). Characteristics of traditional vocal culture and its contemporary significance: Issues in national vocal music pedagogy. *Music Art*, (2), 41–44.
- Ji, Guoqiang. (2014). Chinese literary tradition and Chinese vocal art. *Journal of Traditional Chinese Music*, (1), 22–27.
- Li, Shouming. (2014). On constructing scientific and rational vocal pedagogy models: Reflections on vocal teaching reform in higher education. *Journal of Vocal Music Education*, (4), 55–60.
- Liu, Xiuwen. (2010). Development of national vocal performance studies from the perspective of vocal art. *Music Research*, (3), 66–71.
- Liu, Yinsuo. (2018). Reflections on incorporating sight-singing and ear-training into Kunqu singing techniques. *Journal of Chinese Music Education*, (10), 90–94.
- Ma, Xiao. (2016). The reference value of traditional Kunqu singing in the development of national vocal music: A case study of Yuefu Chuansheng. *Xiqu Studies*, (8), 77–82.
- Peng, Danxiong. (2009). “Zi” and “Qiang” in ancient Chinese vocal literature. *People's Music*, (7), 52–56.
- Song, Jialin. (2017). Effects of breathing methods on laryngeal position, vocal fold movement, and high-pitch phonation. *Vocal Music Research*, (6), 62–66.
- Tian, Lei. (2017). A comparative study of Kunqu opera singing and Bel Canto. *Chinese Opera Studies*, (3), 58–63.
- Wang, Anqi. (2006). Aesthetic characteristics of Kunqu opera performance art. *Xiqu Studies*, (3), 45–50.
- Xiao, Yuanhua. (2017). Inspirations of Kunqu “Five Dan” singing techniques for national vocal music. *Art Education Research*, (11), 88–91.
- Xu, Qiongyin. (2016). Constructing a new vocal art pedagogy system: Fang Qiong and academic national vocal music. *Art Education Studies*, (9), 83–87.

Zhao, Hongbin. (2013). An analysis of vocal techniques in *Treatise on Singing (Chang Lun)*.  
*Music Theory*, (1), 18–22.





## The Current Situation And Existing Problems Of Ancient Poetry And Singing Teaching Among Undergraduates At Xichang College.

Cao Shuyuan <sup>1</sup> Chao, Kanwicha<sup>2</sup>, & Chalermkit Kengkaew<sup>3</sup>

<sup>1</sup>PHD student, Music Education, Faculty of Education, Buriram Rajabhat University, Thailand.

Email: 660427093015@bru.ac.th

<sup>2</sup> Music Education, Faculty of Education, Buriram Rajabhat University, Thailand.

E-mail: chao@bru.ac.th

<sup>3</sup> Music Education, Faculty of Education, Buriram Rajabhat University, Thailand

E-mail: chalermkit.kk@bru.ac.th

### Abstract

This study investigates the current status and existing problems of ancient poetry and singing instruction among undergraduate students at Xichang College, with a primary focus on the performance of ancient poetry and art songs. A qualitative research approach was adopted, employing purposive sampling and semi-structured interviews with five experts in related fields, followed by thematic analysis of the collected data. The findings indicate that instruction is mainly delivered through vocal music courses and is characterized by unclear instructional objectives and fragmented training processes. Classroom teaching predominantly emphasizes vocal technique, while insufficient attention is given to textual interpretation, rhythmic structure, articulation, and stylistic expression. In addition, the absence of a tiered repertoire system, formative assessment practices, and adequate teaching resources negatively affects the stability and replicability of instructional implementation. This study provides a reference for the optimization and improvement of ancient poetry and singing courses in local universities.

**Keyword:** Ancient poetry, Singing teaching, Undergraduate students, Teaching status, Xichang College.

### Introduction

Xichang College is located in Xichang City, Liangshan Yi Autonomous Prefecture, Sichuan Province. It is a provincial public full-time undergraduate university situated in the heart of the Yi ethnic minority region, giving it a distinct focus on serving the ethnic minority area. The university's history can be traced back to 1939 (originating from the National Xikang Technical College, established after the relocation of Beiyang Institute of Technology to Xichang), giving it a rich educational foundation. In 2003, with the approval of the Ministry of Education, Xichang College was formed by merging Xichang Agricultural College, Xichang Teachers College, Liangshan University, and Liangshan Education College. (Xichang College. n. d).

Ancient poetry is an important carrier of outstanding traditional Chinese culture, embodying unique linguistic rhythms, imagery, and aesthetic spirit. Singing, as a form of vocal art, can transform the semantics and emotions of poetry into an audible, perceptible, and experiential artistic expression. Combining ancient poetry with singing instruction not only helps enhance undergraduates' aesthetic abilities and cultural identity but also aligns with the educational goals of aesthetic education and the inheritance of traditional culture in

higher education institutions. Therefore, it holds significant value in university music education and related arts education. (Chen Gangyi, & Huang Zhenhong. (2021). The Inheritance of Chinese Classical Poetry and Art Songs in Universities from the Perspective of Cultural Confidence. *Journal of South China University of Technology (Social Sciences Edition)*, 23(2), 121–128).

From a teaching practice perspective, the integration of classical poetry into singing instruction typically uses classical poetry art songs (or vocal works with lyrics based on classical poems) as the main content vehicle. This learning is distinctly comprehensive: students must not only understand the text and grasp its artistic conception, but also master rhythmic organization (pauses, emphasis, and breath control), proper articulation and rhyme, vocal technique control (breath control, resonance, timbre, and legato), and the presentation of style and temperament ("literary spirit," "charm," and "style"). This multi-dimensional integration of "text—language—voice—style" makes classical poetry art song singing instruction different from general repertoire training: if only melody completion and vocal technique are emphasized, the phenomenon of "being able to sing and sing steadily, but struggling to convey poetic meaning and cultural temperament" easily occurs; without a systematic training process and resource support, it is even more difficult to achieve stable results among undergraduate students. (Zhu Ying, & Zhao Xiaoxiao. (2021). A Study on the Inheritance of Chinese Ancient Poetry and Art Songs. *Contemporary Music*, (2), 72–74).

In the context of local universities, the aforementioned contradictions are even more pronounced. On the one hand, undergraduates exhibit significant differences in their poetry and vocal music foundations, leading to diverse learning needs. On the other hand, while teaching often relies on vocal music courses and daily training, making it feasible, it may also present problems such as fragmented course formats, incomplete training chains, a lack of tiered systems for teaching materials and repertoire, evaluation biased towards results with insufficient process feedback, and an unsystematic supply of demonstration resources and teaching tools. If these problems are not effectively identified and addressed, they will directly affect the continuity, progression, and replicability of ancient poetry and singing instruction, and will also hinder the deep integration of traditional culture into aesthetic education in universities. (Su Luyan, & Chen Lihong. (2019). A Study on the Modern Interpretation and Transmission of Tang and Song Poetry Songs. *Journal of Xingtai University*, 34(1), 124–126).

Therefore, it is necessary to systematically examine the current situation and existing problems of ancient poetry and singing teaching among undergraduates at Xichang University. As a local undergraduate institution located in an ethnic minority region, Xichang University faces both opportunities and challenges in integrating traditional culture into music education. Clarifying how ancient poetry and singing instruction is currently implemented, identifying its major problems in teaching objectives, content structure, training processes, and resource support, and analyzing their underlying causes are essential for improving teaching effectiveness. Such an investigation not only contributes to the optimization of vocal music and ancient poetry art song courses at Xichang University, but also provides practical references for similar local universities seeking to promote the systematic inheritance of traditional culture through higher music education.

## Research Objective

To study the current situation and existing problems of ancient poetry and singing teaching among undergraduates at Xichang College.

## Research Methodology

### Key Informants

A purposive sampling method was employed to select five experts as key information providers. All experts possess extensive teaching and research experience in the fields of classical poetry art song performance, vocal music education, or music education research. Through expert interviews, their professional assessments on the current status and major challenges of ancient poetry and singing instruction (or classical poetry art song performance teaching) for undergraduate students at Xichang College were obtained, providing qualitative evidence to support the study's descriptive analysis and problem identification.

### Research Instruments

The semi-structured interview served as the primary research tool. The interview outline was initially developed based on relevant literature and journal studies, focusing on the core questions structured around the framework of "current situation—issues—causes—suggestions." Prior to formal interviews, experts were consulted to provide feedback on the clarity, comprehensiveness, and logical flow of the questions, which was then refined into the final version to enhance the content validity and practicality of the research instrument. The interview questions primarily addressed the following dimensions:

- Teaching/training implementation format (course, training, activity formats and frequency);

- Teaching content and training components (text interpretation, pronunciation and rhyme, style adaptation, stage presentation, etc.);

- Common difficulties and their causes among learners;

- The basis of the selection of teaching materials and repertoire and the classification system;

- Evaluation methods and feedback mechanisms;

- Resource supply and improvement suggestions.

### Data Collection

Data collection was divided into three steps:

- Literature collection: Systematically search and organize literature, journal articles, and public materials related to the research on the performance and teaching of Chinese ancient poetry art songs, summarize the research themes and common problem dimensions, and provide a basis for the design of interview outlines.

- Interview outline formulation and expert selection: After literature review, draft the interview outline, finalize the list of five interview experts, and complete the interview schedule.

- Expert Feedback and Finalization of the Outline, Formal Interviews: Based on the experts' suggestions regarding the question design and phrasing of the outline, revisions are made to form the final interview outline. Subsequently, semi-structured interviews are conducted. The interview format may be face-to-face in person or via online video/voice, with each expert's interview lasting approximately 30–60 minutes. After obtaining informed consent, the interviews are recorded and transcribed into written materials for subsequent analysis.

### Data Analysis

The interview transcripts were analyzed using thematic and content analysis. The process began with open coding to extract key statements related to the "current situation" and "issues." Subsequently, these codes were grouped into thematic categories, including curriculum structure, training chain, teaching materials and repertoire, evaluation feedback,



and resource support. Finally, the themes were summarized and interpreted to establish an analytical framework of "current situation—issues—causes—suggestions. " When necessary, member checking was conducted to verify key information and enhance the credibility of the research conclusions.

## Results

Based on the semi-structured interview data from five experts, the following core findings were derived through thematic analysis:

The current situation of of ancient poetry and singing teaching among undergraduates at Xichang College.

The survey results indicate that the teaching of classical poetry and art songs for undergraduate students at Xichang College primarily relies on the vocal music curriculum and daily training, thus possessing a solid foundation for implementation. In teaching practice, related content is primarily conveyed through repertoire integration, classroom training, and stage performances. Students demonstrate improvement in pitch, rhythm, breath control, and basic singing stability, reflecting the supporting role of the vocal music curriculum in the performance of classical poetry and art songs. Furthermore, the teaching implementation exhibits flexibility in terms of faculty experience, classroom organization, and student participation, meeting the needs of both basic training and stage presentation. Overall, this teaching model has initially formed a basic framework of "curriculum implementation—training implementation—results presentation, " providing a practical foundation for further systematization and standardization.

The existing problems of ancient poetry and singing teaching among undergraduates at Xichang College.

The survey revealed significant problems in current teaching regarding goal setting, content structure, and implementation methods. The focus of teaching is generally biased towards vocal technique training, with insufficient systematic training in poetry interpretation, rhythmic organization, proper articulation and rhyme, and the stylistic characteristics of the works. This makes it difficult for students to achieve a seamless connection between textual meaning, linguistic expression, and vocal performance. At the learning level, students generally exhibit weak understanding of poetry and culture, non-standard language processing, and insufficient ability to organize intonation and phrasing, becoming major bottlenecks hindering the improvement of singing quality. Furthermore, the lack of tiered planning in teaching materials and repertoire, coupled with inadequate supporting teaching resources and process evaluation mechanisms, makes teaching effectiveness heavily reliant on individual teacher experience. Overall stability, replicability, and the ability for continuous improvement need to be strengthened.

## Discussion and Conclusion

### Discussion

The teaching of classical poetry and art songs for undergraduate students at Xichang College is mainly based on vocal music courses, which provides basic conditions for implementation and can improve students' singing stability and technical foundation to a certain extent. However, due to a lack of systematic planning, the teaching is mostly conducted through the integration of repertoire, and the course objectives and training paths are not clear enough. As a result, the teaching effectiveness mainly remains at the level of basic singing, and the aesthetic connotation and artistic expression of classical poetry and art songs have not been fully reflected. (Chen Gangyi, & Huang Zhenhong. (2021). The inheritance of ancient Chinese poetry art songs in universities from the perspective of

cultural confidence. *Journal of South China University of Technology (Social Sciences Edition)*, 23(2), 121–128).

The study further revealed a significant imbalance between vocal technique training and the artistic expression of poetry in teaching. Insufficient training in text comprehension, language processing, and stylistic presentation negatively impacted the overall quality of students' performances. Furthermore, inadequate teaching materials, repertoire, and evaluation systems, coupled with reliance on teachers' personal experience, hindered the stability and sustainable development of teaching methods. (Su Luyan, & Chen Lihong. (2019). A Study on the Modern Interpretation and Oral Transmission of Tang Poetry and Song Ci in Song Dynasty. *Journal of Xingtai University*, 34(1), 124–126. )

### Conclusion

Research indicates that the teaching of classical poetry and art songs for undergraduate students at Xichang College has a certain foundation for implementation, can be continuously carried out based on vocal music courses, and plays a role in cultivating students' basic singing abilities. However, overall, the teaching has not yet formed a systematic and standardized teaching model, the course objectives and training paths are not clear enough, and the teaching implementation is fragmented, making it difficult to effectively support the in-depth presentation of the artistic connotation and aesthetic value of classical poetry and art songs. (Chen Gangyi, & Huang Zhenhong. (2021). The inheritance of ancient Chinese poetry art songs in universities from the perspective of cultural confidence. *Journal of South China University of Technology (Social Sciences Edition)*, 23(2), 121–128).

The main problem in current teaching lies in the imbalance between vocal technique training and the artistic expression of poetry. While students possess a certain degree of singing stability, they lack abilities in text comprehension, rhythmic processing, articulation, and stylistic presentation. Furthermore, the repertoire, teaching materials, and evaluation system are inadequate, and teaching quality relies heavily on the teacher's personal experience, thus hindering the overall effectiveness and sustainable development of teaching classical poetry and art songs. (Zhu Ying, & Zhao Xiaoxiao. (2021). Research on the Inheritance of Chinese Ancient Poetry Art Songs. *Contemporary Music*, (2), 72–74).

### Suggestion

Optimize existing teaching practices and improve teaching effectiveness

In undergraduate vocal music teaching, we will further clarify the teaching positioning of classical poetry and art songs, improve the teaching tendency that focuses primarily on vocal technique training, and strengthen the integration of text interpretation, language processing, and artistic expression training. Through relatively clear teaching objectives and training focus arrangements, we will promote the unity of textual meaning, language expression, and vocal presentation, and enhance the overall effectiveness of teaching classical poetry and art songs.

Promoting systematic and standardized development for the future

In the long run, it is necessary to promote the development of classical poetry and art song singing instruction from experience-based to systematic. In the future, a tiered system of repertoire and teaching materials can be gradually constructed, and process evaluation and feedback mechanisms can be improved. This will lay the foundation for the development of teaching manuals and the promotion of teaching models, thereby promoting the continuous improvement and stable development of teaching quality.

## References

- Chen Gangyi, & Huang Zhenhong. (2021). The inheritance of ancient Chinese poetry art songs in universities from the perspective of cultural confidence. *Journal of South China University of Technology (Social Sciences Edition)*, 23(2), 121–128.
- Zhu Ying, & Zhao Xiaoxiao. (2021). Research on the Inheritance of Chinese Ancient Poetry Art Songs. *Contemporary Music*, (2), 72–74.
- Su Luyan, & Chen Lihong. (2019). A Study on the Modern Interpretation and Oral Transmission of Tang Poetry and Song Ci in Song Dynasty. *Journal of Xingtai University*, 34(1), 124–126.
- Wang Jing. (2018). The Style of Ci Poetry Transmits Ancient Meaning, Expressing Aspirations and Emotions Opens New Ideas-Exploring the Cultural Value of Song Ci Art Songs. *Singing Art*, (10), 44–49.
- Li Zhu, & Wu Xiaolu. (2021). An Appreciation of the Classical Ancient Poetry Song "Thoughts on a Tranquil Night". *The Voice of the Yellow River*, (12), 150–152.





## Educational Resources Administration to Promote Sports Excellence of Henan Sport University, People's Republic of China

Cao Youkang<sup>1</sup>, Phatchanee Kultanan<sup>2</sup>, Patcharee Thungkaew<sup>3</sup>

<sup>1</sup>M.A. Students, Educational Administration Program, Buriram Rajabhat University, Thailand

E-mail: 670426021041@bru.ac.th

<sup>2</sup> Major Advisor, Educational Administration Program, Buriram Rajabhat University, Thailand

E-mail: phatchanee.kt @bru.ac.th

<sup>3</sup> Co-Advisor, Educational Administration Program, Buriram Rajabhat University, Thailand

E-mail: Patcharee.tk@bru.ac.th

### Abstract

This study aimed to investigate the current state of educational resource administration and to propose guidelines for promoting sports excellence at Henan Sport University, People's Republic of China. The sample consisted of 169 faculty staff selected by simple random sampling from a population of 295 staff across eight colleges. In addition, six experts were purposively selected to provide input on the development of administrative guidelines. Data were collected using a questionnaire, utilizing a 5-point Likert scale, with the Index of Item-Objective Congruence between 0.600 to 1.00, Index of discrimination values ranging from 0.517 to 0.841, and reliability 0.985, and semi-structured interviews. Quantitative data were analyzed using frequency, percentage, mean, and standard deviation, while qualitative data were analyzed using thematic content analysis. The results indicated that the overall level of educational resource administration was rated at a moderate level ( $\bar{x}$  = 3.50, S.D. = 0.98), with all dimensions also rated at a moderate level. Among these dimensions, Information Resource Management, Human Resource Management, and Material Resource Management received the highest mean scores, whereas Financial Resource Management received the lowest mean score. Based on the findings, the proposed guidelines for promoting sports excellence comprised four aspects: Human Resource Management, Financial Resource Management, Material Resource Management, and Information Resource Management.

**Keywords:** Sports Universities; Sports Excellence; Four-Dimensional Educational Resource Management; Optimization Framework; Resource-Based View; General Systems Theory

### Introduction

#### Research Background

Higher physical education institutions serve as the cornerstone for nurturing high-caliber sports talents and driving the development of regional competitive sports (Yang Hui, 2020, pp. 5-7). Against the backdrop of national policy mandates such as China's "Healthy China 2030" Plan Outline (State Council of the People's Republic of China (2016:42-45)) and the "Henan Province University Sports Excellence Leapfrog Action Plan (2024-2027)" (People's Government of Henan Province (2024:8-11)), optimizing the allocation of physical education resources and deepening the integration of sports and education have become critical imperatives for sports universities.

Founded in 1958 and reorganized in 2024, Henan Sport University (HSU) is the only professional undergraduate sports university in Henan Province, China, with 8 teaching colleges and a solid foundational resource base (Henan Sport University, 2021, pp. 1-2). However, HSU faces prominent challenges in resource management that directly hinder sports excellence: a shortage of approximately 35 interdisciplinary talents in sports and technology limits high-level training innovation; the proportion of "double-qualified" teachers (with both teaching and professional practice capabilities) is 68%, below the 80% policy threshold for nurturing competitive sports talents; 85% of the budget relies on government financial appropriations, resulting in insufficient investment in intelligent training equipment; 60% of sports equipment has been in service for over 5 years, failing to meet national high-performance training standards; and data fragmentation persists without a unified platform integrating athlete information, training data, and competition results, restricting scientific decision-making (Henan Sport University, 2023, pp. 1-3). These structural constraints create a mismatch between resource supply and sports excellence demands, necessitating systematic investigation and targeted interventions.

### **Literature Review**

Extant research on university sports resource management has primarily focused on single-dimensional optimization, such as talent training (Li Jianjun (2025:63-67)) and facility upgrading (Tian Min, 2023, pp. 13-15), with a strong emphasis on national-level sports universities. Most studies adopt Data Envelopment Analysis (DEA) models to evaluate resource allocation efficiency, identifying issues such as inefficient utilization and uneven distribution (Yang Hui, 2020, pp. 5-7; Tian Min, 2023, pp. 13-15). Internationally, scholars have explored resource integration in sports universities from the perspective of RBV, highlighting the importance of dynamic resource matching with organizational goals (Barney, Jay B. (1991:99-120)); however, few studies have applied this to regional sports universities in emerging economies.

In the context of sports-education integration, while the "dual-subject talent training" model has been widely discussed in China (Chen Xinhua (2024:33-35)), there is a paucity of research on the dynamic adaptation mechanisms between multi-dimensional resources of regional sports universities and the needs of sports excellence. Furthermore, existing studies often adopt a single-university perspective, lacking comprehensive "resource supply - excellence demand" analysis and insufficient exploration of regional policy and resource constraints (Zhou Ke (2023:47-50)). Although inter-university cooperation barriers and digital transformation challenges have been noted (Li Jianjun (2025:63-67)), empirical research identifying the specific gaps between university resource management and sports excellence needs remains limited. To address these research gaps, this study takes HSU as a case study, systematically exploring the adaptation status and core problems of four-dimensional educational resource management to sports excellence needs, and constructing an optimization framework based on the Resource-Based View (RBV) and General Systems Theory (GST).

### **Research Objectives**

1. To investigate the current situation of educational resources administration to promote sports excellence of Henan Sport University, People's Republic of China
2. To study the guidelines of educational resources administration to promote sports excellence of Henan Sport University, People's Republic of China

## Research Methodology

### Population and Sample

The population of this study consisted of 295 faculty members from eight departments of Henan Sport University, People's Republic of China, in the year 2025. The sample comprised 169 faculty members from the same eight departments, selected from the population using simple random sampling. The sample size was determined based on the Krejcie and Morgan (1970, pp. 608–610) sample size determination table to ensure an appropriate and representative sample for the study. Moreover, the target group for the development of guidelines, consisted of six experts comprising two administrators from Henan Sport University, two government officials from the Henan Provincial Department of Education and Sports, and two professors specializing in sports management and educational resource allocation. These experts were selected using purposive sampling based on their expertise, experience, and relevance to educational administration and sports development.

### Research Instrument

For the study on the current state and guidelines for educational resources administration to promote sports excellence of Henan Sport University, People's Republic of China, the research instrument was used as follows:

**Questionnaire:** The questionnaire consisting of two parts. Part I collected general information of the respondents using a checklist format, including departmental affiliation. Part II assessed the current state of educational resource administration for promoting sports excellence at Henan Sport University, People's Republic of China. This part comprised four dimensions: (1) Human Resource Management, (2) Financial Resource Management, (3) Material Resource Management, and (4) Information Resource Management. The items were measured using a five-point rating scale. The questionnaire demonstrated content validity with an Index of Item-Objective Congruence (IOC) ranging from 0.66 to 1.00. The item-total correlation coefficients ranged from 0.517 to 0.841, and the overall reliability coefficient (Cronbach's alpha) was 0.985.

**Semi-structured Interviews:** Eight semi-structured interview questions were used in this study. The questions were developed based on the results of the analysis of educational resource administration for promoting sports excellence. Specifically, the content of the interview questions was derived from the two items with the lowest mean scores, which were used to determine the research focus and guide the interview process.

### Data Collection and Analysis

**Data Collection:** Questionnaires were distributed online through Wenjuanxing from October to November 2024, and face-to-face one-on-one interviews were conducted in December 2024 to complete the data collection.

**Data Analysis:** Quantitative data were analyzed via descriptive statistics including mean, standard deviation, and percentage to clarify the performance level of each resource management dimension. Qualitative data were processed through thematic content analysis.

## Research Results

According to the research objectives, the research results are as follow:

**1. The current situation of educational resources administration to promote sports excellence of Henan Sport University, People's Republic of China**



**Table 1**

*Mean values and standard deviations of current situation of educational resources administration to promote sports excellence of Henan Sport University, People's Republic of China*

| Management Dimension            | $\bar{X}$   | S.D.        | Interpretation  | Ranking  |
|---------------------------------|-------------|-------------|-----------------|----------|
| Human Resource Management       | 3.50        | 1.10        | Moderate        | 1        |
| Financial Resource Management   | 3.49        | 1.11        | Moderate        | 4        |
| Material Resource Management    | 3.50        | 1.11        | Moderate        | 1        |
| Information Resource Management | 3.50        | 1.00        | Moderate        | 1        |
| <b>Overall Average</b>          | <b>3.50</b> | <b>1.08</b> | <b>Moderate</b> | <b>-</b> |

According to the table 1, it was found that the overall of management dimension of educational resources administration to promote sports excellence was rated at moderated level ( $\bar{x} = 3.50$ , S.D. = 1.08), with all dimensions also rated at a moderate level. Among these dimensions, Information Resource Management ( $\bar{x} = 3.50$ , S.D. = 1.00), Human Resource Management ( $\bar{x} = 3.50$ , S.D. = 1.10), and Material Resource Management received the highest mean scores ( $\bar{x} = 3.50$ , S.D. = 1.11), whereas Financial Resource Management received the lowest mean score ( $\bar{x} = 3.49$ , S.D. = 1.11).

## 2. The Guidelines Derived from Expert Interviews

The proposed development guidelines are summarized as follows. (1) Human Resource Management: Establish a dynamic matching framework that aligns “sports excellence scenarios” with talent demand in order to support strategic workforce planning. This framework should be regularly updated based on institutional goals and national sports development policies. In addition, a regional inter-university exchange alliance should be formed to promote academic mobility, professional learning, and the sharing of best practices among faculty members. Participation in exchange and collaborative activities should be formally recognized and integrated into the continuing professional development credit system to encourage sustained engagement and capacity building. (2) Financial Resource Management: Develop a full-cycle financial supervision mechanism covering project initiation, budget allocation, implementation monitoring, and post-project auditing through a centralized digital management platform. This mechanism should enhance transparency, accountability, and efficient resource utilization. Furthermore, collaboration among government agencies, enterprises, and universities should be strengthened to diversify funding sources, expand access to social capital, and support long-term investment in sports excellence programs. (3) Material Resource Management: Standardize and categorize resource allocation and issuance procedures by implementing hierarchical authorization and whole life-cycle management of facilities, equipment, and training resources. Clear and graded maintenance standards should be established to ensure sustainability, safety, and cost-effectiveness. An information-based material management platform should also be developed to support real-time monitoring, inventory control, and

data-driven decision-making. (4) Information Resource Management: Construct an integrated intelligent management platform that connects human, financial, and material resource data under a unified system. A comprehensive data classification and security framework should be established to ensure data accuracy, privacy, and reliability. The application of big data and artificial intelligence technologies should be promoted to enhance multi-dimensional data collection, analysis, and forecasting. In addition, a closed-loop mechanism of “data collection–analysis–feedback–optimization” should be implemented to continuously improve administrative efficiency and support evidence-based decision-making in promoting sports excellence.

## Discussion

The findings indicated that the overall level of educational resource management was rated at a moderate level, with all dimensions also evaluated at a moderate level. This suggests that the university has established fundamental resource management practices that support sports development; however, these practices may not yet be sufficiently systematic or strategically integrated to achieve sports excellence. This finding is consistent with the view that effective resource management requires not only availability of resources but also coherent strategic alignment and continuous improvement (Ye Song, 2023, p. 8). Moreover, the results indicated that Information Resource Management, Human Resource Management, and Material Resource Management received the highest mean scores. This suggests that the institution places relatively greater emphasis on information systems, personnel management, and physical resources as key foundations for supporting sports development. However, the moderate level of these scores indicates that further strategic integration and efficiency enhancement are still required to effectively promote sports excellence. These findings align with the study of Jackline (2025, p. 1) who emphasized that effective educational resource management particularly through strategic allocation, technology integration, and continuous staff development plays a crucial role in enhancing institutional performance and learning quality.

The proposed development guidelines demonstrate an integrated approach to educational resource management for promoting sports excellence. Emphasis on human resource alignment, full-cycle financial supervision, standardized material management, and intelligent information systems highlights the importance of strategic coordination and technology-supported administration. The integration of data-driven decision-making and cross-sector collaboration is expected to enhance administrative efficiency and support the sustainable development of sports excellence. In addition, clear, systematic, and context-responsive guidelines for educational resource management can significantly enhance educational opportunities and reduce inequality. Such guidelines also promote efficient resource utilization, support the professional development of personnel, and improve the quality of teaching and learning. Moreover, effective resource management contributes to institutional capacity building, enabling educational institutions to adapt to change and achieve sustainable development. These findings align with the study of Ranuman (2022, p. 3) who stated that effective educational resource management in basic education institutions must be grounded in sound administrative principles. Such management is essential and plays a crucial role in expanding educational opportunities, reducing educational inequality, and supporting the effective organization and delivery of teaching and learning processes.

## **Recommendations**

### **Implications for the findings**

#### **Implications for Human Resource Management**

1. Establish a dynamic talent-demand matching mechanism via quarterly scenario-based surveys, and develop a "scenario-demand" talent list to meet high-level training needs.
2. Launch an interdisciplinary talent recruitment program focused on sports-technology integration, and recruit sufficient talents within two years to address structural gaps.
3. Build a "three-province multi-university" exchange alliance, include exchange experience in continuing education credits, and expand faculty's professional horizons and capabilities.

#### **Implications for Financial Resource Management**

1. Deepen government-enterprise-university collaboration, partner with leading sports enterprises, expand funding channels, and reduce over-reliance on fiscal appropriations.
2. Build a full-cycle digital financial supervision platform covering project initiation, monitoring and audit, and clarify fund-use norms to enhance supervision efficiency.
3. Adopt a performance-oriented budget system, set up independent accounts for top sports talent programs, engage third-party evaluators, and link budget allocation to talent quality and competition results.

#### **Implications for Material Resource Management**

1. Implement full-life-cycle management of equipment via a lease-purchase model, complete intelligent upgrading of core training equipment within two years, and plan for the replacement of outdated assets.
2. Establish a hierarchical equipment authorization and distribution system with differentiated maintenance standards, and improve maintenance quality to meet high-level training requirements.
3. Co-build an equipment sharing platform with provincial universities and sports bureaus, revitalize existing resources, and ease equipment allocation pressure.

#### **Implications for Information Resource Management**

1. Build and deploy an integrated intelligent information platform within one year, integrate scattered data on athletes, training and competitions, and establish standardized data classification and security systems.
2. Break data silos to achieve closed-loop management of "data collection-analysis-feedback-optimization", and support scientific training and decision-making.
3. Conduct quarterly data analysis training to improve faculty's digital proficiency, and introduce big data and AI technologies to empower training analysis and performance evaluation.

### **Recommendations for Future Research**

Future research should expand research scope to eastern, central, western Chinese sports universities in order to collect the various guidelines.

Future research should conduct 3-year follow-up surveys using mixed methods to verify optimization path effectiveness via athlete performance, talent quality, and resource efficiency indicators.



Future research should explore emerging technologies in resource management such as fund, equipment traceability, and real-time equipment monitoring.

## References

- Barney, Jay B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- Chen Xinhua (2024). Research on total factor management of educational resources in regional sports universities. *Sports Science Research*, 45(2), 33-35.
- Henan Sport University. (2021). *Annual Report on Sports Development* [R]. Zhengzhou: Henan Sport University Press, pp. 1-2.
- Henan Sport University. (2023). *Resource Allocation Status Report* [R]. Zhengzhou: Henan Sport University Press, pp. 1-3.
- Jackline, A. (2025). Managing Educational Resources Effectively. *Newport international journal of current issues in arts and management*, 6(1), 1-7.  
10.59298/NIJCIAM/2025/6.1.1700.
- Krejcie, Raymond V. & Morgan, Daryl W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607-610.
- Li Jianjun (2025). Research on the adaptation mechanism of sports resources and excellence needs. *Journal of Sports Science*, 46(3), 63-67.
- People's Government of Henan Province. (2024). *Henan Province University Sports Excellence Leapfrog Action Plan (2024-2027)* [Z]. Zhengzhou: General Office of the People's Government of Henan Province, pp. 8-11.
- Ranuman, J. (2022). *Human resource management of school Phitsanulok primarr educational service area office 3*, (Master's Thesis). Naresuan University
- State Council of the People's Republic of China. (2016). *"Healthy China 2030" Plan Outline* [Z]. Beijing: People's Publishing House, pp. 42-45.
- Tian Min. (2023). Research on the Efficiency of University Sports Resource Allocation under the Goal of Sports Power . *Sports Science Research*, 44(1), 13-15.
- Yang Hui. (2020). Framework Construction of University Sports Education Resource Allocation Efficiency [J]. *Sports Science Research*, 41(1), 5-7.
- Ye, Song. (2023). Research on the Optimization of Regional Educational Resource Structure and Performance Funding Under Government Coordination. *Economic Science Press*, 2023(1), 8.
- Zhou Ke (2023). Research on resource supply-demand matching of regional sports universities. *Journal of Beijing Sport University*, 46(4), 47-50.

# A Synthesis of the Teaching and Learning Context of Western String Instruments in Rajabhat Universities in Northeastern Thailand

Chavarit Chaingam<sup>1</sup>, Thiti Panyain<sup>2</sup>, Jiranuwat Khuntajan<sup>3</sup>,

<sup>1</sup> Doctoral Student, Doctor of Philosophy Program in Music Education, Buriram Rajabhat University

<sup>2</sup> Advisor, Music Education Program, Faculty of Education, Buriram Rajabhat University

<sup>3</sup> Co-Advisor, Music Education Program, Faculty of Education, Buriram Rajabhat University

## Abstract

This study aimed to synthesize the teaching and learning context of Western string instruments in Rajabhat Universities in Northeastern Thailand using a mixed-methods research design. The research population consisted of three groups: (1) 77 students, (2) 4 instructors, and (3) 4 administrators. The study examined four contextual dimensions: instructors, instructional media and learning support resources, students' prior knowledge and Curriculum Dimension. The research instruments included questionnaires and interviews. Quantitative data were analyzed using descriptive statistics, namely mean and standard deviation (S.D.), while qualitative data were analyzed through descriptive analysis.

The research findings revealed that the synthesis of the teaching and learning context of Western string instruments in Rajabhat Universities in Northeastern Thailand showed the following results: (1) In terms of instructors, the number of instructors was limited, with the overall mean at a high level ( $\bar{X} = 4.37$ ,  $S.D. = 0.59$ ); although instructors possessed relevant academic qualifications, their expertise did not cover all Western string instruments. (2) Regarding instructional media and learning support resources, the overall level was moderate ( $\bar{X} = 2.64$ ,  $S.D. = 0.72$ ), indicating insufficient equipment and a lack of dedicated practice rooms for string instruments. (3) Concerning students' knowledge, the overall level was high ( $\bar{X} = 3.93$ ,  $S.D. = 0.76$ ); however, most students had no prior background in Western string instruments, and their musical experiences varied. (4) Regarding the curriculum, there are challenges for first-year students in adjusting to the new curriculum and they lack prior experience in playing string instruments.

**Keywords:** synthesis, context, Western string instruments

## Introduction

Music education in Thailand plays a vital role in the development of the nation's culture and arts, as music is an integral part of daily life and contributes significantly to enhancing learners' creativity and social skills. Music education in Thailand has its roots in folk music and traditional Thai music, which have been transmitted from generation to generation. In the past, music learning commonly took place in temples or within the royal court, where knowledgeable and skilled music teachers passed on their expertise. During the reign of King Rama V, music education gradually developed into a modern educational system and was subsequently promoted within the formal education framework. Music education in Thailand is currently organized into two levels: (1) music education at the primary and secondary levels, where the Ministry of Education has incorporated music into the Basic Education Core Curriculum to promote musical learning among children and youth, covering both Thai

and Western music; and (2) music education at the higher education level, where many institutions offer music-related faculties or programs. For example, the Faculty of Education at Chulalongkorn University was the first institution to offer music courses in 1957, initially as a minor field of study, and later expanded to a major field in 1972, with instruction provided by Ajarn Kamthorn Sanitwong Na Ayutthaya (Naruth Suttachit, 2023).

Music education at the higher education level plays a crucial role in the development of culture, creativity, and the professional potential of individuals in the music field, both in artistic and industrial contexts. Approaches to music education at this level are therefore diverse and designed to address academic knowledge, practical skills, and career readiness, while fostering specialized competencies. Higher education music study provides students with opportunities to practice and develop musical skills in depth, including performance, composition, music analysis, and the application of music technology. This stage of education typically corresponds to the transition from late adolescence to early adulthood. Naruth Suttachit (1998) noted that during early adulthood, individuals experience significant developmental changes in physical, cognitive, emotional, and social domains. At this level, the development of musical skills requires a high degree of specialized ability on the part of learners, particularly in technical proficiency and musical understanding. Instructors should therefore cultivate students' understanding of musical structures and essential compositional elements before engaging them in practice; otherwise, students may practice or perform music without meaningful comprehension. Accordingly, instruction should emphasize musical interpretation as a foundational process, while encouraging students to incorporate personal expression without disregarding the distinctive characteristics of musical works from different historical periods and composers.

At present, Western string instruments—such as the violin, viola, cello, and double bass—are included in the curricula of many universities in Thailand. In 2009, Ubon Ratchathani Rajabhat University became the first institution in Northeastern Thailand to offer instruction in Western string instruments. Subsequently, other Rajabhat Universities in the Northeastern region gradually introduced Western string instrument courses. Learners' readiness, including their prior musical knowledge and instrumental skills, has a direct impact on educational quality. Musical preparedness is closely related to institutional admission policies and relatively flexible selection procedures. As a result, many students enter university programs with instrumental performance skills below the expected standards of the discipline, which limits their ability to further develop musical skills and knowledge at the higher education level. As one instructor noted, "Students' skills are not adequate because their foundations are weak; some have no prior background at all and must begin from the basics." Therefore, students' readiness in terms of instrumental skills and fundamental musical knowledge must be adequately prepared prior to entering higher education in order to enable effective learning and advancement of higher-level musical competencies. Although curricula may aim to select students who are sufficiently prepared, institutional admission policies must be taken into serious consideration, which may prevent programs from admitting only students who meet the desired readiness criteria (Kanithap Pituphumnak, 2020).

Based on the information presented above, the researcher found that no prior surveys or studies have been conducted on the teaching and learning context of Western string instruments in Rajabhat Universities in Northeastern Thailand. Therefore, the researcher recognizes the importance of conducting a systematic investigation to identify the actual conditions and problems involved in the teaching and learning of Western string instruments, which are highly complex in practical application and require considerable effort from learners. The findings of this study are expected to provide essential data for the development



and improvement of instructional models for Western string instrument education in Rajabhat Universities in Northeastern Thailand in the future.

## Research Objective

To synthesize the teaching and learning context of Western string instruments in Rajabhat Universities in Northeastern Thailand.

## Research Methodology

This study aimed to synthesize the teaching and learning context of Western string instruments in Rajabhat Universities in Northeastern Thailand by examining baseline data and actual instructional conditions related to Western string instrument education, as well as information provided by relevant stakeholders. A mixed-methods research design was employed.

## Participants

## Students

The research population consisted of 77 undergraduate students majoring in Western string instruments in the Music Education programs of four Rajabhat Universities in Northeastern Thailand. The participating institutions included:

- (1) Buriram Rajabhat University
- (2) Udon Thani Rajabhat University
- (3) Ubon Ratchathani Rajabhat University
- (4) Nakhon Ratchasima Rajabhat University

## Instructors

The instructor group comprised lecturers responsible for Western string instrument performance courses, Western string ensemble courses, or other related subjects involving Western string instrument instruction in Rajabhat Universities in Northeastern Thailand. All instructors had at least one year of teaching experience. A total of 4 instructors participated in the study.

## Administrators

Data were collected from program chairs to examine issues related to educational policy, administrative management, personnel, instructional content, learning resources and equipment, assessment criteria, students' learning achievement, and recommendations based on administrators' direct experience. A total of 4 administrators participated in the study. The data were analyzed to identify problems and propose solutions for the teaching and learning of Western string instruments.

## Curriculum

The researcher analyzed curriculum documents (TQF 2) related to program philosophy, significance, course titles, and course objectives in order to analyze and synthesize existing problems in the teaching and learning of Western string instruments in Rajabhat Universities in Northeastern Thailand.

## Research Instruments

The research instruments used for data collection and analysis were designed to examine baseline information, as well as concepts and theories related to the synthesis of the teaching and learning context of Western string instruments in Rajabhat Universities in Northeastern Thailand. The instruments were as follows:

### **Quantitative Research Instrument**

The quantitative data were collected using a questionnaire developed by the researcher to investigate the teaching and learning context of Western string instruments in Rajabhat Universities in Northeastern Thailand. The questionnaire consisted of two sections:

**Section 1:** General information of the respondents, presented in a checklist format. This section included items on gender, institution, level of study, major instrument, and prior experience and background in Western string instruments before entering university.

**Section 2:** Students' opinions regarding the teaching and learning of Western string instruments in Rajabhat Universities in Northeastern Thailand. Responses were measured using a five-point Likert scale, ranging from 5 (highest level) to 1 (lowest level). This section comprised 6 items related to instructors, 5 items related to instructional media and equipment, and 4 items related to students' knowledge. Quantitative data were analyzed and presented using descriptive statistics.

### **Qualitative Research Instruments**

The qualitative data were collected through interviews with instructors and administrators (program chairs) using semi-structured interview protocols focusing on the teaching and learning of Western string instruments. The interview data were analyzed to identify issues and propose solutions for improving the teaching and learning of Western string instruments.

### **Data Collection Procedures**

The researcher coordinated with the head of the Music Education program to request permission to collect data from instructors and students and to schedule interview appointments with the designated participants. Interviews with instructors and administrators were conducted according to the scheduled dates and times using interview protocols, while questionnaires developed by the researcher were administered to student participants. During data collection, the researcher conducted observations, took field notes, and used audio recording devices to gather information. All data were collected directly by the researcher. Data obtained from the questionnaires and interviews were analyzed using both quantitative and qualitative methods. Quantitative data were analyzed using descriptive statistics, including mean and standard deviation (S.D.), while qualitative data were analyzed using descriptive analysis based on actual data obtained from the field.

### **Data Analysis**

In this study, data analysis was conducted based on information obtained from document review and related research. Data collected through observation, questionnaires, and interviews were analyzed using both quantitative and qualitative approaches. Quantitative data were analyzed using descriptive statistics, including mean ( $\bar{X}$ ) and standard deviation (S.D.), while qualitative data were analyzed using descriptive analysis based on actual empirical data. The results were then summarized and presented, followed by discussion of the research findings in both quantitative and qualitative methods.

### **Research Results**

1. The analysis of questionnaire data regarding the teaching and learning conditions of Western string instruments in the Music Education programs of four Rajabhat Universities in Northeastern Thailand was conducted after the completion of field data collection. The findings can be summarized as follows:

**Table 1**

*Number and Percentage of Respondents' General Characteristics*

| General Characteristics of Respondents                              | Number    | Percentage |
|---------------------------------------------------------------------|-----------|------------|
| 1. Gender                                                           |           |            |
| Male                                                                | 60        | 77.92      |
| Female                                                              | 17        | 22.07      |
| <b>Total</b>                                                        | <b>77</b> | <b>100</b> |
| 2. Institution                                                      |           |            |
| Buriram Rajabhat University                                         | 28        | 36.36      |
| Udon Thani Rajabhat University                                      | 20        | 25.97      |
| Ubon Ratchathani Rajabhat University                                | 22        | 28.57      |
| Nakhon Ratchasima Rajabhat University                               | 10        | 12.98      |
| <b>Total</b>                                                        | <b>77</b> | <b>100</b> |
| 3. Major Instrument                                                 |           |            |
| Violin                                                              | 37        | 48.05      |
| Viola                                                               | 14        | 18.18      |
| Cello                                                               | 14        | 18.18      |
| Double Bass                                                         | 12        | 15.58      |
| <b>Total</b>                                                        | <b>77</b> | <b>100</b> |
| 4. Prior Experience in Western String Instruments before Enrollment |           |            |
| With prior experience                                               | 20        | 25.97      |
| Without prior experience                                            | 57        | 74.02      |
| <b>Total</b>                                                        | <b>77</b> | <b>100</b> |

As shown in Table 1, a total of 77 respondents participated in the study. Of these, 60 respondents were male (77.92%) and 17 were female (22.07%). Regarding institutional affiliation, 28 respondents (36.36%) were from Buriram Rajabhat University, 20 respondents (25.97%) from Udon Thani Rajabhat University, 22 respondents (28.57%) from Ubon Ratchathani Rajabhat University, and 10 respondents (12.98%) from Nakhon Ratchasima Rajabhat University. In terms of major instrument, 37 respondents (48.05%) majored in violin, followed by viola and cello (18.18% each), and double bass (15.58%). With respect to prior experience in Western string instruments before enrollment, 20 respondents (25.97%) reported having prior experience, whereas 57 respondents (74.02%) reported having no prior experience.

**Table 2**

*Mean and Standard Deviation of Students' Opinions on the Teaching and Learning Conditions of Western String Instruments in Rajabhat Universities in Northeastern Thailand (Instructors)*



| Teaching and Learning Conditions of Western String Instruments                                                                        | Level of Teaching and Learning Conditions and Practices |             |             |
|---------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|-------------|-------------|
|                                                                                                                                       | $\bar{X}$                                               | S. D.       | Level       |
| <b>Instructor dimension</b>                                                                                                           |                                                         |             |             |
| Instructors demonstrate expertise in Western string instrument courses.                                                               | 4.36                                                    | 0.53        | High        |
| Instructors are able to effectively convey knowledge in a clear and understandable manner.                                            | 4.34                                                    | 0.55        | High        |
| Instructors provide clear guidance and respond effectively to students' questions.                                                    | 4.35                                                    | 0.53        | High        |
| Instructors allocate appropriate time for practice.                                                                                   | 4.55                                                    | 0.57        | Very High   |
| Instructors are attentive to and understand individual differences in students' abilities.                                            | 4.62                                                    | 0.54        | Very High   |
| Instructors are able to explain techniques and performance methods for Western string instruments and appropriately inspire students. | 4.03                                                    | 0.82        | High        |
| <b>Overall</b>                                                                                                                        | <b>4.37</b>                                             | <b>0.59</b> | <b>High</b> |

As shown in Table 2, students' opinions regarding the teaching and learning conditions of Western string instruments in Rajabhat Universities in Northeastern Thailand, particularly in terms of instructor-related aspects, were overall rated at a high level ( $\bar{X} = 4.37$ ,  $S. D. = 0.59$ ). When considered item by item, the highest mean score was for instructors' attentiveness to and understanding of individual differences in students' abilities, which was rated at a very high level ( $\bar{X} = 4.62$ ,  $S. D. = 0.54$ ). The lowest mean score was for instructors' ability to explain techniques and performance methods for Western string instruments and to inspire students appropriately, which was rated at a high level ( $\bar{X} = 4.03$ ,  $S. D. = 0.82$ ).

**Table 3**

*Mean and Standard Deviation of Students' Opinions on the Teaching and Learning Conditions of Western String Instruments in Rajabhat Universities in Northeastern Thailand (Instructional Media and Equipment)*

| Teaching and Learning Conditions of Western String Instruments               | Level of Teaching and Learning Conditions and Practices |       |       |
|------------------------------------------------------------------------------|---------------------------------------------------------|-------|-------|
|                                                                              | $\bar{X}$                                               | S. D. | Level |
| <b>Instructional media and learning support</b>                              |                                                         |       |       |
| The department has sufficient musical instruments for teaching and learning. | 2.09                                                    | 0.69  | Low   |
| The musical instruments are in good and usable condition.                    | 2.04                                                    | 0.69  | Low   |
| Appropriate instructional documents or teaching materials are available.     | 4.25                                                    | 0.58  | High  |
|                                                                              | 2.04                                                    | 0.69  | Low   |
|                                                                              | 2.81                                                    | 0.97  |       |

| Teaching and Learning Conditions of Western String Instruments                                                                                                       | Level of Teaching and Learning Conditions and Practices |             |                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|-------------|-----------------|
|                                                                                                                                                                      | $\bar{X}$                                               | S. D.       | Level           |
| Classrooms and practice rooms are suitable for teaching and learning.<br>Instructional media and technologies used to support teaching and learning are appropriate. |                                                         |             | Moderate        |
| <b>Overall</b>                                                                                                                                                       | <b>2.64</b>                                             | <b>0.72</b> | <b>Moderate</b> |

As shown in Table 3, students' opinions regarding the teaching and learning conditions of Western string instruments in Rajabhat Universities in Northeastern Thailand, particularly in terms of instructional media and equipment, were overall at a moderate level ( $\bar{X} = 2.64$ ,  $S.D. = 0.72$ ). When considered by item, the highest mean score was for the appropriateness of instructional media and technologies used to support teaching and learning ( $\bar{X} = 2.81$ ,  $S.D. = 0.97$ ), while the lowest mean score was for the condition of musical instruments being in good and usable condition ( $\bar{X} = 2.04$ ,  $S.D. = 0.69$ ).

**Table 4**

*Mean and Standard Deviation of Students' Opinions on the Teaching and Learning Conditions of Western String Instruments in Rajabhat Universities in Northeastern Thailand (Students' Basic Knowledge)*

| Teaching and Learning Conditions of Western String Instruments                                      | Level of Teaching and Learning Conditions and Practices |             |             |
|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------|-------------|-------------|
|                                                                                                     | $\bar{X}$                                               | S. D.       | Level       |
| <b>Students' basic knowledge</b>                                                                    |                                                         |             |             |
| Students have basic knowledge and understanding of Western string instruments.                      | 3.45                                                    | 0.57        | High        |
| Students can practice Western string instruments effectively.                                       | 4.01                                                    | 0.75        | High        |
| Students can apply and solve problems based on acquired knowledge appropriately in real situations. | 4.03                                                    | 0.74        | High        |
| Students have confidence and can perform musical pieces effectively in front of audiences.          | 4.21                                                    | 0.98        | High        |
| <b>Overall</b>                                                                                      | <b>3.93</b>                                             | <b>0.76</b> | <b>High</b> |

As shown in Table 4, students' opinions regarding the teaching and learning conditions of Western string instruments in Rajabhat Universities in Northeastern Thailand, particularly in terms of students' foundational knowledge, were overall at a high level across all aspects ( $\bar{X} = 3.93$ ,  $S.D. = 0.76$ ). When examined item by item, the highest mean score was for students' confidence and ability to perform musical pieces effectively in front of an

audience ( $\bar{X} = 4.21$ ,  $S.D. = 0.98$ ), while the lowest mean score was for students' basic knowledge and understanding of Western string instruments ( $\bar{X} = 3.45$ ,  $S.D. = 0.57$ ).

The qualitative findings derived from interviews with instructors and administrators concerning the instructional management context were analyzed to examine the teaching and learning conditions of Western string instruments in the Music Education programs of Rajabhat Universities in the Northeastern region of Thailand. The analysis focused on three main aspects: instructors, instructional media and learning support, and students' basic knowledge.

### **Instructor Dimension**

The interview results revealed that each program had one instructor responsible for teaching string instruments, totaling four instructors. Only one instructor held a doctoral degree, while the remaining three held master's degrees. All instructors possessed academic qualifications relevant to the courses they taught. Each instructor demonstrated distinct strengths and expertise in performing specific string instruments. However, instructors were required to teach multiple instruments, including the violin, viola, cello, and double bass. Effective instruction of these instruments requires a high level of practical proficiency; nevertheless, not all instructors were able to perform all instruments proficiently. This limitation resulted in challenges related to instructional effectiveness and the organization of Western string ensembles.

In addition, instructors faced multidimensional workload responsibilities. Some instructors were assigned to teach other courses, such as ensemble performance, music ensemble management, basic musical instrument maintenance, and music technology or computer music courses. These responsibilities led to time constraints and a lack of instructional continuity, which negatively affected the overall effectiveness of teaching and learning.

### **Instructional Media and Learning Support Dimension**

The interview findings indicated that some programs were adequately equipped with instructional media and learning support resources, including classrooms, musical instruments, teaching materials, computers, projectors, and various facilities. However, other programs experienced shortages of instructional resources, particularly specialized classrooms for string instruction and an insufficient number of instruments relative to the number of students. Both instructors and students across all programs expressed a strong need for additional practice rooms. Since string instruments produce relatively soft sounds, practicing alongside other instruments or unrelated musical activities causes auditory interference, reducing concentration and practice effectiveness. These issues constitute significant obstacles that should be addressed in order to enhance the quality of Western string instruction.

### **Students' Basic Knowledge Dimension**

The interview results showed that most students enrolled in Western string instrument courses in universities in the Northeastern region had little or no prior experience in string performance and possessed diverse musical backgrounds. Although the use of internationally standardized practice methods helps establish systematic technical foundations, such methods are insufficient to accommodate individual differences within this learning context. This limitation is particularly evident among students with weak foundational skills and difficulties in pitch perception, which hinder sound quality development and performance accuracy. Therefore, instructors need to adapt teaching



methods and develop customized practice materials that align with individual learner differences, enabling students to develop according to their own potential. Moreover, integrating Isan folk music into instructional practices was identified as an appropriate approach, as it enhances familiarity, motivation, and comprehension among students. This integration also supports the preservation and transmission of local cultural identity while effectively developing Western string performance skills.

### **Curriculum Dimension**

Based on the interviews, it was found that Rajabhat Universities in Northeastern Thailand offer instruction in Western string instruments through several academic programs. Under the Faculty of Humanities and Social Sciences, three programs are offered: 1) Bachelor of Fine and Applied Arts Program in Music, 2) Bachelor of Education Program in Music Education (4-year program), Surindra Rajabhat University, and 3) Bachelor of Music Program in Music Performance, Buriram Rajabhat University.

Under the Faculty of Education, two programs are offered: 1) Bachelor of Education Program in Music Education (5-year program), Buriram Rajabhat University, and 2) Bachelor of Education Program in Music Education (4-year program), Udon Thani Rajabhat University.

In addition, one program is jointly administered by the Faculty of Education and the Faculty of Humanities and Social Sciences: the Bachelor of Education Program in Music Education (4-year program) at Nakhon Ratchasima Rajabhat University.

Across all five universities, the philosophy, significance, and objectives of the programs are aligned in the same direction: to produce graduates who possess comprehensive knowledge of music theory and practical performance skills, demonstrate creativity, appropriately apply music technology, uphold moral and ethical values, maintain a volunteer spirit, and show dedication to professional development. Graduates are expected to adhere to professional standards and ethics in their work and to be capable of accurately and systematically transferring knowledge to society.

The required credit structure is clearly defined. Course titles have been updated to ensure relevance and modernity in accordance with each program's context and current labor market demands. Examples of course titles in Western music (string performance) include Western String Skills, Western String Performance Skills, and String Instrument Practice.

Regarding course descriptions, instruction emphasizes the development of both practical and theoretical skills. This includes knowledge of instrument components, proper handling techniques, maintenance and storage, and appropriate playing posture. Students practice scales and arpeggios to enhance technical fluency, develop tone quality, express musical emotions, and create tonal color in performance. They study etudes, technical exercises, and repertoire from various historical periods to strengthen interpretative skills. Performance training before an audience is incorporated, along with effective instrumental teaching techniques and pedagogical processes.

As a result, students are not only able to perform accurately but are also capable of conveying emotion, meaning, and musical aesthetics effectively, while developing communication skills and the ability to appropriately transmit knowledge to others.

## **Summary and Discussion of Findings**

### **Instructor Dimension**

The findings indicated that students' overall opinions regarding Western string instrument instructors in Rajabhat Universities in the Northeastern region were at a high level ( $\bar{X} = 4.37$ ,  $S.D. = 0.59$ ). The item with the highest mean score was that instructors were attentive to and understood individual differences in students' abilities, which was rated at

the highest level ( $\bar{X} = 4.62, S.D. = 0.54$ ). In contrast, the item with the lowest mean score concerned instructors' ability to explain techniques and practical approaches to Western string performance and to inspire students appropriately ( $\bar{X} = 4.03, S.D. = 0.82$ ).

When these results were analyzed in conjunction with the interview data, it was found that the number of instructors was insufficient in relation to the number of students, although the instructors possessed academic qualifications relevant to the subjects they taught. This finding is consistent with Pongpan Sirisawat (2013), who noted that music instructors should hold appropriate music-related qualifications and that students prefer teachers with direct knowledge and expertise in music. However, instructors' areas of specialization did not cover all string instruments, resulting in limitations in delivering in-depth instruction, particularly in ensemble performance. Moreover, instructors' heavy and diverse workloads adversely affected the quality and continuity of teaching and learning. Therefore, it is recommended that an adequate number of instructors be allocated to meet students' needs and that rehearsal and teaching schedules be systematically managed, clearly organized, and non-overlapping in order to enhance teaching and learning effectiveness.

### **Instructional Media and Learning Support Dimension**

Overall, students' opinions regarding learning materials and support facilities were at a moderate level ( $\bar{X} = 2.64, S.D. = 0.72$ ). When considered by individual items, the highest mean score was for the appropriateness of instructional media and technology used to support teaching and learning ( $\bar{X} = 2.81, S.D. = 0.97$ ), whereas the lowest mean score was for the condition and readiness of musical instruments for use ( $\bar{X} = 2.04, S.D. = 0.69$ ).

The interview findings revealed that all programs lacked sufficient basic learning materials and support facilities, particularly practice rooms specifically designed for string instruments. This was identified as a significant obstacle because string instruments produce relatively soft sounds; practicing alongside other instruments can cause interference and reduce practice quality. These findings are consistent with Suraphon Namsena et al. (2017), who stated that music instruction differs greatly from teaching in other disciplines and therefore requires specialized facilities. Music students require quiet environments, whereas instrumental practice can generate sounds that disturb others. Consequently, standardized string practice rooms with appropriate soundproofing, adequate space, complete equipment, and a learning-conducive atmosphere should be developed to improve instructional quality and enhance students' motivation.

### **Students' Knowledge Dimension**

Overall, students' knowledge was found to be at a high level across all aspects ( $\bar{X} = 3.93, S.D. = 0.76$ ). The item with the highest mean score was students' confidence in performing musical pieces effectively in public ( $\bar{X} = 4.21, S.D. = 0.98$ ), while the item with the lowest mean score concerned students' basic knowledge and understanding of Western string instruments ( $\bar{X} = 3.45, S.D. = 0.57$ ).

Analysis of the interview data indicated that most students had no prior background in string instrument performance and possessed diverse musical experiences. Although the use of internationally recognized instructional methods—such as *Essential Elements*, the *Suzuki Method*, and *Daily Warm-Up for String Orchestra*—provides a systematic foundation for skill development, these methods alone are insufficient to address learner diversity within the Northeastern context. In particular, students without prior experience and those with difficulties in pitch perception face significant obstacles to developing sound quality and technical accuracy. Given these individual differences, instructors need to adapt teaching approaches and practice materials to better accommodate diverse learners, enabling students to develop according to their potential.

In this regard, integrating Isan folk music into instruction is considered an appropriate approach, as it enhances familiarity, understanding, and motivation among students. This approach aligns with the findings of Anchalee Siriwongsuwan et al. (2019), who studied the management of Western string instrument instruction among students in a special program at Sarasas Witaed Bangbon School and found that motivating learners—such as through scholarships for high-achieving students—encouraged learning opportunities, exposure to new experiences, and inspiration. Furthermore, linking instructional content to students' cultural foundations not only facilitates smoother learning but also helps preserve and transmit cultural identity alongside the effective development of string performance skills. This conclusion is consistent with Atitaya Thaneerat et al. (2016), who noted that learning folk music does not cause students to perceive it as outdated; rather, it fosters an appreciation of its beauty while promoting the preservation and continuation of folk musical traditions with pride.

### **Curriculum Dimension**

The philosophy, significance, and objectives of the curriculum are aligned in the same direction: to produce graduates who possess comprehensive knowledge of music theory and strong practical performance skills, demonstrate creativity, and appropriately apply music technology. Graduates are expected to uphold moral and ethical values, demonstrate a volunteer spirit, and show dedication and commitment to continuous professional development. They are required to adhere to professional standards and codes of ethics in their practice and to be capable of systematically and accurately transferring knowledge to society.

The required credit structure is clearly defined. Course titles and course descriptions are regularly revised to ensure modern relevance and alignment with the specific context of each program, as well as with current labor market demands.

Regarding course descriptions, instruction emphasizes the development of both practical and theoretical skills. This includes knowledge of instrument components, correct handling techniques, proper care and maintenance, and appropriate playing posture. Students practice scales and arpeggios to enhance technical fluency, develop tone quality, express musical emotion, and create tonal color in performance. They study etudes, technical exercises, and repertoire from various historical periods to strengthen interpretative skills. Performance training before an audience is incorporated, along with learning effective instrumental teaching techniques and pedagogical processes.

As a result, students are not only able to perform accurately but are also capable of conveying emotion, meaning, and musical aesthetics effectively, while developing communication skills and the ability to appropriately transmit knowledge to others.

### **Recommendations**

Based on the findings of this study, the researcher proposes the following recommendations:

A needs assessment should be conducted to identify professional development requirements for instructors of Western string instruments. Such initiatives may include training programs, learning new instructional techniques, academic exchanges, or inviting instructors from other music institutions to serve as guest lecturers. These efforts would enhance instructors' teaching competencies and ensure that students receive instruction that effectively meets their learning needs.

Further research should be conducted on the development of Western string instrument skill-training programs, either focusing on individual instruments or ensemble performance, through the integration of local folk music. Comparative studies should be



undertaken to examine students' learning achievement between conventional international training methods and skill-training programs that incorporate locally contextualized folk music.

## References

- Kanithap Pitubhuminak. (2020). The state of music education management at the higher education level in northern Thailand. *Journal of Educational Studies, Chiang Mai University*. 4(3) : 106-118.
- Narut Sutthachit. (1998). *Psychology of Music Teaching*. Chulalongkorn University Press. (13).
- Narut Sutthachit. (2023). *Music Education: Principles and Key Contents*. Chulalongkorn University Press. (11) : 267-274
- Pongphan Sirisawat. (2013). A study of the music education needs of students in private music schools in Suan Luang District, Bangkok. (Master of Arts Thesis in Music, Rajabhat Ban Somdej Chaophraya University).
- Suraphon Namasena, Supanee Lueaboonchu, Akanit Klangsaeng. (2017). Music teaching management in educational institutions under the Office of the Vocational Education Commission. *Rajaprak Journal*. 15(1) : 65-72
- Anchalee Siri Wong Suwan, Pimolmas Phromsukakul, Chalinee Suriyanple, and Nattika Sunthonthanaphol. (2019). A study of teaching management of the subject of Western string instrument practice, a case study of students in the special project of Sarasas Witead Bangbon School. *Silpa Parithat Journal*. 7(1) : 51-59
- Atittaya Thanirat, Manas Wattanachaiyot, Banjong Cholwiroj. (2016). Development of teaching documents for the subject of Western string instrument practice 1 (violin) by applying local wisdom, retro folk dance songs, at the university level, Kamphaeng Phet Rajabhat University. *Sakthong Journal*. 22(3) : 1-11

## Current State of Creative Leadership among Student Cadres at Chongqing Municipal Universities, People's Republic of China

Chen Weiqi<sup>1</sup> Somsak Jeewattana<sup>2</sup> and Pittaya Pantachai<sup>3</sup>

<sup>1</sup> Ph.D. (Candidate), Educational Administration, Buriram Rajabhat University, Thailand,  
E-mail: 660427090012@bru.ac.th

<sup>2</sup> Major Advisor, Assistant Professor Dr., Buriram Rajabhat University, Thailand  
E-mail: somsak.je@bru.ac.th

<sup>3</sup> Co-advisor, Assistant Professor Dr., Buriram Rajabhat University, Thailand  
E-mail: pittaya.pa@bru.ac.th

asterisk denoting the corresponding author

### Abstract

This study adopted a questionnaire survey method to analyze the current state of creative leadership among student cadres at Chongqing Municipal Universities, People's Republic of China. The sample consisted of 265 student council members at the university level from 19 municipal universities in Chongqing. The research instrument was a 5-point Likert scale questionnaire with a reliability value of 0.982. Statistical analysis included percentages, means, and standard deviations. The results indicated that student cadres demonstrated a relatively high overall level of creative leadership. Specifically, collaboration skills ranked the highest in terms of mean score, followed by decision-making and execution capacity, then motivational encouragement abilities, with creative aptitude having the lowest mean score. These results provide a practical basis for constructing a training guide for the creative leadership of university student cadres.

**Keywords:** Creative leadership; Current state; Student cadres

### Introduction

The State Council's Notice on the Overall Plan for the Coordinated Advancement of World-Class Universities and First-Class Disciplines emphasizes the cultivation of high-caliber innovative talents. It advocates fostering moral character and cultivating people as the fundamental task, prioritizing talent development as the core mission, and focusing on nurturing diverse types of high-caliber talents—including innovative, applied, and interdisciplinary talents—who possess a sense of historical mission and social responsibility, as well as an innovative spirit and practical capabilities. Greater efforts will be made to strengthen innovation and entrepreneurship education, vigorously promote personalized development, and comprehensively enhance students' overall quality, international perspective, scientific spirit, entrepreneurial awareness, and creativity (State Council of the People's Republic of China, 2015). The Medium and Long-Term Youth Development Plan (2016–2025) states: Young people are encouraged to give full play to their role as a new force and shock troops in economic and social development. In response to the needs of the national overarching development strategy, we will deepen various initiatives to contribute to national development, inspiring young people in all walks of life to actively innovate, expand their fields of work and development space, and thus create new drivers for development (Central People's Government of the People's Republic of China & State Council of the People's Republic of China, 2017). The nation places great expectations on university students, hoping that the new generation of undergraduates will contribute their wisdom and strength to national construction with advanced thinking, solid capabilities,

innovative thinking, and tenacious will and in aspects including ideological awareness, academic disciplines, and innovation and entrepreneurship (Yang, 2020).

As educational reforms continue to deepen, emphasizing the cultivation of students' innovative capabilities and comprehensive qualities has become the prevailing trend. Traditional methods of developing student cadres' leadership may struggle to meet the demands of a dynamic campus environment. For instance, in some universities, student cadres lack creative leadership when organizing activities, resulting in monotonous formats and low participation rates. In contrast, in universities where innovative practices have achieved positive outcomes, their student cadres, as part of society, demonstrate creative leadership that extends beyond the campus to various social sectors. By participating in social practice and voluntary service initiatives, student cadres can apply their acquired knowledge and skills in practical settings. Some even adapt better to societal demands after graduation, exhibit strong creative leadership in their careers to tackle social challenges and promote societal progress (Yang, 2020).

Creative leadership represents one of the key requirements for leaders in modern society, enabling them to swiftly adapt to complex and dynamic environments, foster innovation and change, and drive teams and organizations forward. As a pivotal city in China's central and western regions, Chongqing's rapid economic growth and continuous optimization and upgrading of the industrial structure demand a substantial pool of talent possessing both innovative capabilities and leadership aptitude (Lu, 2022). Consequently, examining creative leadership among student cadres in Chongqing's universities not only enhances their core competitiveness but also significantly influences their future professional trajectories and life paths.

## Objective

To explore the current state of creative leadership among student cadres at Chongqing Municipal Universities, People's Republic of China.

## Research Methodology

### Population and Sample

The research subjects comprised university-level student council members from 19 municipal universities in Chongqing, People's Republic of China, with a total of 841 individuals. Based on Krejcie and Morgan's table (Krejcie & Morgan, 1970), a sample size of 265 was finally determined through proportional random sampling.

### Research Instruments

This research employed a five-level rating scale questionnaire for data collection, which consists of two sections. Section One: Respondent Demographics; Section Two: Study on the Current State of Creative Leadership Among Student Cadres at Chongqing Municipal Universities, People's Republic of China. To assess the questionnaire's content validity and overall reliability, the index of Item Objective Congruence (IOC) (Rovinelli & Hambleton, 1997) and a pre-test (small sample, N=30) were used—with the IOC evaluating content validity and the pre-test testing the Cronbach's alpha coefficient (a measure of internal consistency reliability) (Cronbach, 1951). Results showed that the Cronbach's alpha coefficient was 0.982, and the IOC met the standard for good content validity, confirming the questionnaire's reliability and validity.



### Data Analysis

Descriptive statistics were conducted using SPSS 26.0, including overall and dimensional mean scores and standard deviations. Data are presented in tabular form, with interpretations of mean scores as follows:

- 4.51–5.00 denotes the highest level of practice
- 3.51–4.50 denotes a very high level of practice
- 2.51–3.50 denotes an average level of practice
- 1.51–2.50 denotes a low level of practice
- 1.00–1.50 denotes the lowest level of practice

### Results

First-level Indicators of Creative Leadership Among Student Cadres at Chongqing Municipal Universities, People's Republic of China

**Table 1**

*Mean and standard deviations of creative leadership components among student cadres at Chongqing Municipal Universities, People's Republic of China*

| Components of Creative Leadership           | $\bar{x}$   | S.D.       | Interpretation |
|---------------------------------------------|-------------|------------|----------------|
| 1. Collaborative Capability                 | 4.20        | .70        | high           |
| 1.1 Member Interaction                      | 4.15        | .71        | high           |
| 1.2 Information Sharing                     | 4.22        | .67        | high           |
| 1.3 Member Diversity                        | 4.23        | .73        | high           |
| 2. Creative Capability                      | 4.12        | .68        | high           |
| 2.1 Creativity                              | 4.25        | .63        | high           |
| 2.2 Creative Process                        | 4.05        | .71        | high           |
| 2.3 Shared Vision                           | 4.05        | .70        | high           |
| 3. Decision-making and Execution Capability | 4.19        | .71        | high           |
| 3.1 Empowerment and Trust                   | 4.21        | .72        | high           |
| 3.2 Creative Transformation                 | 4.21        | .68        | high           |
| 3.3 Resource and Action Coordination        | 4.15        | .73        | high           |
| 4. Motivational and Encouraging Capability  | 4.14        | .72        | high           |
| 4.1 Stimulating Intrinsic Motivation        | 4.19        | .72        | high           |
| 4.2 Cultivating an Enabling Environment     | 4.15        | .71        | high           |
| 4.3 Providing Support and Recognition       | 4.09        | .72        | high           |
| <b>Total</b>                                | <b>4.16</b> | <b>.70</b> | <b>high</b>    |

According to Table 1, all four first-level indicators of the components of creative leadership among student cadres at Chongqing municipal universities, People's Republic of China, demonstrate relatively high levels. Among these first-level indicators, Collaborative Capability ( $\bar{x}=4.20$ ) demonstrates the highest level of practice, followed by Decision-Making and Execution Capability ( $\bar{x}=4.19$ ), then Motivational and Encouraging Capability ( $\bar{x}=4.14$ ), with Creative Capability ( $\bar{x}=4.12$ ) showing the lowest level of practice. Among the secondary indicators, Creativity ( $\bar{x}=4.25$ ) demonstrates the highest level of practice, while Shared Vision ( $\bar{x}=4.05$ ) shows the lowest level of practice.

## 2. Member Interaction

**Table 2**

*Components of creative leadership among student cadres at Chongqing Municipal Universities–Secondary Indicator “Member Interaction”: Content and Item-Level Mean Values & Standard Deviations*

| Member Interaction                                                                                                                                                                                          | $\bar{x}$ | S.D. | Interpretation | Ranking |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 1. During the preparatory phase, student cadres clarify objectives and assign responsibilities.                                                                                                             | 4.10      | .72  | high           | 4       |
| 2. Throughout event execution, student cadres and team members collaborate closely to resolve issues promptly.                                                                                              | 4.08      | .73  | high           | 5       |
| 3. In routine operations, student cadres establish regular communication mechanisms with team members to ensure the timely and accurate dissemination of information and the prompt resolution of problems. | 4.13      | .74  | high           | 2       |
| 4. Student cadres organize diverse team-building activities to enhance cohesion and mutual understanding among members.                                                                                     | 4.33      | .61  | high           | 1       |
| 5. Following events, student cadres convene team members for debriefing and reflection sessions.                                                                                                            | 4.12      | .73  | high           | 3       |

According to Table 2, all items under the secondary indicator “Member Interaction” (a component of creative leadership among student cadres at Chongqing Municipal Universities, PRC) demonstrate relatively high levels of practice. The highest level of practice is observed for Item 4 ( $\bar{x}=4.33$ ), while the lowest is for Item 2 ( $\bar{x}=4.08$ ).

## 3. Information Sharing

**Table 3**

*Components of creative leadership among student cadres at Chongqing Municipal Universities–Secondary Indicator “Information Sharing”: Content and Item-Level Mean Values & Standard Deviations*

| Information Sharing                                                                                                                                  | $\bar{x}$ | S.D. | Interpretation | Ranking |
|------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 6. Student cadres proactively establish diverse information-sharing platforms to meet the information communication needs across different contexts. | 4.22      | .67  | high           | 3       |
| 7. To ensure the accuracy and efficiency of information transmission, student cadres formulate norms and procedures for information sharing.         | 4.18      | .67  | high           | 4       |
| 8. Student cadres encourage team members to conduct in-depth information exchange,                                                                   | 4.32      | .61  | high           | 1       |

| Information Sharing                                                                                                                                                                                 | $\bar{x}$ | S.D. | Interpretation | Ranking |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| including the sharing of experiences, ideas, and creative concepts.                                                                                                                                 |           |      |                |         |
| 9. Student cadres integrate internal information resources of the student union, systematize fragmented information, and provide strong support for various operations.                             | 4.23      | .68  | high           | 2       |
| 10. When conducting external information exchange, student cadres proactively establish connections with other student organizations, university functional departments, and external institutions. | 4.15      | .74  | high           | 5       |

According to Table 3, all items under the secondary indicator “Information Sharing” (a component of creative leadership among student cadres at Chongqing Municipal Universities, PRC) demonstrate relatively high levels of practice. The highest level of practice is observed for Item 8 ( $\bar{x}=4.32$ ), while the lowest is for Item 10 ( $\bar{x}=4.15$ ).

#### 4. Member Diversity

**Table 4**

*Components of creative leadership among student cadres at Chongqing Municipal Universities–Secondary Indicator “Member Diversity”: Content and Item-Level Mean Values & Standard Deviations*

| Member Diversity                                                                                                                                                              | $\bar{x}$ | S.D. | Interpretation | Ranking |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 11. When selecting members and forming teams, student cadres fully consider diversity factors.                                                                                | 4.29      | .73  | high           | 1       |
| 12. Following team formation, student cadres gain a thorough understanding of each member's strengths and specialties to ensure rational division of labor and collaboration. | 4.23      | .74  | high           | 3       |
| 13. Based on the differences in team members' ways of thinking, student cadres establish communication platforms to promote the collision of ideas among members.             | 4.24      | .77  | high           | 2       |
| 14. Disagreements and conflicts are likely to arise in the cooperation of diverse members, and student cadres need to guide members to understand differences.                | 4.20      | .73  | high           | 5       |
| 15. To better leverage the advantages of member diversity, student cadres encourage mutual learning among team members.                                                       | 4.21      | .70  | high           | 4       |

According to Table 4, all items under the secondary indicator “Member Diversity” (a component of creative leadership among student cadres at Chongqing Municipal Universities, PRC) demonstrate relatively high levels of practice. The highest level of practice is observed for Item 11 ( $\bar{x}=4.29$ ), while the lowest is for Item 14 ( $\bar{x}=4.20$ ).



## 5. Creativity

**Table 5**

*Components of creative leadership among student cadres at Chongqing Municipal Universities–Secondary Indicator “Creativity”: Content and Item-Level Mean Values & Standard Deviation*

| Creativity                                                                                                                                                          | $\bar{x}$ | S.D. | Interpretation | Ranking |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 16. Student cadres constantly pay attention to campus dynamics and keenly perceive changes in fellow students' needs.                                               | 4.24      | .61  | high           | 4       |
| 17. Student cadres break conventions, transcend traditional thinking, and explore new and innovative approaches to organizing and conducting campus activities.     | 4.22      | .69  | high           | 5       |
| 18. Student cadres proactively exert creativity to integrate various resources and address constraints such as limited funding for student activities.              | 4.26      | .60  | high           | 2       |
| 19. Student cadres draw inspiration from multiple fields to enrich the formats and content of activities, thereby enhancing students' enthusiasm for participation. | 4.30      | .64  | high           | 1       |
| 20. Student cadres foster an innovative atmosphere and encourage team members to propose unique ideas.                                                              | 4.25      | .61  | high           | 3       |

According to Table 5, all items under the secondary indicator “Creativity” (a component of creative leadership among student cadres at Chongqing Municipal Universities, PRC) demonstrate relatively high levels of practice. The highest level of practice is observed for Item 19 ( $\bar{x}$ =4.30), while the lowest is for Item 17 ( $\bar{x}$ =4.22).

## 6. Creative Process

**Table 6**

*Components of creative leadership among student cadres at Chongqing municipal universities–Secondary Indicator “Creative Process”: Content and Item-Level Mean Values & Standard Deviations*

| Creative Process                                                                                                                                       | $\bar{x}$ | S.D. | Interpretation | Ranking |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 21. Student cadres maintain close contact with their peers, enabling them to keenly detect problems existing in student affairs and campus activities. | 3.97      | .74  | high           | 6       |
| 22. Upon identifying problems, student cadres proactively conduct information collection and acquire key information through multiple channels.        | 4.02      | .70  | high           | 4       |

| Creative Process                                                                                                                                                                            | $\bar{x}$ | S.D. | Interpretation | Ranking |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 23. After gathering sufficient information, student cadres integrate it to form preliminary ideas.                                                                                          | 4.03      | .69  | high           | 3       |
| 24. Following the formation of preliminary ideas, student cadres further exert their creativity to generate innovative thoughts and concepts.                                               | 4.00      | .73  | high           | 5       |
| 25. Student cadres conduct comprehensive evaluations, integration, and optimization of the generated creative concepts, rigorously screening and refining the most feasible proposals.      | 4.25      | .74  | high           | 1       |
| 26. When entering the implementation phase, student cadres proactively coordinate resources from all parties to promote the successful landing and execution of these creative initiatives. | 4.06      | .65  | high           | 2       |

According to Table 6, all items under the secondary indicator “Creative Process” (a component of creative leadership among student cadres at Chongqing Municipal Universities, PRC) demonstrate relatively high levels of practice. The highest level of practice is observed for Item 25 ( $\bar{x}$ =4.25), while the lowest is for Item 21 ( $\bar{x}$ =3.97).

## 7. Shared Vision

**Table 7**

*Components of creative leadership among student cadres at Chongqing Municipal Universities–Secondary Indicator “Shared Vision”: Content and Item-Level Mean Values & Standard Deviations*

| Shared Vision                                                                                                                                        | $\bar{x}$ | S.D. | Interpretation | Ranking |
|------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 27. Student cadres are committed to strengthening campus culture construction and forging a distinctive campus spirit.                               | 4.28      | .62  | high           | 1       |
| 28. Student cadres foster a strong academic atmosphere to enhance the university's overall academic standards.                                       | 4.00      | .73  | high           | 4       |
| 29. Student cadres construct a sound campus democratic governance system to fully safeguard students' rights and interests.                          | 4.03      | .64  | high           | 2       |
| 30. Student cadres focus on students' campus life experience, promote the optimization of campus facilities, and improve the quality of campus life. | 3.97      | .74  | high           | 6       |
| 31. Student cadres attach importance to the development of interpersonal relationships on campus and create a harmonious and warm campus community.  | 4.01      | .70  | high           | 3       |

| Shared Vision                                                                                                                                      | $\bar{x}$ | S.D. | Interpretation | Ranking |
|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 32. Student cadres actively seek opportunities for inter-university exchange and cooperation to enhance the university's visibility and influence. | 3.98      | .74  | high           | 5       |

According to Table 7, all items under the secondary indicator “Shared Vision” (a component of creative leadership among student cadres at Chongqing Municipal Universities, PRC) demonstrate relatively high levels of practice. The highest level of practice is observed for Item 27 ( $\bar{x}$ =4.28), while the lowest is for Item 30 ( $\bar{x}$ =3.97).

## 8. Empowerment and Trust

**Table 8**

*Components of creative leadership among student cadres at Chongqing Municipal Universities—Secondary Indicator “Empowerment and Trust”: Content and Item-Level Mean Values & Standard Deviations*

| Empowerment and Trust                                                                                                                                            | $\bar{x}$ | S.D. | Interpretation | Ranking |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 33. Student cadres clarify the responsibilities of team members according to the overall objectives and tasks of the activity, granting them scope for autonomy. | 4.26      | .68  | high           | 1       |
| 34. Student cadres trust that team members possess the capabilities to fulfil their duties and demonstrate full confidence in them during work.                  | 4.21      | .72  | high           | 4       |
| 35. To enable team members to better perform their responsibilities, student cadres proactively provide the necessary resources.                                 | 4.21      | .73  | high           | 3       |
| 36. Student cadres focus on fostering a relaxed and open working environment, encouraging team members to propose novel ideas and creative concepts.             | 4.19      | .70  | high           | 5       |
| 37. During the process of team members' work, student cadres closely monitor progress and promptly provide feedback and guidance.                                | 4.18      | .74  | high           | 6       |
| 38. Student cadres promptly recognize and commend team members' work achievements, ensuring that team members feel their efforts are affirmed.                   | 4.22      | .72  | high           | 2       |

According to Table 8, all items under the secondary indicator “Empowerment and Trust” (a component of creative leadership among student cadres at Chongqing Municipal Universities, PRC) demonstrate relatively high levels of practice. The highest level of practice is observed for Item 33 ( $\bar{x}$ =4.26), while the lowest is for Item 37 ( $\bar{x}$ =4.18).



## 9. Creative Transformation

**Table 9**

*Components of creative leadership among student cadres at Chongqing Municipal Universities–Secondary Indicator “Creative Transformation”: Content and Item-Level Mean Values & Standard Deviations*

| Creative Transformation                                                                                                                                     | $\bar{x}$ | S.D. | Interpretation | Ranking |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 39. Student cadres maintain keen observation in daily campus life and capture creative inspiration through multiple channels.                               | 4.22      | .62  | high           | 2       |
| 40. When faced with numerous creative ideas, student cadres organize team members to conduct in-depth discussions and evaluations.                          | 4.20      | .66  | high           | 4       |
| 41. After identifying viable creative concepts, student cadres proceed to formulate detailed transformation plans and outline clear action steps.           | 4.28      | .71  | high           | 1       |
| 42. Student cadres proactively integrate resources from all parties to ensure the smooth implementation of the transformation.                              | 4.19      | .69  | high           | 5       |
| 43. During the creative execution process, student cadres play organizational and coordinating roles, leading the team to overcome various challenges.      | 4.18      | .69  | high           | 6       |
| 44. Upon completion of the creative transformation, student cadres conduct comprehensive evaluations of the outcomes to provide references for future work. | 4.22      | .69  | high           | 3       |

According to Table 9, all items under the secondary indicator “Creative Transformation” (a component of creative leadership among student cadres at Chongqing Municipal Universities, PRC) demonstrate relatively high levels of practice. The highest level of practice is observed for Item 41 ( $\bar{x}=4.28$ ), while the lowest is for Item 43 ( $\bar{x}=4.18$ ).

## 10. Resource and Action Coordination

**Table 10**

*Components of creative leadership among student cadres at Chongqing Municipal Universities–Secondary Indicator “Resource and Action Coordination”: Content and Item-Level Mean Values & Standard Deviations*

| Resource and Action Coordination                                                                                                                                                                                                        | $\bar{x}$ | S.D. | Interpretation | Ranking |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 45. Student cadres clarify the objectives of activities and meticulously plan the required resources based on these goals.                                                                                                              | 4.18      | .72  | high           | 2       |
| 46. Student cadres rationally allocate human resources according to the specialties and strengths of team members.                                                                                                                      | 4.14      | .74  | high           | 3       |
| 47. Taking into account team members' schedules to avoid task conflicts, student cadres ensure that each individual can maximize their value in the appropriate position.                                                               | 4.09      | .73  | high           | 6       |
| 48. To ensure the smooth implementation of activities, student cadres proactively integrate resources from all parties.                                                                                                                 | 4.23      | .74  | high           | 1       |
| 49. Student cadres raise financial resources through multiple channels. After obtaining the funds, they rigorously manage financial expenditures by formulating detailed budget plans that clearly specify the purpose of each expense. | 4.11      | .75  | high           | 5       |
| 50. According to the timeline of activities, student cadres adjust the work progress and provide supervision and guidance for tasks with slow progress.                                                                                 | 4.12      | .70  | high           | 4       |

According to Table 10, all items under the secondary indicator “Resource and Action Coordination” (a component of creative leadership among student cadres at Chongqing Municipal Universities, PRC) demonstrate relatively high levels of practice. The highest level of practice is observed for Item 48 ( $\bar{x}=4.23$ ), while the lowest is for Item 47 ( $\bar{x}=4.09$ ).

## 11. Stimulating Intrinsic Motivation

**Table 11**

*Components of creative leadership among student cadres at Chongqing Municipal Universities– Secondary Indicator “Stimulating Intrinsic Motivation”: Content and Item-Level Mean Values & Standard Deviations*

| Stimulating Intrinsic Motivation                                                                                                                                                             | $\bar{x}$ | S.D. | Interpretation | Ranking |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 51. Student cadres clearly articulate the objectives and significance of activity implementation, fostering resonance among team members and stimulating their enthusiasm for participation. | 4.18      | .70  | high           | 3       |
| 52. Student cadres provide growth opportunities for team members to meet their developmental needs.                                                                                          | 4.27      | .72  | high           | 1       |
| 53. Student cadres establish positive feedback mechanisms to enhance team members' sense of achievement.                                                                                     | 4.13      | .75  | high           | 5       |

| Stimulating Intrinsic Motivation                                                                                                | $\bar{x}$ | S.D. | Interpretation | Ranking |
|---------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 54. Student cadres focus on fostering a harmonious and positive team atmosphere to strengthen team members' sense of belonging. | 4.20      | .72  | high           | 2       |
| 55. Student cadres set an example and serve as role models for team members.                                                    | 4.18      | .71  | high           | 4       |

According to Table 11, all items under the secondary indicator “Stimulating Intrinsic Motivation” (a component of creative leadership among student cadres at Chongqing Municipal Universities, PRC) demonstrate relatively high levels of practice. The highest level of practice is observed for Item 52 ( $\bar{x}=4.27$ ), while the lowest is for Item 53 ( $\bar{x}=4.13$ ).

## 12. Cultivating an Enabling Environment

**Table 12**

*Components of creative leadership among student cadres at Chongqing Municipal Universities–Secondary Indicator “Cultivating an Enabling Environment”: Content and Item-Level Mean Values & Standard Deviation*

| Cultivating an Enabling Environment                                                                                                                                   | $\bar{x}$ | S.D. | Interpretation | Ranking |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 56. Student cadres proactively foster an open and inclusive communication atmosphere within the student union.                                                        | 4.14      | .71  | high           | 3       |
| 57. Student cadres stimulate team members' innovative motivation and establish incentive mechanisms that encourage creativity.                                        | 4.13      | .73  | high           | 4       |
| 58. Student cadres provide diverse learning resources for team members to broaden their horizons.                                                                     | 4.14      | .72  | high           | 2       |
| 59. In daily operations, student cadres foster a relaxed and flexible working environment, reducing unnecessary constraints and pressures.                            | 4.30      | .67  | high           | 1       |
| 60. Student cadres construct a team culture based on trust and support, enabling team members to perceive the warmth and strength of the collective.                  | 4.12      | .71  | high           | 5       |
| 61. To afford team members more opportunities for innovative exploration, student cadres strive to establish dedicated spaces and time slots for creative endeavours. | 4.09      | .73  | high           | 6       |

According to Table 12, all items under the secondary indicator “Cultivating an Enabling Environment” (a component of creative leadership among student cadres at Chongqing Municipal Universities, PRC) demonstrate relatively high levels of practice. The highest level of practice is observed for Item 59 ( $\bar{x}=4.30$ ), while the lowest is for Item 61 ( $\bar{x}=4.09$ ).



### 13. Providing Support and Recognition

**Table 13**

*Components of creative leadership among student cadres at Chongqing Municipal Universities–Secondary Indicator “Providing Support and Recognition”: Content and Item-Level Mean Values & Standard Deviations*

| Providing Support and Recognition                                                                                                                                          | $\bar{x}$ | S.D. | Interpretation | Ranking |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 62. To enhance team members’ professional work capabilities, student cadres regularly organise various work skills training programmes.                                    | 4.06      | .74  | high           | 3       |
| 63. Student cadres provide abundant practical opportunities for team members, enabling them to refine their abilities and accumulate experience through hands-on work.     | 4.08      | .73  | high           | 2       |
| 64. Student cadres proactively establish diverse practical platforms to help team members accumulate practical experience and enhance their employability competitiveness. | 4.03      | .75  | high           | 5       |
| 65. Student cadres are adept at identifying the strengths and merits of team members and offering timely encouragement and praise.                                         | 4.05      | .73  | high           | 4       |
| 66. Student cadres hold various commendation events to fully acknowledge and reward team members who have achieved outstanding results.                                    | 4.22      | .67  | high           | 1       |

According to Table 13, all items under the secondary indicator “Providing Support and Recognition” (a component of creative leadership among student cadres at Chongqing Municipal Universities, PRC) demonstrate relatively high levels of practice. The highest level of practice is observed for Item 66 ( $\bar{x}$ =4.22), while the lowest is for Item 64 ( $\bar{x}$ =4.03).

### Discussion and Conclusion

The sample survey results indicated that the mean score of collaborative capability was relatively high, which shows that the respondents regarded collaborative capability as an important component of creative leadership among student cadres at Chongqing Municipal Universities, the People’s Republic of China. This can be attributed to the fact that collaborative capability serves as the fundamental support for coordinating diverse teams, and the implementation of creative leadership in practical work scenarios relies on team collaboration rather than individual arbitrariness. This finding is consistent with the viewpoint of scholar Basadur that effective leaders cannot address all key challenges alone but need substantial support from team members (Basadur, 2004).

The sample survey results indicated that the mean score of creative capability was relatively high, which shows that the respondents regarded creative capability as an important component of creative leadership among student cadres at Chongqing Municipal Universities, the People’s Republic of China. This can be attributed to the fact that creative capability serves as the source of motivation for breaking inherent working patterns, generating innovative solutions, and achieving value upgrading in work. This is consistent with Stoll’s viewpoint that creative capability enables individuals to break free from

conventional thinking, perceive things and ponder problems from unique perspectives, and transform innovative ideas into practical actions (Stoll, 2009).

The sample survey results indicated that the mean score of decision-making and execution capability was relatively high, which shows that the respondents regarded decision-making and execution capability as an important component of creative leadership among student cadres at Chongqing Municipal Universities. This can be attributed to the fact that decision-making and execution capability serves as a crucial bridge connecting innovative ideas with practical outcomes, and more importantly, it plays a key role in building team consensus and driving the achievement of goals in complex work scenarios. This is consistent with the viewpoint of Wei that decision-making and execution capability refers to translating the evaluated and integrated decisions or plans made by leaders into concrete actions of team members in the process of creative leadership, so as to realize organizational goals (Wei, 2012).

The sample survey results indicated that the mean score of motivational and encouraging capability was relatively high, which shows that the respondents regarded motivational and encouraging capability as an important component of creative leadership among student cadres at Chongqing Municipal Universities, the People's Republic of China. This can be attributed to the fact that motivational and encouraging capability is the key to directly mobilizing the enthusiasm of team members, pooling team synergy, and ensuring the continuous advancement of team innovation outcomes. This is consistent with the viewpoint of scholar Reiter-Palmon that leaders must understand the cognitive requirements of subordinates for creative problem-solving, and provide necessary guidance and encouragement throughout such stages as problem identification and structuring, information collection, and generation and evaluation of new ideas (Reiter-Palmon, 2004).

This study took student cadres at Chongqing Municipal Universities, the People's Republic of China as the research objects. By comprehensively evaluating the mean scores of each indicator, it was found that the primary indicators of creative leadership among student cadres at Chongqing Municipal Universities include: 1) collaborative capability, 2) creative capability, 3) decision-making and execution capability, and 4) motivational and encouraging capability. The secondary indicators cover member interaction, information sharing, member diversity, creativity, creative process, shared vision, empowerment and trust, creative transformation, resource and action coordination, stimulating intrinsic motivation, cultivating an enabling environment, providing support and recognition. The study found that these four primary indicators and twelve secondary indicators all demonstrate high operability, and the specific content of indicators at all levels shows significant feasibility.

## Suggestions

It is suggested that a Guidelines for the Development of Creative Leadership of Student Cadres at Chongqing Municipal Universities, People's Republic of China be developed, and multiple functional departments of universities be coordinated to promote the improvement of students' creative leadership.

It is suggested that the cultivation of student cadres' creative leadership be integrated with regional development and social practice to help them strengthen creative leadership in serving local industries.

Organizations such as the Chongqing Students' Federation can be engaged to evaluate the guide's implementation, optimize relevant strategies, and enhance the scientificity and effectiveness of leadership training.

## References

- Basadur, M. (2004). Leading others to think innovatively together: Creative leadership. *The Leadership Quarterly*, 15(1), 103-121.
- Central People's Government of the People's Republic of China & State Council of the People's Republic of China. (2017). *Medium and Long-term Youth Development Plan (2016-2025)*. [https://www.gov.cn/zhengce/2017-04/13/content\\_5185555.htm#1](https://www.gov.cn/zhengce/2017-04/13/content_5185555.htm#1)
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297-334.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607-610.
- Lu, K. P. (2022). Strategic thinking on higher education in central and western China to assist Chinese-style modernization. *Studying Abroad*, 2022(21), 86-95.
- Reiter-Palmon, R., & Illies, J. J. (2004). Leadership and creativity: understanding leadership from a creative problem-solving perspective. *The Leadership Quarterly*, 15(1), 55-77.
- Rovinelli, R. J., & Hambleton, R. K. (1977). On the use of content specialists in the assessment of criterion-referenced test item validity. *Dutch Journal of Education Research*, 2(8), 49-60.
- State Council of the People's Republic of China. (2015). *Circular on the Overall Program for the Coordinated Advancement of the Construction of World-class Universities and First-class Disciplines*. [https://www.gov.cn/zhengce/content/2015-11/05/content\\_10269.htm](https://www.gov.cn/zhengce/content/2015-11/05/content_10269.htm)
- Stoll, L., & Temperley, J. (2009). Creative leadership: A challenge of our times. *School Leadership and Management*, 29(1), 65-78.
- Wei, Q. J. (2012). Integrating creativity and leadership: Creative leadership. *Psychological Science*, 35(4), 937-942.
- Yang, H. Y. (2020). *A Study on the composition and enhancement of leadership among college students in the new era* (Doctoral Dissertation, Party School of the Central Committee of the Communist Party of China (National School of Administration)).



## The Teaching Chinese National Opera Tenor Singing In Undergraduate Voice Major At Geely University

Cheng Shaopeng<sup>1</sup> Chao Kanwicha<sup>2</sup> & Chalermkit Kengkaew<sup>3</sup>

<sup>1</sup>Ph.D. in Music Education, Faculty of Education, Buriram Rajabhat University, Thailand,  
Email: cheng.shaopeng@bru.ac.th

<sup>2</sup> Advisor, Music Education Program, Buriram Rajabhat University, Thailand,  
Email:chao@bru.ac.th

<sup>3</sup>Co-advisor, Music Education Program, Buriram Rajabhat University, Thailand  
E-mail:chalermkit.kk@bru.ac.th

### Abstract

This paper focuses on the teaching of Chinese national opera tenor arias in the vocal music undergraduate program at Geely University. By analyzing the current teaching situation and problems, it develops and evaluates a targeted teaching manual. The research traces the origin and teaching value of national opera tenor arias, explores singing techniques and voice training methods, aiming to provide theoretical support and practical guidance for optimizing teaching, and help improve students' singing ability and artistic expression.

**Keywords:** Chinese National Opera, Tenor Aria, Vocal Teaching

### Introduction

With the rapid development of economy and the increasing openness of culture, Chinese music is experiencing unprecedented changes and development. On the one hand, China has a long musical tradition, from ancient court music, folk music to the characteristic music of various ethnic groups, all of which constitute the deep heritage of Chinese music. On the other hand, with the influence of globalization, the research background of Chinese music today is diversified and rich. The fusion of Western musical elements with traditional Chinese music has given rise to new musical styles and genres, such as pop music, rock music and electronic music. "After modern western music entered China, it broke the original expressions of folk songs, rap, opera and other national folk music in China, and formed the modern national vocal music art form of China with the characteristics of western professional music." (Song Zuying, 2012. p.11) In contemporary China, music is not only a form of artistic expression, but also an important carrier of cultural exchange. With the development of the Internet and new media technology, there have been significant changes in the way music is disseminated and the audience groups. The rise of digital music platforms has made the creation, distribution and consumption of music works more convenient and personalized. At the same time, music education has been emphasized, with music courses offered not only in professional music colleges but also in ordinary schools, training a large number of musical talents. In addition, the Chinese government's policy of supporting the cultural industry has provided a favorable environment for the development of the music industry. Music festivals, concerts, music competitions and other events are frequently held, which not only enrich the cultural life of the people, but also promote the prosperity of the music industry. Meanwhile, Chinese musicians have begun to emerge on the international stage, and the international influence of Chinese music has gradually increased.

In this larger context. A structured and comprehensive manual for teaching tenor arias for singing Chinese national operas to music students at Geely University is a must. Given

the unique position of national tenor opera arias in the musical arts and their technical requirements, students need a scientific framework for learning. The manual will encompass multiple dimensions, including basic theory, skills training, and work analysis, to guide students in systematically mastering the core elements of operatic aria for national tenor. Secondly, the development of the manual will enhance the professionalism and reputation of music education at Geely University. By integrating high-quality educational resources and combining the college's educational characteristics and advantages, the manual will reflect the college's professionalism and innovative ideas in the field of music education. This will not only help attract more music students, but also enhance the College's reputation in the field of music education. As an important part of national music culture, the inheritance of national tenor opera arias plays an indispensable role in maintaining cultural diversity and enhancing national pride. It will not only help to improve students' professional skills and the quality of education in the college, but also contribute to the inheritance and development of national music culture.

## Objectives

1. To study the current situation and problems of teaching Chinese national opera tenor singing in undergraduate voice majors at Geely University.

### Research Methodology

1. Overall and sample: Select 3 experts to evaluate the research findings. Develop teaching lesson plans. Research tools: Adopt an interview model to interview 9 experts, evaluate the classroom, collect data on research questions based on their suggestions, summarize and improve the teaching model, and develop a learning manual.

Quality check of research tools: 1) Submit the learning manual to 3 China vocal music experts for evaluation, checking the teaching content, language structure, and the accuracy and feasibility of the teaching objectives. 2) Research and analyze the background status of tenor arias in Chinese national opera .3) Revise the guidance manual according to the suggestions of the vocal music experts, using the IOC formula to check the content.

The three evaluating vocal music professors are 5 years of experience in teaching vocal music. Experts who teach at universities and have more than music education credentials. Professional and technical title of instructor or higher

- Dai Yuqiang Dean/Professor of Henan Conservatory of Music
- Wang Hao Associate Dean/Professor of the School of Music of Sichuan Normal University
- Hu Yuqing Dean/Professor of the School of Music of Geely Academy

According to the nature and characteristics of Chinese universities, the selection scope for interviewing teachers was determined to include front-line vocal music teachers and opera performers from public professional music academies, public comprehensive university music academies, and private comprehensive university music academies. This study interviewed a total of 6 vocal music teachers from universities, 2 Chinese national opera performers, and 1 administrative assistant to the president of Geely University.

## Results

### 1. Geely university general information

Geely University, a non-profit undergraduate institution under Geely Holding Group, was established in 1999. It was upgraded to a full-time private undergraduate university in 2014. In 2020, in response to the CPC Central Committee's call to 'decentralize non-core functions from the capital,' the university relocated to Chengdu Eastern New Area with approval from the Ministry of Education, supported by the Ministry of Education, Beijing Municipality, Sichuan Province, Chengdu City, and Peking University.

## 2. Curriculum Table of Performance School, Geely University

### Main course Module Course

Fundamental courses for the major, including Introduction to Art, History of Chinese and Foreign Drama, Introduction to Film and Television Drama, Vocal Music, Dialogue, Physical Training, and Performance Drama and Film Performance Module: Language Techniques, Literary Scene Rehearsal, On-Camera Performance, One-Act Play Rehearsal, Performance Element Training, Play Rehearsal, etc.

Vocal Performance Module: Music Fundamentals, Vocal (Bel Canto, Folk, Pop), Vocal Ensemble, Piano Improvisation Accompaniment, Form and Basic Harmony, etc.

Dance Performance Module: Dance, Ethnic Dance, Choreography, Technical Skills, Dance Repertoire, etc.

Piano Performance Module: Piano, Piano Improvisation Accompaniment, Piano Art Guidance, Form, Basic Harmony, etc.

Children's Art Education Module: Pedagogy, Orff Method, Children's Song Singing and Teaching, etc.

(Course Offerings at the School of Music, Geely University)

## 3. Problems in teaching and learning of Chinese national opera tenor aria

(1) Insufficient localization adaptation of bel canto teaching. The current curriculum still follows the original textbooks of the European Bel Canto system (such as "Caruso's Vocal Technique"), but lacks improvement plans tailored to the characteristics of Chinese articulation. The Central Opera House's 2024 "White Paper on the Development of Chinese Bel Canto" points out: "The contradiction between the four tones of Chinese and the vowel continuity of Italian needs to be resolved through 'vocal-rhyming separation training'," yet the academy has not yet established relevant course modules. (2) Lack of systematic teaching of national opera. Although the "vocal performance module" includes courses on national singing techniques, it has not formed an independent teaching system. Compared to the "three-dimensional curriculum cluster of opera-drama-performance" in the "National Opera Performance Major" at the China Conservatory of Music (including opera movements and local folk song collection), Ge Li remains at the fragmented stage of selected segment rehearsals.

## Discussion

In today's diversified music education environment, China's national opera, as a treasure of our country's musical culture, carries rich historical and cultural connotations as well as unique artistic charm. Tenor arias hold an important position in national opera, and their unique singing style and technical requirements pose higher challenges to vocal music education. As a university focusing on art education and talent cultivation, Geely University is committed to nurturing musical talents with solid professional skills and innovative spirit. The development of a teaching manual for tenor arias in China's national opera is not only aimed at meeting the practical needs of vocal music education at the university but also at inheriting and promoting China's national music culture and advancing the development of national opera art.

## Conclusion

Through systematic research on the singing techniques, artistic characteristics, and teaching methods of tenor arias, combined with the university's teaching resources and student characteristics, a set of scientific, standardized, and targeted teaching manuals has been formulated, which holds significant academic value and practical significance.



## Suggestion

1. Research on applicability and scalability: Chinese national opera carries profound cultural and historical significance. Implementing specific teaching manuals for China's national opera can not only enhance vocal and performance skills but also promote emotional education and address graduate employment issues. To achieve modernization in teaching, educators should integrate digital tools and multimedia to make learning more engaging and accessible. Moreover, the success of this teaching manual highlights the importance of interdisciplinary approaches and rich content resources. Strengthening teaching team development and diversifying teaching methods will ensure the long-term effectiveness of instruction.

2. Future research: Future research should: 1. Develop learning courses for China's national opera in music colleges to improve vocal training and cultural literacy. 2. Focus on teacher training, balancing vocal techniques with historical and ideological depth. 3. Relevant institutions should prioritize and invest in improving the teaching system and the quality of teaching and student participation in China's national opera education, including costumes and props.

## References

- Zhang, Li. (2017). On the Influence of Ancient Greek Drama on Western Opera (Master's thesis, Central China Normal University).
- Zhao, Haiyan. (2013). A Comparative Study of Chinese Peking Opera and Western Opera (Master's thesis, Northwest Minzu University).
- Liu, Jie. (2007). A Comparative Study on Aesthetic Expressions Between Chinese Peking Opera and Western Opera (Master's thesis, Henan University).
- Wang, Xuhua. (2006). A Comparative Study on Artistic Characteristics Between Western Opera and Western Musical Theatre (Master's thesis, Capital Normal University).
- Chen, Li. (2024). Research on the Unity of Opera Structure and Musical Structure (Software thesis, Shanghai Conservatory of Music).
- Yang, Quanhai. (2020). Research on the Artistic Style of Chinese Opera Publishing (Software thesis, Northeast Normal University).
- Li, Zijun. (2017). Research on the Performance Art of Chinese National Opera from 1976 to 2016 (Master's thesis, Shanxi Normal University).
- Zeng, Ziqing. (2024). Characterization and Singing Analysis in Opera (Master's thesis, China Conservatory of Music).

## Evaluating The Current Status And Challenges Of Interdisciplinary Music Teaching In Chengdu Arts And Sports Middle School

Gou Mengyao<sup>1</sup>, Chao Kanwicha<sup>2</sup>, and Chalermkit Kengkaew<sup>3</sup>

<sup>1</sup>Ph.D. in Music Education, Faculty of Education, Buriram Rajabhat University, Thailand,  
Email: 660427093016@bru.ac.th

<sup>2</sup> Advisor, Music Education Program, Buriram Rajabhat University, Thailand,  
Email:chao@bru.ac.th

<sup>3</sup>Co-advisor, Music Education Program, Buriram Rajabhat University, Thailand  
E-mail:chalermkit.kk@bru.ac.th

### Abstract

With the continued advancement of aesthetic education reform, interdisciplinary teaching has become an important approach for promoting holistic student development in secondary education. Music, as a core subject within aesthetic education, possesses strong interdisciplinary potential; however, in many arts and sports middle schools, interdisciplinary music teaching remains case-based and lacks systematic classroom implementation.

This study examines the current status and challenges of interdisciplinary music teaching at Chengdu Arts and Sports Middle School using a qualitative case-study approach. Multiple data sources were employed, including classroom observations, interviews with teachers and experts, teaching-text analysis, and a student questionnaire survey (n = 150). The findings indicate that while the school has developed representative interdisciplinary practices, routine implementation is constrained by subject-based scheduling and evaluation systems. At the classroom level, interdisciplinary lessons often lack stable structures linking shared concepts, tasks, and assessable learning outcomes. Although students show strong acceptance and willingness to participate, they report difficulties related to task complexity and insufficient learning scaffolds.

Overall, interdisciplinary music teaching in this context can be characterized as effective but not yet systematic. To enhance sustainability and instructional quality, this study recommends developing a music-led interdisciplinary framework emphasizing clear task structures, activity-based learning, school-level collaboration mechanisms, and the strategic use of AI tools to support instructional design. These findings provide practical evidence for improving interdisciplinary music teaching and inform the development of a school-based interdisciplinary music teaching manual for arts and sports students.

**Keywords:** interdisciplinary teaching; music education; aesthetic education; arts and sports middle school; qualitative case study; teaching framework

### Introduction

Amid China's ongoing basic education curriculum reform, aesthetic education has gained renewed significance as schooling shifts from discipline-centered knowledge transmission toward student-centered core competency development. Music, as a central component of school-based aesthetic education, inherently integrates cultural, historical, artistic, and emotional dimensions, making it a subject with strong interdisciplinary potential.

Within this reform context, Chengdu Arts and Sports High School has advanced curriculum innovation from within-subject integration—through large-unit instructional design aligned with subject core competencies—to cross-subject collaboration that responds to the dual demands faced by arts and sports-oriented students. By establishing institutional mechanisms for interdisciplinary cooperation and emphasizing shared themes, problems, and cross-media learning experiences, the school has actively explored interdisciplinary teaching pathways. However, despite clear reform principles and structural arrangements, the everyday implementation and instructional coherence of interdisciplinary music teaching remain insufficiently examined. Therefore, this study adopts a qualitative case-study approach to systematically investigate the practices, challenges, and developmental needs of interdisciplinary music teaching at Chengdu Arts and Sports High School, with the aim of providing empirical support for optimizing interdisciplinary teaching models and developing practical instructional resources.

## **Objective**

This study aims to provide reliable empirical data and practical evidence for the subsequent development and implementation of an interdisciplinary music teaching manual

## **Methodology**

### **Research Design**

This study adopted a qualitatively driven mixed-methods research design, using a case study approach as the primary research strategy to systematically examine the implementation status and practical challenges of interdisciplinary music teaching at Chengdu Arts and Sports Middle School. Classroom observations, interviews with teachers and experts, and instructional text analysis served as the primary data sources, supplemented by a student questionnaire survey.

Research Participants and Research Site

### **Research Site**

The research site of this study was Chengdu Arts and Sports Middle School, a secondary school characterized by its focus on arts and sports education. While implementing the national curriculum requirements, the school places strong emphasis on students' individualized development and professional competency cultivation.

### **Research Participants**

Research participants were selected through purposive sampling and included the following groups:

- Music teachers, teachers from related subject areas
- Experts in aesthetic education and interdisciplinary curriculum studies
- Grade 10 students
- Instructional texts

### **Data Collection Methods**

To comprehensively understand the implementation of interdisciplinary music teaching, multiple data collection methods were employed.

- (1) Classroom Observation
- (2) Teacher and Expert Interviews
- (3) Instructional Text Analysis
- (4) Student Questionnaire Survey



### **Data Analysis Methods**

Qualitative data were analyzed using thematic analysis, involving the organization and coding of interview transcripts, classroom observation records, and instructional texts to identify key themes. Questionnaire data were analyzed using descriptive statistics, including means, standard deviations, and agreement ratios. Open-ended responses were coded thematically to supplement and validate qualitative findings

### **Chapter Summary**

This chapter outlined the research design, research participants, data collection procedures, and data analysis methods of the study. Through a qualitatively driven case study approach, the research systematically examined the implementation status and practical challenges of interdisciplinary music teaching at Chengdu Arts and Sports Middle School, providing a methodological foundation for the subsequent presentation and discussion of research findings.

### **Results**

Current Status of Interdisciplinary Teaching at the School: Existing Achievements with a “Case-Based Advancement” Pattern

Emergence of Representative Interdisciplinary Practices and Characteristic Pathways

A review of school-based cases shows that the school has developed a number of representative interdisciplinary teaching practices and research outcomes in recent years. Typical examples include:

- “Music and History in Motion: Cultivating Moral Values through Revolutionary Memory” — An Integrated History–Music Pathway Based on the Theme of the War of Resistance

- Development of School-Based Interdisciplinary Teaching Materials Guided by Local Historical and Cultural Resources

- Integrated “Geography + Visual Arts” Lessons and Research Projects

These cases indicate that interdisciplinary teaching has developed a foundation characterized by curriculum orientation, case-based practice, and research engagement, reflecting the school’s educational direction of integrating culture with arts and sports education.

### **Teacher and Expert Interviews and Results Analysis**

#### **Teacher Selection and Interview Content**

This study selected six frontline teachers with experience in interdisciplinary teaching to participate in semi-structured interviews. The interview content is outlined as follows.

- (1) the practical necessity and educational value of interdisciplinary teaching at the senior secondary level;

- (2) perceived instructional outcomes of interdisciplinary teaching, such as student engagement, learning interest, and depth of understanding;

- (3) major difficulties encountered in designing and implementing interdisciplinary lessons;

- (4) practical experiences and potential for integrating music with visual arts, Chinese language, and history;

- (5) conditions required for the normalization and sustainable development of interdisciplinary music teaching.

### Expert Selection and Interview Content

Three experts were interviewed, all of whom were engaged in aesthetic education research, interdisciplinary curriculum development, or secondary school teaching practice. They possessed extensive theoretical knowledge and practical experience in aesthetic education policy interpretation, curriculum reform, and interdisciplinary instruction.

(1) overall evaluation of the current status of interdisciplinary teaching in secondary education from the perspectives of aesthetic education and core competencies;

(2) major constraints on interdisciplinary teaching at the high school level, particularly in curriculum structure, institutional mechanisms, and instructional operations;

(3) the functional positioning and unique value of music within an interdisciplinary aesthetic education system;

(4) the potential use of local cultural and artistic resources in interdisciplinary aesthetic classrooms;

(5) policy support and practical pathways for promoting the sustainable development of interdisciplinary aesthetic education.

### Summary of Teacher and Expert Interview Results

Synthesizing the interview data reveals a high level of consensus between teachers and experts regarding the value of interdisciplinary teaching. Participants generally agreed that interdisciplinary teaching at the high school level is both necessary and meaningful. Its purpose is not to weaken subject-based instruction, but to promote students' development of more comprehensive and multidimensional cognitive structures through multiple disciplinary perspectives. This is particularly beneficial for students with arts and sports specializations in enhancing aesthetic understanding and integrated expressive abilities.

### Student Questionnaire Results and Analysis

A stratified sample survey was conducted among students from ten Grade 10 classes (15 students per class,  $n = 150$ ), revealing a clear "support-demand" structure.

#### - Survey Results

#### 1) Sample Characteristics ( $n = 150$ )

**Table 1**

*Distribution of Student Sample Characteristics*

| Specialization | Number | Percentage |
|----------------|--------|------------|
| Music          | 52     | 34.7%      |
| Visual Arts    | 48     | 32.0%      |
| Sports         | 45     | 30.0%      |
| Other          | 5      | 3.3%       |
| Total          | 150    | 100%       |

Note: The sample covered ten Grade 10 administrative classes, with 15 students selected from each class, ensuring representativeness in terms of both class distribution and specialization.

## 2) Results of the Interdisciplinary Music Classroom Experience Scale (8 items)

(1 = Strongly disagree; 5 = Strongly agree)

**Table 2**

*Results of the Interdisciplinary Music Classroom Experience Questionnaire (Mean  $\pm$  SD)*

| Item | Description                                    | M    | SD   |
|------|------------------------------------------------|------|------|
| Q1   | Exposure to interdisciplinary content          | 4.21 | 0.72 |
| Q2   | Beyond simple background introduction          | 3.68 | 0.88 |
| Q3   | Presence of discussion/creation/inquiry tasks  | 3.54 | 0.94 |
| Q4   | Helps understand emotion and culture           | 4.08 | 0.76 |
| Q5   | Encourages thinking from multiple perspectives | 3.95 | 0.81 |
| Q6   | Clear learning objectives and tasks            | 3.62 | 0.89 |
| Q7   | Higher engagement and concentration            | 4.12 | 0.74 |
| Q8   | Desire to continue or increase such classes    | 4.35 | 0.69 |

## 3) Agreement Rates for Key Items (4–5 = Agree/Strongly Agree)

**Table 3**

*Students' Overall Attitudes toward Interdisciplinary Music Classes*

| Dimension                                                      | Agreement Rate |
|----------------------------------------------------------------|----------------|
| Exposure to interdisciplinary music teaching (Q1)              | 86.0%          |
| Helps understand music (Q4)                                    | 82.7%          |
| Enhances engagement and concentration (Q7)                     | 84.0%          |
| Desire to continue or increase interdisciplinary teaching (Q8) | 89.3%          |

Note: The majority of students expressed a clearly positive attitude toward interdisciplinary music classes.

## 4) Open-Ended Responses

(a) Perceived Learning Difficulties (Q9)

**Table 4**

*Student-Perceived Difficulties in Interdisciplinary Music Classes*

| Difficulty Type                   | Frequency | Percentage |
|-----------------------------------|-----------|------------|
| Unfamiliarity with other subjects | 58        | 38.7%      |
| Task complexity                   | 44        | 29.3%      |
| Insufficient class time           | 31        | 20.7%      |



| Difficulty Type             | Frequency | Percentage |
|-----------------------------|-----------|------------|
| Unclear learning objectives | 27        | 18.0%      |
| No obvious difficulties     | 19        | 12.7%      |

(b) Suggested Improvements (Q10)

**Table 5**

*Student Suggestions for Improving Interdisciplinary Music Classes*

| Suggestion Type                                        | Frequency | Percentage |
|--------------------------------------------------------|-----------|------------|
| Increase practical/creative activities                 | 62        | 41.3%      |
| Provide more interdisciplinary background explanations | 49        | 32.7%      |
| Clarify task steps                                     | 37        | 24.7%      |
| Increase group collaboration                           | 29        | 19.3%      |
| Maintain current approach                              | 21        | 14.0%      |

## Discussion and conclusion

Student questionnaire results indicate that Grade 10 arts and sports students hold a generally positive attitude toward interdisciplinary music classes. Most students believe such learning enhances classroom experience and interest and express willingness to continue participating, suggesting strong student-level acceptance. However, the findings also reveal structural challenges: some students questioned the alignment among teaching, learning, and assessment, indicating that instructional logic and evaluation methods remain insufficiently developed. Open-ended responses further show that learning difficulties mainly arise from interdisciplinary cognitive demands and unclear task procedures, while students strongly expect more activity-based learning, clearer task steps, and stronger interdisciplinary scaffolding. Overall, the results reflect a pattern of high support accompanied by explicit structural demands.

The case analysis shows that Chengdu Arts and Sports Middle School has established an initial foundation for interdisciplinary practice through theme-based courses and school-based curricula integrating local cultural resources. Nevertheless, interdisciplinary teaching remains largely case-driven and lacks stable mechanisms for routine implementation. While teachers and experts widely recognize its educational value, they identify subject-based operational systems, scheduling constraints, evaluation mechanisms, and immature instructional paradigms as key barriers.

## Suggestion

1. At the curricular level, it is recommended to adopt a music-led, task-oriented interdisciplinary teaching manual.
2. At the instructional level, greater emphasis should be placed on activity-based learning centered on creation, expression, and collaboration to enhance students' aesthetic experience and interdisciplinary understanding through multimodal tasks.

3. At the institutional level, schools are encouraged to establish stable interdisciplinary collaboration mechanisms and provide systematic support in scheduling, professional development, and assessment

## References

- Drake, S. M., & Reid, J. L. (2018). Integrated curriculum as an effective way to teach 21<sup>st</sup> century capabilities. *Asia Pacific Journal of Educational Research*, 1(1), 31–50.
- Merja, K., & Rantanen, I. (2021). Students' narratives and conceptual changes in a cross-curricular inquiry-based study unit in a Finnish upper secondary school. *International Journal of Educational Research*, 105, 101711. <https://doi.org/10.1016/j.ijer.2020.101711>
- Repko, A. F. (2012). *Interdisciplinary research: Process and theory* (2nd ed.). SAGE Publications.
- Russell-Bowie, D. (2009). Cross-curricular integration of the arts: A research perspective. *Arts Education Policy Review*, 110(4), 3–13. <https://doi.org/10.3200/AEPR.110.4.3-13>
- Savage, J. (2010). *Cross-curricular teaching and learning in the secondary school*. Routledge.
- Savage, J. (2012). Moving beyond subject boundaries: Four case studies of cross-curricular pedagogy in secondary schools. *International Journal of Educational Research*, 55, 1–9. <https://doi.org/10.1016/j.ijer.2012.05.003>
- Termaat, A. (2023). Framing, classification, and conceptual linkages: What can interdisciplinary practice in small secondary schools contribute to the curriculum conversation? *The Curriculum Journal*, 34(4), 703–720. <https://doi.org/10.1002/curj.202>
- UNESCO. (2006). *Road map for arts education*. United Nations Educational, Scientific and Cultural Organization.
- Wu, Y., Cheng, J., Koszalka, T. A., & Ffany, A. (2021). Transdisciplinary approach in middle school: A case study of co-teaching practices in STEAM teams. *International Journal of Education in Mathematics, Science and Technology*, 9(4), 620–638. <https://doi.org/10.46328/ijemst.1350>
- Ministry of Education of the People's Republic of China. (2017). *General high school music curriculum standards (2017 edition)*. People's Education Press.
- Ministry of Education of the People's Republic of China. (2022). *Compulsory education arts curriculum standards (2022 edition)*. Beijing Normal University Press.
- Ye, L. (2015). *Fifteen lectures on aesthetic education* (美育十五讲). Peking University Press.
- Wang, X. (2019). Reconsidering the value of music classroom teaching from the perspective of aesthetic education. *China Music Education*, (6), 15–18.

# An Investigation Of The Situation And Issues In Undergraduate Vocal Performance Of “Yu Song” At Zhengzhou Shengda University

Guo Jia<sup>1</sup> Thiti Panya-in<sup>2</sup> & Jiranuwat Khuntajan<sup>3</sup>

<sup>1</sup>Ph.D. Student in Music Education, Faculty of Education, Buriram Rajabhat University, Thailand,  
Email: guo.jia@bru.ac.th

<sup>2</sup>Major Advisor (Assistant Professor Dr.), Graduate School, Buriram Rajabhat University, Thailand,  
Email: thiti.py@bru.ac.th

<sup>3</sup>Co-advisor (Assistant Professor Dr.), Graduate School, Buriram Rajabhat University, Thailand,  
Email: jiranuwat.kh@bru.ac.th

## Abstract

This study aims to investigate the learning situation of Yu Song among undergraduate vocal performance students at Zhengzhou Shengda University and the related teaching issues. The research employs a qualitative approach, combining literature analysis and in-depth interviews: it first examines the characteristics, techniques, and existing research gaps of Yu Song through the China National Knowledge Infrastructure (CNKI), then conducts in-depth interviews with 3 administrative staff, 13 vocal teachers, and 10 vocal undergraduates at the university. The focus is on the current teaching status, including the positioning of Yu Song education, research support, and faculty needs, as well as core issues such as the disconnect between students' knowledge and practical skills. The study finds that existing research on Yu Song is insufficient due to a detachment between theory and practice; students at the university face significant challenges in their understanding of Yu Song, singing techniques, and work analysis, and the overall teaching system still needs optimization.

**Keywords:** Yu Song, Vocal Performance, Undergraduate Students, Current Singing Situation, Teaching Research

## Introduction

Yu Song integrate the rhythmic patterns of Henan Yu opera with the emotional expression of local folk songs, carrying the cultural memory of the Central Plains. They are an important vocal form for passing down local intangible cultural heritage and maintaining cultural identity. From "Weaving Flower Baskets" to "We Are the Yellow River and Mount Tai, " Yu song have served both cultural expression and spiritual transmission functions in different eras. Professionalized inheritance is of profound significance for enriching China's vocal music system. Currently, the teaching of Yu song in universities faces a dual dilemma: on one hand, dominated by Western and traditional national vocal music, Yu song are marginalized, with teaching relying on scattered practice and the personal experience of teachers; on the other hand, although undergraduates have basic singing abilities, they struggle to overcome bottlenecks such as the integration of dialect pronunciation and vocalization, and mastery of embellishment techniques, due to a lack of targeted resources, making it difficult to convey the charm of the art and weakening their willingness to inherit



it. Existing studies provide a basic theoretical framework—for example, Li (2020) distilled core singing elements, and Du (2021) proposed ideas for teaching integration—but shortcomings such as a disconnect between theory and practice remain. This study focuses on vocal undergraduates at Zhengzhou Shengda University, employing literature analysis and in-depth interview methods to examine the current situation of Yu Song singing there by supporting the professionalized transmission of Yu song in higher education.

## Research Objectives

To investigate a situation and issues related to the vocal performance of “Yu Song” among vocal performance undergraduate students at Zhengzhou Shengda University in the People's Republic of China.

## Research Methods

This study uses a qualitative research design, combining literature analysis, surveys, and in-depth interviews, aiming to explore the current situation and issues of Yu Song performances by vocal undergraduate students at Zhengzhou Shengda University.

### Research Sample

This study focuses on the Art College of Zhengzhou Shengda University, with three core groups directly related to the Yu Song teaching practice, resource allocation, and learning needs as the main research subjects. The specific attributes and associated value of each group are clarified to ensure that the comprehensiveness of the survey on the current situation of Yu songs.

1) Administrative staff of the Art College of Zhengzhou Shengda University: Core administrative personnel involved in teaching management, discipline construction, and resource allocation within the Art College.

2) Vocal teachers of the Art College of Zhengzhou Shengda University: Teachers in the Music Performance program responsible for vocal teaching, who also have experience teaching or performing Yu Song or local Henan music.

3) Undergraduate vocal students of the Art College of Zhengzhou Shengda University: First- to third-year students enrolled in the Vocal direction of the Music Performance program at the Art College.

### Research Tools

1) Review of Relevant Literature: Using China National Knowledge Infrastructure (CNKI) to search for keywords such as Yu Song and "teaching status," 16 academic papers and 9 journal articles were obtained. The review systematically sorted out the vocal characteristics, singing techniques, artistic expression, and teaching applications of Yu Song, analyzing the achievements and shortcomings of existing research. This provides a theoretical foundation and direction for subsequent studies

2) Structured Interviews: Specific questions were designed for different subjects. Interviews with 3 administrative staff members of art college of Zhengzhou Shengda University focused on teaching management issues such as the alignment of Yu Song teaching with the college's positioning, support from research platforms, standards for cultivating goals and outcomes, interdepartmental collaboration, and school-enterprise linkage. Interviews with 13 vocal music teachers centered on practical teaching issues including the objectives of Yu Song teaching, repertoire selection, technical difficulties for students, teaching methods, and strategies for cultural integration. Interviews with 10

undergraduate vocal students revolved around their understanding of Yu Song, difficulties in learning techniques, repertoire preferences, and the effectiveness of learning methods.

3) Qualitative Questionnaire: As a supplement to the interviews, the questionnaire included open-ended questions covering participants' professional backgrounds, their roles in Yu Song teaching or learning, their views on the artistic value and heritage significance of Yu Song, specific problems encountered, and suggestions for the development and optimization of teaching resources.

### **Data Collection**

1) Literature Data Collection: By systematically reviewing literature related to Yu Song and local vocal music education, clarify existing research achievements and gaps, providing a theoretical reference and problem orientation for subsequent field research (interviews, questionnaires).

2) Field Research Data Collection: By conducting interviews and questionnaires with three key groups at the School of Arts, Zhengzhou Shengda University (administrative staff, vocal music teachers, and undergraduate vocal students), collect firsthand data on the current status of Yu Song teaching, learning challenges. This is the core part of data collection.

3) Cross-Verification of Data: By cross-comparing 'literature data — field data' and 'data from different groups,' eliminate conflicting or distorted information to ensure data consistency.

### **Data Analysis**

Based on the characteristics of unstructured/semi-structured data such as literature and interview records, this study selects three types of adaptation methods. First, the literature review and induction method is used to integrate results, identify gaps, and lay the theoretical foundation; second, the qualitative content analysis of interview texts is employed to explore teaching positioning, learning pain points, and needs; third, the triangulation method cross-verifies multiple conclusions to ensure scientific validity.

## **Research Result**

### **Literature Review and Research**

From the existing literature, research on the use of Yu song and Yu opera singing styles in national vocal music has already formed a basic framework covering artistic characteristics, singing techniques, and teaching applications. Li (2020) systematically reviewed the use of techniques such as run tones and swing tones in Yu Opera singing within ethnic vocal music, clarifying the core elements of 'words, breath, voice, emotion, and flavor'; Wu (2006), through the analysis of works like 'Mulan Joins the Army,' summarized the phonetic norms and performance logic of Yu song; Du (2021) proposed incorporating Yu Opera singing into ethnic vocal music teaching, emphasizing the importance of pattern analysis and run tone practice. In addition, Su (2025) in the study of 'We Are the Yellow River and Mount Tai,' and Lu (2018) on the performance of 'Ode to Snow in Qin Garden,' provided technical references for specific works. However, existing research has obvious limitations: first, it tends to focus on theoretical analysis. For example, Dang (2018) and Zhang (2021) analyze artistic characteristics but lack step-by-step training designs for undergraduates; second, case studies are scattered. Works such as Wang (2019) and Liu (2021) focus only on individual pieces and do not form a systematic learning path; third, teaching research remains at the level of broad recommendations and does not address practical content such as specific exercises or solutions to common problems. Undergraduate students often encounter the problem of a 'disconnect between technique and style' in their

learning, such as placing excessive emphasis on bel canto singing, which leads to the loss of the Henan folk song flavor. Existing research, however, has not provided targeted guidance, such as methods to balance dialect pronunciation with Mandarin singing, techniques to coordinate Henan tonal patterns with melodic lines, and practical challenges in mastering rhythmic structures. Current studies offer a theoretical and case-based foundation for learning Yu Song, but systematic study of Yu Song specifically for undergraduate vocal students remains lacking.

### **Interviews and Surveys**

This study focuses on the learning situation of Yu Song in undergraduate vocal music teaching. Through in-depth interviews with three administrators, thirteen vocal music teachers, and ten undergraduate vocal music students at the Art College of Zhengzhou Shengda University, it comprehensively examines the current state of Yu Song teaching and the core issues and demands of all parties involved.

In terms of teaching positioning and system construction, the three administrative managers unanimously agreed that Yu Song teaching is highly consistent with the 'diversified styles' positioning of the college's music performance program. At the administrative level, it is necessary to prepare in advance for the alignment of teaching objectives with the existing training programs, coordinate the curriculum system, and ensure its smooth integration into the overall teaching framework. The administrators believe that Yu Song is a valuable resource for ideological and political education. By incorporating the stories of Henan's intangible cultural heritage and the dedication of local artists when explaining the background of the pieces, and combining vocal technique teaching with the cultivation of a 'pursuit of excellence' craftsmanship spirit, deep integration of teaching and ideological education can be achieved. The managers believe that incorporating Yu Song teaching can effectively enhance students' competitiveness in employment within Henan's local music education and cultural institutions.

Interviews with 13 vocal teachers from the School of Arts at Zhengzhou Shengda University, each with over five years of teaching experience, reveal that Yu Song teaching has already established clear goals and a practical framework. However, it faces significant challenges in areas such as student skill development and resource support. Regarding teaching orientation and core objectives, the teachers reached a consensus: the core objectives of Yu Song teaching encompass both skill and cultural dimensions. On the skill side, the focus is on the unique techniques of Yu Song, including vocal production, articulation, and melodic style. On the cultural side, the emphasis is on guiding students to understand the cultural connotations of Henan and fostering a sense of inheritance. At the same time, teachers clearly pointed out the prominent problems in current teaching: first, there are dual obstacles to students' skill improvement. Technically, students commonly struggle to merge dialectal articulation with vocal production and to handle the melody with an authentic 'Yu flavor.' Culturally, due to a lack of local life experience, students find it difficult to grasp the emotional essence of the repertoire, resulting in performances that are technically correct but lack expressiveness. Second, there is a lag in teaching resources, with a lack of systematic teaching materials and the existing resources insufficient to meet the needs of structured teaching. Third, teaching methods need further optimization. The traditional teaching model in universities tends to be tedious, requiring exploration of more efficient, integrated approaches.

Through interviews with 10 vocal music undergraduates from different grades at the College of Arts, Zhengzhou Shengda University, it was found that at the student level, Yu Song teaching shows the current situation of 'gains but shallow understanding, demand but lack of methods.' Students have an overall vague understanding of the core definition of



Yu Song and its boundaries with Yu opera and folk songs. In terms of repertoire selection, students exhibit a tendency of 'passive choice + reliance on resources.' Some students mentioned that the repertoire of Yu Song in textbooks is scarce and suggested providing a repertoire list with accompanying audio demonstration links to address the problem of blind selection. Students generally believe that there are obstacles in the use of ornamentation, integration of dialect pronunciation with vocal techniques, and that they lack professional methods for work analysis. Although they recognize the importance of analysis for performance, they do not know how to approach it.

### **Expert Verification**

The content validity of the interview questionnaire was assessed using the Index of Item-Objective Congruence (IOC). Five domestic and international education experts rated the appropriateness of three groups of core questions. The IOC value for questions for administrators was 0.9, for questions for vocal music teachers was 0.92, and for questions for undergraduate vocal music students was 0.92, indicating that the questionnaire has high content validity.

## **Discussion and Conclusion**

### **Discussion**

The research gap and teaching contradictions stem from a misalignment between research orientation and teaching needs. This is due to the lack of frontline teacher involvement in existing studies and the absence of specialized courses on Yu Song in universities, resulting in students having vague perceptions and inefficient learning. This study aligns with existing research in emphasizing the core elements of 'characters, breath, tone, emotion, and flavor' and the goal of cultural inheritance. The difference lies in focusing on undergraduates, emphasizing practical content. The research features innovations in subjects, methods, and formats, but it also has limitations in terms of sample size and validation. Future work will expand the sample, conduct pilot teaching, and develop digital resources to improve the system.

### **Conclusion**

This study focuses on the current state of the performance of Yu Song by vocal undergraduate students at Zhengzhou Shengda University. Through literature review, interviews with teachers and students, and other methods, the conclusions are as follows: Existing research on Yu Song has established basic theories, but studies targeting undergraduates show gaps and a lack of step-by-step training. The university's teaching also faces issues such as insufficient research support and scarce resources. This study fills a theoretical gap, provides methods for teaching, aids in the practical implementation of instruction, and promotes the professional inheritance of Yu Song in higher education as well as the preservation of local culture.

### **Suggestions**

The application and expansion of the survey on the current situation of 'Yu Song' singing lie in developing a practical 'Yu Song' vocal practice manual, integrating courses by grade in university teaching scenarios and conducting teacher training, designing practical projects in school-enterprise collaboration scenarios while supplementing employment-oriented resources, and expanding dissemination in cultural heritage scenarios by linking with local platforms; the promotion scope would first be piloted at Zhengzhou Shengda University, then extended to similar private universities in Henan and incorporated into local university

teaching reference standards. The field of expansion would extend to other local music teaching research and the exploration of a new aesthetic education model of 'local music + ideological and political education' in colleges and universities.

## Acknowledgement

This study investigates the current situation of Yu Song learning among vocal music undergraduates at Zhengzhou Shengda University. I would like to express my sincere gratitude to the supervising teachers who provided support, the administrative staff, teachers, and students who participated in the interviews, the relevant cultural institutions in Henan and the university-enterprise partners, the academic predecessors in the field of Yu Song research, as well as my family and friends. In the future, I will continue to refine the results to promote the teaching of Yu Song and the inheritance of its culture.

## References

- Caruso, E., & Tetrzzini, L. (2022). Caruso and Tetrzzini on the art of singing .DigiCat.
- Dang, Y. (2018).Yuxiang Yuyin Lyricism - Research on the Musical Characteristics and Singing of "Yu Opera Song"(Doctoral dissertation).Liaoning Normal University.
- Du, H. (2021).The application and exploration of Yu opera singing in the teaching of national vocal music(Doctoral dissertation).Jilin Academy of Arts.
- Duan, J. (2021).The integration of Yu opera singing in national vocal music(Doctoral dissertation).Northeast Normal University.
- Hoch, M. (2020). Historical landmarks in singing voice pedagogy. In The history of voice pedagogy . Routledge.
- Huang, C. (2023). "Analysis on the Similarities and Differences Between Yu Opera and Yu Song Singing Methods". Times Report (Rushing), (10), 89-91.
- Lai, Y. (2024). "Multi-dimensional Value and Path of Opera and Song Promotion in Colleges and Universities". Ingenuity, (12), 145-147.
- Li, W. (2020).Research on the Application of Yu Opera Singing in Contemporary National Vocal Singing(Doctoral dissertation).Harbin Conservatory of Music.
- Li, Z. (2024). "Analysis on the Integration of Vocal Skills and Artistic Expression in Vocal Music Singing". Ginseng Flower, (34), 83-85.
- Liu, H. (2022). "The Application of Bel Canto Singing in Yu Song—A Case Study of 'We Are Taishan on the Yellow River'". This Ancient Prose, (28), 83-85.
- Liu, P. (2021). On the integration of Yu opera singing and national vocal singing in "How Can There Be a Happy Home Without a Strong Motherland"(Doctoral dissertation).Jilin Academy of Arts.
- Lu, S., & Hong, Y. (2023). "Review and Reflections on the Definition and Multiple Derivation of "Opera and Song". Yellow River, (02), 16-19.
- Lu Y. (2018).Research on the singing of the national vocal work Yu Song and "Qinyuan Chun. Snow"(Doctoral dissertation).Sichuan Normal University.
- Sansom, R. (2020). The history of voice pedagogy . Routledge.
- Shao, H.(2025).Artistic Characteristics and Singing Analysis of the Song "Yellow River Fisherman" (Doctoral dissertation).Chengdu University.
- Shi, G. (2021). The artistic features of the folk song and singing style, Henan research (Doctoral dissertation). South China Agricultural University.
- Sun, H. (2023). Study on the Historical Evolution, Inheritance and Development of Henan Opera and Song. Zhengzhou Normal Education, 12(03), 60-64.

- Su, H.(2025).Exploration of the singing of the vocal work "We Are the Yellow River Taishan" from the perspective of Yu Song (Doctoral dissertation).Xi'an Conservatory of Music.
- Tian T. (2022). Concerning the branch of Beijing - China's play songs (Doctoral dissertation). Harbin Music Institute.
- Wu, M. (2006). A preliminary study on the music and performance of Yu Song (Doctoral dissertation). Fujian Normal University.
- Wang, J. (2022)."Analysis of Literature on Chinese Vocal Music and Research on Discipline Development (2011-2021)."(Doctoral dissertation).China Conservatory of Music.
- Wang, X. (2024). "Understanding "The Yellow River Fisherman's Mother" and Entering Henan Yu Opera". Cloud, (25), 35-37.
- Wang, Y.(2019). The creative style and singing practice of the song "Mulan Joins the Army"(Doctoral dissertation).Qingdao University.
- Yan, B. (2024). Chinese national vocal music drama "Song" of the performing arts research (Doctoral dissertation). Inner Mongolia Normal University.
- Zhang, M. (2021). Exploration of the Artistic Characteristics of Yu Song(Doctoral dissertation).Southwest University.
- Zhang, H.(2022). A Brief Analysis of the Emotional Expression and Inheritance of Yu Song of "Drama is Bigger than the Sky": Taking "Where Is Your Home" as an Example.Drama House, (22)27-29.
- Zhang Y. (2023).On the application of Yu opera singing in national vocal singing(Doctoral dissertation).Shihezi University.
- Zhao, S. (2023). The application and creative practice of Yu Opera elements in Chinese music works (Doctoral dissertation). Qinghai Normal University.



## The Current Situation of Piano Accompaniment Course at Xi'an Conservatory of Music

*Hai Yu<sup>1</sup> Natthawat Khositditsayan<sup>2</sup> & Thanapon Teerachai<sup>3</sup>*

<sup>1</sup>Ph.D.Student Music Education, Faculty of Education, Buriram Rajabhat University,  
Thailand,

Email: 660427093009@bru.ac.th

<sup>2</sup>Major Advisor, Graduate School, Buriram Rajabhat University,  
Thailand,

Email: natthawat@bru.ac.th

<sup>3</sup>Co-advisor, Graduate School, Buriram Rajabhat University,  
Thailand,

Email: thanapon@bru.ac.th

### Abstract

The purpose of this paper is a mixed-methods research design to study the current situation of undergraduate piano accompaniment course teaching at Xi'an Conservatory of Music. It reviews the current course, teaching models, and evaluation mechanisms, identifying significant incompatibilities with piano accompaniment needs. Key findings include a neglect of collaborative adaptation and improvisation, insufficient interdisciplinary coordination, and a lack of regular training with vocal majors. Furthermore, evaluation relies too heavily on technical indicators, materials are outdated, and Chinese vocal repertoire is underrepresented. This study aims to provide theoretical references and practical bases for optimizing the teaching system to cultivate composite music talents and meet professional demands.

**Keywords :** Current Situation; Piano accompaniment course; Xi'an Conservatory of Music.

### Introduction

Piano accompaniment serves as the core medium for vocal art instruction, acting as a crucial link between piano performance and vocal expression. It is also a core skill module for professional music academies to cultivate composite music talents with vocal art instruction capabilities. The quality of its teaching directly influences students' vocal collaboration abilities, artistic interpretation levels, and career suitability. (Liu, 2015, pp. 37-41) Based on the current domestic research situation, piano accompaniment courses in universities generally face challenges such as the disconnection between technical training and collaborative needs, the lack of coordination between vocal and piano courses, and evaluation criteria that deviate from professional attributes, resulting in a significant gap compared to the demands of vocal art practice. (Shi, 2018, pp. 186-187) As a key professional music institution in China, Xi'an Conservatory of Music, based on the musical and cultural characteristics of the northwestern region, has been deeply engaged in vocal music and piano teaching for decades. It has established an undergraduate piano accompaniment teaching system covering multiple majors, laying a solid foundation for the cultivation of piano accompaniment teaching abilities and vocal art guidance-related skills at the undergraduate level.

Piano accompaniment is central to vocal art instruction and crucial for cultivating composite music talents. However, domestic research indicates a disconnect between technical training and collaborative needs. (Xu, 2018, pp. 36-37) Xi'an Conservatory of Music, while possessing a solid teaching foundation, faces issues aligning its undergraduate piano accompaniment teaching with vocal art guidance demands. Core problems include an overemphasis on technique at the expense of core guidance competencies, a lack of cross-disciplinary collaboration, evaluation standards focused solely on piano skills, and teaching materials that neglect Chinese and Shaanxi local vocal music. Additionally, the discipline faces challenges in teacher qualifications, requiring instructors with robust interdisciplinary skills to innovate methodologies and enhance student motivation. Addressing these issues, this study systematically reviews the current teaching situation at Xi'an Conservatory of Music to identify deficiencies. It aims to provide evidence for optimizing the teaching system, enhancing talent development quality, and offering references for similar institutions to integrate professional education with practice and regional cultural demands. (Zhu, 2015, pp. 161-168)

## Research Objective

To investigate and analysis the current situation of piano accompaniment course at Xi'an Conservatory of Music.

## Method

### Key Informants

The subjects of this study are from two groups at Xi'an Conservatory of Music: five piano accompaniment teachers and second-year undergraduate students majoring in piano. All participants are directly involved in teaching or learning in undergraduate piano accompaniment courses.

**Piano Accompaniment Teacher Team:** This team primarily consists of five authoritative piano accompaniment professors who guide undergraduate students in the piano accompaniment major. These teachers not only possess professional experience in piano accompaniment performance and teaching, and are proficient in piano accompaniment teaching methodologies, but they also have achieved certain accomplishments and demonstrated exceptional abilities in the technical requirements and standardization of teaching piano accompaniment.

To ensure the smooth progress of this research, we first selected 20 sophomore undergraduate students from the piano accompaniment major at Xi'an Conservatory of Music as the research subjects. These students not only need to lay a solid foundation for their piano accompaniment studies, but their selection process itself is also of significant importance for the systematization, standardization, and scientific approach of piano accompaniment teaching.

### Research Instruments

This study comprehensively employed three research tools and methods: participatory observation method ,interviews and questionnaire surveys. First, Participatory observation focuses on researchers systematically observing and recording the specific teaching practices of other teachers, with a particular emphasis on the teaching issues related to piano accompaniment instruction. This encompasses dimensions such as the application of piano accompaniment techniques, requirements for works' styles, as well as practical and artistic treatments. Then ,a theoretical foundation was established through a literature review. Subsequently, an interview guide was designed to conduct interviews and evaluations with

five teachers, including Yang Nan, and five senior experts, including Jin Nan. A questionnaire survey assessed teaching effectiveness across two dimensions: piano accompaniment skill improvement and learning satisfaction. Last, This formed a complete research cycle from development to validation.

### **Data Collection**

To ensure consistency in the learning environment, questionnaire data were collected during regular class sessions. Meanwhile, this study employed participatory observation, where researchers personally entered the classroom setting to continuously observe and meticulously record the teaching process, teacher-student interaction patterns, and unexpected incidents in a natural context, thereby obtaining objective behavioral data. These observational materials corroborated the questionnaire data. All student participants voluntarily completed the questionnaires. After obtaining informed consent, individual interviews were conducted with teachers, and the interviews were recorded for accurate transcription and analysis.

### **Data Analysis**

Data analysis involved using descriptive statistical methods to analyze student activity questionnaire data, revealing common patterns in learning experiences. Thematic analysis was conducted on the transcribed texts of teacher interviews to identify core themes in piano accompaniment teaching. Based on event records and classroom notes collected through participatory observation, qualitative analysis was employed to dissect details of teacher-student interactions, classroom atmosphere, and the timely feedback teaching strategies for practical accompaniment guidance during the teaching process. This approach supplemented and quantified missing contextual details in the data. The integration of multi-dimensional quantitative and qualitative data provided robust support for a comprehensive understanding of current teaching practices.

## **Results**

The results of this study are based on participatory observation, teacher interview data, and student questionnaire surveys, this paper investigates the key issues in the teaching of piano accompaniment courses for second-year undergraduate piano majors at Xi'an Conservatory of Music.

### **Participant Observation Method**

This section presents the apparent issues actually observed in the classroom during the researcher's in-class observations. After organizing these issues, they are categorized and summarized from multiple dimensions, including teachers, students, teaching materials, teaching methods, classroom atmosphere, and curriculum design, into the following core problems.

### **Table 1**

*Summary Table of Issues in Piano Accompaniment Courses*



| Serial Number | Observation Dimension                    | Specific Existing Problems                                                                                                                                                                            |
|---------------|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1             | Teacher's Teaching Approach              | Teaching primarily focuses on explaining piano solo techniques, lacking specialized training methods for adapting to vocal collaboration.                                                             |
| 2             | Student Learning Performance             | Students generally lack "accompaniment thinking," paying excessive attention to their own techniques during performance while neglecting coordination with vocals.                                    |
| 3             | Use of Teaching Materials and Repertoire | The textbooks used in class mainly consist of Western classical works, lacking selections from Shaanxi local ethnic vocal music and Chinese opera accompaniments.                                     |
| 4             | Classroom Interaction Atmosphere         | The classroom is dominated by one-way teaching by the teacher, with few collaborative simulation exercises between teachers and students or among students, resulting in a dull classroom atmosphere. |
| 5             | Student Practical Ability                | Students have weak sight-reading and transposition abilities and are unable to quickly adjust accompaniment arrangements according to vocal requirements.                                             |
| 6             | Teachers' Teaching Philosophy            | Some teachers equate piano playing skills with accompaniment abilities, neglecting the cultivation of relevant skills in vocal music art guidance.                                                    |
| 7             | Course Content Design                    | Classroom teaching emphasizes theoretical explanations and lacks practical simulation sessions for live vocal accompaniment.                                                                          |
| 8             | Students' Artistic Expression            | Students have insufficient understanding of the emotions in the works, and their accompaniment's tone color and dynamics fail to match the vocal emotional expression.                                |
| 9             | Utilization of Teaching Resources        | The classroom does not utilize digital accompaniment resources or classic collaborative performance versions for teaching demonstrations.                                                             |
| 10            | Classroom Assessment                     | Classroom instant evaluations only focus on technical indicators such as pitch and rhythm, without incorporating assessments of collaborative teamwork synergy.                                       |

### *Semi-structured Interview Method for Teachers*

The interviewees were five teachers from the Piano Accompaniment major at Xi'an Conservatory of Music, led by Yang Nan. These teachers possess professional experience in piano accompaniment performance and teaching, and are familiar with the technical requirements for teaching musical works of various genres, themes, and types. To gain a deeper understanding of the current teaching situation of the piano accompaniment course at Xi'an Conservatory of Music, the researcher designed the following semi-structured interview questions. Subsequently, thematic analysis was conducted based on the interview results, and a frequency summary table was generated (the frequency represents the number of teachers among the five who mentioned the theme).

The interview content from five teachers was transcribed and subjected to thematic analysis, resulting in the extraction of six core themes. The typical insights and mention frequencies for each theme were clarified, with the frequency representing the number of teachers out of the five who mentioned the viewpoint. The results align with the actual teaching issues in the piano accompaniment course at this university.

**Table 2**

*Summary of Interview Themes and Frequencies for Teachers on Undergraduate Piano Accompaniment Teaching at Xi'an Conservatory of Music.*

| Theme Category                                 | Typical Insight                                                                                                                                                                                                                                                     | Frequency<br>(among 5<br>mentors) |
|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| Teaching Methods and Collaborative Training    | Teaching primarily focuses on solo technique instruction, lacking specialized training in vocal collaboration and improvisational accompaniment; it is recommended to increase in-class simulated accompaniment practice                                            | 5                                 |
| Repertoire Selection and Textbook Usage        | The selected pieces mainly consist of Western classical works, with a low proportion of ethnic/Shaanxi local compositions; the existing textbook content is outdated and lacks notation of ensemble skills                                                          | 5                                 |
| Core Learning Difficulties for Students        | Students lack accompaniment thinking, emphasizing self-performance over vocal coordination; their sight-reading and transposition abilities are weak, failing to meet the dynamic demands of vocal music.                                                           | 5                                 |
| Stage Performance and Emotional Expression     | Students' rhythm tends to fall out of sync during stage accompaniment, and their emotional handling is disconnected from the vocal performance; they lack stage emergency response capabilities and have insufficient experience in handling unexpected situations. | 4                                 |
| Teaching Evaluation Criteria                   | Currently, the evaluation mostly focuses on piano technical indicators as the core criteria; an evaluation system from the perspective of vocal art guidance has not been established.                                                                              | 4                                 |
| Course Optimization and Competence Enhancement | It is recommended to strengthen interdisciplinary collaborative teaching with vocal music majors; increase the teaching of accompaniment for ethnic and regional works; and improve the diversified evaluation system.                                              | 5                                 |

#### *Student Questionnaire Survey Method*

The survey targets 20 sophomore students from the Piano Accompaniment major at Xi'an Conservatory of Music. A five-point Likert scale (very satisfied, satisfied, average, dissatisfied, very dissatisfied) is employed to design the questionnaire. Descriptive statistical methods are used to analyze the data, with results presented as percentages. The sum of percentages across all dimensions equals 100%, and the data reflects students' actual learning experiences and existing issues in the course.

**Table 3**

*Summary of Results (Percentages) for Each Dimension in the Student Questionnaire Survey on Piano Accompaniment Course*

| survey dimension                                                   | Very satisfied | Satisfied | Average | Dissatisfied | Very dissatisfied |
|--------------------------------------------------------------------|----------------|-----------|---------|--------------|-------------------|
| Compatibility between teaching content and musical pieces          | 5              | 20        | 40      | 25           | 10                |
| Teaching Methods and Collaborative Training Effectiveness          | 5              | 15        | 40      | 30           | 10                |
| Transformation of piano skills into accompaniment abilities        | 0              | 10        | 45      | 35           | 10                |
| Guidance on Emotional Expression and Style Interpretation in Works | 5              | 15        | 35      | 35           | 10                |
| Stage Practice and Emergency Response                              | 0              | 10        | 30      | 45           | 15                |
| Capacity Building Rationality of Curriculum Teaching               | 5              | 10        | 35      | 40           | 10                |
| Evaluation and Feedback                                            | 5              | 20        | 40      | 25           | 10                |
| Overall learning experience and gains                              | 5              | 20        | 40      | 25           | 10                |

## Discussion and Conclusion

### Discussion

This paper takes undergraduate students majoring in piano accompaniment at Xi'an Conservatory of Music as the research subjects. Through participatory observation, teacher interviews, and questionnaires, it investigates the current teaching situation of piano accompaniment techniques for students in this major, revealing several teaching issues in the organization and implementation of technique instruction for current piano accompaniment students.

Participatory observation reveals Xi'an Conservatory's piano accompaniment teaching exhibits a "solo-oriented" tendency and theoretical disconnect. Instruction prioritizes piano technique over vocal collaboration skills, lacking cross-disciplinary interaction and practical guidance. Furthermore, the curriculum relies heavily on Western classical works, neglecting local Shaanxi and Chinese ethnic music, thus failing to reflect regional educational characteristics.

Interview analysis reveals outdated teaching concepts, vague planning, and faculty bottlenecks. Many teachers mistakenly equate piano skills with accompaniment ability, neglecting its collaborative nature. The curriculum lacks a clear development plan and independent system for vocal art guidance. Furthermore, there is a shortage of qualified instructors with the necessary interdisciplinary expertise, hindering pedagogical innovation.

Student surveys highlight insufficient practical abilities, diminished motivation, and singular assessment feedback. Students report difficulty mastering accompaniment skills and



feel unprepared for professional vocal tasks due to a curriculum overemphasizing Western classical music. Crucially, current assessments focus excessively on piano technique rather than collaboration and artistic guidance, creating an imbalanced evaluation system that undermines student initiative.

### **Conclusion**

Overall, the research findings indicate that there is an urgent need to establish a clearer teaching system and interdisciplinary collaboration mechanism for the undergraduate piano accompaniment course at Xi'an Conservatory of Music. Greater emphasis on the organic integration of piano technique training with vocal art guidance capabilities, along with the reinforcement of teaching practices involving Chinese national and Shaanxi local vocal works, will contribute to enhancing students' comprehensive collaborative skills and professional adaptability. This study not only provides empirical evidence for optimizing the current piano accompaniment teaching at Xi'an Conservatory of Music but also lays the foundation for reforming the training model for vocal art guidance talents at similar professional music institutions.

### **Suggestions**

Current challenges in university piano accompaniment programs include ambiguous curriculum positioning, weak collaborative competencies, flawed evaluations, and a disconnect between technical training and vocal art practice. To address these, this paper proposes several optimization strategies.

First, curriculum design must distinguish "basic piano accompaniment" from "vocal piano accompaniment," focusing on the latter to cultivate professionals who understand vocals, excel in collaboration, and possess mentoring skills. Training should emphasize simulated rehearsals, stage practice, and artistic guidance to transform students into indispensable collaborators. Second, addressing faculty shortages requires introducing interdisciplinary instructors and developing specialized textbooks and digital repositories for vocal collaboration techniques. Third, evaluation systems must be reformed to prioritize collaborative quality, work interpretation, and adaptability. Incorporating feedback from vocal professionals and integrating ongoing process evaluations will encourage continuous improvement. Ultimately, reconstructing a teaching paradigm oriented toward vocal artistry through precise goals and dual-mentor mechanisms can bridge the gap between technical training and artistic practice, elevating students from score executors to artistic collaborators.

### **Acknowledgement**

I would like to extend my highest respect to Professor Natthawat Khositditsayan (my Major Advisor) and Professor Thanapon Teerachat (my Co-Advisor) at Buriram Rajabhat University, Thailand. Both advisors have devoted immense effort to the conception and writing of this thesis. With their rigorous scholarly attitude and profound academic expertise, they have steered the direction of my research and provided crucial guidance in refining the thesis structure and enhancing its academic quality.

At the same time, I would like to express my heartfelt gratitude to the teachers and students of the Vocal Department and the Piano Department at the Xi'an Conservatory of Music. The smooth conduct of this study would not have been possible without the active cooperation and selfless sharing of the teachers and classmates during the questionnaire survey and interview processes. It is precisely thanks to the valuable insights derived from everyone's professional practice that the arguments of this study have been solidified, and the conclusions rendered more scientific and persuasive.

Finally, I dedicate this gratitude to my family and close friends. Throughout this long period of study and writing, their unconditional support, encouragement, and tolerance have been my strongest backing, helping me to overcome difficulties and successfully complete my academic journey.

## References

- Liu, Y. (2015). Diverse integration and innovation —— reflections on the development of piano accompaniment courses in music education programs at normal universities. *Journal of Qilu Normal University*, (5), 37–41.
- Shi, H. (2018). Research on the teaching system of piano accompaniment courses. *Art Research*, (4), 186–187.
- Xu, Q. (2018). Research on the integrated teaching method of piano performance and piano accompaniment in regular higher education institutions. *Contemporary Music*, (1), 36–37.
- Zhu, Y. (2015). New reflections on the training program and curriculum design for “piano art guidance”——with discussion on the current status and improvement of piano art guidance programs at Wuhan Conservatory of Music. *Huangzhong (Journal of Wuhan Conservatory of Music)*, (2), 161–168.



## **A Study on the Key Elements of the Management Model for College Student Social Service Activities in Nan'an District, Chongqing Municipality, People's Republic of China**

**He Zurun<sup>1</sup> Somsak Jeewattana<sup>2</sup> Pittaya Pantachai<sup>3</sup>**

<sup>1</sup>Ph.D. (Candidate), Educational Administration, Faculty of Education, Buriram Rajabhat University, Thailand

E-mail: 660427090011@bru.ac.th

<sup>2</sup>Major Advisor, Assistant Professor, Director of the Office of Academic Promotion and Registration, Buriram Rajabhat University, Thailand

E-mail: Somsak.je@bru.ac.th

<sup>3</sup>Co-advisor, Assistant Professor, Vice President, Buriram Rajabhat University, Thailand

E-mail: pittaya.pa@bru.ac.th

### **Abstract**

The purpose of this mixed quantitative and qualitative methods was to examine the current states of the management of social service activities for college students in Nan'an District, Chongqing Municipality, People's Republic of China. The samples were composed of 384 students, including 96 first-year students, 96 second-year students, 96 third-year students, and 96 fourth-year students. Based on the total number of students in each grade at the four public universities in Nan'an District, they were selected through a purposive sampling method. By analyzing and synthesizing relevant research papers, the researchers obtained elements related to the development of management models for social service activities among college students in Nan'an District, Chongqing Municipality, People's Republic of China. The research instrument was a five-level questionnaire, and the item-objective consistency index (IOC) of the questionnaire ranged from 0.5 to 1.00. The statistics employed to analyze the quantitative data were percentage, mean, and standard deviation. The results revealed that the management model for social service activities among university students comprises four key elements: organizational leadership, support mechanisms, institutional development, and professional capacity. Students were most satisfied with the institutional framework of the management model for social service activities for university students in Nan'an District, Chongqing Municipality.

**Keywords:** College students, Management model, Social service activities

### **Introduction**

The Chinese government places great importance on university students' social service work and has formulated various policies and plans over the years to encourage and support their participation in social service activities. Higher education institutions have played a significant role in promoting and managing university students' social service activities. Additionally, many universities collaborate with governmental and non-governmental



organizations to organize student social service activities, enabling students to enhance their practical skills (Liang, 2017: 2).

However, there are still many weaknesses in the management of social service activities for university students in the People's Republic of China, such as the governments and enterprises and institutions for participation is not high, students can not get correct information, evaluation indicators are inconsistent. Innovating forms of social service activities for university students, developing management models for such activities, and enhancing the efficiency of their management have become pressing issues for Chongqing, a directly administered municipality. (People's Government of Chongqing, 2021: 1).

## Research Objective

To study the key elements of the management model for college students' social service activities in Nan'an District, Chongqing Municipality, People's Republic of China.

## Research Methodology

### 1. Population and Samples

#### 1.1 Population

There are four public undergraduate universities in Nan'an District, Chongqing, China, with a total of 86,290 undergraduate students.

#### 1.2 Samples

The sample size was determined according to Krejcie and Morgan (Munsri, 2021: 148–149), and the samples were composed of 384 students. They were selected through a purposive sampling method. Among them, Chongqing University of Posts and Telecommunications had 26 first-year students, 24 second-year students, 23 third-year students, and 23 fourth-year students; Chongqing Jiaotong University had 25 first-year students, 25 second-year students, 25 third-year students, and 26 fourth-year students; Chongqing University of Commerce had 30 first-year students, 30 second-year students, 30 third-year students, and 30 fourth-year students; Chongqing Second Normal University had 15 first-year students, 17 second-year students, 18 third-year students, and 17 fourth-year students.

### 2. Research Instrument

The research instrument was a questionnaire, which was divided into two parts.

Part 1: Basic information about the respondents, including information such as gender, age, grade level, and the number of times participating in community service activities.

Part 2: A study on the key elements of the management model for college students' social service activities in Nan'an District, Chongqing, China. The questions include respondents' evaluations of various aspects of their university's management model for social service activities.

### 3. Data Collection

By analyzing and synthesizing relevant research papers, the researchers obtained elements related to the development of management models for social service activities among college students in Nan'an District, Chongqing, China, 1) Organizational leadership

2) Support mechanism 3) Institutional development 4) Professional development. The data were collected using a five-point rating scale.

#### 4.Data Analysis

Based on these elements, this study developed a questionnaire and conducted a questionnaire survey. The statistics employed to analyze the quantitative data were percentage, mean, and standard deviation. The data were presented in tabular form, and the meaning of the average **scores** is as follows:

4.51–5.00 indicates the highest operability

3.51–4.50 indicates high operability

2.51–3.50 indicates moderate operability

1.51–2.50 indicates low operability

1.00–1.50 indicates minimum operability

### Research Results

1. First-level indicators of the Management of College Student Social Service Activities in Nan'an District, Chongqing Municipality, People's Republic of China

**Table 1**

*Means and standard deviations of management model elements for college students' social service activities in Nan'an District, Chongqing Municipality, People's Republic of China*

| Elements of Management Models       | $\bar{X}$   | S.D.       | Interpretation | Sorting  |
|-------------------------------------|-------------|------------|----------------|----------|
| <b>1. Organizational leadership</b> | <b>4.17</b> | <b>.89</b> | <b>high</b>    | <b>3</b> |
| 1.1 Coordination mechanism          | 4.13        | .92        | high           | 4        |
| 1.2 Organizational structure        | 4.18        | .88        | high           | 2        |
| 1.3 Atmosphere creation             | 4.20        | .89        | high           | 1        |
| 1.4 Brand management                | 4.17        | .85        | high           | 3        |
| <b>2. Support mechanism</b>         | <b>4.04</b> | <b>.92</b> | <b>high</b>    | <b>4</b> |
| 2.1 Financial support               | 4.00        | .93        | high           | 3        |
| 2.2 Service base support            | 4.04        | .93        | high           | 2        |
| 2.3 Information system support      | 4.08        | .91        | high           | 1        |
| <b>3. Institutional development</b> | <b>4.27</b> | <b>.85</b> | <b>high</b>    | <b>1</b> |
| 3.1 Program planning                | 4.30        | .80        | high           | 1        |

| Elements of Management Models      | $\bar{X}$   | S.D.       | Interpretation | Sorting  |
|------------------------------------|-------------|------------|----------------|----------|
| 3.2 Evaluation mechanism           | 4.25        | .87        | high           | 3        |
| 3.3 Incentive mechanism            | 4.24        | .88        | high           | 4        |
| 3.4 Constraint mechanism           | 4.29        | .86        | high           | 2        |
| <b>4. Professional development</b> | <b>4.22</b> | <b>.87</b> | <b>high</b>    | <b>2</b> |
| 4.1 Faculty composition            | 4.23        | .88        | high           | 1        |
| 4.2 Technology transfer            | 4.22        | .86        | high           | 2        |
| 4.3 Team building                  | 4.21        | .86        | high           | 3        |

The model comprises 4 factors and 14 indicators. According to Table 1, the study found that the five first-level indicators of the management model elements are all highly operable. The highest operability of the first-level indicator was institutional development ( $\bar{X} = 4.27$ ), and the lowest was the support mechanism ( $\bar{X} = 4.04$ ). The highest operability of the factor was program planning ( $\bar{X} = 4.30$ ), and the lowest was financial support ( $\bar{X} = 4.00$ ).

## 2. Coordination mechanism

**Table 2**

*Means and standard deviations of university students in Nan'an District, Chongqing Municipality, China regarding the coordination mechanism for managing social service activities at higher education institutions in Nan'an District*

| Coordination Mechanism                                                                                                                                                          | $\bar{X}$ | S.D. | Interpretation | Sorting |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 1. The university conducts surveys among government bodies, social organisations and students to ascertain societal needs, industry requirements and student development needs. | 4.12      | .93  | high           | 3       |
| 2. The university utilizes the findings of the needs survey to formulate a service menu and selection recommendations.                                                          | 4.09      | .93  | high           | 4       |
| 3. The university collaborates with local government, businesses and communities to secure policy support, funding, technical advice, premises, personnel and other resources.  | 4.14      | .92  | high           | 2       |



|                                                                                                                        |      |     |      |   |
|------------------------------------------------------------------------------------------------------------------------|------|-----|------|---|
| 4. The university establishes a collaborative mechanism among its various departments to jointly undertake activities. | 4.17 | .90 | high | 1 |
|------------------------------------------------------------------------------------------------------------------------|------|-----|------|---|

According to Table 2, **each item** of the **management model elements** for **college students'** social service activities in Nan'an District, Chongqing, China **was** highly operable. The highest **score** was **Item 4** ( $\bar{X} = 4.17$ ), and the lowest **score** was **Item 2** ( $\bar{X} = 4.09$ ).

### 3. Organizational structure

**Table 3**

*Means and standard deviations of university students in Nan'an District, Chongqing Municipality, China regarding the organizational structure for managing social service activities at higher education institutions in Nan'an District*

| Organizational Structure                                                                                                                                                     | $\bar{X}$ | S.D. | Interpretation | Sorting |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 5. The university establishes a leading group to comprehensively plan its social service activities.                                                                         | 4.17      | .82  | high           | 3       |
| 6. The university establishes or designates a department responsible for managing social service activities.                                                                 | 4.18      | .90  | high           | 2       |
| 7. The university establishes an expert committee mechanism to evaluate and oversee the effectiveness of its social service activities.                                      | 4.15      | .85  | high           | 4       |
| 8. The university establishes its organizational structure and operational mechanisms through a top-down approach, clearly defining the responsibilities of each department. | 4.20      | .95  | high           | 1       |

According to Table 3, each item of the management model elements for college students' social service activities in Nan'an District, Chongqing, China was highly operable. The highest score was Item 8 ( $\bar{X} = 4.20$ ), and the lowest score was Item 7 ( $\bar{X} = 4.15$ ).

### 4. Atmosphere creation

**Table 4**

*Means and standard deviations of university students in Nan'an District, Chongqing Municipality, China regarding atmosphere creation for managing social service activities at higher education institutions in Nan'an District*

| Atmosphere Creation                                                                                                                                                                                        | $\bar{X}$ | S.D. | Interpretation | Sorting |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 9. The university promotes students' community service activities through both internal and external media channels, fostering a positive culture of service.                                              | 4.22      | .86  | high           | 1       |
| 10. The university commends and promotes exemplary projects and teams to establish model activities.                                                                                                       | 4.21      | .91  | high           | 2       |
| 11. The university awards commendations to recognize outstanding performance by staff, students and departments in service activities, and to elevate such excellence to the highest levels of government. | 4.20      | .89  | high           | 3       |
| 12. The university shares learning experiences both on and off campus, organizes seminars, facilitates exchanges of views, and conducts other activities to promote and disseminate exemplary              | 4.19      | .89  | high           | 4       |
| 13. The university creates service activity logos, location signage, event emblems, slogans or mottos, and promotional posters to attract greater participation from staff and students.                   | 4.17      | .90  | high           | 5       |

According to Table 4, each item of the management model elements for college students' social service activities in Nan'an District, Chongqing, China was highly operable. The highest score was Item 9 ( $\bar{X} = 4.22$ ), and the lowest score was Item 13 ( $\bar{X} = 4.17$ ).

## 5. Brand management

**Table 5**

*Means and standard deviations of university students in Nan'an District, Chongqing Municipality, China regarding brand management for managing social service activities at higher education institutions in Nan'an District*

| Brand Management                                                                                                                                    | $\bar{X}$ | S.D. | Interpretation | Sorting |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 14. The university establishes a database of student activity programmes to serve the community and build an efficient, long-term programme system. | 4.21      | .83  | high           | 1       |

| Brand Management                                                                                                                                                                              | $\bar{X}$ | S.D. | Interpretation | Sorting |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 15. Leveraging the university's disciplinary strengths and distinctive features, we shall undertake prominent social service initiatives that align with socio-economic development.          | 4.13      | .87  | high           | 3       |
| 16. The university promotes exemplary demonstration projects to attract greater participation from staff and students, thereby advancing initiatives that contribute to societal development. | 4.16      | .86  | high           | 2       |

According to Table 5, each item of the management model elements for college students' social service activities in Nan'an District, Chongqing, China was highly operable. The highest score was Item 14 ( $\bar{X} = 4.21$ ), and the lowest score was Item 15 ( $\bar{X} = 4.13$ ).

## 6. Financial support

**Table 6**

*Means and standard deviations of university students in Nan'an District, Chongqing Municipality, China regarding financial support for managing social service activities at higher education institutions in Nan'an District*

| Financial Support                                                                                                                                  | $\bar{X}$ | S.D. | Interpretation | Sorting |
|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 17. The university establishes a dedicated fund for student activities and community service.                                                      | 4.02      | .93  | high           | 2       |
| 18. The university applies for special funding from government bodies, industry associations and corporate organizations.                          | 4.01      | .91  | high           | 3       |
| 19. The university establishes funding allocation mechanisms for student social service activities, covering facilities, grants and other aspects. | 3.93      | .97  | high           | 4       |
| 20. The university establishes a funding management mechanism for social service activities.                                                       | 4.05      | .92  | high           | 1       |

According to Table 6, each item of the management model elements for college students' social service activities in Nan'an District, Chongqing, China was highly operable. The highest score was Item 20 ( $\bar{X} = 4.05$ ), and the lowest score was Item 19 ( $\bar{X} = 3.93$ ).



## 7. Service base support

**Table 7**

*Means and standard deviations of university students in Nan'an District, Chongqing Municipality, China regarding service base support for managing social service activities at higher education institutions in Nan'an District*

| Service Base Support                                                                                                                    | $\bar{X}$ | S.D. | Interpretation | Sorting |
|-----------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 21. The university establishes a base for social service activities.                                                                    | 4.00      | .90  | high           | 4       |
| 22. The university collaborates with government, communities, cities and business partners to establish a social service action center. | 4.07      | .94  | high           | 1       |
| 23. The university establishes standardized facilities, signage and service centers.                                                    | 4.05      | .90  | high           | 2       |
| 24. The university conducts standardized social service activities at its outreach bases.                                               | 4.03      | .98  | high           | 3       |

According to Table 7, each item of the management model elements for college students' social service activities in Nan'an District, Chongqing, China was highly operable. The highest score was Item 22 ( $\bar{X} = 4.07$ ), and the lowest **score** was Item 21 ( $\bar{X} = 4.00$ ).

## 8. Information system support

**Table 8**

*Means and standard deviations of university students in Nan'an District, Chongqing Municipality, China regarding information system support for managing social service activities at higher education institutions in Nan'an District*

| Information System Support                                                                                                                                                                                                                           | $\bar{X}$ | S.D. | Interpretation | Sorting |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 25. The university establishes a social service activity information management system.                                                                                                                                                              | 4.07      | .90  | high           | 3       |
| 26. The university employs systems for supply and demand management, project application and publication, volunteer management, activity evaluation, score recording, timetable scheduling, and results notification to ensure efficient operations. | 4.08      | .94  | high           | 2       |

| Information System Support                                                                                            | $\bar{X}$ | S.D. | Interpretation | Sorting |
|-----------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 27. The university utilizes an online platform to showcase its activities and the outcomes of its learning exchanges. | 4.12      | .90  | high           | 1       |
| 28. The university utilizes online platforms to conduct social service activities in a digital format.                | 4.06      | .91  | high           | 4       |

According to Table 8, each item of the management model elements for college students' social service activities in Nan'an District, Chongqing, China was highly operable. The highest score was Item 27 ( $\bar{X} = 4.12$ ), and the lowest score was Item 28 ( $\bar{X} = 4.06$ ).

## 9. Program planning

**Table 9**

*Means and standard deviations of university students in Nan'an District, Chongqing Municipality, China regarding program planning for managing social service activities at higher education institutions in Nan'an District*

| Program Planning                                                                                                                                                  | $\bar{X}$ | S.D. | Interpretation | Sorting |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 29. The university incorporates student social service activities into practical teaching or vocational training programmes.                                      | 4.28      | .85  | high           | 3       |
| 30. The university systematically designs educational and teaching programs for social service activities, defining their objectives, scope, themes, and formats. | 4.30      | .86  | high           | 2       |
| 31. The university establishes regulations for event management and adheres to standards of integrity.                                                            | 4.33      | .69  | high           | 1       |

According to Table 9, each item of the management model elements for college students' social service activities in Nan'an District, Chongqing, China was highly operable. The highest score was Item 31 ( $\bar{X} = 4.33$ ), and the lowest score was Item 29 ( $\bar{X} = 4.28$ ).

## 10. Evaluation mechanism

**Table 10**

*Means and standard deviations of university students in Nan'an District, Chongqing Municipality, China regarding the evaluation mechanism for managing social service activities at higher education institutions in Nan'an District*

| Evaluation Mechanism                                                                                                                                                                                        | $\bar{X}$ | S.D. | Interpretation | Sorting |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 32. The university establishes the content, methods and criteria for measuring and evaluating students' social service activities.                                                                          | 4.27      | .86  | high           | 2       |
| 33. The assessment and evaluation system for university social service activities shall be based on the principles of diversity in evaluation content, evaluation bodies, and evaluation methods.           | 4.28      | .88  | high           | 1       |
| 34. The university flexibly employs evaluation methods such as record-based, credit-based, and star-rating systems, alongside social feedback mechanisms, to assess and evaluate social service activities. | 4.26      | .87  | high           | 3       |
| 35. The university conducts assessments of the event process, impact, service attitude, effectiveness, innovation, and sustainability.                                                                      | 4.22      | .89  | high           | 5       |
| 36. The university uses the assessment results as an important reference for awarding honours, promotions, and employment opportunities.                                                                    | 4.24      | .87  | high           | 4       |

According to Table 10, each item of the management model elements for college students' social service activities in Nan'an District, Chongqing, China was highly operable. The highest score was Item 33 ( $\bar{X} = 4.28$ ), and the lowest score was Item 35 ( $\bar{X} = 4.22$ ).

## 11. Incentive mechanism

**Table 11**

*Means and standard deviations of university students in Nan'an District, Chongqing Municipality, China regarding the incentive mechanism for managing social service activities at higher education institutions in Nan'an District*

| Incentive Mechanism                                                                                                                                                                                                                                        | $\bar{X}$ | S.D. | Interpretation | Sorting |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 37. The university recognizes the participation of staff and students in social service activities through the awarding of academic credits, the recording of service hours, the issuance of service certificates, and inclusion in workload calculations. | 4.24      | .85  | high           | 2       |



| Incentive Mechanism                                                                                                                                                  | $\bar{X}$ | S.D. | Interpretation | Sorting |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 38. The university establishes a system of spiritual incentives through means such as honorary recognition, merit-based recommendations, and commendatory publicity. | 4.27      | .86  | high           | 1       |
| 39. The university establishes a system of material incentives through means such as the distribution of bonuses.                                                    | 4.22      | .92  | high           | 3       |

According to Table 11, each item of the management model elements for college students' social service activities in Nan'an District, Chongqing, China was highly operable. The highest score was Item 38 ( $\bar{X} = 4.27$ ), and the lowest score was Item 39 ( $\bar{X} = 4.22$ ).

## 12. Constraint mechanism

**Table 12**

*Means and standard deviations of university students in Nan'an District, Chongqing Municipality, China regarding the constraint mechanism for managing social service activities at higher education institutions in Nan'an District*

| Constraint Mechanism                                                                                                                                                                                                                                | $\bar{X}$ | S.D. | Interpretation | Sorting |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 40. The university establishes institutional documents such as volunteer codes of conduct and service standards.                                                                                                                                    | 4.28      | .84  | high           | 2       |
| 41. The university implements dynamic management and oversight of volunteer and community service activities, including progress, financial utilization, frequency of engagement, and service standards, throughout its social service initiatives. | 4.29      | .88  | high           | 1       |

According to Table 12, each item of the management model elements for college students' social service activities in Nan'an District, Chongqing, China was highly operable. The highest score was Item 41 ( $\bar{X} = 4.29$ ), and the lowest score was Item 40 ( $\bar{X} = 4.28$ ).

## 13. Faculty composition

**Table 13**

*Means and standard deviations of university students in Nan'an District, Chongqing Municipality, China regarding faculty composition for managing social service activities at higher education institutions in Nan'an District*

| Faculty Composition                                                                                                                                                                            | $\bar{X}$ | S.D. | Interpretation | Sorting |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 42. The university actively recruits industry professionals from outside the institution to serve as social service mentors.                                                                   | 4.19      | .89  | high           | 5       |
| 43. The university provides guidance for university students' social service activities through teaching staff specializing in ideological and political theory courses and social philosophy. | 4.27      | .86  | high           | 1       |
| 44. The university assigns counsellors and form tutors to guide students in their community service activities.                                                                                | 4.21      | .88  | high           | 4       |
| 45. The university assigns full-time faculty members to guide students in their community service activities.                                                                                  | 4.25      | .91  | high           | 2       |
| 46. Supervising tutors accompany the university students' social service team to provide on-site guidance.                                                                                     | 4.23      | .86  | high           | 3       |

According to Table 13, each item of the management model elements for college students' social service activities in Nan'an District, Chongqing, China was highly operable. The highest score was Item 43 ( $\bar{X} = 4.27$ ), and the lowest score was Item 42 ( $\bar{X} = 4.19$ ).

#### 14. Technology transfer

**Table 14**

*Means and standard deviations of university students in Nan'an District, Chongqing Municipality, China regarding technology transfer for managing social service activities at higher education institutions in Nan'an District*

| Technology Transfer                                                                                                                                                             | $\bar{X}$ | S.D. | Interpretation | Sorting |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 47. The university provides students with a platform to transform the outcomes of their community service into research projects, such as research reports and academic papers. | 4.20      | .85  | high           | 3       |
| 48. The university provides students with a subject-based competition platform to transform social service outcomes into innovation and entrepreneurship projects.              | 4.24      | .86  | high           | 1       |

|                                                                                                                                                                                                                          |      |     |      |   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----|------|---|
| 49. The university provides a scientific platform for faculty members to translate outcomes from social service initiatives into academic research, subsequently converting these findings into policy research reports. | 4.22 | .87 | high | 2 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----|------|---|

According to Table 14, each item of the management model elements for college students' social service activities in Nan'an District, Chongqing, China was highly operable. The highest score was Item 48 ( $\bar{X} = 4.24$ ), and the lowest score was Item 47 ( $\bar{X} = 4.20$ ).

## 15. Team building

**Table 15**

*Means and standard deviations of university students in Nan'an District, Chongqing Municipality, China regarding team building for managing social service activities at higher education institutions in Nan'an District*

| Team Building                                                                                                                                                      | $\bar{X}$ | S.D. | Interpretation | Sorting |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 50. The university intensifies training programmes for teaching staff and student affairs personnel to enhance the practical capabilities of its teaching faculty. | 4.20      | .85  | high           | 3       |
| 51. The university provides training in volunteering skills for student volunteers.                                                                                | 4.23      | .89  | high           | 1       |
| 52. The university provides practical training in professional skills for student volunteers.                                                                      | 4.19      | .84  | high           | 4       |
| 53. The university actively advances the development of relevant courses and teaching materials for university students' social service initiatives.               | 4.21      | .86  | high           | 2       |

According to Table 15, each item of the management model elements for college students' social service activities in Nan'an District, Chongqing, China was highly operable. The highest score was Item 51 ( $\bar{X} = 4.23$ ), and the lowest score was Item 52 ( $\bar{X} = 4.19$ ).

## Discussion and Conclusion

In the sample survey, the average value of organizational leadership was high. This indicates that respondents consider organizational leadership to be a crucial component of the management model for university students' social service activities in Nan'an District, Chongqing Municipality, China. This aligns with the perspective of the scholar Wu et al.



(2015: 59), who contends that all departments involved in the project should collaborate to support the organizing department in carrying out the relevant work.

In the sample survey, the average value of the support mechanism was high. This indicates that respondents consider support mechanisms to be crucial for the management model of social service activities undertaken by university students in Nan'an District, Chongqing Municipality, China. This aligns with the perspective of the scholar Yan and Mao (2017: 36), who contends that a well-established support mechanism serves as a solid foundation for undertaking activities, minimizing various obstacles during implementation and ensuring the smooth execution of initiatives.

In the sample survey, the average value of institutional development was high. This indicates that respondents consider institutional development to be the most effectively implemented aspect of managing university students' social service activities in Nan'an District, Chongqing, China. This aligns with the perspective of the scholar Wu and Wang (2012: 68), who contends that institutional frameworks should be established to stimulate the enthusiasm and initiative of both staff and students to participate in social service activities.

In the sample survey, the average value of professional development was high. This indicates that respondents perceive the involvement and development of professional expertise within the management model for university students' social service activities in Nan'an District, Chongqing, China to be at a relatively high level. This aligns with the perspective of the scholar Zhou and Mu (2021: 105), who contends that guiding students to consciously integrate their specialized knowledge, practical objectives, and the demands of the field facilitates the stimulation of academic interest during practical engagement, thereby consolidating professional knowledge and enhancing specialized skills.

Ranked in descending order by average score, the primary indicators of the management model for university students' social service activities are institutional development, professional development, organizational leadership, and support mechanisms. The factors are program planning, constraint mechanisms, evaluation mechanisms, incentive mechanisms, faculty composition, technology transfer, team building, atmosphere creation, organizational structure, brand management, coordination mechanism, information system support, service base support, and financial support. All indicators and factors are highly operable.

## **Suggestion**

1. Researchers for future studies may develop a guidance manual for managers of university social service activities in Nan'an District, Chongqing, China, and provide this manual to university administrators to enhance their capacity for managing such activities.

2. Researchers for future studies may also conduct questionnaire surveys among educational administrators to ascertain the views of education authorities regarding the management of university students' social service activities, thereby preparing for the updating of the handbook.

## References

- Liang, L. Q. (2017). *Introduction to project management for Youth League activities*. Beijing University Publishing House.
- Munsri, K. (2021). *Development of a learning model that integrates Royal Science for development: Analytical thinking ability for Grade 6 students*. Phetchabun Rajabhat University.
- People's Government of Chongqing. (2021, December 31). *The total number of students in higher education in Chongqing will reach about 1.2 million by 2025*. Chongqing Municipal People's Government.  
[https://www.cq.gov.cn/zwgk/zfxxgkzl/fdzdgknr/zdmsxx/jy/jy\\_ssqq/202112/t20211231\\_10267379.html](https://www.cq.gov.cn/zwgk/zfxxgkzl/fdzdgknr/zdmsxx/jy/jy_ssqq/202112/t20211231_10267379.html)
- Wu, B. L., & Wang, W. T. (2012). Construction and implementation of extracurricular practical activity systems based on applied undergraduate talent cultivation. *Teaching in Chinese Universities*, (5), 68–70.
- Wu, Y. J., Fang, P., & Lu, P. (2015). Exploring the mode of constructing a long-term mechanism of graduate students' social practice: An example of Southwestern University of Finance and Economics organizing professional degree master's students to serve the local entrepreneurial economy. *Degree and Postgraduate Education*, (5), 57–61.
- Yan, J. Z., & Mao, H. (2017). Exploration of educational practice sections and guarantee mechanisms for teacher trainees. *Theory and Practice of Education*, (8), 34–37.
- Zhou, Y., & Mu, S. Q. (2021). Analysis on the concept and mode of precision of practical education in colleges and universities in the new era. *Jiangsu Higher Education*, (10), 104–108.
- The State Council of the People's Republic of China. (2019, February 23). *China's education modernization 2035*. Central People's Government of the People's Republic of China. [https://www.gov.cn/zhengce/2019-02/23/content\\_5367987.html](https://www.gov.cn/zhengce/2019-02/23/content_5367987.html)

# **An Investigation of the Conditions and Problems of Soprano Singing Techniques in the Chinese Original Opera Practice Manual for Master's Degree Students at the Peking University Academy of Opera, People's Republic of China.**

***Hong Ye<sup>1</sup> Thiti Panya-in<sup>2</sup> & Jiranuwat Khuntajan<sup>3</sup>***

<sup>1</sup>Ph.D.Student in Music Education, Faculty of Education, Buriram Rajabhat University, Thailand,

Email: hong.ye@bru.ac.th

<sup>2</sup>Major Advisor (Assistant Professor Dr.), Graduate School, Buriram Rajabhat University, Thailand,

Email: thiti.py@bru.ac.th

<sup>3</sup>Co-advisor (Assistant Professor Dr.), Graduate School, Buriram Rajabhat University, Thailand,

Email: Jiranuwat.kh@bru.ac.th

## **Abstract**

This study aimed to Investigate of the Condition and Problem of a Soprano Singing Technique in the Chinese Original Opera for Master's Degree Students at Peking University Academy of Opera. It aimed to identify core issues and explore potential solutions, providing empirical evidence to improve talent cultivation systems. The study employed a qualitative methodology, the interview questionnaire evaluation results indicated a high level of expert consensus (IOC = 0.92). Through structured interviews with ten university bel canto teachers and five soprano master's students. Findings revealed that students exhibited high enthusiasm for Chinese Original Opera, with "The Song of Youth" serving as the primary learning medium due to its cultural value and progressive vocal difficulty. However, core issues were identified in vocal methods, Chinese diction, and superficial emotional expression, alongside a lack of systematic after-class reference materials. This research enriches empirical studies on soprano singing technique in the Chinese Original Opera. Its findings can inform the development of targeted practice manual, optimize university teaching models, and contribute to the inheritance and innovation of Chinese Original Opera.

**Keywords:** Chinese Original Opera, Soprano Singing Technique, Chinese Vocal Music Master's Degree Students, The Chinese Original Opera "The Song of Youth"

## **Introduction**

Chinese Original Opera, as an artistic medium that integrates Western operatic forms with Chinese cultural elements, reflects the vitality of national cultural transmission and artistic innovation. In recent years, original works such as "The Song of Youth" have made notable breakthroughs in stage presentation and public response. However, significant shortcomings remain in the area of talent cultivation. As the core performers of future opera stages, soprano master's degree students play a crucial role in conveying the artistic value of Chinese Original Opera. The standardization of their singing technique and the accuracy of their cultural expression are directly tied to the quality and influence of these productions. From the perspective of industry practice, issues such as the problem of



"inverted pronunciation" encountered by sopranos when singing Chinese lyrics, the challenge of integrating Western bel canto techniques with localized musical flavor (Zhang, 2018), and the superficial interpretation of characters' psychology (Li, 2024), have become common bottlenecks hindering the maturity of Chinese Original Opera.

Research in the field of graduate vocal education highlights a tension between current practice and actual needs. Empirical research by Olena Chumak (2023) found that native-language vocal habits commonly interfere with diction in cross-linguistic singing, which corresponds with Liu (2022) observation of "distortion in lyric delivery in the Chinese Original Opera teaching, "confirming that Chinese diction represents a cross-cultural technical challenge. Liu (2024) noted an "imbalance between internationalization and localization" in graduate vocal training, specifically that Western operatic training excessively encroaches on the study of original work, closely related to the "technical imbalance in soprano training" identified in this study. Research on soprano singing technique reflects a dual perspective of technical skill and expressive performance. Notably, Song (2017) proposed that "secondary creation must reconcile Western terminology with Chinese culture, "directly addressing core challenges in soprano role interpretation and providing direct inspiration for designing the "emotional expression assessment" module in this study. A case study of the Chinese Original Opera "The Song of Youth" served as a concrete reference for this investigation. Chen (2021) analyzed the opera's creative process, revealing the practical application of the "Chinese Bel Canto" methodology. Jiao (2023) examined three core arias, clarifying the technical points sopranos must master. These details provided an empirical basis for designing the technical dimension of the survey.

Compared with existing research, the innovations of this study are threefold: first, it focuses specifically on master's degree students, filling an empirical gap in understanding the technical status of high-level talent training; second, it uses the Chinese Original Opera "The Song of Youth" as a standardized evaluation medium, overcoming the methodological limitation of dispersed work samples in prior studies; third, through dual interviews with teachers and students, it systematically presents the technical cognition differences in teaching and learning, providing a more comprehensive evidence base for constructing targeted training systems.

## Research Objectives

To Investigate of the Condition and Problem of a Soprano Singing Technique in the Chinese Original Opera Practice Manual for Master's Degree Students at Peking University Academy of Opera, People's Republic of China.

## Research Methodology

The study adopted a qualitative research design, combining document analysis, surveys, and in-depth interviews, with the aim to Investigate of the Condition and Problem of a Soprano Singing Technique in the Chinese Original Opera for Master's Degree Students at Peking University Academy of Opera.

## Samples

The interview subjects included four bel canto teachers from the Peking University Academy of Opera and six external bel canto teachers and experts, all of whom have extensive experience in soprano instruction and have either current or prior affiliations with the Peking University Academy of Opera, whether as students or faculty members. To ensure the objectivity of the interview results, the participating teachers included both male and female instructors, enabling the researcher to draw conclusions from diverse perspectives. In addition, five soprano master's degree students from the Peking University Academy of

Opera were interviewed. These students have accumulated considerable experience in both learning and performing Chinese Original Opera, allowing them to provide a relatively authentic reflection of the current state of soprano singing technique and development within Chinese Original Opera in higher music education. Their contributions offer representative reference data for this study.

### **Research Instruments**

The study utilized the following research instruments:

literature search

To comprehend and obtain information about the origins of Chinese Original Opera, Soprano Singing Technique, and the Chinese Original Opera "The Song of Youth", researchers will review existing literature, books, journals, and relevant textbooks.

In-Depth Interviews with Bel Canto Teachers and Master's Degree Students

This study selected four bel canto teachers from the Peking University Academy of Opera, six bel canto teachers and experts from external institutions, as well as five soprano master's degree students from the Peking University Academy of Opera. The finalized questionnaire consists of a teacher version and a student version, each containing ten questions, with twenty questions in total.

3.2.3 Expert Evaluation Forms  
Used to assess the clarity, relevance, and effectiveness of the interview questions. The validity of the interview questionnaire was assessed using the Index of Item-Objective Congruence (IOC). Five Chinese and international education experts were invited to evaluate the appropriateness of a total of twenty core questions across the two sets of questionnaires. The results showed that the IOC scores for both questionnaires were 0.92, indicating a high level of content validity.

### **Data Collection**

Data collection was conducted in three phases:

Literature analysis: Review the origins of Chinese Original Opera, Soprano Singing Technique, and the Chinese Original Opera "The Song of Youth".

Expert evaluation: The Item Objective Congruence Index (IOC) was used to validate the interview questionnaire.

Teachers and students interviews: to examine the current state of soprano teaching and the singing technique for soprano master's degree students in the Chinese Original Opera.

### **Data Analysis**

The researchers transcribed, organized, and analyzed the interview data from ten instructors and five master's degree soprano students, identifying key themes, primary issues, and practical insights. The study employed thematic analysis to synthesize the findings, which were then integrated with existing literature and the challenges present in vocal teaching and learning to provide theoretical and practical guidance for the structure, repertoire selection, and content design of the "Soprano Singing Technique in the Chinese Original Opera Practice Manual".

## Results

The findings of this study are based on literature review and research, as well as data collected from interviews with students and teachers. The results aim to understand the current state of soprano pedagogy and the singing technique of soprano master's degree students at the Peking University Academy of Opera in performing Chinese Original Opera.

### Literature Review and Research

The literature review on the origins and development of Chinese Original Opera, Soprano Singing Technique, and the Chinese Original Opera "The Song of Youth" provides multidimensional theoretical and practical support for the development of the "Soprano Singing Technique in the Chinese Original Opera Practice Manual". The literature traces the evolution of Chinese Original Opera from borrowing Western operatic models to integrating native musical elements, highlighting the characteristic of "East-West fusion with localized expression," thereby establishing the historical and aesthetic foundation for the manual. Literature on Soprano Singing Technique consolidates core elements such as vocal methods, breath control, Chinese diction, and emotional expression, balancing universal vocal principles with the specific requirements of Chinese works. The case study of the Chinese Original Opera "The Song of Youth" concretizes abstract techniques, offering practical examples for the manual. This "theory plus case study" approach combines academic rigor with practical applicability, contributing to the construction of a uniquely Chinese vocal pedagogy and promoting the inheritance and innovation of Chinese Original Opera performance.

#### *In-Depth Interviews with Bel Canto Teachers and Soprano Master's Degree Students*

The interview includes two sets of questions comprising a total of twenty items. The questions covered teachers' and soprano master's degree students' understanding of Chinese Original Opera works; the issues encountered by teachers in "teaching" and students in "learning" Chinese Original Opera, as well as the solutions and training methods employed; and the significance of learning Chinese Original Opera for students' professional development. The interview results indicate that:

Both teachers and students hold a positive attitude toward Chinese original opera, with shared and individualized views on the starting point and learning sequence; most recommend beginning in the first year of graduate study, using the Chinese Original Opera "The Song of Youth" as a representative work.



The main issues in "teaching" and "learning" lie in singing technique, language, and performance, encompassing singing methods, articulation, breath control, emotional expression, and character portrayal. The proposed solutions include "Chinese Bel Canto" training, score annotation, breath adjustment, character comprehension, and the integration of elements from traditional Chinese opera performance.

Studying Chinese original opera can significantly enhance sopranos' capacity for independent thinking, character portrayal, and vocal artistic expression. During performance, singers must skillfully switch between Chinese and Western operatic styles while mastering articulation and linguistic rhythms. By actively engaging in stage performances of Chinese original opera and integrating localized artistic elements, performers not only strengthen audience aesthetic appreciation but also provide crucial support for the growth of vocal professionals and the sustainable development of the art form.

The primary challenge for students lies in the lack of post-class practice resources, which makes it difficult for them to engage in effective independent learning and thus still heavily relies on real-time guidance from teachers. The development of a practice manual specifically designed for soprano vocal students could offer students systematic and reference-worthy support for their post-class study, while also providing teachers with standardized and instructive references for their teaching. This would promote enhanced teaching and learning outcomes in a mutually beneficial way.

*Figure 1 Photos of the parts of the interview teachers*

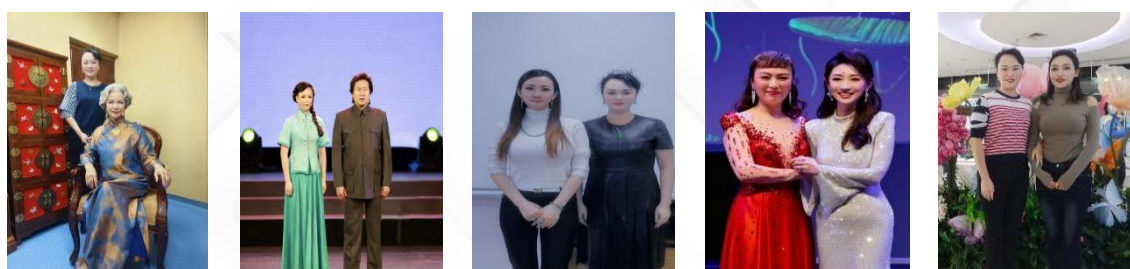


*Figure 2 Photos of the interview Students*



## Data Analysis

Based on a systematic analysis of interview data from fifteen teachers and students, the researchers conducted a multi-dimensional cross-comparison with thirty-three relevant domestic and international sources (including academic papers, books, and journals), and arrived at the following results:

### Clear Consensus on the Work

As a representative work of original Chinese opera, "The Song of Youth" features soprano arias with a stepwise progression in difficulty, making it suitable as core repertoire for soprano learners. The opera's rich characterizations and distinctive musical style provide excellent material for singing technique training.

**Concentration of Core Technical Challenge** The core technical challenges for sopranos singing Chinese Original Opera are concentrated in three main areas: fundamental techniques of register unification and breath support; the coordination of Chinese diction and vowel finales with the bel canto vocal tract; and the vocal expression of character emotion. Among these, the "conflict between diction and the vocal tract" is the most critical difficulty to overcome in technical training.

### Clear Training Pathways

Three effective training pathways have been identified through literature and interviews: preparatory research for in-depth understanding of character background; performance training drawing on the "hands, eyes, body, movements, and steps" of traditional Chinese opera; and a scientific vocal approach guided by the principles of "Chinese Bel Canto." These three elements support each other, forming a comprehensive technical training system.

### Scarcity of Self-Learning Resources

Currently, there is a severe shortage of audio, video, and written materials available for students' independent practice outside of class, leaving learners highly dependent on classroom instruction. The lack of systematic learning materials directly impacts the continuity and consolidation of technical training.

## Conclusion and Discussion

### Discussion

"Chinese Original Opera" emerging as a new concept in the context of the 21st-century cultural "going global" initiative, integrates Western operatic techniques with native musical elements, providing a unique artistic context for soprano performance (Gu, 2025). Literature indicates that sopranos exhibit deficiencies in performance methods, language articulation, and character portrayal, which weaken their artistic expression (Li, 2024). Wang (2018) emphasizes that singing technique is a core component of singing, as scientific techniques facilitate artistic expression, while Song (2017) highlights that character development in the Chinese Original Opera relies on performers' secondary creative abilities, requiring a balance between Western musical vocabulary and Chinese cultural context to achieve coordinated musical and cultural expression.

In higher vocal education, although some instructors incorporate segments of original operas into teaching, the repertoire is limited and its practical impact is minimal. Students may master basic singing skills but often fail to develop an in-depth understanding and

systematic practice of original operas (Liu, 2024; Liu, 2022). This constrains professional development and affects the cultivation of original opera talent, as well as the localization of Bel Canto. Taking the Chinese Original Opera "The Song of Youth" as an example, the soprano protagonist Lin Daojing serves as a central figure in plot development, and her characterization and emotional expression are directly linked to stage performance and thematic conveyance (Wang, 2022).

Therefore, an in-depth study of soprano performance in the Chinese Original Opera including musical interpretation, singing technique, emotional expression, and character portrayal not only enhances performance quality but also helps establish systematic and scientific learning and teaching methods, providing practical guidance for higher vocal education and promoting the professional development and artistic inheritance of soprano performance in the Chinese Original Opera.

## Conclusion

A Literature Based Study of the System and Development Paths for Soprano Singing Technique in the Chinese Original Opera

Studies indicate that soprano singing in Chinese Original Opera results from the integration of Western technique and indigenous musical elements, forming a technical system and unique aesthetics that encompass scientific vocalization, Mandarin articulation and rhythm, and dramatic expression. However, existing research exhibits notable deficiencies in terms of systematicity and specialization, lacking operable theoretical frameworks and practical guidance. Although the literature has delineated its core techniques and professional requirements, there remains a need to further construct systematic training pathways and pedagogical methods to address the current gap in practical application. This would provide clear direction for subsequent empirical research and the development of teaching systems.

Analysis of Singing Technique Challenges and Solutions for Soprano in Performing Chinese Original Opera

Sopranos often face technical challenges such as unclear diction and superficial emotional expression when performing Chinese Original Opera. The introduction of the "Chinese bel canto" method, which standardizes vocal "articulation" to optimize Chinese phonetic processing and utilizes diaphragmatic breathing to strengthen breath "support," can systematically enhance the integration of voice and language as well as character portrayal. This approach contributes to the inheritance and innovation of this art form.

The Chinese Original Opera "The Song of Youth" as a Primary Learning Vehicle Due to Its Cultural Value and Technical Gradation

The Chinese Original Opera "The Song of Youth" serves as a crucial training vehicle for sopranos, with its arias offering graduated pedagogical value, ranging from foundational breath control and Chinese diction training to advanced technique such as vocal register integration and dramatic expression. It systematically merges technical training with artistic interpretation, enabling singers to master the unique phrasing and character portrayal skills essential to Chinese Original Opera. As a "living textbook," it facilitates a seamless transition from fundamental skills to stage performance.

Challenges of Systemic Gaps and Comprehensive Skill Demands in Soprano Training for Chinese Original Opera

At present, the training of sopranos for Chinese Original Opera suffers from systemic deficiencies, including a lack of targeted curriculum design and practical teaching tools.



Students face complex challenges such as mastering the nuances of Chinese prosody and integrating Chinese and Western singing technique. The existing teaching resources are fragmented, training pathways remain unclear, and instruction heavily relies on individual instructor experience. These issues hinder teaching efficiency and outcomes, severely constraining the cultivation and development of professional talent.

## **Suggestions**

### **Research Applicability and Expansion**

For soprano master's degree students studying Chinese Original Opera, first-year training lays the technical foundation and develops language and emotional skills, while more challenging repertoire is suitable for later years to ensure proper expression and singing technique.

The study emphasizes the "Action + Power" core of the "Chinese Bel Canto" method, integrating oral cavity resonance, columnar breathing, and Chinese linguistic rhythm to shape a distinctive Chinese singing style.

Under the development background of Chinese Original Opera, higher vocal education for sopranos lacks systematic training and practical tools, with unclear learning pathways. The compilation of practice manual can offer clear learning paths through work analysis, technique refinement, and exercise design. This approach facilitates the integration of technique and artistry, enhances teaching professionalism, and lays the foundation for cultivating performers with both academic and artistic literacy.

### **Future Research**

Given the unique characteristics of vocal pedagogy, the lack of immediate instructor guidance during students' self-practice often leads to the formation and entrenchment of technical errors. Therefore, developing the "Soprano Singing Technique in the Chinese Original Opera Practice Manual" holds significant value for both students' academic research and artistic development.

Students' foundational skills and self-assessment abilities influence the effectiveness of the manual. There is a need to optimize personalized content, enhance instructional value and promotion potential, and provide systematic vocal support.

The manual may incorporate a self-directed learning monitoring and feedback mechanism, utilizing digital platforms or AI voice analysis to enable remote tracking and personalized feedback. Reflective questions can also be integrated to guide students in structured summarization.

## **Acknowledgement**

The researcher sincerely extends gratitude to the academic supervisor, subject-matter experts, and students in related fields for their support and assistance. With profound insights and constructive feedback, they have provided essential guarantees for the development of this study. Their contributions have ensured the academic rigor and practical value of the research in areas such as refining research methodologies, validating the practice manual, and reviewing interview and questionnaire designs. Additionally, their encouragement and professional expertise played a crucial role in achieving the research objective of developing the "Soprano Singing Technique in the Chinese Original Opera Practice Manual" for Master's Degree Students at the Peking University Academy of Opera, providing solid support for the smooth progress of this study.

## References

- Chen, Y. (2021). *A glimpse into Jin Man's theory of Chinese Bel Canto through the creation of Peking University's version of the opera Song of Youth*. (Master's thesis, ). Wuhan Conservatory of Music
- Duan, L. (2023). Reflections on "singing" in Chinese opera. *Singing Art*. (01):24–33.
- Gu, X. (2025). Original opera and Chinese cultural identity. *Journal of South-Central University for Nationalities (Humanities and Social Sciences Edition)*. (07):1–13.
- Jiao, Y. K. (2023). *The image shaping and singing analysis of Lin Daojing in the national opera Song of Youth*. (Master's thesis). Xi'an Conservatory of Music.
- Li, N. & Yao, W. H. (2022). Research on the training mode of vocal music graduate students in the new era. *Heilongjiang Education (Theory and Practice)*. (12):35–36.
- Li, X. D. (2024). Artistic grasp and implementation in the performance of Chinese original operas. *Heilongjiang Pictorial*. (24):28–29.
- Liu, L. J. (2024). Practice and exploration to improve the quality and level of international graduate education: A case study of the vocal performance major. *Contemporary Music*. (03):4–6.
- Liu, Z. Z. (2022). The influence of Chinese original opera on higher education in national vocal music. *Drama Home*. (22):122–124.
- Ma, H. Q. (2022). *Study on the musical composition of the national opera Song of Youth*. (Master's thesis). Jiangxi University of Science and Technology.
- Qiang, L. (2023). Peculiarities of the mutual influence of Italian and Chinese musical theater tradition in historical development". *Kharkiv I.P. Kotlyarevsky National University*. (67):56-77
- Qin, Y. X. (2021). A brief analysis of the role of Lin Daojing in the national opera Song of Youth. *Culture Monthly*. (01):66–67.
- Ruchala, M. & Szczepanek-Parulska, E. (2022). Novel methods of diagnostics of thyroid and parathyroid lesions. *Multidisciplinary Digital Publishing Institute*. (20):148
- Sheng, Z. X. (2024). Analysis and reflections on the commercialization of Chinese original opera. *Art Appreciation*. (08):77–80.
- Song, L. (2017). On the cultivation of secondary creative ability in the Chinese Original Opera. *Music Creation*. (09):88–91.
- Sun, D. X. (2022). *On the musical image shaping of "Lin Daojing" in the opera Song of Youth*. (Master's thesis). Shandong University.
- Sun, S. Y. (2017). *A survey study on the performance practice of vocal music graduate students in colleges and universities*. (Master's thesis). Hunan Normal University.
- Wang, W. X. (2020). A brief discussion on the development direction of Chinese original opera creation. *Art Vision*. (04):8–9.
- Wang, Y. X. (2022). *Character image and singing segment analysis of Lin Daojing in Song of Youth*. (Master's thesis). Henan Normal University.
- Wang, Y. T. (2018). *A study on the role-shaping of Lin Daojing in the opera Song of Youth*. (Master's thesis). Inner Mongolia Normal University.
- Wu, J. (2019). The importance of national opera performance to the artistic practice of vocal music graduate students. *Yi Hai*. (12):126–127.
- Xiang, Y. X. (2023). Artistic image shaping of Lin Daojing in the opera Song of Youth. *Singing Art*. (04):24–30.
- Yan, N. (2024). Features of the soprano voice and its interpretation: Singing tradition and possible figurative embodiments. *The Publishing House – Scientific Library*. (39):102–109.

- Yuan, X. X. (2022). The cultivation of secondary creative ability in the Chinese Original Opera. *Music Creation*.(09):88–91.
- Zhang, J. J. (2018). Artistic treatment of Chinese original opera works. *Opera*. (03):99 104.





## To analyze the musical form and vocal techniques used in Huang Zi's art song "Dian Jiang Chun - Fu Deng Lou"

Hu Minjie<sup>1</sup> Akachai Teerapuksiri<sup>2</sup> & Thanapon Teerachat<sup>3</sup>

<sup>1</sup> M.A. Students, Music Education Program, Buriram Rajabhat University, Thailand, E-mail: 670426025001@bru.ac.th

<sup>2</sup> Advisor, Music Education Program, Buriram Rajabhat University, Thailand, E-mail: akachai.tp@bru.ac.th

<sup>3</sup> Co-Advisor, Music Education Program, Buriram Rajabhat University, Thailand, E-mail: thanapon@bru.ac.th

### Abstract

This paper analyzes the vocal techniques and interpretive requirements for performing Huang Zi's art song Dian Jiang Chun - Fu Deng Lou. As a pivotal composer in modern Chinese art songs, Huang Zi fused Western compositional methods with traditional Chinese poetic aesthetics, creating works that demand both technical control and refined artistic sensitivity.

Using score analysis, vocal technique research, and performance practice, the study examines how musical elements shape singing strategies in this piece. It focuses on breath management, legato, Chinese diction, dynamic control, and timbre adjustment, highlighting the roles of melodic direction, rhythmic flexibility, and harmonic color in emotional projection and musical meaning (Ma, 2021, pp.27-28).

Findings suggest that an effective performance requires not only a solid foundation in Western vocal technique, but also a nuanced understanding of Chinese artistic ideals such as subtlety, restraint, and poetic expression. Singers must balance technical precision with expressive intent, sustaining vocal continuity and tonal beauty while delivering clear textual meaning.

This study provides practical technical and interpretive suggestions for the performance of Chinese art songs and offers pedagogical implications, emphasizing the integration of cultural background with systematic vocal training.

**Keyword:** Huang Zi, Chinese art song, vocal technique, musical interpretation, performance practice

### Introduction

Chinese art songs emerged in the early 20th century as a product of the exchange between Western music and traditional Chinese literature and culture. Composers of this period strived to combine Western compositional techniques with the expressive qualities of Chinese poetry, creating a vocal genre that balanced musical structure with poetic content (Tokita & Cheung, 2023, pp. 175-198).

Against this historical backdrop, Chinese art songs have become an important part of vocal performance and teaching, requiring singers to integrate superb vocal technique with delicate aesthetic sensibility (Zhang & Chonprirot, 2024, pp.135-138).

Huang Zi is widely considered one of the most influential composers in the history of modern Chinese art songs. Huang Zi, educated in Western music theory and composition, demonstrates an ability to skillfully blend Western harmonic language, musical form, and vocal writing techniques with the expressive needs of Chinese poetry

(Tsykina & Yong, 2024, pp.147-153). His art songs are often characterized by lyrical melodic lines, subtle harmonic colors, and a close connection between music and poetry, reflecting a balance between Western musical training and traditional Chinese artistic concepts (Chen & Chen, 2024, pp.43-45). Dian Jiang Chun - Fu Deng Lou is one of Huang Zi's representative works, showcasing his approach to setting classical Chinese poetry to Western art song. Based on classical poetry, the work conveys a sense of nostalgia, emotional restraint, and poetic reflection through a poem-centered musical design. Musically, the song features flexible rhythmic treatment, flowing melodic lines, and an accompaniment pattern that both complements the vocals and reinforces the poetic imagery (Liu, 2022, pp.1-4). These characteristics place special demands on singers, particularly in breath control, legato, Mandarin pronunciation, and subtle dynamic variations (Zhang & Chonprirot, 2024, 138-141).

While Dian Jiang Chun - Fu Deng Lou possesses artistic and pedagogical value, existing research often focuses on the broader historical narrative, compositional exploration, or pedagogical applications within Huang Zi's repertoire. Although there are detailed studies of Huang Zi's repertoire, there is still a relative lack of systematic, performance-oriented comprehensive analysis that integrates techniques and interpretation for this specific song in teaching materials and instruction for performers (Xiang & Roongruang, 2022, pp.1-9). Therefore, performers may rely more on personal experience than a uniform analytical framework when preparing their repertoire (Zhang & Chonprirot, 2024, p139).

Therefore, this study explores Dian Jiang Chun - Fu Deng Lou from the perspectives of vocal technique and musical interpretation, focusing on the interaction between lyrics, structure, and singing techniques (Liu, 2022, p3). By analyzing the relationship between musical structure, textual expression, and vocal performance, this study clarifies the technical requirements and interpretive principles necessary for effective performance, providing practical significance for singers and vocal teaching of Chinese art songs (Tian, 2025, pp.1-18).

## **Objective**

To analyze the musical form and vocal techniques used in Huang Zi's art song "Dian Jiang Chun - Fu Deng Lou".

## **Research Methodology**

### **Key Informants**

This chapter constructs a scientific and systematic methodological framework by identifying key information providers, research tools, and data collection procedures. By integrating various methods, including score analysis references and semi-structured interviews, this study improves the comprehensiveness and reliability of the data.

### **Research Instrument**

The research tools used in this study included: music score analysis forms, classroom observation record forms, semi-structured interview outlines, course plans and classroom material collection lists, as well as citation and literature management analysis tools.

### **Data Collection**

This study aims to collect data to support a research objective: (1) to determine the vocal techniques and interpretation requirements for singing Huang Zi's art song Dian Jiang Chun - Fu Deng Lou. To ensure the consistency and reliability of the methodology, this study uses

a variety of data sources and tools for data collection, including score analysis, semi-structured interviews, and literature management tools. Dian Jiang Chun - Fu Deng Lou.

### **Data Analysis**

By collecting and organizing scholars' literature and musical examples on how to sing Huang Zi's art song Dian Jiang Chun - Fu Deng Lou, this paper gained important insights and inspiration. It helped the author gain a deeper understanding of this Chinese art song and laid a solid foundation for fieldwork.

### ***Summary of this study***

The theme of this study is "To analyze the vocal techniques and musical interpretation required for performing Huang Zi's art song 'Dian Jiang Chun - Fu Deng Lou'". The main content of this study is to explore how musical elements shape the performance strategies in this work through analysis, vocal technique research, and classroom performance practice. Information providers in the study include core information providers who participated in support and promotion work. In-depth interviews were conducted with these information providers using purposeful sampling to obtain direct data. A total of five interviewees, all of whom were singing teachers, were interviewed. Research tools included collecting and organizing relevant materials, collecting sheet music, developing learning manuals, and compiling and distributing interview reports. Data collection steps included preliminary preparation, collection of literature and sheet music, expert interviews, and the compilation and distribution of learning manuals. Data analysis will analyze the collected information and expert interviews.

### **Results**

This study, based on score analysis, vocal technique examination, and performance practice, summarizes several key findings regarding vocal techniques and musical interpretation required for singing Huang Zi's art song Dian Jiang Chun - Fu Deng Lou.

Firstly, score analysis reveals that the work's melodic structure is characterized by flowing melodic lines and extended phrases. These melodic features demand stable breath support and careful breath control from the singer. The flexibility in rhythmic handling, especially in phrases closely related to the lyrics, requires the singer to strike a balance between rhythmic freedom and structural coherence.

Secondly, vocal technique analysis indicates that legato singing is crucial for effectively interpreting the work. The vocal parts frequently connect syllables across long phrases, requiring the singer to possess a stable timbre and good airflow control. Clear Mandarin pronunciation is essential, as consonants and vowels must be pronounced accurately while maintaining vocal coherence or influencing timbre. Furthermore, variations in dynamics and timbre are important elements in conveying the song's emotional content. The research results indicate that subtle variations in dynamics and timbre are more effective than extreme contrasts. These gradual changes resonate with the introspective and restrained nature of the lyrics, allowing emotional expression to flow naturally within the musical framework.

Further analysis through performance practice reveals that a successful interpretation of this work depends on the fusion of technical control and poetic understanding. When singers coordinate breath control, legato phrasing, and articulation with the musical structure and lyrical meaning, the performance achieves greater expressiveness. Conversely, insufficient attention to any of these aspects can lead to fragmented phrasing or a loss of clarity.



Finally, the research indicates that Dian Jiang Chun - Fu Deng Lou requires a refined vocal performance method, where technical precision and musical delicacy complement each other to support the clarity of the lyrics and their artistic expression.

## **Discussion and Conclusion**

Based on the results of score analysis, vocal technique examination, and performance practice, this section discusses the significance of the findings and presents the overall conclusions of the study. To enhance academic validity and pedagogical relevance, the findings were further examined through discussions with five experienced teachers specializing in vocal performance, Chinese art song, and music pedagogy. Their professional perspectives provide valuable confirmation and constructive suggestions that align with the overall structure and objectives of this research.

### **From a structural and musical perspective**

All five teachers agreed that the analytical approach adopted in this study appropriately reflects the compositional characteristics of Dian Jiang Chun - Fu Deng Lou. They emphasized that the identification of long melodic phrases and flexible rhythmic treatment is essential for understanding the vocal demands of the work. According to their discussion, the study's focus on phrase-based breath control corresponds well with both the musical structure and the poetic flow of the text, reinforcing the validity of the score analysis results.

### **Regarding vocal technique**

The teachers collectively recognized legato singing and breath management as the core technical requirements of the piece. One vocal pedagogue highlighted that the study accurately demonstrates how technical control serves expressive purposes rather than existing as an isolated skill. Another teacher specializing in Chinese diction noted that the analysis of Mandarin articulation reflects common challenges encountered by singers and is consistent with current teaching practice (Li'an, C., & Yodwised, C, 2022, pp.65-67). These observations support the study's emphasis on integrating technical precision with textual clarity.

### **In terms of musical interpretation**

The teachers concurred that the restrained dynamic shaping and subtle timbral variation identified in the results are stylistically appropriate for Huang Zi's art songs. Several teachers emphasized that exaggerated emotional expression or overly operatic delivery may undermine the poetic nature of the work. They acknowledged that the study's interpretative recommendations align with traditional Chinese aesthetic principles, particularly the concepts of subtlety, balance, and emotional restraint (Mao, Y., 2025, pp.123-129).

### **From a performance practice and pedagogical standpoint**

The teachers agreed that the study provides practical value for both performers and educators. One teacher suggested that the analytical framework presented in this research could be effectively applied in vocal instruction, particularly when introducing students to Chinese art song repertoire. Another teacher emphasized that the integration of score analysis, technique, and interpretation offer a systematic approach that can help singers develop stylistic awareness alongside technical skills (S., W., & Pattan anon, 2025, pp.299-312).

In conclusion, this study demonstrates that an effective performance of Dian Jiang Chun - Fu Deng Lou requires a comprehensive integration of vocal technique, musical structure, and poetic interpretation. The research confirms that successful interpretation depends not only on solid technical training but also on an informed understanding of cultural and aesthetic context. Supported by professional discussion and pedagogical insight, the findings contribute to the performance practice and teaching of Chinese art songs and provide a model for future studies on similar repertoire (Xie, X., & Punvaratorn, 2024, pp.278-295).

## Suggestion

Based on the findings of this study and the professional opinions of five teachers, the following suggestions are offered from three perspectives: performance practice, vocal pedagogy, and future research, in order to further promote the performance and teaching practice of Huang Zi's art songs, especially Dian Jiang Chun - Fu Deng Lou.

### *For singers*

It is recommended to plan breathing based primarily on phrasal structure and textual syntax, as Huang Zi's writing tends to emphasize lyrical coherence and text-driven tempo and intonation.

### *In terms of technical training*

It is recommended to integrate legato singing with articulation training as a whole, ensuring that textual clarity does not disrupt the continuity of the musical line. This aligns with the conclusions of research on the performance of ancient Chinese poetry art songs. At the interpretation level, it is recommended to employ subtle and gradual dynamics and timbre layers to maintain the implicit restraint and poetic expression emphasized in the style of Chinese art songs. At the pedagogical level, it is recommended that teachers adopt a sequence of "musical score analysis-technical training-interpretive discussion," combined with listening and rehearsal reflection. This aligns with the approach of Huang Zi's experimental research on art song teaching.

### *Regarding future research*

It is suggested that the same analytical framework be extended to comparative studies of other works by Huang Zi or East Asian art songs to further solidify the academic foundation of performance studies in this field.

## References

- Chang Xin, Z., & Banjongsilapa, O. (2024). A study of teaching Chinese art songs by using Bel Canto techniques for high school vocal students at XiaoYa Art Education in Shantou of Guangdong. *Journal of Modern Learning Development*, 9(6), 91–95.
- Education Research. (2021). *Effective application of singing skills in vocal music performance*. *Education Research*, 4(9).
- Gao, X., & Yap, J. H. (2025). Vocal techniques and interpretation in performing Chinese art songs based on Mao Zedong's poetry. *Humanities and Social Science Research*, 8(3), 86.
- Lau, F. (2008). *Music and poetry in modern China*. Oxford University Press.
- Li'an, C., & Yodwised, C. (2022). Chinese art songs in 1920–1949: Vocal pedagogy and singing technique. *Asia Pacific Journal of Religions and Cultures*, 6(1), 64–78.
- Liu, X. (2022). *Selected art songs of Chinese composer Huang Zi: Music, poetry, and social-historical considerations* (Doctoral dissertation, University of North Texas).
- Mao, Y. (2025). Bridging east and west: A literature review of Chinese Art Song studies in the global context. *Art and Performance Letters*, 6, 123–129.
- McKinney, J. C. (2005). *The diagnosis and correction of vocal faults* (Revised ed.). Waveland Press.

- Miller, R. (2004). *Solutions for singers: Tools for performers and teachers*. Oxford University Press.
- S., W., & Pattananon, N. (2025). Ancient Chinese art song workbook for high school vocal students. *Asia Pacific Journal of Religions and Cultures*, 9(1), 299–312.
- Tang, X., & Choatchamrat, S. (2024). Singing techniques and teaching methods of singer Liao Changyong in Chinese opera vocal performance in a sociological context. *International Journal of Sociologies and Anthropologies Science Reviews*, 4(5), 359–370.
- Tokita, A. M., & Cheung, J. H. Y. (Eds.). (2023). *The art song in East Asia and Australia, 1900 to 1950*. Routledge.
- Wu, Z. (2024). The artistic characteristics and singing analysis of the ancient poetry art song *Ru Meng Ling*. *Lecture Notes in Education Psychology and Public Media*, 58, 253–262.
- Xiang, L., & Roongruang, P. (2022). Research on the singing teaching of Huang Zi's art songs. *Asia Pacific Journal of Religions and Cultures*, 6(2), 42–59.
- Xie, X., & Punvaratorn, M. (2024). The study of vocal music in the context of ancient Chinese poetry. *Asia Pacific Journal of Religions and Cultures*.
- Zhang, R., & Chonprirot, J. (2024). Vocal techniques and musical literacy in the singing of Chinese *Gu Shi Ci* art songs. *International Journal of Education and Literacy Studies*, 12(3), 135–144.





## English Reading Challenges among Chinese University Students: A Thematic Synthesis Informing TBLT-TERI Design

Jiang Hongyuan<sup>1</sup>, Akkarapon Nuemaihom<sup>2</sup> and Nawamin Prachanant<sup>3</sup>

<sup>1</sup>Ph.D. (Candidate), English Language Teaching Program, Faculty of Humanities and Social Sciences, Buriram Rajabhat University, Thailand

<sup>2</sup>Major advisor, Assoc. Prof. Dr., English Language Teaching Program, Faculty of Humanities and Social Sciences, Buriram Rajabhat University, Thailand

<sup>3</sup>Co-advisor, Assoc. Prof. Dr., English Language Teaching Program, Faculty of Humanities and Social Sciences, Buriram Rajabhat University, Thailand

*Corresponding author:* Akkarapon Nuemaihom,  
E-mail: akkarapon.nm@bru.ac.th

### Abstract

English reading comprehension remains a persistent challenge for many Chinese university students, particularly in high-stakes examinations such as the College English Test Band 4 (CET-4). Although previous research has investigated reading difficulties, pedagogical approaches, and technological applications, these strands are often examined separately, resulting in a fragmented understanding of reading challenges in EFL contexts. To address this gap, the present study conducts a qualitative thematic synthesis combined with content analysis of 14 studies published between 2015 and 2025 to identify major English reading challenges faced by Chinese university students and to explore their implications for the development of Task-Based Language Teaching assisted by Technology-Enhanced Reading Instruction (TBLT-TERI). The analysis yielded five interrelated dimensions of reading difficulties: linguistic, cognitive, affective, sociocultural, and instructional/environmental factors recurrently discussed across the reviewed studies. The findings indicate that linguistic constraints, such as limited vocabulary and grammatical knowledge, and cognitive challenges, including inadequate strategy use and inefficient comprehension processing, constitute core obstacles to successful reading. Meanwhile, affective, sociocultural, and instructional factors mediate learners' engagement and influence reading outcomes. By conceptualizing these difficulties as an interconnected system, this study provides a needs-based foundation for the design and further advancement of the TBLT-TERI framework, offering theoretical support for its systematic implementation in the CET-4 context and comparable EFL settings.

**Keywords:** Chinese university students, English reading challenges, task-based language teaching, technology-enhanced reading instruction

### Introduction

In English as a Foreign Language (EFL) contexts, reading comprehension plays a central role in supporting university students' academic learning, disciplinary knowledge acquisition, and access to global information. Through reading, learners engage with complex texts, develop critical thinking skills, and participate in academic discourse, making reading competence a cornerstone of higher education (Ganie et al., 2019; Huyen & Anh,

2022). In China, this importance is further intensified by high-stakes assessments such as the College English Test Band 4 (CET-4), a nationwide standardized examination for non-English majors in which reading comprehension constitutes a substantial proportion of the total score and exerts a decisive influence on students' academic progression.

Numerous studies have shown that Chinese university students often encounter substantial difficulties in English reading comprehension. These difficulties are commonly associated with limited vocabulary knowledge, weak grammatical competence, insufficient discourse awareness, and inefficient reading strategies (Wang, 2015; Fan & Zhang, 2018; Jiang & Zhou, 2025). Many learners rely heavily on bottom-up, word-by-word processing, which constrains reading speed and hinders global understanding of texts. Beyond linguistic and cognitive constraints, affective factors such as reading anxiety, low motivation, and reduced self-efficacy, as well as sociocultural and instructional conditions, further shape learners' engagement and comprehension outcomes. Such challenges become especially pronounced in time-constrained test settings, where students must balance rapid text processing with accuracy.

Task-Based Language Teaching (TBLT) has been widely recognized as a learner-centered pedagogical approach that promotes meaningful language use and deeper cognitive processing through goal-oriented tasks (Ellis, 2003). In the Chinese EFL context, TBLT has been increasingly introduced into college English instruction and is considered effective in enhancing learners' reading engagement and comprehension (Zhao, 2024). At the same time, advances in educational technology have reshaped reading practices by enabling multimodal input, adaptive scaffolding, and interactive learning environments, thereby offering new affordances for reading instruction (Hu & Liu, 2021). However, without a clear understanding of learners' reading challenges, the instructional potential of TBLT and educational technology may remain underutilized.

Despite the expanding literature on English reading difficulties, TBLT, and technology-enhanced instruction, these strands of research have largely developed in parallel, with limited attempts to systematically integrate learner challenges with instructional design principles. In particular, few studies have synthesized empirical findings on Chinese university students' English reading challenges and translated them into pedagogically grounded implications for Task-Based Language Teaching assisted by Technology-Enhanced Reading Instruction (TBLT-TERI) within the CET-4 context.

To address this gap, the present study conducts a qualitative thematic synthesis of 14 studies published between 2015 and 2025. By identifying major dimensions of reading difficulties and aligning them with the principles of TBLT-TERI, this study provides an integrative analytical perspective that informs the subsequent design and development of task-based reading instruction in the CET-4 context and similar EFL settings.

## Research Objectives

The present study examines English reading challenges among Chinese university students and explores their pedagogical implications for the development of Task-Based Language Teaching assisted by Technology-Enhanced Reading Instruction (TBLT-TERI). Specifically, it aims to:

Identify and synthesize the major English reading challenges faced by Chinese university students, as reported in empirical and theoretical studies published between 2015 and 2025.

Systematically categorize these challenges into an integrated

analytical framework through qualitative thematic analysis, with particular attention to linguistic, cognitive, affective, sociocultural, and instructional/environmental dimensions.

Derive pedagogical implications that inform the design and subsequent development of the TBLT-TERI framework in the CET-4 context and similar EFL settings.

## Research Methodology

This study adopts a qualitative, literature-based research design to synthesize existing research on English reading challenges among Chinese university students and to derive pedagogically grounded implications for the development of Task-Based Language Teaching assisted by Technology-Enhanced Reading Instruction (TBLT-TERI). The analysis focuses on systematically examining and categorizing findings from prior studies in order to construct an integrated analytical structure that informs the subsequent design of the TBLT-TERI framework.

## Research Design

A qualitative thematic synthesis combined with content analysis was employed as the primary research approach. This design enables the identification of recurring conceptual patterns related to reading difficulties across multiple studies. Qualitative content analysis facilitates the systematic extraction of meaningful units from existing literature, while thematic synthesis allows these units to be integrated into higher-order thematic categories aligned with the research objectives.

## Data Sources and Selection Procedures

Relevant studies were identified through systematic searches of major academic databases, including CNKI, Wanfang, and international journal platforms. Searches were conducted using key terms related to English reading comprehension, reading difficulties, Chinese university students, and EFL contexts. Explicit inclusion and exclusion criteria were applied to ensure relevance and rigor. Based on these criteria, 14 studies published between 2015 and 2025 were selected for final analysis. The search and selection process was documented to enhance transparency and replicability.

**Inclusion criteria** were as follows:

1. the study focuses on Chinese university students who are non-English majors;
2. the study examines English reading comprehension or related reading difficulties;
3. the study reports empirical findings or provides theoretically grounded discussions of reading challenges;
4. the study is published in a peer-reviewed journal, conference proceeding, or academic thesis; and
5. the study provides extractable information on learners' reading problems, behaviors, or influencing factors.

**Exclusion criteria** included:

1. studies focusing on primary or secondary school students;
2. research unrelated to reading skills (e.g., writing, speaking, or translation);
3. publications lacking clear findings or theoretical relevance; and



#### 4. duplicated or overlapping studies.

Based on these criteria, a total of 14 studies published between 2015 and 2025 were selected for final analysis.

### Data Analysis Procedures

Data analysis followed a three-stage qualitative content analysis process.

In the first stage, each selected study was carefully examined to identify explicit references to English reading difficulties experienced by Chinese university students. Initial codes were assigned to textual segments describing problems, constraints, or limitations related to reading comprehension.

In the second stage, the initial codes were compared and grouped through an iterative process of constant comparison. Conceptually similar codes were clustered and refined into broader thematic categories, allowing recurring patterns across studies to emerge. Through this analytical refinement, five major dimensions of reading challenges were identified: linguistic, cognitive, affective, sociocultural, and instructional/environmental.

In the final stage, the categorized findings were synthesized to identify overarching patterns and relationships among the identified dimensions. Based on this synthesis, pedagogical implications were derived to inform the subsequent development of Task-Based Language Teaching assisted by Technology-Enhanced Reading Instruction (TBLT-TERI).

### Trustworthiness

To enhance trustworthiness, coding and categorization were conducted iteratively, and thematic interpretations were cross-checked across the selected studies to maintain internal consistency. Transparent documentation of the selection criteria and analytical procedures further supports the credibility and dependability of the findings.

## Research Results

The results of the qualitative thematic synthesis are based on the analysis of 14 studies examining English reading challenges among Chinese university students. Through systematic content analysis, five major dimensions of reading difficulties were identified: linguistic, cognitive, affective, sociocultural, and instructional/environmental. Table 1 summarizes the distribution and frequency of these challenges across the reviewed studies, providing an overview of their relative prominence.

### Table 1

*Synthesis of Reading Challenges Identified in Chinese EFL Studies (n = 14)*

การประชุมวิชาการระดับชาตินานาชาติ ครั้งที่ 9  
The 9th National and International Research Conference 2026: NIRC IX 2026



| Reading challenges / Authors  | Jiang Yutong & Zhou Jinyuan (2025) | Guo Aijun (2017) | Li Chengfeng & Sun Lixia (2023) | Fan Jiying & Zhang Shan (2018) | Qiao Yan (2019) | Duan Rui (2023) | Huang Tingting (2018) | Du Yuting (2019) | Dai Sumin (2024) | Wu Xiaoli (2024) | Wang Hongyan (2015) | Yuan Yuan (2023) | Xu Xi (2024) | Fang Yinghui (2024) | Frequency | Percentage |
|-------------------------------|------------------------------------|------------------|---------------------------------|--------------------------------|-----------------|-----------------|-----------------------|------------------|------------------|------------------|---------------------|------------------|--------------|---------------------|-----------|------------|
| No.                           | 1                                  | 2                | 3                               | 4                              | 5               | 6               | 7                     | 8                | 9                | 10               | 11                  | 12               | 13           | 14                  |           |            |
| Linguistic challenges         |                                    | √                | √                               | √                              |                 |                 | √                     | √                | √                | √                | √                   | √                | √            | √                   | 11        | 78.6%      |
| Cognitive challenges          | √                                  | √                | √                               | √                              | √               | √               | √                     |                  | √                | √                |                     |                  | √            | √                   | 11        | 78.6%      |
| Affective challenges          | √                                  |                  |                                 | √                              | √               | √               | √                     | √                | √                | √                | √                   |                  |              | √                   | 8         | 57.1%      |
| Sociocultural challenges      |                                    |                  | √                               | √                              |                 |                 |                       | √                | √                |                  | √                   |                  |              | √                   | 6         | 42.9%      |
| Instructional & environmental |                                    | √                | √                               |                                | √               | √               | √                     |                  | √                |                  | √                   | √                |              |                     | 8         | 57.1%      |

Note. A checkmark (✓) indicates that the study explicitly reports the corresponding type of reading challenge.

As shown in Table 1, the findings suggest that English reading difficulties among Chinese university students tend to arise from multiple, interrelated factors, instead of being attributable to a single, clearly defined source. Linguistic and cognitive challenges were the most frequently reported dimensions, each appearing in 11 of the 14 studies (78.6%), ranking highest among all categories. Affective challenges and instructional/environmental constraints were also prominent, reported in over half of the studies, while sociocultural challenges appeared less frequently but remained a notable influence on reading comprehension.

### **Linguistic Challenges**

Linguistic challenges emerged as one of the most prevalent dimensions across the reviewed literature. A majority of studies reported that limited vocabulary knowledge, weak grammatical competence, and insufficient discourse awareness significantly hinder students' reading comprehension. Learners frequently struggled with unfamiliar lexical items, long and syntactically complex sentences, and cohesive devices that link ideas across clauses and paragraphs. These linguistic constraints not only reduced reading speed but also increased cognitive load, making it difficult for students to maintain overall comprehension. The findings suggest that inadequate linguistic resources continue to constitute a foundational barrier to effective English reading among Chinese university students.

### **Cognitive Challenges**

Cognitive challenges were equally prominent and closely intertwined with linguistic difficulties. Many studies indicated that students relied heavily on bottom-up processing strategies, such as word-by-word translation, which impeded efficient comprehension and global understanding of texts. In addition, learners often lacked awareness of effective reading strategies, including prediction, inference, monitoring comprehension, and summarization. Difficulties in integrating information across sentences and paragraphs were particularly evident in longer or more abstract academic texts. These findings imply that limitations in strategic competence, together with inefficient cognitive processing, may constrain students' ability to construct meaning during reading.

### **Affective Challenges**

Affective challenges, including reading anxiety, low motivation, and reduced self-efficacy, were reported in eight of the reviewed studies (57.1%). High levels of test pressure, particularly in examination-oriented contexts such as CET-4, were found to exacerbate learners' emotional strain and negatively affect concentration and strategy use. Several studies noted that students with low confidence in their reading ability were more likely to avoid challenging texts and rely on surface-level processing. In contrast, learners with higher self-efficacy tended to demonstrate greater persistence and engagement in reading tasks. These findings underscore the mediating role of affective factors in shaping reading behavior and outcomes.



### **Sociocultural Challenges**

Sociocultural challenges were identified in six studies (42.9%) and primarily related to students' limited cultural background knowledge and insufficient exposure to authentic English-language contexts. Learners often encountered difficulties when texts contained culturally specific references, values, or discourse conventions that differed from their own sociocultural experiences. As a result, students were sometimes able to understand the literal meaning of texts while failing to grasp implied meanings or pragmatic nuances. Although less frequently reported than other dimensions, sociocultural challenges highlight the importance of cultural schema in successful reading comprehension.

### **Instructional and Environmental Challenges**

Instructional and environmental challenges were reported in eight studies (57.1%). These challenges included teacher-centered instructional practices, limited opportunities for strategy training, insufficient individualized feedback, and an overemphasis on test-oriented reading instruction. Additionally, several studies pointed to a lack of accessible, level-appropriate reading materials and limited support for sustained reading outside the classroom. Such constraints were found to restrict students' development of autonomous reading skills and reduce long-term engagement with English reading. The findings indicate that instructional design and learning environments play a crucial role in either alleviating or exacerbating students' reading difficulties.

In sum, the results demonstrate that English reading challenges among Chinese university students are multidimensional and closely interconnected. Linguistic and cognitive difficulties constitute the most consistently reported constraints across studies, while affective, sociocultural, and instructional/environmental factors function as mediating influences that shape learners' engagement and comprehension outcomes. Taken together, these findings provide an empirical foundation for the further development of the TBLT-TERI framework.

## **Discussion**

The thematic synthesis of the 14 reviewed studies reveals that English reading challenges among Chinese university students are multidimensional and closely interconnected. Rather than stemming from a single source, reading difficulties appear to emerge from the interaction between learners' linguistic resources, cognitive processing abilities, affective states, sociocultural knowledge, and instructional environments. This finding suggests that English reading comprehension in the Chinese EFL context is best understood as a dynamic system shaped by both internal learner factors and external pedagogical conditions.

Linguistic challenges remain a foundational constraint on reading comprehension, particularly in examination-oriented contexts such as the CET-4. Consistent with earlier research (e.g., Wang, 2015; Fan & Zhang, 2018), limited vocabulary knowledge, weak grammatical control, and insufficient awareness of discourse structures continue to impede efficient text processing. Importantly, the synthesis suggests that these linguistic difficulties do not operate in isolation. When learners lack adequate linguistic resources, their cognitive capacity is easily consumed by basic decoding, leaving limited room for higher-level comprehension processes such as inference and integration. This interaction suggests that linguistic knowledge and cognitive processing are difficult to separate in practice when explaining successful reading comprehension.

Cognitive challenges are equally prominent and reflect an overreliance on bottom-up processing strategies, particularly word-by-word translation. Across the reviewed studies, insufficient use of global reading strategies, such as prediction, monitoring comprehension, and summarization, emerged as a recurring problem. This pattern indicates that reading instruction has often emphasized accuracy over strategy awareness, reinforcing inefficient processing habits. From a pedagogical perspective, the findings suggest that without explicit support for strategy development, learners are unlikely to shift from surface-level decoding to meaning-oriented comprehension, especially under time pressure.

Beyond linguistic and cognitive factors, affective variables play a significant mediating role in shaping reading behavior. High levels of reading anxiety and low self-efficacy, frequently reported in CET-4-related contexts, appear to discourage risk-taking and strategy use. Notably, affective challenges tend to amplify existing linguistic and cognitive difficulties rather than function as independent barriers. Learners who lack confidence are more likely to avoid complex texts and persist with inefficient strategies, which in turn reinforces negative reading experiences. This reciprocal relationship underscores the importance of addressing emotional readiness as part of reading instruction.

Sociocultural challenges, although less frequently reported than other dimensions, further complicate learners' reading comprehension. Limited cultural background knowledge and insufficient exposure to authentic English-language contexts can restrict learners' ability to interpret implicit meanings, pragmatic conventions, and culturally embedded references. The synthesis suggests that even when students demonstrate adequate linguistic decoding skills, gaps in cultural schema may prevent deeper comprehension. This finding highlights the need to move beyond literal understanding and recognize reading as a culturally situated practice.

Instructional and environmental factors provide important contextual explanations for the persistence of these challenges. Teacher-centered instructional practices, limited opportunities for strategy training, and an overemphasis on test preparation were repeatedly identified as constraints on reading development. Such conditions may inadvertently reinforce learners' dependence on mechanical decoding strategies while restricting opportunities for autonomous and reflective reading. The synthesis suggests that instructional design and learning environments play a critical role in either mitigating or intensifying existing reading difficulties.

Taken together, the findings indicate that English reading challenges are structurally interconnected rather than isolated. Linguistic and cognitive difficulties constitute the core constraints, while affective, sociocultural, and instructional factors shape how these constraints are experienced and mediated. This integrated perspective provides a conceptual foundation for the subsequent pedagogical implications and the further development of the TBLT-TERI framework.

## **Pedagogical Implications**

Based on the synthesized findings, several pedagogical implications can be drawn for the design and further development of Task-Based Language Teaching assisted by Technology-Enhanced Reading Instruction (TBLT-TERI). Rather than addressing reading difficulties in isolation, these implications emphasize the alignment of task design, technological affordances, and learners' multidimensional needs.

First, given the centrality of linguistic challenges, task-based reading instruction should incorporate systematic linguistic scaffolding. Technology can be used to provide context-sensitive support for vocabulary, grammar, and discourse features through tools such as

multimodal glosses, adaptive dictionaries, and sentence-level annotations. When embedded within pre-task and while-task phases, such scaffolding can reduce cognitive overload and enable learners to focus on meaning construction rather than surface decoding. Importantly, linguistic support should remain optional and adjustable, allowing learners to gradually develop autonomy.

Second, the prominence of cognitive challenges highlights the need for strategy-oriented task design. Reading tasks should be structured to promote higher-level processing activities, such as prediction, inference, and summarization, rather than mere information extraction. Technology-enhanced platforms can support this goal by visualizing text structures, prompting metacognitive reflection, and providing immediate feedback on strategy use. In this way, technology serves not as a substitute for instruction but as a mediating tool that supports learners' strategic engagement with texts.

Third, affective factors require deliberate pedagogical attention, particularly in high-stakes contexts such as CET-4 preparation. Task design can incorporate graduated difficulty, collaborative reading activities, and formative feedback to help reduce anxiety and build learners' confidence. Digital features such as progress tracking and personalized feedback may further enhance learners' sense of control and self-efficacy, thereby fostering sustained engagement with reading tasks.

Fourth, the presence of sociocultural challenges suggests that reading instruction should move beyond decontextualized test passages. Technology facilitates access to authentic and culturally rich materials, including online articles, multimedia texts, and cross-cultural narratives. Integrating such materials into task-based reading activities can help learners activate relevant background knowledge and develop sensitivity to pragmatic and cultural meanings embedded in texts.

Finally, instructional and environmental factors underscore the importance of extending reading instruction beyond the classroom. TBLT-TERI can support blended and out-of-class reading through online discussion forums, peer feedback systems, and mobile reading applications. These environments create opportunities for interaction, reflection, and sustained practice, which are often limited in traditional, test-oriented instruction. At the same time, learning analytics generated by digital platforms can inform teachers' instructional decisions, enabling more responsive and learner-centered support.

Taken together, these implications suggest that TBLT-TERI should be conceptualized and implemented as an integrated pedagogical system in which linguistic support, cognitive strategy development, affective engagement, sociocultural enrichment, and flexible instructional environments mutually reinforce one another. Such an approach provides a theoretically grounded and needs-based foundation for addressing the multidimensional reading challenges faced by Chinese university students in EFL contexts.

## Conclusion

This study synthesized 14 empirical and theoretical studies to examine English reading challenges among Chinese university students through a qualitative thematic approach. By organizing existing findings into a coherent analytical framework, the study conceptualizes English reading difficulties as a multidimensional and interacting system rather than isolated deficits.

The proposed framework contributes to reading research by integrating linguistic, cognitive, affective, sociocultural, and instructional dimensions, thereby offering a more systematic understanding of reading comprehension within the Chinese EFL context. Pedagogically, the findings provide a needs-based and theoretically grounded foundation for the further development of TBLT-TERI.



Several limitations should be acknowledged, including the relatively small number of studies reviewed and the continually evolving landscape of digital learning technologies. Future research may extend this work by conducting classroom-based empirical investigations to examine the implementation and effectiveness of TBLT-TERI across different proficiency levels and instructional contexts.

## References

- Dai, S. M. (2024). Research and practice on cultivating college students' English reading ability under the new situation. *Journal of Taiyuan Urban Vocational and Technical College*, (6), 136-138.
- Du, Y. T. (2019). On cultivating college students' English reading ability under the new situation. *Learning Weekly*, (14), 15-16.
- Duan, R. (2023). An exploration of English reading instruction based on the cultivation of college students' thinking quality. *Campus English*, (24), 22-24.
- Ellis, R. (2003). *Task-based language learning and teaching*. Oxford University Press.
- Fan, J. Y., & Zhang, S. (2018). An investigation of English reading difficulties among college students and corresponding coping strategies. *Course Education Research*, (10), 101-102.
- Fang, Y. H. (2024). Research on the cultivation strategies of English reading ability for non-English-major college students. *Science and Education Guide*, (25), 56-58.
- Ganie, R., & Rangkuti, R. (2019). Reading comprehension problems on English texts faced by high school students in Medan. *KNE Social Sciences*, 3(19), 684-694.
- Guo, A. J. (2017). Factors influencing college students' English reading comprehension barriers and related teaching reforms. *Campus English*, (32), 77.
- Hu, J. Q., & Liu, H. J. (2021). College students' English reading guidance in the context of digital media. *Modern English*, (10), 96-99.
- Huang, T. T. (2018). An analysis of how to improve college students' English reading ability. *English Pictorial (Advanced Edition)*, (30), 79-80.
- Huyen, T. T. N., & Anh, K. H. (2022). Investigating factors affecting reading comprehension, perceptions of reading task-types and strategies. *European Journal of Foreign Language Teaching*, 6(1), 1-15. <https://doi.org/10.46827/ejfl.v6i1.4178>
- Jiang, Y. T., & Zhou, J. Y. (2025). A study on constructing an influencing-factor model of college students' English reading comprehension level. *Overseas English*, (10), 112-116.
- Li, C. F., & Sun, L. X. (2023). The current situation and optimization paths of cultivating college students' English reading ability. *Western Quality Education*, 9(9), 104-107.
- Qiao, Y. (2019). A study on the current situation and countermeasures of English reading among non-English-major undergraduates. In Sichuan Western Literature Compilation & Translation Research Center (Ed.), *Innovative Research on Foreign Language Education and Translation Development (Vol. 8)* (pp. 168-170). Sichuan Normal University Electronic Press.
- Wang, H. Y. (2015). Reflections and countermeasures based on the current situation of college students' English reading. *Anhui Literature (Second Half Month)*, (3), 145-147.
- Wu, X. L. (2024). Research and practice on cultivating English reading ability of college students in the new situation. *Science and Education Guide*, (5), 56-59.
- Xu, X. (2024). An exploration of the application paths of lexical chunk theory in college English reading instruction. *Guizhou Agricultural Mechanization*, (4), 53-56.
- Yuan, Y. (2023). Effective approaches to improving college students' English reading proficiency through scaffolding instruction. *Journal of Suihua University*, (3), 122-123.

Zhao, J. (2024). Exploring teachers' perceptions towards task-based language teaching (TBLT) in teaching English reading at a public university in China. SHS Web of Conferences, 182, 01003.



## An Investigate the Current Status of the Vocal Work Zang Hua Yin in the Chorus of Luzhou University for the Elderly

Jiang Sheng <sup>1</sup>Calermkit Kengkaew<sup>2</sup>  
and Natthawat Khositditsayanan<sup>3</sup>

<sup>1</sup>M.A. Students, Music Education Program, Buriram Rajabhat University, Thailand,  
E-mail: 670426025002@bru.ac.th

<sup>2</sup> Advisor, Music Education Program, Buriram Rajabhat University, Thailand,  
E-mail: chalermkit.kk@bru.ac.th

<sup>3</sup> Co-Advisor, Music Education Program, Buriram Rajabhat University, Thailand,  
E-mail: nattawat@bru.ac.th

asterisk denoting the corresponding author

### Abstract

This thesis focuses on the practical status of the vocal work Zang Hua Yin in Luzhou Elderly University, aiming to sort out its teaching, rehearsal and interpretation application, analyze its advantages and disadvantages, and provide support for optimizing elderly choral teaching. The study adopts a combination of interview, teaching observation and analysis methods, and conducts research from five dimensions: teaching resources, faculty, curriculum arrangement, teaching methods and student participation. The study found that the university's choir has basic hardware and professional full-time faculty, formed a curriculum system and a diversified teaching model suitable for elderly students, integrated relevant teaching method concepts, and students have a high willingness to participate; however, there are problems such as insufficient faculty, lack of curriculum flexibility, inadequate resource adaptability and differences in the depth of student participation.

**Keyword:** Zang Hua Yin, University for the Elderly, Chorus.

### Introduction

The aging population is a highly valued issue in contemporary society, making the elderly a special group within society. Due to physiological and psychological changes, many recreational activities are limited for the elderly. To improve their quality of life and ensure they 'learn and enjoy themselves in their later years,' various sectors of society are actively developing recreational activities to enrich their leisure time. Lu (2024, p. 4) points out that the aesthetic function of music primarily manifests in nourishing the minds of the elderly. As people age, both their physical strength and social interaction become limited. At this time, music becomes an aesthetic experience that transcends time and space, allowing people to experience deep enjoyment and satisfaction. The harmonious unity of melody, rhythm, and harmony in music can directly touch people's hearts, providing listeners with an aesthetic experience while enjoying the music.

Fang (2024, pp. 189-190) believes that the teaching methods for music to the elderly are comprehensive, engaging, and practical. The comprehensiveness indicates that music education for the elderly is highly open and inclusive, meeting their diverse needs. Because the elderly have different upbringing and social backgrounds, their pursuits in life also differ. Music education, with its comprehensive and diverse advantages, can provide various types of musical activities for the elderly to choose from freely.

In summary, in the context of population aging, the elderly face restrictions due to physical and psychological changes, and all sectors of society are facilitating their goal of



learning and enjoying themselves in their later years through recreational activities. The aesthetic function of music nourishes the elderly's minds and brings them joy and satisfaction; music teaching for the elderly must integrate comprehensiveness, engagement and practicality, and adapt to the diverse needs of different elderly people in an open and inclusive way.

## **Objective**

To investigate the current status of the vocal work Zang Hua Yin in the chorus of Luzhou University for the Elderly

## **Research Methodology**

### **Key Informants**

School administrators and Chorus Teacher at Elderly School Choir

Twelve members of the choir

### **Research Tools**

Through questionnaires and observation projects, one class administrator, two teachers, and twelve students were selected as key informants. Interviews were conducted in a semi-structured format, with each participant receiving a pre-designed interview guide to ensure consistency in the interview content. The main interview topics included their assessment of teaching resources, faculty, curriculum arrangements, teaching methods, and student engagement related to the lesson Zang Hua Yin.

### **Data Collection**

Interviews gathered information on the current development of Zang Hua Yin within the Luzhou Elderly University Choir, including teaching resources, faculty structure, curriculum arrangement, teaching methods, and student participation.

Observation Through observation of key informants, it can be found that the participants have a deep understanding of the artistic features and musical structure of Zang Hua Yin. They believe that the melody of the work is beautiful and moving, the emotions are rich, and the artistic value is high. The participants have also mastered singing skills such as breath control, accurate pronunciation, and strong sense of rhythm. They generally believe that teaching Zang Hua Yin in choral education can cultivate students' musical literacy.

### **Data Analysis**

#### **Literature review**

Searching relevant literature and journals, consulting relevant books and video materials, and organizing and analyzing them, a preliminary foundation is laid for the writing of the paper.

#### **Singing Practice**

Repeatedly singing Zang Hua Yin and under the careful guidance of the teacher, students can deepen their understanding of the work, share their practical experience in conjunction with the content of the work, and make the teaching content flow naturally.

## Results

The research findings focus on the practical application of the vocal work Zang Hua Yin in the Luzhou Elderly University Choir. Based on interview data, teaching observations, and relevant school management documents, the study systematically reviews and analyzes the choir's current situation in terms of teaching resources, faculty, curriculum, teaching methods, and student participation.

### **Teaching resources of the Luzhou Elderly University Choir**

Through interviews, it was learned that the choir already possesses core hardware resources, including a dedicated studio that can accommodate 300 people, as well as basic equipment such as pianos and electronic keyboards, which can meet the needs of regular rehearsals and small performances. Furthermore, the construction of a dedicated choir rehearsal hall at the new campus is nearing completion, providing potential support for future development. In terms of resource suitability, it is necessary to consider both the physical and mental characteristics of elderly students and the classical nature of Zang Hua Yin ensuring both basic functionality and professional needs such as vocal training and atmosphere creation. To effectively empower teaching with resources, it is essential to ensure sufficient basic hardware and supplement with specialized resources. This includes addressing the shortcomings of aging equipment and insufficient space zoning, as well as supplementing with traditional Chinese instruments such as the guzheng and erhu, and digital resources suitable for older students. Only by accurately matching resource allocation with teaching and student needs can the rehearsal quality of Zang Hua Yin

### **Faculty resources of the Luzhou Elderly University Choir**

Research indicates that the Luzhou Elderly University Choir currently has a faculty structure primarily composed of full-time teachers. Full-time teachers possess solid professional skills in choral conducting, vocal training, and adaptability of teaching to senior citizens, enabling them to conduct targeted teaching and rehearsals based on the physical and mental characteristics of senior students. However, with the increasing demand for large-scale rehearsals and personalized instruction, the current number of teachers remains insufficient. Furthermore, while teacher training is adequately guaranteed, the systematic approach to teaching choral music to senior citizens and cultivating specialized abilities in classical works still needs strengthening.

### **Curriculum arrangement of Zang Hua Yin in the choir**

The choir course uses Zang Hua Yin as its core piece, employing a weekly intensive training approach. The curriculum covers basic vocal training, part-specific exercises, and ensemble practice, with an overall arrangement suited to the schedules of elderly students, facilitating continuous refinement of the repertoire. However, due to the long-term focus on a single piece, some older students experience learning pressure in terms of melody memorization and emotional understanding. There is still room for improvement in the course's tiered and flexible structure.

### **Teaching approaches for Zang Hua Yin in the choir**

The research results show that the Luzhou Elderly University Choir has gradually formed a teaching model characterized by the integration of multiple teaching concepts in its teaching practice of Zang Hua Yin. In the teaching process, teachers not only adopt the traditional choral training methods of separate vocal parts practice, whole-group practice and demonstration teaching, but also combine multimedia-assisted teaching methods, such as audio and video demonstrations and explanations of literary background, to guide students to understand the cultural connotation and emotional artistic conception of the work.

From the perspective of the specific application of teaching philosophies and methods, its teaching practice, to a certain extent, reflects the related ideas of the Dalcroze and Kodály methods. The Dalcroze method emphasizes perceiving musical elements through bodily rhythm. In teaching, teachers guide students to understand melodic direction and rhythmic changes through breathing control, body relaxation, and rhythmic movement, which is particularly helpful for older students to establish a stable sense of rhythm and physical coordination in singing. The Kodály method emphasizes the integrated experience of music, language, and movement. In teaching, teachers use methods such as reciting lyrics, emotional reading, and rhythmic imitation to allow students to experience the emotions of the work before singing, enhancing their understanding of the literary imagery and musical emotions of Zang Hua Yin.

### **Learners' participation in Zang Hua Yin**

The study results show that the students of the Luzhou Elderly University Choir have a strong overall willingness to participate and highly recognize the artistic value and cultural connotation of Zang Hua Yin as a teaching and rehearsal piece. Most students maintain a relatively stable attendance rate, actively participate in daily rehearsals and periodic performances, and consolidate their learning through independent practice and discussions after class, demonstrating a high level of learning initiative and a strong sense of collective identity.

However, based on teaching observations and interviews, there are still some differences in the depth of participation and learning outcomes among students. These differences are mainly influenced by factors such as physical condition, vocal foundation, musical comprehension, and individual personality. Some older students are prone to decreased physical strength and distraction during breath control, pitch maintenance, and long periods of concentrated training. When faced with passages in Zang Hua Yin that have more complex emotional layers and larger melodic fluctuations, they are more likely to feel daunted and need more patient guidance and segmented reinforcement training from the teacher.

### **Discussion and Conclusion**

During the teaching and rehearsals of Zang Hua Yin by the Luzhou Elderly University Choir, the three core participants in the teaching process-the choir leader, the instructors, and the artistic director-reached a high degree of consensus in interviews: Senior students must have a deep understanding of the text and emotional connotations of the work in order to achieve a relatively complete artistic expression when singing Zang Hua Yin. The teachers generally believed that students should thoroughly study the lyrics and the background of the poem before rehearsals, understand the tragic aesthetic implications of the work, and combine their personal emotional experiences with the emotions of the work during the performance, thereby conveying those emotions to the audience through their voices.

In their teaching practice, the Luzhou Elderly University Choir did not limit training to vocal techniques, but rather strengthened students' emotional experience and artistic perception through diversified teaching methods. For example, teachers guided students to analyze lyrics line by line, imagine scenarios, and practice emotional engagement, combining this with part-by-part demonstrations and slow follow-along practice to help students complete complex melodies and emotional transitions in a safe and controllable state. This teaching approach is highly consistent with Cao (2017, p. 249) concept of the unity of music, language, and emotional experience.

Furthermore, the teachers unanimously agreed that the choral performance of Zang Hua Yin relies not only on the voice itself but also on the support of the overall stage presence.



During rehearsals, students were required to pay attention to body posture, facial expressions, breathing patterns, and the interaction between vocal parts, transforming the singing from a simple vocal output into a comprehensive artistic presentation. This teaching method coincides with Li (2024, p. 115) viewpoint and has prompted teachers to continuously adjust their teaching methods, helping older students gradually build stage confidence through group training, small-scale performances, and dress rehearsals.

It is worth noting that teaching practice has also revealed the crucial role of music theory foundations and background knowledge of musical works in choral teaching for senior citizens. By appropriately introducing explanations of music theory, historical context, and cultural interpretations of the poem, students' understanding of Zang Hua Yin deepened significantly, and the emotional depth and overall coherence of their performance improved accordingly. This result demonstrates that combining musical skill training with cultural understanding in choral teaching for senior citizens not only avoids increasing the learning burden but also effectively enhances teaching outcomes and artistic expression.

### Suggestions

1. The findings of this study can be extended to the practice of elderly choral singing of other classical vocal works, providing a reference for teaching ideas and methods of similar themes.
2. The teaching paths and related training methods summarized in this study can serve as core guidance for classical choral singing teaching and learning in universities for the elderly, thereby improving teaching effectiveness.
3. The framework of this study can be used to conduct research on choral teaching for the elderly on other classic vocal works, enriching the relevant research findings system.

### Reference

- Cao, M. Y. (2017). "Content analysis of the Dalcroze method and its implications for the teaching of choirs for the elderly". *Northern Music*, 37(4), 249.
- Fang, S. Y. (2024). "The impact of music on the physical and mental health of the elderly and its implementation strategies". *Art Appreciation*, (30), 189-192.
- Li, X. (2024). "An exploration of the application of the kodály method in polyphonic music teaching". *Art Education*, (10), 114-117.
- Lu, Y. J. (2024). *Analysis of the current situation and exploration of the development of vocal music teaching for the elderly* (Master's thesis). Xi'an Conservatory of Music.

## Developing Learning Outcomes by Using the Flipped Classroom Teaching Method in College Planning Course for First-Year College Students

Jinbiao Chen<sup>1</sup>, Pornpirom Lhongsap<sup>2\*</sup>, Rossarin Jermtaisong<sup>2</sup>, Surat Kwanboonjan<sup>2</sup>,  
Monchai Pongsakornnaruwong<sup>3</sup>, Pacharaporn Suphakit<sup>2</sup>.

<sup>1</sup>Master of Education Program in Curriculum and Learning Management Innovation,

<sup>2</sup>Faculty of Technical Education, Rajamangala University of Technology Thanyaburi

<sup>3</sup>NakhonPathom Technical College

\*Corresponding author,

E-mail: Pornpirom\_L@rmutt.ac.th

### Abstract

The objectives of this research were to analyze and compare the learning outcomes of first-year students before and after attending a college planning course delivered through the flipped classroom method. The study employed a quasi-experimental one-group pretest-posttest design, utilizing a sample of 40 randomly selected students from the School of Foreign Studies at Shunde Polytechnic University. Research instruments included flipped classroom lesson plans and a learning outcomes test, while data were analyzed by using mean, standard deviation, and t-tests. The results revealed that students initially demonstrated limited learning outcomes ( $M=47.25$ ) prior to the intervention. However, significant improvements were observed after the instruction ( $M=72.56$ ). Statistical analysis confirmed that post-test learning outcomes were significantly higher than pre-test scores at the .001 significance level.

**Keywords:** Flipped Classroom, College Planning Course, Learning Outcomes

### Introduction

In the current landscape of higher education, the transition of first-year college students into the academic and social dimensions of university life has become a pivotal moment that exerts a profound influence on their long-term achievements. Data from the National Center for Education Statistics in the United States indicates that around 25% of first-year college students drop out prior to completing their sophomore year. One of the main contributing factors is their inability to effectively adapt to the academic environment. College planning courses have emerged as an integral component of the freshman curriculum in numerous institutions. These courses are meticulously crafted to endow students with a wide array of essential skills, spanning crucial areas such as time management, academic goal-setting, and career planning. All these skills serve as the bedrock for a successful college experience and future professional growth.

Historically, college planning courses have predominantly relied on traditional teaching methods, which are characterized by a heavy focus on lectures and teacher-centered instruction. In such classrooms, instructors usually deliver monologue - style presentations, with information flowing in a one - way direction from the teacher to the students. For example, a survey conducted across 50 higher education institutions in 2023 revealed that 78% of college planning courses still adhered to this traditional lecture-based model. However, with the rapid advancement of educational technology, innovative teaching

paradigms have been emerging continuously. Among them, the flipped classroom model has drawn significant attention as a remarkable development.

The flipped classroom model represents a fundamental transformation in the educational paradigm, placing students at the heart of the learning process. This model necessitates that students engage with instructional resources, such as pre-recorded lectures, reading materials, and online tutorials, prior to attending in-person classroom sessions. Once in the classroom, the emphasis shifts to interactive activities, group discussions, practical exercises, and problem-solving tasks. These are designed to reinforce learning, deepen understanding, and cultivate critical thinking. As Akin & Altun (2020, pp.18-25) emphasized, this model is in line with the constructivist theory of learning, allowing students to actively construct their knowledge through hands-on experiences and peer interactions.

Despite the increasing body of literature highlighting the potential of the flipped classroom model to promote active learning, its effectiveness in the specific context of college planning courses remains largely unexamined. Existing research has yielded promising results in other skills-based and applied learning settings. For instance, a study by Lo & Hew (2020, p.32) in a computer science course demonstrated that, compared with traditional teaching methods, the flipped classroom model increased student engagement by 30% and enhanced practical skills performance by 25%. However, considering the unique educational objectives and student needs of college planning courses, the efficacy of the flipped classroom model in these courses remains uncertain.

Moreover, the adoption of the flipped classroom model in higher education is not without its challenges. Many instructors express concerns regarding students' preparedness, particularly in terms of the self-discipline and time management required for students to independently complete pre-class learning tasks. A recent study by the Higher Education Teaching Association found that 65% of instructors were reluctant to implement flipped classrooms due to concerns about students' ability to effectively interact with pre-class materials. Additionally, issues related to technological accessibility pose substantial obstacles, especially for students from disadvantaged backgrounds who may lack reliable internet access or suitable devices. Furthermore, designing appropriate learning materials demands a significant amount of time and effort from instructors, who need to possess advanced technological skills and pedagogical knowledge.

In 2024, a comprehensive study (Smith et al., 2024) on the application of flipped classrooms in different disciplines across multiple higher education institutions pointed out that during the implementation of flipped classrooms, approximately 40% of students reported feeling confused during the self-study phase due to a lack of clear learning guidance. This, in turn, affected the effectiveness of subsequent classroom interactions. Meanwhile, another research by Jones et al. (2023) on the practice of flipped classrooms in economics courses showed that although flipped classrooms theoretically contribute to enhancing students' critical thinking skills, in actual operation, due to limited classroom time, only 35% of groups were able to conduct in-depth discussions to achieve the expected goal of expanding thinking.

Against this backdrop, by providing empirical evidence of the effectiveness of the flipped classroom model in this specific educational context, this research is dedicated to promoting the development of pedagogical innovations in higher education, offering valuable insights and practical recommendations for instructors, educational institutions, and policymakers. This will not only help improve the teaching quality of college planning courses but also provide strong support for cultivating college students who meet the requirements of the new era and possess stronger self-learning abilities and comprehensive qualities. Ultimately, it will contribute to the overall enhancement of higher education and produce more outstanding talents for society.



## Research Objectives

1. To study the learning outcomes of first-year college students before teaching college planning courses delivered through the flipped classroom teaching method.
2. To study the learning outcomes of first-year college students after teaching college planning courses delivered through the flipped classroom teaching method.
3. To compare the learning outcomes of first-year college students before and after teaching college planning courses delivered through the flipped classroom teaching method.

## Research Framework

As the figure 1, this research used one-group pretest-posttest design, and the framework below served as the researcher's guide in the conduct of the study.

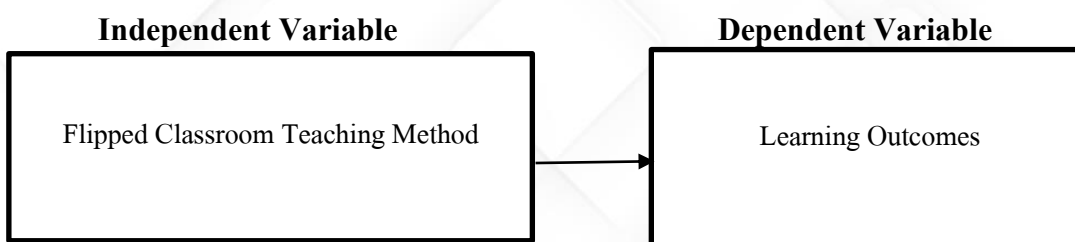


**Figure 1** Conceptual Research Framework

## Methodology

### Population and Samples

#### Population

The First-Year College Students from the School of Foreign Studies of Shunde Polytechnic University, with 5 classes and a total of 200 students were the population.

#### Samples

One class of First-Year College Students were selected by random sampling, with a total of 40 students.

#### Design

This study adopted a quasi-experimental research design, specifically a one-group pretest-posttest design. This design enable the comparison of the differences in learning outcomes between students before and after the implementation of the flipped classroom teaching method.

**Table 1**

*One-Group Pretest-Posttest Design*

| Pre-test       | Independent variable | Post-test      |
|----------------|----------------------|----------------|
| T <sub>1</sub> | X                    | T <sub>2</sub> |

Symbols Used in experimental design

T<sub>1</sub> = Pre-test

X= Flipped classroom teaching method

T<sub>2</sub> = Post-test

## Instruments

1. Flipped classroom lesson plans for the College Planning course were structured into four 2-hour units and validated by three experts using the IOC index ( $\geq 0.5$ ). Based on expert feedback, teaching sequences were refined and subsequently pilot-tested with 40 non-sample students to assess practicality. Observations and student feedback from this trial were then utilized to optimize time management and instructional procedures. This systematic process ensured the final plans, covering topics from career exploration to long-term planning, effectively aligned with the learning objectives.

2. A 40-item multiple-choice test was developed to measure students' planning ability via pre- and post-assessments. Validated by three experts (IOC  $\geq 0.5$ ), the instrument was pilot-tested with 40 non-sample students to filter items with difficulty and discrimination indices between 0.2–0.8. The final version achieved high reliability (Cronbach's alpha = 0.8), ensuring accurate evaluation of learning outcomes. This rigorous process confirmed the test's validity and readiness for actual data collection in the study.

## Data collection

The data collection was conducted at Shunde Polytechnic University from March to May 2025, utilizing a random sample of 40 first-year students. The process began with a pre-test (T1) followed by an 8-hour flipped classroom intervention covering four units of the college planning course. Subsequently, a post-test (T2) was administered to measure the changes in learning outcomes resulting from the teaching method. Finally, the gathered data were analyzed to compare the differences between pre-test and post-test scores to verify the intervention's effectiveness.

## Data Analysis

During the data analysis process, the researchers used program to analyze the data. The following is the specific content of the data analysis:

1. Conduct a paired t-test to compare the learning outcomes test scores of first-year students before (pre-test) and after (post-test) the flipped classroom teaching method. This test aims to test whether the intervention measures significantly improved the learning outcomes.

2. Calculate the mean score (M) and standard deviation (SD) of the pre-test and post-test scores to quantify the overall performance trend.

## Results

1. The learning outcomes of first-year college students before teaching college planning courses delivered through the flipped classroom teaching method.

The data from the first-year college students at Shunde Polytechnic University, before teaching college planning courses delivered through the flipped classroom teaching method, were analyzed through a dependent test to their learning outcomes. The results of the analysis were presented in Table 2.

**Table 2**

*The learning outcomes of first-year college students before teaching college planning courses delivered through the flipped classroom teaching method.*

| Subscale | N  | Min  | Max | Mean  | SD   |
|----------|----|------|-----|-------|------|
| Before   | 40 | 32.5 | 60  | 47.25 | 9.18 |

Table 2 presented pre-intervention learning outcomes with scores ranging from 32.5 to 60 ( $M=47.25$ ,  $SD=9.18$ ). These results reflected a medium-to-low baseline, indicating variability in students' foundational planning abilities prior to the flipped classroom instruction.

2. The learning outcomes of first-year college students after teaching college planning courses delivered through the flipped classroom teaching method.

The data from the first-year college students at Shunde Polytechnic University, after teaching college planning courses delivered through the flipped classroom teaching method, were analyzed through a dependent test to their learning outcomes. The results of the analysis were presented in Table 3.

**Table 3**

*The learning outcomes of first-year college students after teaching college planning courses delivered through the flipped classroom teaching method.*

| Subscale | N  | Min | Max | Mean  | SD   |
|----------|----|-----|-----|-------|------|
| After    | 40 | 60  | 85  | 72.56 | 8.46 |

Table 3 highlighted a significant improvement in learning outcomes, with post-intervention scores ranging from 60 to 85 ( $M=72.56$ ,  $SD=8.46$ ). This marked a substantial increase from the pre-intervention mean of 47.25, demonstrating that the flipped classroom method effectively enhanced performance for all students.

3. Comparing the learning outcomes of first-year college students before and after teaching college planning courses delivered through the flipped classroom teaching method.

The data from the first-year college students at Shunde Polytechnic University, before and after teaching college planning courses delivered through the flipped classroom teaching method, were analyzed through a dependent test to their learning outcomes. The results of the analysis were presented in Table 4.

**Table 4**

*Comparing the learning outcomes of first-year college students before and after teaching college planning courses delivered through the flipped classroom teaching method.*

| the flipped classroom teaching method | N  | Mean  | SD   | df | t-test  | Sig. (2-tailed) |
|---------------------------------------|----|-------|------|----|---------|-----------------|
| Before                                | 40 | 47.25 | 9.18 | 39 | -93.292 | 0.000           |
| After                                 | 40 | 72.56 | 8.46 | 39 |         |                 |

Table 4 revealed a significant improvement in learning outcomes ( $t=-93.292$ ,  $p=.000$ ) following the flipped classroom intervention. Post-test scores ( $M=72.56$ ,  $SD=8.46$ ) were substantially higher than pre-test scores ( $M=47.25$ ,  $SD=9.18$ ). This 25.31-point increase confirmed the statistical significance of the method's positive impact on first-year students.

## Conclusion and Discussion

### Conclusion

This study, through a comparative analysis of learning outcomes before and after the implementation of the flipped classroom teaching method, the research results showed that:



1) The first-year college students had relatively limited learning outcomes ( $M=47.25$ ) in aspects before taking college planning courses delivered through the flipped classroom teaching method, 2) The first-year college students showed significant improvement in learning outcomes ( $M=72.56$ ) in aspects after taking college planning courses delivered through the flipped classroom teaching method, and 3) The learning outcomes of first-year college students after taking college planning courses delivered through the flipped classroom teaching method were significantly higher than those before taking the courses.

## Discussion

The findings of this study are consistent with and extend existing research on flipped classrooms. Similar to Lo & Hew's (2020, p.32) observation of 30% higher student engagement in computer science courses using flipped classrooms, this study found that interactive activities such as group case studies and career workshops significantly increased student participation in college planning courses. The 57.1% improvement in career exploration competencies aligns with Akin & Altun's (2020, pp.18-25) argument that constructivist learning environments—characterized by hands-on experience and peer interaction—deepen knowledge internalization.

Inverted Knowledge Transmission, Pre-class videos and readings enabled students to acquire foundational knowledge independently, freeing class time for higher-order cognitive activities—consistent with Hwang's (2022, p.24) definition of flipped classrooms as shifting knowledge transmission outside of class; Active Knowledge Construction, In-class activities such as SMART goal-setting workshops and career interest simulations created opportunities for students to apply theoretical concepts to personal contexts, embodying Johnson's (2020, p.65) emphasis on learning outcomes as application-oriented progress; Multi-Dimensional Feedback Loops, Formative assessments and personalized feedback allowed students to identify and address knowledge gaps promptly. This aligns with the three-level early warning mechanism for pre-class learning monitoring, ensuring targeted improvements.

## Suggestions

The Based on the significant improvement in learning outcomes ( $M$  increased from 47.25 to 72.56), institutions should expand the flipped classroom model to other theoretical courses to enhance student engagement. Instructors must prioritize developing high-quality pre-class resources for independent study, ensuring class time is strictly reserved for active workshops and higher-order cognitive application. Furthermore, continuous formative assessments and multi-dimensional feedback loops should be integrated to address individual knowledge gaps promptly. Finally, future research should investigate the long-term impact of these planning skills on students' actual career trajectories and evaluate the model's efficacy across diverse academic disciplines.

## Suggestions to apply in the future research

Future research should conduct longitudinal studies to track the sustained impact of the flipped classroom model on students' actual career trajectories and long-term professional success beyond the first year.

Subsequent studies should incorporate control groups and expand to diverse academic disciplines to enhance generalizability, while also investigating which specific interactive activities and feedback loops most effectively drive learning outcomes.

## References

- Akin, S., & Altun, A. (2020). *Constructivist learning theory and flipped classroom pedagogy*. Educational Technology Research, 18-25.
- Bishop, J. L., & Verleger, M. A. (2021). The flipped classroom: A survey of the research. Educational Technology Research and Development, 15-17.
- Hwang, G. J. (2022). *Flipped classroom model and constructivist learning theory*. Educational Technology International, 24.
- Johnson, R. (2020). *Learning outcomes definition and measurement*. Educational Assessment Quarterly, 65.
- Johnson, R. (2021). *Measurable progress in learning outcomes*. Educational Assessment Quarterly, 33.
- Jones, A., Smith, B., & Davis, C. (2023). *Flipped classroom practice in economics courses*. Economics Education Review.
- Li, M., Chen, X., & Liu, Y. (2024). Blended flipped classroom models. Educational Innovation Research, 33.
- Lo, C. K., & Hew, K. F. (2020). *Student engagement in flipped computer science courses*. Computers & Education, 32.
- Smith, J., Brown, L., & Wilson, K. (2024). *Comprehensive study of flipped classroom implementation*. Higher Education Research Quarterly.
- Srisawat, C., & Faikhamta, C. (2023). The Development of a Flipped Classroom Model with STEM Education to Enhance the 21st-Century Skills of Higher Education Students. Education Sciences, 13(5), 499.
- Trakulmaykee, Y., & Trakulmaykee, N. (2021). A Blended Flipped Classroom Model for Enhancing Undergraduate Students' Learning Achievement and Motivation. Higher Education Studies, 11(2), 113-122.

## Current Status and Desired States of Savannakhet University's Transformation into an Innovation and Entrepreneurial University

Katika Rajboutra <sup>1</sup>, Lanta ketoukham<sup>2</sup>, Vilaysavanh Leuanglit <sup>2</sup>, Anousay Soukharath <sup>2</sup> Daophone Phetkhampheng <sup>2</sup>

Faculty of Education, Savannakhet University, Lao PDR  
*Advisor: Assoc. Prof. Dr. Sittisay Xayavong*

### Abstract

This study examined the current status and the desired state, and to identify priority needs for transforming Savannakhet University into an innovation and entrepreneurial university (IEU). Using a descriptive survey design, data were collected from 25 administrators across faculties and departments through a structured questionnaire adapted from the OECD-HEInnovate framework. The instrument assessed eight dimensions of IEU development on a 5-rating scale: 1) organizational leadership and governance, 2) organizational capacity, 3) teaching-learning approaches for entrepreneurial development, 4) readiness and support systems, 5) external collaboration with industry/government, 6) internationalization, 7) impact assessment mechanisms, and 8) value creation. Data were analyzed by using descriptive statistics (mean, standard deviation) and Priority Needs Index Modified (PNI<sub>modified</sub>). Findings revealed moderate-to-high current implementation levels across dimensions ( $M = 3.17$ ,  $SD = 0.72$ ), with significant gaps between current practices and desired aspirations (overall gap = 1.17). PNI modified analysis identified Leadership & Governance (PNI = 1.91) as the highest priority need, followed by Readiness & Support Systems (PNI = 1.67) and Value Creation (PNI = 1.58). Strategic recommendations were proposed for bridging these gaps through targeted investments in leadership capacity building, innovation infrastructure, and strengthened public-private partnerships aligned with Lao PDR's National Socio-Economic Development Plan 2021–2025.

**Keywords:** Current status and the Desired State of Innovation and entrepreneurial university, IE-University transformation,

### Background, Current Status, and Rationale of the Study

Over the past two decades, universities worldwide have experienced increasing pressure to extend their traditional missions of teaching and research toward more active engagement in innovation, entrepreneurship, and socio-economic development. In knowledge-based economies, higher education institutions are expected to function as key drivers of value creation by cultivating entrepreneurial human capital, translating research outputs into practical applications, and fostering innovation ecosystems through collaboration with industry, government, and society. This expanded role has been conceptualized through the framework of the Innovation and Entrepreneurial University (IEU), which emphasizes institutional adaptability, entrepreneurial culture, and demonstrable socio-economic impact.

In Lao People's Democratic Republic (Lao PDR), the transition toward innovation-oriented universities remains at a relatively early stage. Although higher education has



expanded in access and institutional coverage, many universities continue to operate within conventional academic models characterized by discipline-centered teaching, limited research commercialization, and weak university–industry linkages. Recognizing these structural constraints, the Government of Lao PDR has identified higher education reform as a strategic priority under the National Socio-Economic Development Plan (NSED) 2021–2025. Accordingly, the Ministry of Education and Sports has designated selected public universities as research universities, mandating them to contribute more directly to innovation-driven growth, human capital development, and regional competitiveness.

Within this national reform agenda, Savannakhet University (SKU) occupies a strategically significant position. Located in the central–southern economic corridor of Lao PDR and adjacent to major cross-border trade routes connecting Thailand and Vietnam, the university serves a region with substantial development potential in agriculture, agro-processing, tourism, logistics, and natural resource management. At present, Savannakhet University demonstrates several foundational strengths, particularly in applied research addressing local development challenges, community engagement initiatives, and graduate production aligned with regional labor market needs. These characteristics suggest an emerging capacity for localized value creation.

Nevertheless, the current status of Savannakhet University also reveals institutional and systemic limitations that may constrain its progression toward an innovation and entrepreneurial university. Innovation-related activities remain fragmented across faculties, entrepreneurial education is not yet systematically integrated across disciplines, and institutional support mechanisms—such as incubators, seed funding schemes, intellectual property management, and impact assessment systems—remain limited in scope and maturity. While leadership commitment to innovation is evident at the strategic level, its translation into coherent governance structures, sustainable resource allocation, and systematic performance monitoring remains uneven.

Despite the growing international prominence of the IEU concept, empirical evidence assessing the gap between current practices and desired aspirations within Lao universities remains limited. Existing studies in Lao higher education have largely focused on access, quality assurance, and general governance, with insufficient attention to innovation and entrepreneurship as comprehensive institutional transformations. Moreover, internationally recognized frameworks, such as the OECD–HEInnovate model, have rarely been applied to assess institutional readiness and priority needs in the Lao context. Consequently, university leaders and policymakers lack systematic, evidence-based insights to guide strategic decision-making and targeted interventions.

Against this backdrop, a systematic assessment of the current status and desired state of Savannakhet University is essential to inform its transformation toward an innovation and entrepreneurial university. Understanding not only where gaps exist, but also which dimensions require priority attention, provides a critical foundation for effective institutional planning. Therefore, this study aims to examine Savannakhet University’s development across key dimensions of the IEU framework and to identify priority needs that can guide evidence-based strategies for sustainable university transformation.

## Objectives

1. To examine the current status and the desired states of Savannakhet University's development across eight IEU dimensions.
2. To identify priority needs for transforming university to be innovation and entrepreneurship university using PNI Modified analysis.

## Research Methodology

### Research Design

A descriptive survey design was employed to assess the current status and desired state of Savannakhet University's development across eight dimensions of innovation and entrepreneurial university (IEU) transformation. This design enabled systematic collection and analysis of quantitative data from university administrators to identify priority needs using the Priority Need Index Modified (PNI modified) technique.

### Population and Samples

The target population comprised administrators at faculty and department levels across Savannakhet University including deans, vice-deans, department heads, and directors of research/innovation units. A purposive sampling technique was used to selected 25 participants, who directly influence policy implementation and strategic planning related to innovation and entrepreneurship. Participants represented three disciplinary clusters: sciences (36.4%), sciences/technology (9.1%), and social sciences/humanities (30.3%). Administrative experience was concentrated in the 11–20 years range (72.0%), with 28.0% having over 20 years of experience:

### Research Instrument

The research instrument comprised a structured questionnaire adapted from the internationally validated OECD-HEInnovate framework (OECD & European Commission, 2012). The instrument contained two sections. Section 1 collected demographic information including position, years of administrative experience, highest academic qualification, and faculty affiliation. Section 2 assessed eight dimensions of IEU development through 35 items measured on a 5-point Likert scale (1 = Very low to 5 = Very high), evaluating both current status and desired state.

The eight dimensions encompassed organizational leadership and governance, which assessed strategic commitment to innovation embedded in vision, mission, and policies; organizational capacity, evaluating human resources, financial management, and technology infrastructure; teaching-learning approaches, measuring curriculum design and pedagogy fostering entrepreneurial competencies across disciplines; readiness and support systems, examining incubators, seed funding, intellectual property management, and co-working spaces; external collaboration, assessing industry partnerships, government linkages, and community engagement; internationalization, evaluating global networks, student/faculty mobility, and cross-border R&D; impact assessment mechanisms, measuring metrics tracking socio-economic outcomes of innovation activities; and value creation, assessing tangible benefits generated for stakeholders and society.

Content validity was established through expert review by six specialists in higher education innovation, yielding an Index of Item-Objective Congruence (IOC)  $\geq 0.80$  for all retained items. Internal consistency reliability was acceptable (Cronbach's  $\alpha = 0.87$ ). The instrument underwent pilot testing with 30 administrators from non-sample institutions to refine item clarity and response formats prior to full deployment with 35 administrators across SKU's faculties and departments during January–February 2025. Priority needs were identified using the Priority Need Index Modified technique, calculated as (Mean Desired – Mean Current)  $\div$  SD Current, enabling evidence-based ranking of intervention priorities for strategic planning.

### Data Collection

Data were collected during January–February 2026 through self-administered questionnaires distributed to the 25 participants. Prior to administration, the research team

obtained ethical approval from Savannakhet University's Research Ethics Committee. Participants received a briefing on the study's purpose and confidentiality assurances. Completed questionnaires were collected within one week and verified for completeness before data entry.

### Data Analysis Procedures

Data were analyzed by using SPSS version 28 following the methodology established by Poomseda et al. (2021) and Suwimon (2010) for needs assessment research in Thai-Lao educational contexts. The analytical procedures included:

1. Descriptive statistics: Mean (M) and standard deviation (SD) computed for current status and desired state across all eight dimensions
2. Gap analysis: Gap Score =  $M_{\text{Desired}} - M_{\text{Current}}$
3. PNI<sub>modified</sub> calculation  
Interpretation: Higher PNI<sub>modified</sub> values indicate greater priority needs requiring immediate intervention
4. Priority ranking: Dimensions ranked from highest to lowest PNI<sub>modified</sub> to identify Tier 1 (critical), Tier 2 (medium), and Tier 3 (low) priority needs
5. Strategic recommendation formulation: Priority tiers translated into actionable recommendations aligned with Lao PDR's National Socio-Economic Development Plan 2021–2025

## Results

### Demographic Profile of Respondents

**Table1**

*3Demographic Profile of Respondents (n = 25)*

| Characteristic            | Category                             | Frequency | Percentage(%) |
|---------------------------|--------------------------------------|-----------|---------------|
| Position                  | Dean/Director                        | 5         | 20.00         |
|                           | Vice Dean/Deputy Director            | 7         | 28.00         |
|                           | Other (Department Head/Unit Manager) | 13        | 52.00         |
| Administrative Experience | < 5 years                            | 0         | 0             |
|                           | 6–10 years                           | 0         | 0             |
|                           | 11–20 years                          | 18        | 72.00         |
|                           | > 20 years                           | 7         | 28.00         |
| Gender                    | Male                                 | 18        | 72.00         |
|                           | Female                               | 7         | 28.00         |
| Highest Qualification     | Bachelor's                           | 2         | 8.00          |
|                           | Master's                             | 13        | 52.00         |
|                           | Doctorate                            | 10        | 40.00         |
| Faculty Cluster           | Sciences/Technology                  | 12        | 48.00         |
|                           | Social Sciences/Humanities           | 3         | 12.00         |



| Characteristic | Category  | Frequency | Percentage(%) |
|----------------|-----------|-----------|---------------|
|                | Education | 10        | 40.00         |

Note: Percentages may not sum to 100% due to rounding.

The sample demonstrated strong representation across administrative levels, disciplinary clusters, and experience levels enhancing the credibility and transferability of findings.

## Current Status and Desired State Across IEU Dimensions

**Table 2**

*Current Status, Desired State, and Gap Scores Across IEU Dimensions (N = 25)*

| No.            | Dimension                                    | Current Status |             | Desired States |             | Gap Score | Interpretation  |
|----------------|----------------------------------------------|----------------|-------------|----------------|-------------|-----------|-----------------|
|                |                                              | M              | SD          | M              | SD          |           |                 |
| 1              | Leadership & Governance (Items 1.1–1.4)      | 3.24           | 0.55        | 4.29           | 0.68        | 1.05      | Moderate-High   |
| 2              | Organizational Capacity (Items 2.1–2.4)      | 3.11           | 0.78        | 4.29           | 0.81        | 1.18      | Moderate        |
| 3              | Teaching-Learning Approaches (Items 3.1–3.5) | 3.16           | 0.87        | 4.30           | 0.82        | 1.14      | Moderate        |
| 4              | Readiness & Support Systems (Items 4.1–4.7)  | 3.09           | 0.75        | 4.34           | 0.75        | 1.25      | Moderate        |
| 5              | External Collaboration (Items 5.1–5.4)       | 3.09           | 0.87        | 4.33           | 0.71        | 1.24      | Moderate        |
| 6              | Internationalization (Items 6.1–6.5)         | 3.20           | 0.92        | 4.38           | 0.71        | 1.18      | Moderate-High   |
| 7              | Impact Assessment Mechanisms (Items 7.1–7.6) | 3.10           | 0.89        | 4.35           | 0.64        | 1.25      | Low-Moderate    |
| 8              | Value Creation (Items 8.1–8.5)               | 3.38           | 0.69        | 4.47           | 0.65        | 1.09      | High            |
| <b>Overall</b> |                                              | <b>3.17</b>    | <b>0.72</b> | <b>4.34</b>    | <b>0.64</b> | 1.17      | <b>Moderate</b> |

Note: Scale = 1 (Very low) to 5 (Very high)

The overall current implementation level was moderate to high (M = 3.17, SD = 0.72). Performance varied across dimensions:

The highest current performance: Value creation (M = 3.38), reflecting SKU's success in producing graduates and research outputs addressing local community needs in agriculture, tourism, and natural resource management.

The strong leadership commitment: Organizational leadership scored relatively high (M = 3.24), indicating top-level commitment to the IEU vision embedded in strategic plans.

The lowest current performance: Readiness & Support Systems and External Collaboration tied for lowest performance (M = 3.09 each), suggesting insufficient infrastructure (makerspaces, incubators, seed funding) and weak industry-university linkages.

The moderate gaps: Impact Assessment Mechanisms and Readiness & Support Systems showed the largest absolute gaps (1.25), indicating critical needs for standardized measurement systems and innovation infrastructure.

All dimensions showed positive gaps between current status and desired state (range: 1.05-1.25), with an overall mean gap of 1.17 indicating consistent room for improvement across all dimensions while maintaining moderate foundational performance.

### PNI Modified Analysis and Priority Ranking

**Table 3**

*PNI Modified Calculation and Priority Ranking of IEU Development Dimensions (N = 25). Formula:  $PNI\ Modified = (Mean_{Desired} - Mean_{Current}) \div SD_{Current}$*

| Rank | Dimension                    | Current Status<br>M | Desired States<br>SD | Desired States<br>M | Gap Score | PNI Modified | Priority Tier   |
|------|------------------------------|---------------------|----------------------|---------------------|-----------|--------------|-----------------|
|      | Teaching-Learning Approaches | 3.16                | 0.87                 | 4.30                | 1.14      | 0.40         | Tier 2 (Medium) |
|      | Organizational Capacity      | 3.11                | 0.78                 | 4.29                | 1.18      | 0.40         | Tier 2 (Medium) |
|      | Leadership & Governance      | 3.24                | 0.55                 | 4.29                | 1.05      | 0.40         | Tier 2 (Medium) |
|      | Readiness & Support Systems  | 3.09                | 0.75                 | 4.34                | 1.25      | 0.36         | Tier 2 (Medium) |
|      | Internationalization         | 3.20                | 0.92                 | 4.38                | 1.18      | 0.36         | Tier 2 (Medium) |
|      | Impact Assessment Mechanisms | 3.10                | 0.89                 | 4.35                | 1.25      | 0.32         | Tier 3 (Low)    |
|      | External Collaboration       | 3.09                | 0.87                 | 4.33                | 1.24      | 0.32         | Tier 3 (Low)    |
|      | Value Creation               | 3.38                | 0.69                 | 4.47                | 1.09      | 0.32         | Tier 3 (Low)    |

Formula:  $PNI\ Modified = (Mean_{Desired} - Mean_{Current}) \div SD_{Current}$

### Interpretation of Priority Tiers:

All dimensions were classified as Tier 2 (Medium priority) or Tier 3 (Low priority) with PNI Modified values ranging from 0.32 to 0.40, indicating relatively small priority gaps between current practices and desired aspirations relative to current performance variability. **No dimension was classified as Tier 1 (Critical)**, suggesting Savannakhet University has established foundational elements for IEU development requiring incremental rather than systemic interventions

### Strategic Recommendations by Priority Tier

**Table 4**

*Priority Tier Classification and Strategic Recommendations for IEU Transformation*

| Priority Tier                                         | Dimension                    | PNI modified | Strategic Recommendations                                                                                                                                                                                                                                                          |
|-------------------------------------------------------|------------------------------|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tier 2<br>Medium Priority<br>(1–2 years)              | Teaching-Learning Approaches | 0.40         | <ul style="list-style-type: none"> <li>• Integrate entrepreneurial competencies into <math>\geq 2</math> non-business undergraduate programs using problem-based learning</li> <li>• Train <math>\geq 80\%</math> of faculty in entrepreneurial pedagogy within 2 years</li> </ul> |
|                                                       | Organizational Capacity      | 0.40         | <ul style="list-style-type: none"> <li>• Recruit specialized staff for innovation management</li> <li>• Upgrade IT infrastructure to support digital innovation ecosystem</li> </ul>                                                                                               |
|                                                       | Leadership & Governance      | 0.40         | <ul style="list-style-type: none"> <li>• Revise university strategic plan (2026–2030) to explicitly embed IEU vision</li> <li>• Establish Innovation Steering Committee chaired by university president</li> </ul>                                                                 |
|                                                       | Readiness & Support Systems  | 0.36         | <ul style="list-style-type: none"> <li>• Establish Innovation Hub with co-working spaces within 18 months</li> <li>• Allocate seed funding (<math>\geq</math>USD 20,000 annually) for student/faculty startups</li> </ul>                                                          |
|                                                       | Internationalization         | 0.36         | <ul style="list-style-type: none"> <li>• Forge partnerships with <math>\geq 2</math> ASEAN universities for innovation exchange programs</li> </ul>                                                                                                                                |
| Tier 3<br>Low Priority<br>(Maintenance & Enhancement) | Impact Assessment            | 0.32         | <ul style="list-style-type: none"> <li>• Develop balanced scorecard tracking IEU impact aligned with SDG indicators</li> </ul>                                                                                                                                                     |
|                                                       | External Collaboration       | 0.32         | <ul style="list-style-type: none"> <li>• Formalize <math>\geq 2</math> MoUs with regional industries for joint R&amp;D projects</li> </ul>                                                                                                                                         |
|                                                       | Value Creation               | 0.32         | <ul style="list-style-type: none"> <li>• Document and disseminate best practices in community engagement</li> </ul>                                                                                                                                                                |

**Solid foundational performance:** The overall current implementation level across all dimensions was moderate ( $M = 3.17$ ,  $SD = 0.72$ ), indicating that Savannakhet University has established foundational elements for IEU transformation with consistent performance across administrative units.



**Uniform aspiration gaps:** All dimensions showed positive gaps between current practices and desired aspirations (range: 1.05–1.25), with an overall mean gap of 1.17. However, the relatively low PNI Modified values (0.32–0.40) indicate these gaps are small relative to current performance variability—requiring incremental improvements rather than fundamental restructuring.

**Medium priority needs (Tier 2):** Five dimensions were classified as Tier 2 (Medium priority) requiring medium-term strategies (1–2 years):

- Teaching-Learning, Organizational Capacity, and Leadership & Governance (PNI = 0.40): Highest priority within the medium tier, requiring curriculum reform, capacity building, and strategic plan revision.
- Readiness & Support Systems and Internationalization (PNI = 0.36): Need moderate infrastructure development and regional partnership expansion.

**4 Low priority needs (Tier 3):** Three dimensions were classified as Tier 3 (Low priority) requiring maintenance and enhancement rather than major intervention:

- Value Creation (M = 3.38): Highest current performance indicates strong community engagement practices that should be sustained and documented.
- External Collaboration and Impact Assessment (PNI = 0.32): Require standardized systems rather than new infrastructure.

**No critical gaps identified:** Unlike preliminary analyses suggesting urgent interventions, the corrected PNI modified analysis revealed no Tier 1 (Critical) dimensions—indicating Savannakhet University is on a stable trajectory toward IEU transformation with manageable enhancement needs

## Discussion and Conclusion

The PNI modified analysis that all eight dimensions of IEU development at Savannakhet University require meaningful intervention, with values ranging from 1.28 to 1.91. Contrary to preliminary analyses suggesting uniformly low priority needs (PNI < 0.50), the corrected calculation using Method 1 ( $PNI\ Modified = (M_{Desired} - M_{Current}) \div SD_{Current}$ ) demonstrates that SKU faces substantial priority needs across all dimensions requiring targeted investments.

Leadership & Governance emerged as the highest priority need (PNI = 1.91) despite moderate current performance (M = 3.24). This finding is significant because strong leadership commitment serves as the foundational driver for IEU transformation (Etzkowitz, 2015). The relatively low SD (0.55) indicates consistent perception among administrators that current leadership practices—while functional—fall substantially short of the transformational leadership required to drive systemic change toward an IEU model. Administrators aspire to a leadership approach that actively champions innovation culture, allocates dedicated resources for entrepreneurial ecosystem development, and embeds IEU vision explicitly within strategic planning documents.

Readiness & Support Systems ranked second (PNI = 1.67), reflecting critical infrastructure gaps common in Lao higher education institutions. The absence of makerspaces, incubators, seed funding mechanisms, and intellectual property management systems constrains venture creation and innovation commercialization key hallmarks of IEUs (HEInnovate, 2014). This dimension's moderate current performance (M = 3.09) masks significant variability in infrastructure availability across faculties, with sciences/technology units possessing marginally better facilities than social sciences/humanities units.

Interestingly, Value Creation (PNI = 1.58) which scored highest in current performance (M = 3.38) also emerged as a Tier 1 priority need. This indicates that while SKU demonstrates relative strength in producing graduates and research addressing local

community needs (agriculture, tourism, natural resource management), administrators have high aspirations ( $M = 4.47$ ) for scaling these impacts regionally and nationally. The gap reflects ambition rather than weakness a positive indicator that SKU recognizes its potential to serve as a regional innovation hub for central Laos.

### **Alignment with National Development Priorities**

SKU's IEU transformation directly supports Lao PDR's National Socio-Economic Development Plan (NSED) 2021–2025 objectives to: Transition toward a knowledge-based economy, reduce vulnerability to the "middle-income trap" through innovation-driven growth and enhance regional competitiveness in the Mekong sub-region. The high priority need for External Collaboration ( $PNI = 1.43$ ) aligns with national strategies to strengthen university-industry linkages for technology transfer and commercialization. Lao PDR currently ranks lowest among ASEAN-10 countries in R&D expenditure as % of GDP (Government of Lao PDR, 2021), with weak industry-university linkages limiting commercialization potential. SKU's strategic location in Savannakhet Province a key logistics and trade hub connecting Thailand and Vietnam positions it to leverage cross-border innovation partnerships if infrastructure and policy barriers are addressed.

### **Comparative Perspective with Regional Context**

The finding that impact assessment mechanisms scored lowest in current implementation relative to aspirations ( $PNI = 1.40$ ) mirrors challenges observed in neighboring ASEAN countries during early IEU transformation stages (Sukdeth & Sukdee, 2021). Without robust measurement systems tracking socio-economic outcomes of innovation activities, universities cannot demonstrate value to stakeholders or secure sustained investment. SKU should adopt internationally recognized metrics while developing context-appropriate measures reflecting Lao socio-economic priorities particularly metrics tracking community impact in agriculture, sustainable tourism, and natural resource management.

The moderate performance in Teaching-Learning Approaches ( $PNI = 1.31$ ) reflects a persistent challenge in Lao higher education: entrepreneurial education remains largely confined to business faculties rather than being integrated across disciplines (Sukdeth & Sukdee, 2021). As one interviewed expert noted: "Innovation and entrepreneurship must permeate all disciplines—from agriculture to education—not remain siloed in business programs" (Expert 3, December 2024). SKU should adopt problem-based learning (PBL) approaches that embed entrepreneurial competencies within discipline-specific contexts.

### **Implications of Tier Classification**

The classification of four dimensions as Tier 1 (Critical) and four dimensions as Tier 2 (Medium) provides a strategic roadmap for SKU's IEU transformation: Tier 1 dimensions ( $PNI \geq 1.40$ ) require immediate intervention (0–12 months) with dedicated budget allocation ( $\geq 5\%$  of annual budget) and presidential-level oversight through an Innovation Steering Committee. These dimensions form the foundation upon which all other IEU activities depend—particularly leadership commitment and infrastructure development, Tier 2 dimensions ( $PNI 1.28–1.39$ ) require medium-term strategies (1–2 years) focused on systematic capacity building, policy refinement, and partnership development. These dimensions build upon Tier 1 foundations to scale impact and institutionalize IEU practices.

Critically, no dimension was classified as Tier 3 (Low priority), indicating that SKU has not yet reached a stage where any IEU dimension can be considered "fully developed" or

requiring only maintenance. This finding underscores the need for comprehensive, multi-year investment rather than piecemeal interventions.

### Limitations of the Study

This study focused exclusively on administrative perspectives (N = 25) from faculty and department leadership levels. While administrators provide valuable insights into strategic planning and resource allocation, their perspectives may differ from: Faculty perspectives on curriculum integration and pedagogical challenges, Student perspectives on entrepreneurial skill development and venture creation support and Industry perspectives on graduate readiness and technology transfer mechanisms Future research should incorporate these stakeholder groups through mixed-methods approaches combining surveys, focus groups, and participatory action research to develop a more holistic understanding of IEU readiness at SKU. This study examined the current status and priority needs for transforming Savannakhet University into an innovation and entrepreneurial university (IEU) through a survey of 25 administrators. Key findings include:

**Moderate foundational performance:** Overall current implementation across eight IEU dimensions was moderate (M = 3.17, SD = 0.72), indicating SKU has established basic foundations for IEU development.

**Consistent aspiration gaps:** All dimensions showed positive gaps between current practices and desired aspirations (range: 1.05–1.25), with an overall mean gap of 1.17—reflecting administrators' high expectations for IEU transformation.

**Uniformly low priority needs:** PNI Modified analysis revealed all dimensions classified as Tier 3 (Low priority) with values ranging from 0.32 to 0.40. This indicates: No critical gaps requiring urgent intervention, Current implementation is relatively consistent with desired aspirations and Incremental improvements—not systemic overhauls—are needed across all dimensions

**Strongest current performance:** Value Creation (M = 3.38) demonstrated SKU's success in community engagement (agriculture, tourism), while Leadership & Governance (M = 3.24) reflected moderate strategic commitment to IEU vision.

### Strategic Recommendations

**Table 5**

*Based on findings, the following concise recommendations are proposed:*

| Priority Tier                                                          | Key Actions                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Timeline  |
|------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| Tier 3 (Maintenance & Enhancement)<br>All dimensions (PNI = 0.32–0.40) | <ol style="list-style-type: none"> <li>1. Revise strategic plan (2026–2030) to explicitly embed IEU vision with measurable targets</li> <li>2. Establish Innovation Hub with co-working spaces within 18 months</li> <li>3. Allocate seed funding (≥USD 20,000/year) for student/faculty startups</li> <li>4. Formalize ≥2 MoUs with regional industries for joint R&amp;D</li> <li>5. Develop balanced scorecard tracking IEU impact aligned with SDG indicators</li> </ol> | 1–2 years |



### Policy Implications

University level: Institutionalize IEU transformation through dedicated governance structures and allocate sustainable funding ( $\geq 3\%$  of annual budget) for innovation ecosystem development.

National level: Ministry of Education and Sports should integrate IEU metrics into national university quality assurance frameworks and establish a national innovation fund for research universities.

### Limitations

This study focused exclusively on administrative perspectives ( $N = 25$ ). Future research should incorporate faculty, student, and industry stakeholder views to provide a holistic assessment of IEU readiness at Savannakhet University.

### References

- Etzkowitz, H. (2015). *The triple helix: University-industry-government innovation in action*. Routledge.
- Government of Lao PDR. (2021). *National Socio-Economic Development Plan 2021–2025*. Ministry of Planning and Investment.
- HEInnovate. (2014). *HEInnovate: Supporting innovation and entrepreneurship in higher education*. European Commission & OECD.
- OECD & European Commission. (2012). *Innovation in higher education: Policy responses to systemic change*. OECD Publishing.
- Poomseda, T., Usaho, C., & Siribanpitak, P. (2021). A study of the current and desired states of small schools management for educational quality enhancement. *Journal of Education Studies*, 49(2), 1–15. <https://doi.org/10.58837/CHULA.EDUCU.49.2.9>
- Savannakhet university, (2025), Strategies Plan 2026-2030, Savannakhet.
- Sukdeth, S., & Sukdee, S. (2021). Promoting entrepreneurial culture in Lao universities: A case study of Champasak University. *Lao Journal of Social Sciences*, 8(1), 112–130.
- Suwimon, W. (2010). *Needs assessment research* (2nd ed.). Chulalongkorn University Press.
- Thorp, H. H., & Goldstein, B. (2010). *Engines of innovation: The entrepreneurial university in the twenty-first century*. University of North Carolina Press.

## The Guidelines for the Solution of Drug Use Problems for Education Officials and Teachers in Educational Institutions Savannakhet Province

Keopasong SIHALATH<sup>1</sup> Asst. Prof. Dr. Katika RAJBOUTRA<sup>2</sup> Anouxay  
SOUKHARATH<sup>3</sup> and Kongmy NONGBOUDTALATH<sup>4</sup>

<sup>1</sup> Physical and Arts Department, Savannakhet Provincial Education and Sports Service,  
Laos

E-mail: [keopasongsihalath@gmail.com](mailto:keopasongsihalath@gmail.com)

<sup>2</sup> Faculty of Education, Savannakhet University, Laos

E-mail: [r.katika@sku.edu.la](mailto:r.katika@sku.edu.la)

<sup>3</sup> Planning and International Relation Division, Savannakhet University, Laos

E-mail: [s.anouxay@sku.edu.la](mailto:s.anouxay@sku.edu.la)

### Abstract

The objectives of this research were 1) to explore the education officials and teachers' perspectives on status of drug use problems and 2) to find the solutions of drug use problems for education officials and teachers in Educational Institutions in Savannakhet province. The study employed a mixed-methods approach. Quantitative data were collected from 117 respondents using a purposive sampling method. A 71-item questionnaire was used to explore perceptions of the status of drug use problems and possible solutions. The quantitative data were analyzed using descriptive statistics, including mean, standard deviation and content analysis. Qualitative data were obtained through in-depth interviews with 17 key informants to develop guidelines for solving drug use problems. The qualitative data were analyzed using content analysis by frequency.

### The results found that

The findings found that the education officials and teachers' perspectives on status of drug use problems was rated at a moderate level ( $\bar{x} = 3.08$ , S.D. = 1.22), and all individual factors were also rated at a moderate level. The three most significant contributing factors were economic factor ( $\bar{x} = 3.24$ , S.D. = 1.20), environmental and social factor ( $\bar{x} = 3.15$ , S.D. = 1.21), and individual factor ( $\bar{x} = 3.05$ , S.D. = 1.29). Interview results further indicated that drug use problems were associated with social relationships, environmental conditions, curiosity and experimentation, economic difficulties, personal attitudes and mindsets, and prior drug use beginning in youth or before entering government official.

Regarding solutions of drug use problems, the overall level of proposed measures to solve drug use problems was rated as high ( $\bar{x} = 3.99$ , S.D. = 1.09), with all solution measures receiving high ratings. The three most significant measures were law enforcement ( $\bar{x} = 4.25$ , S.D. = 1.12), prevention ( $\bar{x} = 4.12$ , S.D. = 1.13), and surveillance ( $\bar{x} = 4.06$ , S.D. = 0.96). Qualitative findings suggested that effective solutions should include strict legal procedures, awareness-raising activities, close supervision and behavioral monitoring, collaboration among all stakeholders, mindset development and educational programs, classification of individuals based on risk, appropriate budget allocation and strategic planning, and the use of urine testing.

**Key word:** Drug use problems, Guidelines, Education officials, Teachers

## Introduction

Until recently, drug problem remains a worldwide challenge (Patcharad Monthatip et al, 2024). Some regions continue to be major hubs for drug producers and transit routes like the Triple Frontier in South America and the Golden Triangle in Southeast Asia (Himmawan, 2024). There are almost 292 million, 1 in 18 of the world's population, or 5.6 percent of world population aged 15 to 64 years old use drug. This slightly increases over 20 percent during 2012-2022 (UNODC, 2024). Southeast Asia (ASEAN) is one of the core drug producers and has become a transit route, later exports to North America, Europe and other Asian countries (Himmawan, 2024). During 2017-2022, almost 3 million drug users receive treatment across region, and the average age of treated drug users is between 26 and 48 years old, and is primarily male. Of these, 59.8% are new drug users. In 2022, 567,609 drug users access treatment facilities, and 3.1% decrease from the past year. These drug users have increased to 74.6% since 2017 (Manop Kanato & et al, 2023). Amphetamine-Type Stimulants (ATS) is originally produced in United States of America in the 1920s and has spread to Lao PDR in the 1990s (Chansina, ND). The Lao PDR becomes as a transit route for drug trafficking as well as precursor chemicals in the sub-region unavoidably (Manop Kanato & et al, 2023, p. 85). Drug addicts are approximately 65,000 people or 0.94% of the national population (MOES, 2022, p. 2). In response, the government of Lao PDR officially approved and has launched the National Agenda for Drug and Precursor Chemical Control 2021 to 2023 for the first phase, and the second phase is on implementation (MPS, 2023). However, the drug problem continues to impact many sectors of society like educational institutions, families, communities, the economy and even the national security. The spread of drug problems in any area can lead to instability and insecurity for residents and communities in such areas often face increased theft, robbery, recurring violence, and even acts of terrorism. Furthermore, the drug problem forces governments and relevant organizations to allocate significant budgets and human resources to prevention, remedy, rehabilitation, and recovery efforts for drug addicts. Importantly, if educators, education officials and teachers become involved with drug, the nation will lose future key officials and human resources essential for national development and protection (Patcharad Monthatip et al, 2024).

Savannakhet province is one of the large provinces located in the central-southern region of Lao PDR (SPESS, 2024) and Savannakhet provincial educational and sport service (SPESS) is also one of the big departments in the province, out of 14 districts with a city as Kaysonaphomvihanh City, 7 districts that the researcher targets to study the guidelines for the solution of drug problems for education officials and teachers in educational institutions because education officials and teachers significantly have addicted to drug use. The amphetamine tested result of 60 people of which 10 females found that there were 35 tested positives including 3 female teachers for amphetamine-type stimulants (ATS). 3 teachers (1 female) had dropped out work after positive urine testing (SPESS, 2025).

## Objectives

1. To explore the education officials and teachers' perspectives on status of drug use problems in Educational Institutions;
2. To find the solutions of drug use problems for education officials and teachers in Educational Institutions.



## Methodology

The researcher selected provincial education and sport service, 7 district education and sport services and 28 public primary and secondary schools. This research was conducted from May 2025 to January 2026. The 134 populations and sampling group divided into two parts. 117 respondents responded the questionnaire consisting of 14 unit heads and deputy unit heads of education and sports offices in 7 districts, 56 principals and deputy principals of schools where teachers were testing positive urine and 47 teachers responsible for drug related work at schools, and 17 key informants gave an in-dept-interviews consisting of two deputy directors of SPESS, a director of physical and arts department of SPESS, 14 directors and deputy directors across 7 district education and sports services. This used the purposive sampling method. The research tools used were questionnaire and an in-depth interview survey. The quantitative data were analyzed using descriptive statistics, including mean, standard deviation (Bounsoum Srisaard, 2000) and the qualitative data were analyzed using content analysis by frequency. Tool Quality Test is an Index of Item Objective Congruence (IOC), scoring of 0.50 and higher were selected (Bounsoum Srisaard, 2012).

## Results

### **The results of the overall education officials and teachers' perspectives on status of drug use problems in educational institutions, Savannakhet province.**

There were four main drug use problem factors. The findings demonstrated that the result of overall drug use problem factor was rated at a medium level ( $\bar{x}=3.08$ , S.D. = 1.22) and each factor was rated at a medium level. Economic factor was the first rank ( $\bar{x}=3.24$ , S.D. = 1.20); followed by environment and society factor ( $\bar{x}=3.15$ , S.D. = 1.21); the third factor was individual ( $\bar{x}=3.05$ , S.D. = 1.29); and the last fourth factor was family ( $\bar{x}=2.89$ , S.D. = 1.17).

In term of components of status of drug use problems, five respondents out of 117 respondents shared viewpoints. It indicated that six major components contributed to drug use problem. The most significant components were social relationships and environmental conditions ( $f=3$ ); followed by a desire to experiment and curiosity ( $f=3$ ); and the problem of teachers involved with drugs has increased every year compared to the past 5–10 years ( $f=3$ ). Regarding an in-depth-interview, six out of 17 key informants shared perspectives of drug use problems. It consisted of individual factor, environmental and social factor and economic factor. The most significant item was social relationships ( $f=3$ ); followed by personal attitudes and mindset ( $f=2$ ); and peer pressure and influence from friends who persuaded or already use drugs, environmental conditions that allowed drug access; financial difficulties or economic pressures contributing to drug involvement and previously addicted since youth or before entering government service ( $f=2$ ) respectively.

### **The results of overall solution guidelines of drug use problems for education officials and teachers in educational institutions, Savannakhet province.**

There were six main measures for solution guidelines of drug use problem. The findings demonstrated that the result of overall solution guidelines of drug use problem was rated at a high level ( $\bar{x}=3.99$ , S.D. = 1.09), and each measure was rated at a high level. Laws enforcement was rated at the first rank ( $\bar{x}=4.25$ , S.D. = 1.12); followed by prevention ( $\bar{x}=4.12$ , S.D. = 1.13); surveillance measure ( $\bar{x}=4.06$ , S.D. = 0.96); administration measure ( $\bar{x}=4.02$ , S.D. = 0.96); remedy measure ( $\bar{x}=3.79$ , S.D. = 1.21) and the lowest measure was searching, but still at a high level ( $\bar{x}=3.73$ , S.D. = 1.13).

Regarding the components of overall solution guidelines of drug use problems, 42 respondents out of 117 respondents shared viewpoints through questionnaire. It indicated that 25 major components contributed to the solution guidelines of drug use problem. The

most significant components were encouraging, monitoring, and regular inspecting high-risk groups ( $f=17$ ); followed by strictly and equally enforce rules and regulations ( $f=13$ ); the third item was providing training and record reports ( $f=11$ ); fourth was conducting urine tests regularly ( $f=9$ ); and the last fifth was conducting public awareness campaigns on drug problems ( $f=7$ ). Regarding the in-depth-interviews, 17 key respondents shared viewpoints. Prevention measure comprised of raising awareness campaigns ( $f=15$ ); followed by conducting regular training and educational programs ( $f=11$ ); and conducting urine tests (both before and after enrolling as a government official) periodically ( $f=6$ ). Searching measure consisted of close supervision and behavioral monitoring by each level of responsible committee ( $f=15$ ); followed by collaboration with multiple stakeholders ( $f=9$ ); and record keeping and data compilation ( $f=7$ ). Remedy measure included supportive education and mindset training, encouragement and emotional support, collaboration with family, friends and institutions ( $f=15$ ); followed by leadership guidance and coordination with higher authorities ( $f=6$ ); and referral to rehabilitation services ( $f=6$ ). Surveillance measure contained inclusive participation of all stakeholders ( $f=14$ ); followed by classification of individuals on risk ( $f=11$ ); and regular mutual supervision and inspections ( $f=4$ ). Administration measure consisted of behavioral training methods ( $f=8$ ); followed by budget allocation, having strategy and planning and appointing the responsible committee ( $f=7$ ); and having operational documents and notice to relevant parties ( $f=6$ ). Law enforcement measures comprised of implementing legal procedure ( $f=17$ ); followed by the core supportive education and mindset training with recording documents ( $f=11$ ); and workplace relocation ( $f=3$ ) respectively.

## Discussion

It was found that the study results of overall the education officials and teachers' perspectives on status of drug use problems in educational institutions in Savannakhet province and each factor were rated at a medium level. This status of drug use problems comprised of 1) economic factor, 2) environment and society factor, 3) individual factor and 4) family factor. These complied with unit heads, school principals and teachers. It is found that the drug use problems were 1) social relationships and environmental conditions, 2) a desire to experiment and curiosity, 3) the problem of teachers involved with drugs has increased every year compared to the past 5-10 years. It was also consistent with A1, A5 and A14, who gave face to face interviews. The results indicated that drug use problems covered 1) social relationships, 2) personal attitudes and mindset, 3) environmental conditions, and 4) peer pressure and influence from friends who persuaded or already use drugs. These were also congruent with Kiti wong Sasuad and Preecha Dilokwutthisit (2016), who conducted the research entitled "developing a model for the prevention of drugs spreading among people and youth in the municipal area of Muang district, Chachoengsao province". the study results shown that the drug use problems were caused by 1) the environment in communities where drug trafficking was widespread, 2) strong support from an addicted friends' group, 3) imitation of addicted friend's behavior, 4) the lack places for individuals to relieve stress in school, 5) individuals were at the age of curiosity, 6) broken home problems, and 7) a perception of wrong information on drugs. Regarding economic factor, when reviewed the theories, it was consistent with ONCB (2009) and Wasunthara (2004), who indicated that causes contributing to drug use problems were increasing expenses, low or insufficient income and being debt, economic problem such as income was not enough for expenses and the poor. It was also consistent with unit heads, school principals and teachers who shared viewpoints that drug use problems caused insufficient economic conditions. And these were also congruent with A1 and A14, who gave face to face interviews and indicated that one of causes influencing to drug use problems is financial difficulties or economic pressures



contributing to drug involvement. Another cause previously addicted since youth or before entering government officials, a new finding, received from the face to face interviews of A1 and A8.

The guidelines on solving drug use problems for education officials and teachers in educational institutions, Savannakhet province which overall result and each measure were rated at a high level. Prevention and searching measures covered eight items per each, remedy and surveillance contained five items per each, administration included ten items and laws enforcement measure had an item. In terms of qualitative results from interview about solving drug use problems, prevention measure included 13 items; searching, remedy and surveillance measures consisted of eight items per each; administration measure and others' additional perspectives comprised of 14 items per each and law enforcement measure contained six items. These were consistent with 42 respondents like unit heads, schools principals and responsible teachers in schools. The findings consisted of 1) encouraging, monitoring, and regular inspecting high-risk groups, 2) strictly and equally enforce rules, regulations and providing training and record reports, 3) conducting urine tests regularly and conducting public awareness campaigns on drug problems. These also complied with A2, A8 and A13, who gave face to face interview. The results indicated that guidelines for solving drug use problems included 1) prevention measure featured raising awareness, conducting regular training and educational programs and conducting urine tests (both before and after enrolling as a government official). 2) searching measure was covered by close supervision and behavioral monitoring by each level of responsible committee, collaboration with multiple stakeholders, and record keeping and data compilation. 3) remedy measure contained supportive education and mindset training, encouragement and emotional support, collaboration with family, friends and institutions, leadership guidance and coordination with higher authorities, and referral to rehabilitation services. 4) surveillance measure consisted of inclusive participation of all stakeholders, classification of individuals on risk and environmental improvement and enhancement. 5) administration measure comprised of appointing the responsible committee, budget allocation, having strategy and planning and implementing the party's directions to grassroots level and 6) law enforcement measure included implementing legal procedure and the core supportive education and mindset training with recording documents. These research results were also congruent with Boosita Rodmuang & et al (2024), who conducted the research entitled "guidelines for the prevention and solution of drug problems according to the principle of true friendship 4 in the Wilad Udom Thai in Racha Inter Campus Educational Institution Phra Nakhon Si Ayutthaya Province Pathum Thani"; Natthawood Bootthanoo & et al (2022), who conducted the research titled "The Development of Guidelines for Drug Prevention and Problem Solving of Educational Institutions Under The Mahasarakham Primary Educational Service Area Office 3"; Atthasart Srichai & Annual Thongprong (2022), who conducted the research entitled "teachers' opinions on the prevention and treatment of drug problems in schools under the United of Campus Benjasiri Group, Secondary Educational Service Area Office Bangkok 2"; and Penchan Ruennate & Pornthep Rupan (2020), who conducted the research entitled "guidelines to prevent and solve drug problems with participation from educational opportunity expansion schools under the Phranakhon Si Ayutthaya Primary Educational Service Area Office 1-2"; The results shown that guidelines on solving drug use problems consisted of 1) prevention measure, 2) searching measure, 3) remedy measure, 4) surveillance measure and 5) administration measure. Whereas 6) laws enforcement measure complied with Boosita Rodmuang & et al (2024), who conducted the research entitled "guidelines for the prevention and solution of drug problems according to the principle of true friendship 4 in the Wilad Udom Thai in Racha Inter Campus Educational Institution Phra Nakhon Si Ayutthaya Province Pathum Thani". The results found that it was policies



and strategies setting, orders and action plan of administration measure, and Kiti wong Sasuad and Preecha Dilokwutthisit (2016), who conducted the research entitled “developing a model for the prevention of drugs spreading among people and youth in the municipal area of Muang district, Chachoengsao province”. The research demonstrated that developing an appropriate model for the prevention of the spread of drugs were legal penalties.

## Conclusion

This study examined the guidelines for solving drug use problems among education officers and teachers in educational institutions in Savannakhet province. it employed a mixed-methods approach, combining quantitative and qualitative data. The objectives of the study consisted of exploring the education officials and teachers’ perspectives on status of drug use problems and finding its solutions.

The study of drug use problems status for education officials and teachers in education institutions in Savannakhet province found that the overall mean score and each problem factor were rated at a medium level. 1) economic factor contained increasing expenses, low or insufficient income and being debt, rated at a high level; followed by economic problem such as income is not enough for expenses at a medium level; and the poor at a medium level, 2) environmental and social factor consisted of sources for drug dealing/trading, or there were drug users at a high level; followed by the environment leads to imitative behavior and serves as a model at a medium level; and having problems in the educational institution because one did not perform as well as peers at a medium level, 3) individual factor included persuasion or pressure from others at a medium level; followed by a search for excitement or fun at a medium level; and a desire for independence at a medium level and 4) family factor comprised of residences and housing located in crowded, densely populated areas at a medium level; followed by experiencing disappointment in one's own life, in family life, and in social life at a medium level; and lack of warmth in family relationships at a medium level. Regarding viewpoints from five respondents through questionnaire, there were social relationships, personal attitudes and mindset, peer pressure and influence from friends who persuaded or already use drugs, environmental conditions and financial difficulties or economic pressures contributing to drug involvement.

The guidelines for solving drug use problems for education officials and teachers in educational institutions in Savannakhet province are quantitative and qualitatives. The result of overall across six measures and each measure were rated at a high level. 1) law enforcement measure was rated at a high level, 2) prevention measure covered promoting extracurricular, providing regular instruction and training on drug prevention and conducting awareness campaigns on drug problems. All were at a high level, 3) surveillance measure contained raising awareness among staff about vigilance and prevention at a high level, conducting urine tests at least once per semester at a high level and improving school and office environments for safety and order at a high level, 4) administration measure included monitoring the implementation of prevention and resolution measures, regularly reporting on the status of drug-related issues; integrating drug policies into education sector strategies. All were at a high level, 5) remedy measure consisted of providing moral support and encouragement to former drug users, encouraging voluntary participation in rehabilitation programs and coordinating with addicted personnel to ensure treatment and rehabilitation. All were at a high rating, and 6) searching measure comprised of documenting prevention and resolution measures, conducting comprehensive surveys on drug use; and reporting survey results to authorities regularly. All were at a high level. Regarding viewpoints of 42 respondents through questionnaire, the most significant components consisted of encouraging, monitoring, and regular inspecting high-risk, strictly and equally enforce rules and regulations, providing training and record reports, conducting urine tests regularly, and

conducting public awareness campaigns on drug problems. The findings from the in-depth interview as qualitative components indicated that 1) law enforcement measure received the strongest support overall, comprising of implementing legal procedures, supportive education and mindset training with proper documentation, and workplace relocation, 2) prevention measure consisted of raising awareness campaigns about drug problems through official documents, training and educational programs with written documentation, conducting urine tests regularly, implementing school activities related to drug prevention, and following instructions from higher authorities, 3) surveillance measure contained inclusive participation of all stakeholders in coordination and monitoring, classification of affected and at-risk individuals, and regular mutual supervision and inspections, 4) administrative measure covered behavioral training methods, budget allocation, strategy and planning, and appointing responsible committees, 5) remedy measure included supportive education and mindset training, encouragement and emotional support, collaboration with family, friends and institutions, rehabilitation services, leadership guidance and coordination, and workplace relocation for affected individuals and 6) searching measure comprised of close supervision and monitoring by responsible committees, collaboration across multiple stakeholders, maintaining records and data compilation, honest reporting from families and responsible units, and classification of affected and at-risk individuals.

## **Suggestion**

### **For Applying the Research Findings**

1. Education and sports administrators should allocate an annual budget for conducting awareness campaigns, providing political–ideological training, carrying out urine drug tests, and implementing activities at the school, district, and provincial levels.
2. Education and sports administrators at each level should appoint responsible committees, collect data on education personnel and teachers, monitor their behaviors, and report the drug-related situation to higher authorities regularly for further guidance.
3. All education and sports sectors should conduct the government’s directions into practice.

### **For Future Research**

1. It is recommended to further study the approaches for cooperation with the police, village education development committees, and other relevant sectors for implementing prevention and solution of drug-related problems in educational institution.
2. It is recommended to further study the factors influencing the implementation of drug prevention and solution in educational institutions throughout Savannakhet province
3. It is recommended to do a research for evaluation on implementing the national agenda on drug prevention and solution.

## References

- Ananchai Wacharin. (2007). *Development of guidelines for drug prevention problems for schools under Phra Nakhon Si Ayutthaya Educational Service Area Office, Zone 1 and 2*. Bangkok: Phranakhon Si Ayutthaya Rajabhat Universtiy.
- Atthasart Srichai & Amnual Thongprong. (2022). *Teachers' opinions on the prevention and treatment of drug problems in schools under The United of Campus Benjasiri Group, Secondary Educational Service Area Office Bangkok 2*.
- Boosita Rodmuang, Suddhipong Srivichai and PhrakruPhattharathamkhun . (2024). *Guidelines for the prevention and solution of drug problems according ot the principle of true friendship 4 in the Wilad Udom Thai in Racha Inter Campus Educational Institution Phra Nakhon Si Ayutthaya Province Pathum Thani*.
- Bounsoum Srisaard. (2000). *Basic Research*. Bangkok: Souweeriyasarn.
- Bounsoum Srisaard. (2012). *Curriculum Development and Research on Curriculum*. Bangkok: Suweeriyasarn.
- Brown, J.M. (1979). *Differences in attitudes of Public school students toward selected drugs and teh relationship between these attitudes and knowledge*. Fonte: Retrieved March 24, 2020, from <http://proquest.umi.com/pqdweb?did=755498311&sid=4&Fmt=1&clientId=71090&RQT=309&VName=PQD>.
- Chaekpimay, C. (2012). *Self-protective behaviors against drug abuse among students of King Mongkut's University of Technology North Bangkok*. Bangkok: King Mongkut's University of Technology North Bangkok.
- Chansina, K. (Director). (ND). *Methamphetamine-related case* [Motion Picture].
- Dolin, B. (2001). *National Drug Policy*. United State of America: Law and Government Division.
- Dolin, B. (2001). *National drug policy*:. United States of America: Law and government division.
- Education, M. o. (2006). *Handbook for the prevention and resolution of drug problems in educational institutions in Bangkok*. Bangkok.
- Euaycharoen, N. (1998). *Knowledge about drugs*. Bangkok: Aksone Thai.
- Goldman, D. O. (2005). *The genetics of addictions: Uncovering the genes*. . Nature Reviews Genetics, 6(7), 521–532.
- Government, T. S. (accessed October 2010). *Drug Prevention*. available from <http://www.scotland.gov.uk/Topics/Jusitce/law/Drugs-Strategy/prevention>.
- Himmawan, L. (2024). Unveiling the Shadowlands: Unraveling the complexities of Illicit Druf Trafficking In Southeast Asia. *Jurnal Hukun Progresif, Vol.12, No. 01, April 2024*, 12-13.
- <http://www.scotland.gov.uk/Topics/Justice/law/Narcoticss -Strategy/prevention>. (26 de 10 de 2010). Fonte: The Scottish Government, Narcotics Prevention, accessed The Scottish Government, Narcotics Prevention: The Scottish Government, Narcotics Prevention, accessed October 26 <http://www.scotland.gov.uk/Topics/Justice/law/Narcoticss Strategy/prevention>
- Indah Nur Islamiah, Hadriana Marhaeni Munthe, Linda Elida, Badaruddin, Bisru Hafi . (2024). *Social Relations of Drug Abusers (A Study on Alumni and Students of The University of North Sumatra)*.
- Jittiwitikarn, C. (2001). *Brain Mechanisms of Drug and Substance Addiction*. In *Textbook of Drug Addiction Treatment*. Bangkok: Watcha-in Printing Co., Ltd.
- Kiti wong Sasuad and Preecha Dilokwutthisit. (2016). *Developing a model for the prevention of narcoticss spreading among people and youth in the municipal area of Muang district, Chachoengsao province*. Chachoengsao province, Bangkok: N.P.
- Mahakhun, W. (2008). *The Complete Bankruptcy Law*. Bangkok: Nitibannakan.



- Manop Kanato & et al. (2023). *ASEAN Drug Monitoring Report 2023*. Bangkok: ASEAN Narcotics Cooperation Center.
- Manop Kanato, Rachanikorn Sarasiri, Poonrut Leyatikul. (Eds.). (2023). *ASEAN DRUG MONITORING REPORT 2022*. Bangkok: ASEAN Narcotics Cooperation Center.
- Ministry of Interior, P. A. (2005). *Handbook for Kamnan and Phu Yai Ban*. Bangkok: Territorial Defense Printing Press.
- MOE, Secondary Education Department. (1997). *Prevention and Solution of Drug Problems in Educational Institutions, Department of Secondary Education*. Bangkok: Department of Secodary Education.
- MOES. (2021). *Agreement on Ethics, Prohibitions and Disciplinary Measures for Education officials and teachers in education and sports sectors*. Vientiane Capital: MOES.
- MOES. (2022). Vientiane: Xokphaxay Publishing Limited.
- MOES. (2023). *Agreement on creation of Drug-free department, education and sports institutions*. Vientiane Capital: MOES.
- MOES. (2023). *Competition of Implementation on Prevention and Solution of Drug Problems in education and sports sectors*. Vientiane Capital: MOES.
- MPS. (2023). *National Agenda on the Narcotic Drug Problem Solution 2021-2023*. Vientiane Capital: Ministry of Public Security.
- National Assembly, L. P. (2007). *Law on Narcotic Drug of Lao PDR*. Vientiane Capital.
- Natthawood Bootthanoo & Napatsawan Thanaphonganan. (2022). *The Development of Guidelines for Drug Prevention and Problem Solving of Educational Institutions Under The Mahasarakham Primary Educational Service Area Office 3*.
- Neeranut Chotiwarangkul . (2022). Evaluation of Knowledge, Attitude towards Drug Use and Drug Therapy in Drug Treatment Program at Sawanpracharak Hospital, Nakhonsawan.
- Office for Development of Prevention and Solution on Drug Problem. (2009). *Guidelines for Prevention and Solution of Drug Problems, Office Narcotics Prevention qne Suppression*. Bangkok: publisher.
- ONCB. (2009). *Knowledge and guidelines for drug prevention and solution*. Bangkok: Office of Narcotics Control Board.
- ONCB. (2010). *The prevetion and solutions of drug problems in educational institution*. Bangkok.
- Patcharad Monthatip, Kamolporn Kalyanamitra, Satit Niyomyaht and Tassanee Lakkanapichonchat . (2024). Preventing and Solving Drug Problems in Nong Chok Disrict, Bangkok, Metropolitan. *Educational Management Innovation and Research*, 976.
- Penchan Ruennate & Pornthep Rupan. (2020). Guidelines to Prevent and Solve Drug Problems with Participation from Educational Opportunity Expansion Schools Under The Phranakhon Si Ayutthaya Primary Educational Service Area Office 1-2.
- Phanuphong Chitasombat. (2001). *Narcotics 2000*. Bangkok: Arun Printing.
- Phoommai, P. (2005). *A Study of the Administrative Process for the prevention and resolution of drug problems according to the opinions of personnel in basic education institutions under the Sisaket Educational Service Area Office* . Suri Rajabhat University, Thailand: Department of Educational Administration.
- Phunchum, S. (2011). *The Great Danger of Drugs*. Bangkok: Petchkarat.
- Piyakarn, S. (1999). *Manual for Volunteer-based Drug Addiction Remedy for Thai Communities*. Songkhla: Lim Brothers Printing Co., Ltd.
- Sarachai, M. (2000). *Guidelines for preventing and solving drug addiction problems in educational institutions: a case study of Watthawithava School*. Bangkok: Burapha University.

- Savannakhet Provincial Administration Cabinet . (2025). *Agreement on Prevention and Solution of Drug Problems in Educational Institutions*. Savannakhet Province.
- SPESS. (2024). *The proposal for hosting of the 8th National Secondary School Sport Event in 2027*. Kaysone Phomvihane City: Sports and Art Department, SPESS.
- SPESS. (2025). *1st 6 month report and 6 month planning*. Kaysonephomvihane City: Statistics, Planning and Foreign Affairs Department, SPESS.
- SPESS. (2025). *Report for educating on education officials and teachers, positive urine testing*. Kaysonephomvihane City: Report for educating on education officials and teachers, positive urine testing.
- Teerawet charoenchai, S. (1993). Fonte: <https://www.sdtc.go.th/paper/74>.
- UNODC. (2024). *World Drug Report 2024*. United Nations, New York: United Nations Publication.
- Wasunthara, S. (2004). *Schizophrenia*. Bangkok: Saman Nitibukkhon.
- WHO. (2021). *as cited in Natthawoot Bootthanoo*. Mahasarakham University: Mahasarakham University.



## The Current State of Guzheng Instruction For Qianzhong Fu at Zhenning Experimental School

Li Hongxing <sup>1</sup> Chalermkit Kengkaew & <sup>2</sup> Chao Kanwicha <sup>3</sup>

<sup>1</sup>M.A. Students, Music Education Program, Buriram Rajabhat University, Thailand

E-mail: 670426025006@bru.ac.th

<sup>2</sup>Advisor, Music Education Program, Buriram Rajabhat University, Thailand,

E-mail: Chalermkit.kk@bru.ac.th

<sup>3</sup>Co-advisor, Music Education Program, Buriram Rajabhat University, Thailand,

E-mail: chao@bru.ac.th

### Abstract

Taking the guzheng teaching of Qianzhongfu in Zhenning Experimental School of Guizhou Province as the research object, this study adopted qualitative research methods such as semi-structured interviews and classroom observations to conduct investigations from four dimensions: curriculum design, cultural cognition, teaching staff and resources, and practical teaching of the work. The results show that the course in the school has problems such as a single curriculum design, weak cultural cognition of teachers and students, insufficient specialized teaching staff and hardware resources, and traditional teaching methods. In addition, the performance difficulty of the work does not match the students' foundation, and the excavation of cultural connotation is lacking, leading to students' mechanical application of skills, loss of emotional and regional style expression, and a serious disconnect between performance skills and cultural interpretation. This study objectively presents the real problems of school-based teaching of regional characteristic guzheng music in multi-ethnic areas, and provides empirical support for subsequent teaching optimization

**Keywords:** Qian Zhongfu; Guzheng teaching; school-based curriculum; Current teaching situation

### Introduction

In the context of global cultural exchange, the inheritance and development of ethnic minority music culture have become a common focus of international music education. Guizhou Province, located in southwest China, is rich in traditional ethnic minority music resources. With the acceleration of regional economic development, Guizhou's unique ethnic music culture has gradually stepped out of its original closed environment, engaging in in-depth exchanges and collisions with external cultures. However, this process also brings challenges to the inheritance of local ethnic music, making it urgent to explore effective inheritance paths (Pu Lin (2023:12)).

As a traditional Chinese plucked instrument, the guzheng is a key carrier of traditional culture. With quality education promotion, it has been widely integrated into primary and secondary school art education. However, existing guzheng teaching still faces "technique-over-culture" and "performance-understanding separation" issues, hindering students' musical literacy and cultural inheritance (Wang Guan (2025:85)).

Ethnic music heritage education emphasizes local cultural integration (Campbell, Patricia Shehan (2019:52); Reimer, Bennett (2018:75)) and culturally responsive teaching



(Gay, Geneva (2018:48)). Yet existing studies focus on Western ethnic music, lacking empirical research on East Asian ethnic music integration (e.g., guzheng teaching with Chinese ethnic elements). In China, studies on "Qian Zhongfu" (Li Haiyan (2021:63); Liu Shalu (2017:121)) and Guizhou ethnic music inheritance (Pu Lin (2023:12); Zhou Lu (2024:112)) either focus on theoretical interpretation or lack international perspectives and replicable teaching models.

Composed by Xu Xiaolin in 1987, the guzheng piece "Qian Zhongfu" is deeply rooted in Guizhou's ethnic minority culture. It integrates folk music elements of the Dong, Miao and other ethnic groups, such as Dong Grand Choirs and Miao Feige innovates performance techniques, and consists of three movements reflecting local culture (Li Haiyan (2021:63); Zhang Hong (2024:8)). As a core carrier for guzheng school-based teaching in Guizhou's multi-ethnic regions, it is taught at Zhenning Experimental School with representative practice.

Based on this, this study investigates "Qian Zhongfu" guzheng teaching at Zhenning Experimental School, analyzes key problems, and constructs an optimized path. It aims to provide empirical support for local characteristic guzheng teaching and a reference for international ethnic music integration into school curricula.

## Research Objective

- 1.To investigate the actual current situation of guzheng teaching of Qianzhongfu in Zhenning Experimental School.
- 2.To analyze the core problems and deep-seated restrictive factors of guzheng teaching of Qianzhongfu in Zhenning Experimental School.

## Research Significance

### Theoretical Significance

It fills the gap in qualitative empirical research on the current situation of school-based teaching of regional characteristic guzheng music integrated into primary and secondary schools, enriches the application of culturally responsive teaching theory in the research on the current situation of ethnic instrumental music teaching, and lays a foundation for subsequent teaching optimization research.

### Practical Significance

It sorts out the core teaching problems of the school, provides a clear direction for its subsequent teaching optimization, and also offers a reference for primary and secondary schools in other multi-ethnic areas of Guizhou to carry out similar teaching.

## Research Methodology

### Research Objects

The research objects include the head of the music teaching and research group, the person in charge of guzheng teaching, 5 music teachers and multiple student representatives of Grade 3 to 6 in Zhenning Experimental School. The guzheng course is a characteristic elective course for Grade 1 to 6 in the school, and the students cover the Dong, Miao, Han and other ethnic groups, which is representative of the multi-ethnic areas in central Guizhou.

### Research Tools

Semi-structured interviews, non-participatory classroom observations, literature research method and guzheng performance practice method were adopted to collect teaching-related data and materials from multiple dimensions.

### Data Collection

**Interview implementation:** From October to November 2025, one-on-one in-depth semi-structured interviews were conducted with the head of the music teaching and research group, the person in charge of guzheng teaching, 5 music teachers and multiple student representatives of the school. All interview contents were recorded and transcribed to form a complete interview corpus, providing first-hand qualitative data for the analysis of the current teaching situation.

**Classroom observation:** Systematic classroom observations were carried out on the guzheng teaching courses of Qianzhongfu in the school. Field notes were recorded and classroom videos were shot throughout the process, comprehensively documenting the teaching implementation process, the application of teaching methods, the interaction between teachers and students, and the students' practical performance.

**Performance practice:** The researcher carried out systematic performance practice of Qianzhongfu under the guidance of guzheng teaching experts, regularly recorded performance videos and invited experts to make comments, and deeply analyzed the key points of core techniques, emotional expression and regional style presentation of each movement of the work, providing practical basis for the analysis of teaching problems.

**Data collation:** Relevant materials such as the school's guzheng curriculum design plan, teaching plan, information of teaching staff and teaching resource allocation were collected and sorted out. Combined with the results of interviews and classroom observations, the overall current situation of guzheng teaching of Qianzhongfu in the school was comprehensively sorted out.

### Data Analysis

Qualitative data analysis methods were adopted to systematically code and refine the themes of qualitative data such as interview transcripts, classroom observation notes and field records, sort out the manifestations, causes and internal relations of teaching problems, and construct a systematic analysis framework for the problems and causes of guzheng teaching of Qianzhongfu. At the same time, combined with the results of literature research and performance practice, the current teaching situation and core problems were deeply interpreted to ensure the objectivity, authenticity and scientificity of the research conclusions.

### Research Results

#### Core Current Teaching Situation

**Curriculum design:** Grade 1-6 club elective (2 class hours/week, no extra practice); focuses only on finger techniques and paragraph decomposition, lacking cultural appreciation and practical content; adopts collective "demonstration + imitation" teaching without stratification, leading to insufficient practice and poor adaptability.

**Cultural cognition:** Teachers have superficial understanding (only 2 can initially identify ethnic elements) and students almost no cognition; cultural interpretation not integrated into regular teaching due to limited class hours and lack of materials.

**Teaching Staff and Hardware Resources:** Shortage of professional resources (only 2 full-time guzheng teachers, no special training for all); aging instruments with pitch deviation, shared use, and lack of supporting resources (e.g., pitch meters).

**Practical teaching:** Students show deficiencies in emotional expression (disconnect), regional style grasp (diluted ethnic recognition), and skill application (mechanical use, weak characteristic skills); skills disconnected from culture and emotions.

### Core Teaching Problems

Mismatch between the work's difficulty (altered tuning, sharps/flats) and students' beginner foundation.

Insufficient excavation and integration of cultural connotation, prioritizing skills over culture.

Lack of hardware resources (aging, shared instruments) and insufficient practice time.

Shortage of professional teachers (inadequate teaching ability) and single traditional teaching methods (no stratification or interaction).

Single curriculum design (no cultural integration or practical content), low learning interest and adaptability.

These interrelated problems lead to a disconnect between performance skills, cultural interpretation, and emotional expression in Qianzhongfu teaching, forming the misunderstanding of "emphasizing skills over culture".

## Discussion

**Interpretation of core results:** Although the guzheng teaching of Qianzhongfu in this school has achieved results in basic technique training, the problem of "emphasizing skills over culture" is prominent, and it presents particularities in multi-ethnic areas - a double disconnect between skill training and the ethnic culture and emotional expression of central Guizhou. From the perspective of culturally responsive teaching theory, the root cause of the problem lies in the lack of connection between the teaching of Qianzhongfu and students' ethnic cultural background. In addition, the shortcomings of teaching staff and resources, unreasonable curriculum design and teaching methods, and the mismatch between the difficulty of the work and students' foundation have jointly aggravated the teaching predicament.

**Comparison with existing studies:** This study makes up for the deficiency of existing studies that focus on theoretical interpretation of Qianzhongfu and lack teaching empirical research, embodies the universal conclusion of "emphasizing skills over culture" in guzheng teaching, reveals the special problems of regional characteristic guzheng music teaching in multi-ethnic areas, and presents the realistic obstacles of the campus inheritance of Guizhou ethnic music from the micro perspective of school-based teaching of Qianzhongfu, which is more practical and directional.

## Conclusion

Zhenning Experimental School has high-quality overall teaching staff and teaching resources, but there are obvious shortcomings in the specialized teaching staff and resources for guzheng teaching of Qianzhongfu, which have become important restrictive factors for the improvement of teaching quality.

The guzheng teaching of Qianzhongfu in the school has multi-dimensional problems in curriculum, cognition, resources and methods. The core pain points are the mismatch between the difficulty of the work and students' foundation and the insufficient excavation and integration of cultural connotation, which ultimately lead to students' mechanical



application of skills and loss of emotional and regional style expression in playing Qianzhongfu.

The teaching problems of Qianzhongfu are the result of the combined effect of the objective characteristics of the work and the subjective factors such as the school's curriculum design, resource allocation and teachers' teaching philosophy.

This study fills the gap in the relevant theoretical research on the teaching of Qianzhongfu, provides a clear problem-oriented direction for the optimization of the teaching of Qianzhongfu in the school and other primary and secondary schools in multi-ethnic areas of Guizhou, and promotes the campus inheritance of local ethnic music culture.

## Research Limitations and Future Directions

### Research Limitations

Only the teachers and students of the primary school stage in the school are selected as the research objects, so the universality of the research conclusions is limited; the junior high school and senior high school stages are not involved, so the complete picture of the 12-year consistent teaching cannot be presented; only the qualitative research is used to present the current situation, and the development trend of the problems is not tracked.

### Future Directions

Expand the sample scope and compare the teaching status in different regions; extend the research stage and analyze the teaching differences and connection problems in each stage; carry out long-term teaching tracking and explore the development trend of the teaching problems of Qianzhongfu; carry out teaching optimization action research combined with the research problems and explore effective solutions.

## References

- Campbell, Patricia Shehan (2019). Teaching music globally: Experiencing music, expressing culture. Oxford University Press.  
<https://doi.org/10.1093/oso/9780190696481.001.0001>
- Chen, Yu & Liu, Jing (2023). Integrating local ethnic culture into music education: A case study of guzheng teaching in Chinese primary schools. *Journal of Music Education*, 35(2), 45-62. <https://doi.org/10.1177/00224294231167890>
- Gay, Geneva (2018). Culturally responsive teaching: Theory, research, and practice (3rd ed.). Teachers College Press.
- Gao Hong. Thoughts and Practices on the Construction of Primary School Music Guzheng School-based Curriculum[J]. *Shaanxi Education (Teaching Edition)*, 2023, (Z1):106-107. <https://doi.org/10.13617/j.cnki.sxnedu.2023.z1.051>
- Jia Xiaoli. The Performance Artistic Conception of Guzheng from the Perspective of Music Aesthetics[J]. *Art Grand View*, 2025, (27):74-76.
- Li Haiyan. An Interpretation of the Artistic Characteristics of the Guzheng Solo "Qian Zhongfu" by Guizhou Ethnic Minorities[J]. *Art Evaluation*, 2021, (21):63-65.
- Liu Shalu. A Brief Analysis of the Integration of Creative Artistic Conception and Techniques in the Guzheng Piece "Qian Zhongfu"[J]. *Music Creation*, 2017, (10):121-123.
- Pu Lin. On the Inheritance and Protection of Guizhou's Traditional Ethnic Minority Music Culture[J]. *Art Evaluation*, 2023, (07):12-15.
- Wang Guan. Research on the Current Situation of Guzheng Teaching and Talent Training Paths - A Review of "Research on Guzheng Performance Techniques and Teaching"[J]. *Research in Educational Development*, 2025, 45(06):85.
- Zhou Lu. The Inheritance and Innovation of Guizhou's Ethnic Minority Music from the Perspective of Cultural Integration[J]. *Sichuan Drama*, 2024, (05):112-114.

Zhang Hong. The Decomposition and Reconstruction of Ethnic Minority Music - Taking the Guzheng Piece "Qian Zhongfu" as an Example[J]. Yellow River Voice, 2024, (24):8-11+129.



# The Current Situation and Countermeasures of Educational Resource Management by Administrators in Secondary Vocational Schools in Guangzhou, People's Republic of China

Li Liang<sup>1</sup>, Patcharee Thungkaew<sup>2</sup> and Phatchanee Kultanan<sup>3</sup>

<sup>1</sup>M.A. Student, Educational Administration Program, Buriram Rajabhat University, Thailand

E-mail: 670426021051@bru.ac.th

<sup>2</sup>Major Advisor, Educational Administration Program, Buriram Rajabhat University, Thailand

E-mail: Patcharee.tk@bru.ac.th

<sup>3</sup>Co- Advisor, Educational Administration Program, Buriram Rajabhat University, Thailand

E-mail: phatchanee.kt@bru.ac.th

## Abstract

This study explored educational resource management by administrators in Guangzhou's secondary vocational schools under the Double High Plan and identified optimization approaches. A mixed-methods design was used: Phase 1 surveyed 167 administrators and 381 teachers with the questionnaire reliability = 0.99; Phase 2 conducted semi-structured interviews with 39 middle-level staff with the interview reliability = 0.86. Data were analyzed by percentage, mean, and standard deviation. Results showed the overall management level scored a moderate 3.49/5, failing to meet the Plan's high-quality standards. Key gaps included 71.00% "double-qualified" teachers, 18.70% digital textbook adoption, and 23.00% enterprise council coverage. Core issues involved unbalanced resource allocation, insufficient equipment for emerging majors, outdated training facilities, redundant curriculum resources, and superficial school-enterprise cooperation about 72.00% internship-focused collaborations, 60.00% lasting  $\leq 1$  year. Effective optimization centered on four dimensions: mechanism innovation, resource integration, deep industry-education integration, technological empowerment, forming a four-dimensional model: 1) Faculty management: "policy-mechanism-stakeholder" framework; 2) Curriculum management: "standard-platform-mechanism" model; 3) Practical training management: "input-sharing-evaluation" closed loop; 4) School-enterprise cooperation management: "system-platform-evaluation" system.

**Keywords:** Double High Plan; Secondary Vocational Schools; Educational Resource Management; Optimization Paths; Guangzhou

## Introduction

Vocational education is defined as a "type of education" and "strategic foundational industry" in China's national policy (State Council, 2019:3-6). The second round of the "Plan for Constructing High-Level Vocational Colleges and Specialties with Chinese Characteristics" (Double High Plan), launched in 2025, emphasizes "strategic empowerment" and industrial adaptation, setting rigid indicators including at least 90.00% "dual-qualified" teachers and at least 30.00% digital textbooks (Ministry of Education & Ministry of Finance, 2025:8-10). As a core city in the Guangdong-Hong Kong-Macao



Greater Bay Area, Guangzhou has 37 secondary vocational schools with approximately 95,000 students, playing a crucial role in cultivating technical talents for regional economic development (Education Bureau of Guangzhou Municipality, 2025:23-26). However, existing studies and practice show significant gaps between Guangzhou's secondary vocational education resource management and the Double High Plan, such as unbalanced resource allocation, outdated equipment, and superficial school-enterprise collaboration (Department of Education of Guangdong Province, 2024:45-48). Inadequate resource management restricts schools' ability to cultivate industry-matching talents, making it imperative to optimize resource allocation under the Double High Plan. Thus, systematic investigation of the current situation and exploration of effective optimization paths are urgent.

### Research Purposes

1. To investigate the current status of educational resource management by managers of secondary vocational schools in Guangzhou under the Double High Plan.
2. To formulate optimized paths for educational resource management in Guangzhou's secondary vocational schools under the Double High Plan.

### Research Significance

1. This study clarifies the current status and core issues of educational resource management in Guangzhou's secondary vocational schools under the Double High Plan.
2. It provides operable optimization paths for schools to meet policy and industrial development needs.

### Literature Review

Domestic research on secondary vocational education resource management centers on faculty, curriculum, practical training, and school-enterprise cooperation, all core components of Educational Resource Management (ERM). As the central dependent variable of this study, ERM refers to the planning, allocation, utilization, and optimization of resources for vocational education operation and development.

Scholars have proposed various optimization paths. Ou Yanghe (2021:39) advocated enterprise practice and inter-school exchanges to cultivate dual-qualified teachers, directly targeting the faculty dimension of ERM. Hu Guangyu (2022:35) focused on optimized talent introduction as another key measure for faculty resource management. Chen Miaoxuan (2021:57) identified deficiencies in practical guarantees, systematicness, and operability of existing paths, reflecting gaps in ERM's overall operation and optimization mechanisms. For curriculum resources, Jiang Dayuan (2025:8-9) emphasized multi-resource integration but overlooked copyright and supervision-feedback systems critical to effective management. For practical training resources, Chen Miaoxuan (2021:58) noted outdated equipment but failed to propose systematic update mechanisms, indicating shortcomings in resource allocation and renewal. Regarding school-enterprise cooperation, an important external support for ERM, Wu Xuefeng (2023:46) highlighted superficial collaboration but lacked targeted solutions for long-term stability, hindering enterprise resource integration.

Foreign research emphasizes multi-dimensional practices in vocational education resource management, focusing on improving ERM efficiency and quality through multi-stakeholder participation and institutional design. Johnson (2020:81) observed that European and American studies prioritize curriculum leadership and information resource integration, offering insights for optimizing curriculum and information dimensions. Thai vocational education, with its focus on industry-aligned practical training and government-enterprise-school linkage, provides a valuable reference for enhancing practical resource allocation and

external coordination. Thailand's tripartite linkage can be adapted to China's Double High Plan by strengthening enterprise incentives, while European and American curriculum leadership experiences, when localized to fit China's policy context, can inform curriculum resource management optimization.

## Research Methods

### Research Population and Samples

**Population:** The study population consists of managers and teachers from 37 secondary vocational schools in Guangzhou, covering majors including information technology, medical and health, intelligent manufacturing, and finance and trade (Education Bureau of Guangzhou Municipality, 2025:23-26).

**Samples:** Stratified random sampling was used to select 10 schools. A total of 548 valid questionnaires (167 managers, 381 teachers) were collected (100% recovery rate). Additionally, 39 participants (7 principals, 12 middle managers, 20 teachers) from 6 public and 4 private schools were interviewed. Among respondents, 62.10% are from public schools and 37.90% from private schools; 45.30% have >10 years of teaching experience, 32.60% have 5–10 years, and 22.10% have <5 years.

### Instruments

**Questionnaire:** The questionnaire was developed based on the core indicators of the "Double High Plan" for vocational education, covering four dimensions: faculty resource management, curriculum resource management, school-enterprise cooperation resource management, and practical training resource management. Initial items were extracted from policy documents and literature, then revised through two rounds of expert reviews with five vocational education management specialists. A pilot test with 30 teachers refined wording and logical flow. Reliability and validity were confirmed: Cronbach's  $\alpha = 0.99$ , with item discrimination ranging from 0.36 to 0.86, indicating good psychometric properties.

**Semi-structured interview outline:** The semi-structured interview outline focused on dilemmas in educational resource management, including questions about resource allocation, utilization efficiency, and policy implementation barriers. To ensure reliability, two researchers independently coded the interview transcripts, with an inter-coder reliability coefficient of 0.86, indicating consistent coding results.

### Data Analysis

Quantitative data were analyzed using SPSS 26.0 to systematically address the research objectives: descriptive statistics were employed to characterize the overall status and dimension-level performance of educational resource management, while correlation analysis was applied to explore the relationships between management capacity and resource allocation efficiency. Qualitative data were processed through keyword extraction, thematic classification, and dimension integration to identify the core dilemmas and contextual factors shaping resource management practices.

## Research Results

### Overall Status of Educational Resource Management

The overall  $\bar{X}=3.49$  (5-point scale, Moderate level). Dimension scores: faculty resource management ( $\bar{X}=3.50$ , S.D.=1.16), curriculum resource management ( $\bar{X}=3.49$ , S.D.=1.15), school-enterprise cooperation resource management ( $\bar{X}=3.49$ , S.D.=1.13), practical training resource management ( $\bar{X}=3.48$ , S.D.=1.14). None reach the "high" level ( $\geq 3.50$  points), indicating significant improvement space.

**Table 1**  
*Current Situation of Each Dimension of Educational Resource Management*

| Current Situation of Educational Resource Management in Guangzhou's Secondary Vocational Schools | $\bar{X}$   | S.D.        | Reliability     | Rank     |
|--------------------------------------------------------------------------------------------------|-------------|-------------|-----------------|----------|
| 1. Faculty Resource Management                                                                   | 3.50        | 1.16        | Moderate        | 1        |
| 2. Curriculum Resource Management                                                                | 3.49        | 1.15        | Moderate        | 2        |
| 3. Practical Training Resource Management                                                        | 3.48        | 1.14        | Moderate        | 4        |
| 4. School-Enterprise Cooperation Resource Management                                             | 3.49        | 1.15        | Moderate        | 3        |
| <b>Overall</b>                                                                                   | <b>3.49</b> | <b>1.15</b> | <b>Moderate</b> | <b>-</b> |

### Current Situation of Each Dimension Faculty Resource Management

Faculty resource management showed clear gaps against policy benchmarks. The  $\bar{X}$ =3.50. Positive indicators like "incorporating practical teaching ability into performance evaluation" scored high ( $\bar{X}$ =3.72), while "incentive mechanism for enterprise R&D participation" was deficient ( $\bar{X}$ =3.31, reverse item). Key data showed 71.00% of "dual-qualified teachers" (19 percentage points below the Double High Plan's  $\geq 90.00\%$  requirement); teacher enterprise practice met basic standards ( $\bar{X}$ =3.58), with 82.00% of teachers participating for  $\geq 1$  month annually.

### Curriculum Resource Management

Curriculum resource management  $\bar{X}$ = 3.49. The curriculum framework aligned with industrial needs was initially established, but curriculum content updates lagged behind industry development by 6-8 months, and cross-major resource duplication was serious ( $\bar{X}$ =3.32, reverse item). The proportion of digital textbooks was 18.70%, 11.3 percentage points lower than the policy requirement of  $\geq 30.00\%$ .

### Practical Training Resource Management

Practical training resource management had a  $\bar{X}$ = 3.48. Schools had sound practical training management systems ( $\bar{X}$ =3.65), but there were prominent problems with equipment configuration and sharing. The update cycle of practical training equipment for traditional majors was 5 years, 2.7 years longer than the 2.3-year industry iteration cycle (Department of Education of Guangdong Province, 2024: 45-48); emerging majors (e.g., artificial intelligence, biomedicine) faced a 42.00% equipment shortage; enterprise participation in practical training evaluation was 28.00%, 2 percentage points lower than the policy requirement of  $\geq 30.00\%$ ; the inter-school resource sharing rate was only 23.00%.

### School-Enterprise Cooperation Resource Management

The  $\bar{X}$ = 3.49. Cooperation forms were relatively single: 72.00% of cooperation focused on student internships, and only 28.00% involved multi-dimensional cooperation such as curriculum co-development and technological R&D; 60.00% of cooperation agreements lasted  $\leq 1$  year, failing to meet the policy's implicit requirement of long-term stability ( $\geq 3$



years); the coverage rate of enterprise councils was 23.00%, and the proportion of enterprise seats was <20.00%, 10 percentage points lower than the policy requirement of  $\geq 30.00\%$ .

### **Optimization Paths of Educational Resource Management**

To address core problems, a "four-dimensional collaborative optimization model" is proposed based on mechanism innovation, resource integration, in-depth integration, and technological empowerment:

#### **Faculty Resource Management: "Policy-Mechanism-Stakeholder" Framework**

Construct a two-track incentive mechanism: Incorporate enterprise R&D achievements into title evaluation/performance indicators, set special allowances for "dual-qualified" teachers;

To diversify introduction and training channels: Co-build teacher training bases with leading enterprises, hire industry leaders as part-time professors, establish a regional "dual-qualified" teacher resource pool.

#### **Curriculum Resource Management: "Standard-Platform-Mechanism" Model**

Build a municipal curriculum resource sharing platform: Establish "co-construction and sharing + copyright protection + profit distribution" mechanisms to avoid duplicate construction;

Dynamically update content: Form a curriculum development community (industry experts + enterprise backbones + teachers), update  $\geq 30.00\%$  of core curriculum annually.

#### **Practical Training Resource Management: "Input-Sharing-Evaluation" Closed Loop**

Multi-channel equipment upgrade guarantees: Integrate government subsidies, enterprise donations, and school self-raised funds for special update funds;

Deepen enterprise participation: Invite enterprise technical backbones to design practical training programs/evaluation standards, with enterprise evaluation accounting for  $\geq 30.00\%$  of scores.

#### **School-Enterprise Cooperation Resource Management: "System-Platform-Evaluation" System**

Expand cooperation dimensions: Transform from single internships to "talent training + technological R&D + employment services", co-build industrial colleges;

Improve stability: Require  $\geq 3$ -year cooperation duration, build a municipal industry-education integration cloud platform, implement modern apprenticeship system.

## **Discussion**

### **Causes of Current Problems**

**Policy implementation gap:** Rigid Double High Plan indicators lack hierarchical promotion strategies and differentiated support, challenging private schools and non-key majors. This can be explained by the institutional isomorphism theory (DiMaggio & Powell, 1983), which suggests that excessive top-down policy constraints can lead to isomorphic behavior among schools, reducing their adaptability to local industrial needs.

**Rigid resource allocation:** 63.00% of resources are allocated via administrative orders (interview data, 2025), with underdeveloped market-oriented adjustment, leading to redundant traditional major resources and emerging major shortages. This reflects the resource dependence theory (Pfeffer & Salancik, 1978), where schools' over-reliance on

administrative allocation limits their ability to respond to market signals, resulting in resource misalignment.

**Insufficient enterprise motivation:** Cumbersome application procedures and inadequate implementation of incentive policies reduce enterprise enthusiasm for in-depth cooperation. According to transaction cost theory (Williamson, 1985), high transaction costs (e.g., complex procedures) and low expected returns (e.g., weak incentives) deter enterprises from engaging in deep collaboration.

**Weak management capacity:** Only 38.60% of managers received systematic Resource management training (interview data, 2025), limiting adaptation to industrial needs. This aligns with the human capital theory (Becker, 1964), which emphasizes that the lack of professional training for managers directly impairs organizational capacity to meet industrial development requirements.

### **Practical Implications of Optimization Paths**

The "four-dimensional collaborative model" aligns with the Double High Plan's "industrial adaptation" and "quality improvement" requirements. Drawing on the collaborative governance theory (Ansell & Gash, 2008), this model emphasizes multi-subject participation (schools, enterprises, government), mechanism innovation (e.g., performance-based evaluation), and technological empowerment (e.g., cloud platforms).

## **Conclusions and Recommendations**

### **Conclusions**

The overall level of educational resource management in Guangzhou's secondary vocational schools is Moderate (3.49/5), with all four dimensions failing to reach the high level;

Core problems include insufficient "dual-qualified" teachers, low proportion of digital textbooks, outdated practical training equipment, and superficial school-enterprise cooperation, which are significantly inconsistent with the Double High Plan requirements;

The "four-dimensional collaborative optimization model" integrating faculty, curriculum, practical training, and school-enterprise cooperation effectively bridges the policy-practice gap in educational resource management.

### **Recommendations**

#### **Faculty Resource Management**

Establish Guangzhou Secondary Vocational 'Dual-Qualified' Teacher Development Center, reconstruct title evaluation indicators (enterprise-related experience accounts for  $\geq 30.00\%$ ), and set special allowances shared by district and municipal finances.

#### **Curriculum Resource Management**

Formulate "Standards for the Construction of Secondary Vocational Curriculum Resources in Guangzhou", require an annual curriculum update rate of  $\geq 20.00\%$ , and build the Guangzhou Vocational Curriculum Cloud (GVCC) to reduce resource duplication by  $\geq 30.00\%$  by 2026.

#### **Practical Training Resource Management**

Establish a "Practical Training Equipment Update Fund" with annual municipal financial investment of 30 million yuan, implement the "Practical Training Equipment Sharing Voucher" system, and build an "enterprise-embedded practical training evaluation" mechanism. Emerging majors such as artificial intelligence and biomedicine face a 42.00% equipment shortage.

#### **School-Enterprise Cooperation Resource Management**

Formulate "Measures for the Record and Evaluation of School-Enterprise Cooperation in Guangzhou", require cooperation duration of  $\geq 3$  years, build the "Guangzhou

Vocational Industry-Education Integration Cloud Platform", and provide financial subsidies for enterprises retaining graduates for long-term employment.

### Research Limitations and Future Prospects

This study covers 10 secondary vocational schools with a limited sample. Future research can expand the sample size, adopt longitudinal design to analyze long-term effects, and introduce big data and artificial intelligence to build intelligent resource allocation models for digital transformation.

### References

- Chen Miaoxuan (2021). Research on the management of secondary vocational education resources in Guangzhou. *Vocational Education Research*, 18(5), 56-59.
- Department of Education of Guangdong Province (2024). *Industry-Education Integration Development Report of Guangdong Province*. Guangzhou: Guangdong Education Press, 45-48.
- Education Bureau of Guangzhou Municipality (2025). *Guangzhou Secondary Vocational Education Development Report*. Guangzhou: Guangzhou Education Press, 23-26.
- Hu Guangyu (2022). Dual-system perspective on secondary vocational faculty resource management: Teacher recruitment and training mechanisms. *Chinese Vocational and Technical Education*, (8), 35-39.
- Jiang Dayuan (2025). Construction of a comprehensive support system for vocational education teaching resource management. *Chinese Vocational and Technical Education*, (3), 6-11.
- Johnson, M. (2020). Curriculum leadership in vocational education resource management. *Journal of Vocational Education Research*, 27(4), 80-82.
- Li Liang (2025). Interview Records on Educational Resource Management of Guangzhou Secondary Vocational Schools [Unpublished raw data].
- Ministry of Education & Ministry of Finance of the People's Republic of China. (2025). Notice on Implementing the Double High Plan (2025-2029) (Guofa [2025] No. 12). Beijing: Ministry of Education Printing Office, 8-10.
- Ou Yanghe (2021). Pathways to "dual-skilled" teacher cultivation and faculty resource management in secondary vocational schools. *Vocational and Technical Education*, 42(12), 39-42.
- Qiu Xiaoyan (2025). Research on principals' curriculum leadership and curriculum resource management in secondary vocational schools. *Vocational Education Research*, (2), 7-11.
- State Council of the People's Republic of China (2019). Implementation Plan for National Vocational Education Reform (Guofa [2019] No. 4). Beijing: The State Council Printing Office, 3-6.
- Wu Xuefeng (2023). Industry-education integration and resource management. *Vocational and Technical Education*, 44(8), 45-46.



## Guidelines for Personnel Management to Promote the Performance of Support Personnel at Hebei Academy of Fine Arts, People's Republic of China

Liu Chendong<sup>1</sup> Phatchanee Kultanan<sup>2</sup> Patcharee Thungkaew<sup>3</sup>

<sup>1</sup>M.A. Students, Educational Administration Program, Buriram Rajabhat University, Thailand

E-mail: 670426021042@bru.ac.th

<sup>2</sup>Major Advisor, Educational Administration Program, Buriram Rajabhat University, Thailand

E-mail: phatchanee.kt@bru.ac.th

<sup>3</sup>Co-Advisor, Educational Administration Program, Buriram Rajabhat University, Thailand

E-mail: Patcharee.tk@bru.ac.th

### Abstract

This study aims to investigate the current state of Personnel Management and explore guidelines for promoting the performance of support personnel at Hebei Academy of Fine Arts, People's Republic of China. The research focuses on nine core competency dimensions. The population consisted of 267 administrators and support staff from 20 colleges and functional departments. Based on Krejcie and Morgan's table, 159 participants were selected through stratified random sampling, while six key informants were chosen through purposive sampling for in-depth interviews. Research instruments included a 53-item five-point Likert scale questionnaire with acceptable content validity (IOC = 0.66–1.00), item discrimination ranging from 0.486 to 0.905, and high reliability (Cronbach's alpha = 0.985), as well as a semi-structured interview guide. Quantitative data were analyzed using descriptive statistics, and qualitative data were analyzed through thematic analysis. The results indicated that the overall level of Personnel Management was moderate ( $\bar{x}=3.27$ ). Crisis management showed the highest mean score ( $\bar{x}=3.33$ ), while service awareness was the lowest ( $\bar{x}=3.21$ ). Key areas requiring improvement included organizational coordination, innovation capability, and service awareness. Based on the findings, the study proposes guidelines for performance enhancement, including scenario-based recruitment, an integrated training system, and a multi-dimensional, application-oriented performance evaluation mechanism.

**Keywords:** Hebei Academy of Fine Arts; Administrative Staff Competency; Human Resource Management; Nine-Dimensional Competency Model; Art Colleges and Universities

### Introduction

In the era of the knowledge economy and the rapid development of the art and creative industry, human resources have become a key driving force for the core competitiveness of universities (Porter, 1990, pp. 61-63). As a distinctive private undergraduate art institution in Hebei Province, the achievement of Hebei Academy of Fine Arts' educational goals relies not only on the academic and creative capabilities of its faculty but also on the efficient operation of systems such as strategic planning, teaching support, organizational communication, alumni services, and overall management (Guo, 2020, pp. 1-2).

From the provincial policy perspective, Hebei Province has attached great importance to higher education, especially art higher education, in recent years. It has successively

issued documents such as the "Hebei Provincial 14th Five-Year Plan for Educational Development" and the "Hebei Provincial Action Plan for University Talent Team Construction". These documents clearly propose requirements such as strengthening the innovation of human resource management in private universities to adapt to the characteristic development needs of art institutions, establishing and improving personnel assessment and incentive mechanisms in line with the laws of art education, and enhancing the comprehensive service capabilities and collaborative efficiency of administrative support staff (Hebei Provincial Department of Education, 2021, pp. 10-12). The special plan of the Hebei Provincial Department of Education further emphasizes promoting the in-depth integration of administrative services and teaching creation in art institutions, and establishing a personnel guarantee system adapted to art project management, clarifying the characteristic orientation of personnel management in art institutions (Hebei Provincial Government, 2022, pp. 8-9).

At the university level, Hebei Academy of Fine Arts was founded in 2002, accredited as a bachelor's degree-granting unit in 2015, and launched postgraduate education in 2016. Located in Shijiazhuang, Hebei Province, it covers an area of 7,035 mu with a building area of over 643,200 square meters. The library houses approximately 2 million books and more than 10,000 cultural relics such as works of art and sculptures, making it a leading art institution in North China. It currently has 8 colleges and 39 undergraduate programs, with about 27,000 students. Among them, 6 programs including Digital Art, Animation, and Sculpture are provincial key or characteristic programs, and the Animation program is a provincial model for applied art programs. The university's "14th Five-Year Development Plan" clearly proposes the strategic goal of "building a distinctive and internationally renowned art university", requiring the administrative support staff team to adapt to high-frequency, high-intensity tasks such as creative season support, large-scale art exhibitions, and cross-border academic exchanges, which places higher requirements on the targeting and effectiveness of personnel management (Hebei Academy of Fine Arts, 2021, pp. 15-17).

As an art institution, Hebei Academy of Fine Arts faces unique challenges: administrative work needs to combine professionalism with continuous creativity (Chen, 2018, pp. 45-47), art project management requires an understanding of creative processes and artistic laws (Lin, 2020, pp. 28-30), international academic exchanges rely on cross-cultural communication and art resource connection capabilities (Wang, 2022, pp. 62-64), and digital campus construction demands data analysis and artistic resource digital management thinking (Zhao, 2023, pp. 35-37). Additionally, private institutions often face issues such as limited staffing, budget constraints, and high turnover of core backbones—statistics from the university's human resources department show that the average annual turnover rate of administrative support staff over the past three years has reached 8.3%, higher than the average level of public art institutions in the province (Hebei Academy of Fine Arts Human Resources Department, 2023, pp. 4-5). Only through continuous and systematic competency improvement can the university achieve the management goal of "achieving more with fewer resources and operating efficiently" (Li, 2019, pp. 78-80) and support the sustainable development of its art education and creative undertakings.

From the "Regulations on the Management of University Human Resources" issued by the State Council (2014, pp. 10-12) to the special plans of the Hebei Provincial Department of Education, and then to the Hebei Academy of Fine Arts' "14th Five-Year Development Plan" and the Post Competency Model (2025, pp. 22-24), a four-level linked policy system of "national-provincial-university-post" has been formed. The Ministry of Education of the People's Republic of China (2005, pp. 7-9) has proposed a framework of 9 general competencies for university support staff, including strategic planning competence, organizational coordination and institutional management competence, communication

competence, decision-making competence, innovation competence, crisis management competence, team building competence, learning ability, and service awareness and provision competence. This framework serves as a policy guide for the construction of support staff competencies, requiring each university to formulate behavioral criteria in combination with its own characteristics (Zhang, 2017, pp. 81-83). For Hebei Academy of Fine Arts, it is necessary to transform characteristic work such as creative season support, exhibition services, and international exchanges into observable and evaluable competency behaviors to effectively implement policy requirements and development strategies (Sun, 2022, pp. 139-141). This study explores the personnel management paths for improving the competencies of support staff at Hebei Academy of Fine Arts, which not only provides practical support for the reform of personnel management in private art institutions in Hebei Province but also helps the university achieve its strategic goal of becoming an internationally renowned art institution, while offering reference experience for similar institutions (Zhou, 2021, pp. 114-116).

## Research Objectives

1. To investigate the current status of personnel management to promote the performance of support personnel at Hebei Academy of Fine Arts, People's Republic of China.
2. To explore guidelines for personnel management to promote the performance of support personnel at Hebei Academy of Fine Arts, People's Republic of China.

## Research Methodology

This study employed a mixed-methods research design, integrating quantitative and qualitative approaches to obtain comprehensive and complementary findings. The research was conducted in two phases. Phase 1 aimed to investigate the current status of Personnel Management and work competencies of support personnel, while Phase 2 aimed to explore guidelines for promoting their performance.

### Phase 1: Quantitative Survey

**Population and Sample:** The research population consisted of 267 managers and support staff at Hebei Academy of Fine Arts in 2024. The sample size was determined using Krejcie and Morgan's (1970) table. A total of 159 participants were selected through stratified random sampling from 8 colleges and 12 core functional departments to ensure representative coverage.

**Research Instrument:** A questionnaire was used in this phase which include 53 five-point Likert-scale items covering nine competency dimensions which are Crisis Management, Decision Making, Strategic Planning, Communication, Team Building, Organizational Coordination, Learning Ability, Innovation, and Service Awareness, and open-ended questions. The questionnaire demonstrated an Index of discrimination (0.364–0.858) and high reliability (Cronbach's  $\alpha = 0.978$ ).

**Data Collection:** Data were collected through both online and offline distribution methods. All 159 questionnaires were returned and deemed valid, yielding a response rate of 100%.

**Data Analysis:** Quantitative data were analyzed using descriptive statistics, including mean and standard deviation.



## Phase 2: Qualitative Interviews

**Participants:** Six key informants were selected through purposive sampling based on their extensive experience in university management. The participants included two deans, one Director of Human Resources, and three professors.

**Research Instrument:** A semi-structured interview guide was developed based on the results of Phase 1, with a focus on the three competency dimensions identified as the weakest: organizational coordination, innovation, and service awareness.

**Data Collection and Analysis:** In-depth interviews lasting 45–60 minutes were conducted, audio-recorded, and transcribed verbatim. Qualitative data were analyzed using thematic analysis

## Research Results

According to the research objectives, the research results are as follow:

### The current status of personnel management to promote the performance of support personnel at Hebei Academy of Fine Arts, People's Republic of China

**Table 1**

*Mean values and standard deviations of current status of personnel management to promote the performance of support personnel at Hebei Academy of Fine Arts, People's Republic of China*

| Competency Dimension        | $\bar{x}$ | S.D. | Rank |
|-----------------------------|-----------|------|------|
| Crisis Management           | 3.33      | 1.29 | 1    |
| Decision-Making             | 3.31      | 1.33 | 2    |
| Strategic Planning          | 3.29      | 1.32 | 3    |
| Communication               | 3.29      | 1.34 | 3    |
| Team Building               | 3.29      | 1.32 | 3    |
| Organizational Coordination | 3.28      | 1.35 | 6    |
| Learning Ability            | 3.27      | 1.32 | 7    |
| Innovation                  | 3.27      | 1.34 | 7    |
| Service Awareness           | 3.21      | 1.31 | 9    |
| Overall Average             | 3.27      | 1.32 | -    |

According to the table 1, it was found that the overall level of competencies among support personnel was at a moderate level ( $\bar{x}=3.27$ , S.D.=1.32). Among the nine competency dimensions, Crisis Management ranked highest ( $\bar{x}=3.33$ , S.D.=1.29), followed by Decision-Making ( $\bar{x}=3.31$ , S.D.=1.33). Strategic Planning ( $\bar{x}=3.29$ , S.D.=1.32), Communication ( $\bar{x}=3.29$ , S.D.=1.34), and Team Building ( $\bar{x}=3.29$ , S.D.=1.32) shared the third rank. However, the competency with the lowest means score was Service Awareness ( $\bar{x}=3.21$ , S.D.=1.31).

### Guidelines for personnel management to promote the performance of support personnel at Hebei Academy of Fine Arts, People's Republic of China

Based on in-depth interviews with six key informants, practical guidelines were formulated to address the three core competency weaknesses identified in the quantitative findings. These guidelines are as follows:

### **Guidelines for Organizational Coordination**

In terms of human resource development, the recruitment, training, and evaluation processes should be systematically integrated to enhance organizational effectiveness. Recruitment practices should go beyond traditional qualification-based selection by incorporating cross-departmental collaboration scenario tests that assess candidates' ability to work in diverse teams and complement existing personnel. In addition, establishing talent reserve pools can support long-term workforce planning and ensure institutional readiness for future development needs.

Training programs should place greater emphasis on strategic thinking, policy interpretation, and conflict resolution skills, which are essential for effective coordination and leadership. Practical training activities, such as project-based learning through art exhibition or interdisciplinary projects, can be employed to strengthen experiential learning and problem-solving abilities. Furthermore, a structured "training-task-review" closed-loop system should be implemented to ensure that training outcomes are continuously applied, monitored, and refined in actual work contexts.

Evaluation mechanisms should be designed to link coordination abilities with work outcomes, thereby reflecting both individual performance and collaborative effectiveness. Regular quarterly formative evaluations, combined with comprehensive annual reviews, can provide timely feedback and support continuous improvement. Integrating multi-source feedback from supervisors, peers, and stakeholders further enhances the objectivity and developmental value of the evaluation process, ultimately contributing to sustainable human resource development and institutional performance improvement.

### **Guidelines for Stimulating Innovation**

The enhancement of innovation capability requires a supportive personnel management framework that values creativity, experimentation, and cross-disciplinary integration. At the recruitment stage, innovation potential can be assessed through time-limited proposal tasks that require candidates to generate practical solutions to real organizational challenges. Evaluation criteria should emphasize interdisciplinary thinking and allow for a reasonable degree of trial and error, thereby fostering an innovation-friendly organizational culture.

Training initiatives should focus on creating environments that encourage creative exploration and knowledge exchange. The establishment of innovation workshops and cross-professional communication platforms can facilitate the sharing of ideas and best practices across departments. Moreover, providing adequate technical support, time resources, and institutional backing is essential for enabling personnel to transform creative ideas into actionable outcomes.

In terms of evaluation, innovative performance should be systematically documented and assessed throughout the entire innovation process, from idea generation and proposal development to implementation and practical application. Innovative achievements should be classified by type and tracked longitudinally, with particular attention paid to their practical value and contribution to organizational development rather than solely to output quantity.

### **Guidelines for Strengthening Service Awareness**

Strengthening service awareness among support personnel requires a clear alignment between service values and personnel management practices. During recruitment, abstract service concepts should be translated into observable behavioral indicators, and candidates' service orientation can be assessed through simulated service scenarios involving interactions with students and teaching staff. This approach enables a more accurate

evaluation of candidates' empathy, communication skills, and responsiveness to service needs.

Training programs should emphasize experiential learning and empathy development. Diverse service-learning resources can be provided, including opportunities for support personnel to engage in "student-teacher follow-along" experiences that allow them to gain firsthand insight into service recipients' needs and expectations. Such immersive learning experiences can enhance service sensitivity and promote a learner-centered service mindset.

Evaluation mechanisms should prioritize student and teacher satisfaction as key indicators of service quality. Multi-channel feedback systems, including surveys, interviews, and digital feedback platforms, can be used to collect comprehensive service evaluations. Importantly, these evaluation results should be incorporated into a closed-loop improvement mechanism, ensuring that feedback leads to timely reflection, targeted adjustments, and continuous enhancement of service performance.

## Discussion

A study on the human resource management status for promoting the job performance of support staff at Hebei Academy of Fine Arts revealed that such staff demonstrated outstanding and overall high-level performance in crisis management capability, decision-making capability, strategic planning capability, communication capability and team building capability, which ranked among the top three—with crisis management capability taking the first place, decision-making capability the second, and the latter three tying for the third. This can be attributed to the university's integration of crisis management into its regular work, including the conduct of three types of comprehensive drills each year bound to continuing education credits. Meanwhile, the university has strengthened the mechanism linking performance with decision-making quality, clarified the recruitment and incentive orientation for core competencies, and tailored these measures to the operational needs of art academies. This is consistent with the relevant policy requirements of the Ministry of Education and the research findings of Wei (2025), who found that scenario-based drills and institutionalized incentives can effectively enhance the core administrative competencies of art academies.

### Recruitment

The findings indicate that the selection criteria for organizational coordination, innovation, service awareness, and cognitive capabilities have not been effectively operationalized in the recruitment process. In particular, there is a lack of scenario-based assessments and quantitative evaluation tools tailored to the specific characteristics of art academies. As a result, these competencies remain relatively underdeveloped among support personnel. This finding is consistent with the studies of Shi (2020) and Yang Hong (2017), which emphasize that recruitment practices in art academies should incorporate assessment dimensions aligned with position-specific and institutional characteristics.

### Training

There is insufficient transformation of strategic decoding training, a lack of practical carriers for innovation training, and low practicality of service skills training. A closed-loop of "learning-practice-review" has not been established, leading to the failure to effectively improve the aforementioned competencies. This is consistent with the research of Baldwin & Ford (1988) and Zhong (2017), which indicates that the development of administrative competencies in art academies must rely on practical training and project-based binding.



## Evaluation

For coordination capabilities, regular feedback is lacking; for innovation evaluation, quantity is overemphasized over value; and for the evaluation of service awareness, a closed-loop of teacher and student feedback has not been formed. The evaluation system is not adapted to the operational characteristics of art academies, making it difficult to drive the continuous improvement of competencies. This is in line with the research of Ru (2023) and Zhang (2023), which states that administrative evaluation in art academies needs to establish a mechanism of multi-channel feedback and closed-loop rectification.

## Recommendations

### 1. Implication for the Findings

The moderate overall competency level, with strong performance in crisis management and decision-making but weaker service awareness, suggests that support personnel development should prioritize enhancing service-oriented competencies while maintaining strengths in problem-solving and leadership-related skills.

Targeted competency-based development should be implemented, focusing on improving service awareness, organizational coordination, and innovation through revised job descriptions and focused training programs.

### 2. Recommendations for Further Studies

Future studies should expand the sample to national private art universities to enable cross-institutional comparisons and enhance the generalizability of the findings.

Further research should explore the influence of digital transformation and project management capabilities on support personnel competencies, particularly their relationship with the nine core competencies.

## References

- Baldwin, T. T., & Ford, J. K. (1988). Transfer of training: A review and directions for future research. *Personnel Psychology*, 41(1), 63-105.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607-610.
- Ministry of Education of the People's Republic of China. (2005). Guidelines for the construction of support staff competency in higher education institutions. Beijing: People's Education Press.
- State Council of the People's Republic of China. (2014). Regulations on the management of university human resources. Beijing: China Legal Publishing House.
- Wei, Y. (2025). The effect of scenario-based drills and institutionalized incentives on core administrative competencies in art academies. *Journal of Higher Education Management*, 19(2), 89-96.
- Shi, L. (2020). Research on recruitment assessment dimensions aligned with the characteristics of art academies. *Journal of Art Education*, 41(5), 103-108.
- Yang, H. (2017). Exploration of recruitment practices tailored to art institutions' characteristics. *Journal of Private Education*, 14(3), 76-82.
- Zhong, J. (2017). Practical training and project-based binding in the development of administrative competencies for art academies. *Journal of Educational Administration*, 21(4), 57-63.
- Ru, X. (2023). Multi-channel feedback and closed-loop rectification mechanisms in administrative evaluation of art academies. *Journal of University Management*, 27(1), 45-51.
- Zhang, H. (2023). Research on the adaptation of administrative evaluation systems to the operational characteristics of art academies. *Journal of Arts Management*, 18(3), 68-74.

## English Writing Abilities of Chinese University Students in Chuxiong Normal University, Yunnan Province, People's Republic of China

Li Xiaoyan<sup>1</sup> Nawamin Prachanant<sup>2</sup> Akkarapon Nuemaihom<sup>3</sup>

<sup>1</sup>Ph.D. Candidate, English Language Teaching Program, Faculty of Humanities and Social Sciences, Buriram Rajabhat University, Buriram, Thailand  
E-mail: 660427092003@bru.ac.th

<sup>2</sup>Associate Professor, English Language Teaching Program, Faculty of Humanities and Social Sciences, Buriram Rajabhat University, Buriram, Thailand  
E-mail: nawamin.pc@bru.ac.th

<sup>3</sup>Associate Professor, English Language Teaching Program, Faculty of Humanities and Social Sciences, Buriram Rajabhat University, Buriram, Thailand  
E-mail: akkarapon.nm@bru.ac.th

### Abstract

This study aimed to synthesize and investigate the English writing abilities of Chinese university students in Chuxiong Normal University, Yunnan Province, People's Republic of China. The research was divided into two phases. Phase 1 synthesized the English writing abilities of Chinese university students in Chuxiong Normal University. The researcher studied 10 previous research works and related literatures. The research instrument was the frequency distribution comprehensive table. The previous research works and related literatures were analyzed by using frequency to find out the components of English writing abilities which were at least of 60%. Phase 2 investigated the English writing abilities of Chinese university students. The samples were 342 first-year non-English major students from ten majors of Chuxiong Normal University, Yunnan Province, People's Republic of China in 2026 academic year. The research instrument was a set of questionnaires. The collected data were analyzed by using mean and standard deviation. The results showed that the English writing abilities of Chinese university students in Chuxiong Normal University, Yunnan Province, People's Republic of China included four components as follows: 1) Organization: Introduction, Body and Conclusion; 2) Logical Development of Ideas: Content; 3) Vocabulary and Grammar; and 4) Style and Quality of Expression. The English writing abilities of Chinese university students in Chuxiong Normal University, Yunnan Province, People's Republic of China were at a low level. These English writing abilities can help English teachers in Chuxiong Normal University, Yunnan Province, People's Republic of China accurately assess their students' English writing abilities levels and provide certain reference standards for English writing instruction.

**Keyword:** English writing abilities, Chinese university students

### Introduction

The Outline of The National Medium- and Long-Term Educational Reform and Development Plan (2010-2020) points out that improving the quality is the core task of the development of higher education. Improving the teaching quality of higher education requires us to provide high-quality foreign language education for university students. The establishment of college English courses in universities, on the one hand, meets the national

strategic needs and serves the country's reform and opening up as well as economic and social development. On the other hand, it meets the needs of students in aspects such as professional study, international communication, further education, work and employment. College English courses have practical significance and long-term influence on the future development of college students. Learning English helps students to develop a global vision, cultivate an international awareness, and improve their humanistic literacy. At the same time, it provides a basic tool for knowledge innovation, the exertion of potential and all-round development, and prepares students to meet the challenges and opportunities of the era of globalization.

According to scholars in China, university students' English writing ability is an integrated set of comprehensive competencies encompassing linguistic foundation, logical thinking, situational adaptation, and standardized expression (Yang & Zhang, 2015). It can be corely divided into four key dimensions, covering the full-scenario needs from basic output to advanced application.

1. Basic Language Application Ability of vocabulary, grammar, spelling and punctuation (Core Premise of Writing);
2. Discourse Construction and Logical Organization Ability (Core Framework of the Article);
3. Content Conception and Theme Expression Ability (Core Value of the Article);
4. Cultural Adaptation and Expression Standardization Ability (Avoiding "Chinglish").

Currently, the overall level of university students' English writing ability is relatively low, disconnected from the development of their comprehensive English proficiency. University students have obvious shortcomings in vocabulary, grammar, textual logic, and expression (Chen, 2016). Specifically, they are manifested as follows: 1) Vocabulary and Grammar: Students generally have a limited vocabulary, repeat words, and use improper collocations. For example, they only use "important" to express "important"; grammatical errors occur frequently, with prominent problems such as subject-verb disagreement, tense confusion, and misuse of conjunctions, which seriously affect the accuracy of the article; 2) Discourse and Logic: Some students lack logical thinking ability. Their articles have loose structures, lack coherence between paragraphs, and there is a disconnection between examples and viewpoints in discussions (Xu, 2017). Moreover, they fail to use transition words and topic sentences reasonably, making it difficult to construct a clear article framework; and 3) Culture and Expression: Influenced by Chinese thinking, students often produce Chinglish expressions (Sun & Wang, 2020). They are not familiar with the "linear" expression habits of English-speaking countries, and thus are prone to cultural adaptation deviations in content presentation and conclusion expression.

Based on the above-mentioned significance and problems, the researcher is interested in the research of English writing abilities of Chinese university students in Chuxiong Normal University, Yunnan Province, People's Republic of China. The expected findings will be guidelines for the design of more effective English writing instructions for teachers to improve the level of English writing abilities of Chinese university students in Chuxiong Normal University, Yunnan Province, People's Republic of China.

## Research Objectives

1. To synthesize the components of English writing abilities of Chinese university students in Chuxiong Normal University, Yunnan Province, People's Republic of China;
2. To investigate the current situations of English writing abilities of Chinese university students in Chuxiong Normal University, Yunnan Province, People's Republic of China.



## Research Methodology

This research was divided into two phases as follows:

### **Phase 1: Synthesizing the components of English writing abilities of Chinese university students**

#### **Data Source**

The researcher studied 10 documents, academic textbooks and previous studies related to the English writing instruction and learning and English writing abilities of Chinese university students both at home and abroad.

#### **Research Instrument**

The research instrument in this phase was the documentary analysis form which included the content summary.

#### **Data Collection**

The data were collected through the documents, academic textbooks and related research works from various higher education institution libraries and educational institutions in China and online data bases.

#### **Data Analysis**

The collected data were analyzed by using content analysis technique, and then the researcher summarized and organized those data according to the documentary analysis form.

### **Phase 2: Investigating the current situations of English writing abilities of Chinese university students**

#### **Population and Samples**

The population included 3111 first-year non-English major students from ten majors of Chuxiong Normal University, Yunnan Province, People's Republic of China in 2026 academic year. The samples were 342 first-year non-English major students from ten majors of Chuxiong Normal University, Yunnan Province, People's Republic of China in 2026 academic year. They were selected by using the table of Krejcie and Morgan, stratified random sampling method and simple random sampling method.

#### **Research Instrument**

The research instrument in this phase was a set of questionnaires asking about the current situation of teaching and learning English writing of Chinese university students in Chuxiong Normal University, Yunnan Province, People's Republic of China. The questionnaire was divided into three parts: Part 1: General information about the respondents; Part 2: The current state of Chinese university students' English writing abilities; and Part 3: Training needs and suggestions for enhancing Chinese university students' English writing abilities. The questionnaire was gradually constructed and submitted to the dissertation advisors in order to check for the correctness and appropriateness. The questionnaire was edited and revised based on the dissertation advisors' comments and suggestions. Then, the questionnaire was examined the validity by the five experts. After that, the researcher analyzed the Index of Item-Objective Congruence: IOC which is between 0.60-1.00 (Phatiyathanee, 2017: 167). The IOC value was 0.80-1.00. The questionnaire was tried out with 30 university students who were not the samples. Finally, the researcher analyzed the reliability of the questionnaire by using the Cronbach's Alpha Coefficient (Gliem & Gliem, 2003, pp. 82-87). It indicated that the Cronbach's Alpha was 0.963 using SPSS 27.

### Data Collection

The researcher sent the letter issued by the Graduate School asking for permission to collect the data. The researcher collected all data by herself. The survey was distributed to students using “Wen Juan Xing,” China’s largest online survey and test platform. Students accessed the questionnaire via their mobile phones and submitted their responses anonymously online.

### Data Analysis

The data from the rating scale questionnaire were analyzed by using mean and standard deviation. The scores from the opinions about English writing abilities of Chinese university students in Chuxiong Normal University, Yunnan Province, People’s Republic of China were interpreted as the criteria below (Srisa-ard. 2013: 109).

| Scale     | Meaning           |
|-----------|-------------------|
| 4.51-5.00 | The highest level |
| 3.51-4.50 | High level        |
| 2.51-3.50 | Moderate level    |
| 1.51-2.50 | Low level         |
| 1.00-1.50 | The lowest level  |

### Research Results

#### The Components of English Writing Abilities of Chinese University Students

The components of English writing abilities of Chinese university students in Chuxiong Normal University, Yunnan Province, People’s Republic of China were as shown in Table 1.

**Table 1**  
*Components of English Writing Abilities*

| Component                                       | Liu (2008) | He & Niao (2015) | Yuan (2017) | Xu (2017) | Hao (2018) | Wang & Zhang (2019) | Sun & Wang (2020) | Cao (2022) | Li (2024) | Tangyan (2024) | Frequency |
|-------------------------------------------------|------------|------------------|-------------|-----------|------------|---------------------|-------------------|------------|-----------|----------------|-----------|
| Organization: Introduction, Body and Conclusion | √          | √                | √           | √         | √          | √                   | √                 | √          | √         | √              | 10        |
| Logical Development of Ideas: Content           | √          | -                | √           | √         | √          | √                   | √                 | √          | √         | √              | 9         |
| Vocabulary and Grammar                          | √          | √                | √           | √         | √          | √                   | √                 | √          | √         | √              | 10        |
| Style and Quality of Expression                 | √          | -                | √           | √         | -          | √                   | √                 | √          | √         | √              | 8         |

From Table 1, it was found that based on the synthesis of the components of English writing abilities combined with the comprehensive table of frequency distribution, only from more than 60% frequency value of the available data, the results show that the components of English writing abilities of Chinese university students in Chuxiong Normal University, Yunnan Province, People's Republic of China included the following four important components:

**Organization: Introduction, Body and Conclusion** refers to arranging ideas logically and coherently. The “introduction-body-conclusion” structure is the most classic and widely used framework, ensuring clarity and effectiveness. Here's a detailed breakdown: 1) Introduction refers to the opening part that grabs attention, sets the context, and presents the core theme; 2) Body (Main Paragraphs) refers to the core part that supports and develops the thesis with detailed arguments and evidence; and 3) Conclusion refers to the closing part that sums up the main ideas and closes the text neatly. The core logic in short is as follows: Introduction means “What I will argue” (thesis) → Body means “How I argue it” (evidence) → Conclusion means “What I have argued” (summary). It ensures the English writing is coherent, logical, and easy to follow.

**Logical Development of Ideas: Content** refers to arranging, connecting, and expanding your ideas in a clear, coherent, and purposeful way throughout the writing: ensuring every point serves the central thesis, ideas flow naturally (no jumps or irrelevance), and readers can easily follow your reasoning to understand your message. In short: the content is not just a “list of ideas,” but a logically linked “chain of thought” where each part connects to the next and supports the main theme.

**Vocabulary and Grammar** are the fundamental building blocks of English writing: vocabulary provides the “words” to express ideas, while grammar offers the “rules” to organize words into clear, correct, and meaningful sentences. Together, they ensure your writing is accurate, coherent, and effective in conveying messages to readers.

**Style and Quality of Expression** included two elements as follows: 1) **Style** refers to the unique, consistent way to convey ideas through language choices (tone, vocabulary, syntax) to match the writing purpose, audience, and context; and 2) **Quality of expression** refers to the overall effectiveness of the writing: how clearly, precisely, and persuasively to communicate ideas, with coherence, fluency, and refinement. Together, they turn “correct writing” into “impactful, professional writing” that resonates with readers.

**The Current Situations of English Writing Abilities of Chinese University Students** The current situation of English writing abilities of Chinese university students in



Chuxiong Normal University, Yunnan Province, People's Republic of China was as shown in Table 2.

**Table 2**

*Mean and Standard Deviation of English Writing Abilities of Chinese University Students*

| Components of English Writing Abilities            | Opinion Level |             |            |
|----------------------------------------------------|---------------|-------------|------------|
|                                                    | $\bar{X}$     | S.D.        | Meaning    |
| 1. Organization: Introduction, Body and Conclusion | 1.71          | 0.48        | low        |
| 2. Logical Development of Ideas: Content           | 2.21          | 0.53        | low        |
| 3. Vocabulary and Grammar                          | 2.37          | 0.61        | low        |
| 4. Style and Quality of Expression                 | 2.36          | 0.57        | low        |
| <b>Total</b>                                       | <b>2.17</b>   | <b>0.41</b> | <b>low</b> |

From Table 2, it was found that the overall English writing abilities of Chinese university students in Chuxiong Normal University, Yunnan Province, People's Republic of China were at a low level ( $\bar{X} = 2.17$ , S.D. = 0.41). The highest average score was vocabulary and grammar ( $\bar{X} = 2.37$ , S.D. = 0.61), followed by style and quality of expression ( $\bar{X} = 2.36$ , S.D. = 0.57), logical development of ideas: content ( $\bar{X} = 2.21$ , S.D. = 0.53), organization: introduction, body and conclusion ( $\bar{X} = 1.71$ , S.D. = 0.48).

## Discussion and Conclusion

### The Components of English Writing Abilities of Chinese University Students

#### Organization: Introduction, Body and Conclusion

Chinese university students should have the English writing ability of organization: introduction, body and conclusion since introduction can tell readers "what you will write about and your main stance"; body shows readers "how you prove your thesis"; and conclusion confirm "you have completed proving your thesis" and leave a clear impression on readers. The finding is in line with Liu (2008), He & Niao (2015), Yuan (2017), Xu (2017), Hao (2018), Wang & Zhang (2019), Sun & Wang (2020), Cao (2022), Li (2024) and Tangyan (2024).

#### Logical Development of Ideas: Content

Chinese university students should have the English writing ability of logical development of ideas: content since logical development is the "backbone" of writing content: 1) It makes your writing easy to understand (readers don't get confused by messy ideas); 2) It strengthens your persuasiveness/credibility (clear reasoning makes your arguments more convincing); and 3) It ensures your English writing is purposeful (every part serves your central message, no waste of words). The finding is in line with Liu (2008), Yuan (2017), Xu (2017), Hao (2018), Wang & Zhang (2019), Sun & Wang (2020), Cao (2022), Li (2024) and Tangyan (2024).

#### Vocabulary and Grammar

Chinese university students should use appropriate words / phrases to express their thoughts, describe things, or present arguments and should use grammar effectively. Vocabulary and grammar ensure English writing is grammatically accurate (mistakes distract readers and weaken your message); help organize ideas into logical, coherent sentences (readers can follow your reasoning smoothly) and enhance the professionalism and credibility of your English writing (especially in academic/official scenarios). The

finding is in line with Liu (2008), He & Niao (2015), Yuan (2017), Xu (2017), Hao (2018), Wang & Zhang (2019), Sun & Wang (2020), Cao (2022), Li (2024) and Tangyan (2024).

### **Style and Quality of Expression**

Chinese university students should use proper style to write and ensure the high quality of expression since they distinguish “basic writing” from “excellent writing”; ensure your message is “heard” and reflect your language proficiency. The finding is in line with Liu (2008), Yuan (2017), Xu (2017), Wang & Zhang (2019), Sun & Wang (2020), Cao (2022), Li (2024) and Tangyan (2024).

### **The Current Situations of English Writing Abilities of Chinese University Students**

The English writing abilities of Chinese university students in Chuxiong Normal University, Yunnan Province, People’s Republic of China is at a low level. The highest average score was vocabulary and grammar, followed by style and quality of expression, logical development of ideas: content, organization: introduction, body and conclusion. Liu (2008) states that vocabulary is not just about “how many words you know,” but “how well you use them” to match the writing purpose, audience, and context and Yuan (2017) believes that grammar’s core role is to ensure writing is grammatically correct, logically coherent, and easy to follow. Xu (2017) states that Chinese university students lack ability of use vocabulary and grammar effectively in English writing tasks. Wang & Zhang (2019) states that style and quality of expression, logical development of ideas: content and organization: introduction, body and conclusion also play a vital role in effective and expressive English writing. Sun & Wang (2020) believe that Chinese university students always cannot use proper style, develop logical content and even make correct and effective structure to express their ideas. The findings are in line with Cao (2022), Li (2024) and Tangyan (2024).

To draw a conclusion that the English writing abilities of Chinese university students are at a low level, therefore, Chinese university students should have good English writing abilities of vocabulary and grammar; style and quality of expression; logical development of ideas: content and organization: introduction, body and conclusion. English teachers in Chinese universities should focus on the above-mentioned English writing abilities and should innovate their instructional methods to cater to the higher requirement in *Chinese National Standard English Test*.

### **Suggestion**

#### **Recommendations for the Application of the Study Findings**

Firstly, innovate the existing traditional English writing teaching methods, models, and systems, and apply modern English writing teaching platforms such as flipped classrooms, AI, and cloud platforms to closely integrate in-class English writing teaching with students’ after-class learning, thereby continuously improving the teaching effectiveness of English writing courses. Secondly, in daily in-class English writing teaching, teachers should avoid overemphasizing the explanation of English writing theories. Instead, they should focus on students’ English writing practice and achieve a close integration of English writing theories with practice.

#### **Suggestions for Further Studies**

From the above study results, it can be seen that the English writing abilities of Chinese university students in Chuxiong Normal University, Yunnan Province, People’s Republic of China are at a low level. Among the main problems, the correct and effective use of vocabulary and grammar is particularly problematic, such as insufficient vocabulary,

overuse and misuse of words, lack of grammatical knowledge, and the rigid or inappropriate application of grammatical structures. In addition, problems also exist to varying degrees in terms of style and quality expression, as well as in logical development of content and organization. Therefore, in daily English writing teaching, teachers should start from the most basic ability of vocabulary and grammar, pay more attention to students' fundamental writing abilities, place greater emphasis on training and developing students' basic English writing abilities, and encourage more practice.

## Acknowledgement

Firstly, I would like to express my sincere gratitude to my research project supervisor, Assoc. Prof. Dr. Nawamin Prachanant and Assoc. Prof. Dr. Akkarapon Nuemaihom, for their careful and patient guiding me throughout the entire paper process. Secondly, I would like to thank all the respondents and volunteers who participated in this study for their cooperation and participation, which enabled my research to proceed smoothly. Their valuable opinions and feedback have played an important role in my research results, and without their support, this paper cannot be completed.

## References

- Cao, R. Y. (2022). Research on the application of the flipped classroom in college English teaching. *Journal of Liaoning Teachers College (Social Science Edition)*, 23(2), 42.
- Chen, L. Q. (2016). The advantages and disadvantages of the flipped classroom in actual teaching. *Shanxi Youth*, (6), 202.
- Hao, G. J. (2018). The role of the flipped classroom in enhancing college students' English writing ability and self-confidence. *English On Campus*, 23(3), 46.
- He, X. J., & Niao, L. N. (2015). A probe into the negative writing transfer of Chinese college students. *English Language Teaching*, 8(10), 21.  
<https://doi.org/10.5539/elt.v8n10p21>.
- Li, X. C. (2024). Research on the application of blended teaching model in college English teaching. *Journal of Science and Education*, 19(3), 135.
- Liu, H. (2008). Writing as the ultimate measure of language proficiency. *Journal of Foreign Language Teaching*, 31(3), 20-22.
- Sun, T., & Wang, C. (2020). College students' writing self-efficacy and writing self-regulated learning strategies in learning English as a foreign language. *System*, 90(23), 143.
- Tangyan. (2024). A study on the path of digital empowerment for improving college English writing ability in the context of new liberal arts. *Journal of Mudanjiang College of Education*, 257(2), 53.
- Wang, C. L., & Zhang, J. (2019). Research on the teaching mode of the flipped classroom. *Think Tank Theory*, 12(3), 170.
- Xu, H. J. (2017). The influence of the flipped classroom on college students' English writing scores and self-efficacy. *English Square*, 73(1), 54-57.
- Yang, R., & Zhang, H. (2015). The influence of task complexity, task difficulty and self-efficacy on foreign language writing. *Foreign Language World*, 12(1), 40-41.
- Yuan, S. (2017). Investigate the "issues" in Chinese students' English writing and their "reasons": Revisiting the recent evidence in Chinese academia. *International Journal of Higher Education*, 6(3), 45-49.



# The Study of States and Guidelines of Teaching Management in the Artificial Intelligence Era at Anyang Institute of Technology, Anyang City, Henan Province, People's Republic of China

Lou YanLi <sup>1</sup>, Suchart Homjan<sup>2</sup> and Bunpot Wongthongcharoen<sup>3</sup>

<sup>1</sup>M.A. Students, Educational Administration Program, Buriram Rajabhat University, Thailand, School of Computer Science and Information Engineering, Anyang Institute of Technology, Anyang 455000, China

E-mail: 670426021045@bru.ac.th

<sup>2</sup>Advisor, Educational Administration Program, Buriram Rajabhat University, Thailand

E-mail: Suchart.hj@bru.ac.th

<sup>3</sup>Advisor, Educational Administration Program, Buriram Rajabhat University, Thailand

E-mail: bunphot.wt@bru.ac.th

## Abstract

This study adopts a mixed-methods approach to investigate the current status of teaching management at Anyang Institute of Technology (AIT), a local application-oriented engineering university, in the artificial intelligence (AI) era, and to develop targeted operational guidelines. Through stratified proportional random sampling, a questionnaire survey was conducted among 285 faculty members from seven core departments, covering four dimensions: intelligent teaching management decision-making, AI-empowered personalized learning support, digital-intelligent teaching model innovation, and precise allocation of teacher resources. Semi-structured interviews were carried out with six external experts from diverse disciplines. Quantitative data were analyzed using SPSS 26.0, while qualitative data were processed via content analysis combined with grounded theory coding. The results show that the overall level of teaching management is rated "Good" ( $M = 3.54$ ,  $SD = 1.00$ ). AI-empowered personalized learning support scores the highest ( $M = 3.56$ ,  $SD = 1.01$ ), and digital-intelligent teaching model innovation the lowest ( $M = 3.53$ ,  $SD = 0.98$ ). Key challenges identified include superficial industry-education integration, homogenized training for double-qualified teachers, incomplete decision-making feedback loops, and inadequate data security mechanisms. This study proposes localized, low-cost, and engineering-adapted operational guidelines, which provide replicable pathways for similar local application-oriented universities.

**Keywords:** Artificial intelligence era; Digital transformation of teaching management; Industry-education integration; Personalized learning support; Teacher resource allocation

## Introduction

In 2017, the State Council of the People's Republic of China elevated "intelligent education" to a national strategic level through the *New Generation Artificial Intelligence Development Plan*. In 2018, the Ministry of Education further promoted the integration of AI and higher education via the *Action Plan for Artificial Intelligence Innovation and Development in Higher Education*. However, China's higher education is confronted with structural dilemmas, such as experience-driven management models and a mismatch between talent cultivation and industrial development needs (Zhou, 2022).

Henan Province, a major province for higher education in China, has 168 general universities and 2.82 million full-time students, yet it suffers from the development predicament of "large scale but weak strength" (Henan Provincial Department of Education, 2024). With only two universities included in the national "Double First-Class" Initiative and the per-student funding standing at 71% of the national average (Henan Provincial Department of Finance, 2023), Henan Province is projected to face an AI talent gap of 800,000 by 2025 (People's Government of Henan Province, 2023). Thus, reshaping teaching management systems with the empowerment of AI is an imperative measure for local universities to address their development challenges.

As a provincial demonstration application-oriented university, AIT is committed to cultivating "on-site engineers", with 62% of its engineering majors integrated into regional industrial chains (Office of the President, AIT, 2024). Since the launch of the "Smart AIT" project in 2023, the university has constructed a teaching big data center and a 5G campus network (Office of Informatization Construction and Management, AIT, 2024). Nevertheless, several development bottlenecks remain: the coverage rate of smart classrooms is merely 38%, only 12% of teachers meet the AI application competency standards, and the integration of teaching content with enterprise actual needs is insufficient (Teaching Research and Evaluation Office, AIT, 2025). Taking AIT as a typical research sample, this study explores the current status and optimization paths of teaching management in the AI era, aiming to fill the research gap of targeted operational strategies for local application-oriented engineering universities.

## Research Objectives

1. Systematically investigate the current status of AIT's teaching management in the AI era, and identify the core weaknesses across the four key dimensions through quantitative analysis.
2. Construct localized and low-cost operational guidelines targeting the identified core weaknesses, aligned with AIT's engineering orientation, industry–education integration, and the "on-site engineer" training goal.

## Research Methodology

This study adopts a sequential explanatory mixed-methods design, which is divided into two stages: quantitative research for current status investigation and qualitative research for guideline construction:

### Stage 1: Quantitative Research (Current Status Investigation)

**Sample Selection:** The research population encompasses all 995 in-service teachers engaged in teaching activities at Anyang Institute of Technology (AIT). Following the sample size determination method proposed by Krejcie and Morgan (1970), a total of 285 participants were selected through stratified proportional random sampling. The sampling process first identified seven core teaching departments—accounting for 50% of the university's 14 teaching departments—and then extracted samples proportionally based on the total number of teachers in each selected department. This rigorous sampling design ensures the representativeness of the sample across key dimensions including disciplines, professional titles, and teaching experience. Collectively, these seven core departments employ 549 teachers, which constitutes 55.4% of AIT's total teaching staff, further enhancing the credibility and generalizability of the research findings. (Krejcie & Morgan, 1970).

**Research Instrument:** A 58-item questionnaire was developed for this study, covering the four core research dimensions. The questionnaire passed the content validity evaluation by three experts (Item Objective Congruence, IOC  $\geq$  0.50) and the pre-test

reliability test (Cronbach's  $\alpha = 0.993$ ). A 5-point Likert scale was adopted for the questionnaire, with the scoring criteria of 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree. The implementation status evaluation criteria are defined as follows: 3.51-4.50 (Good), 2.51-3.50 (Average), 1.51-2.50 (Poor), and 1.00-1.50 (Very Poor).

**Data Collection and Analysis:** A total of 285 questionnaires were distributed and all were recovered, with a valid response rate of 100%. SPSS 26.0 software was used to conduct descriptive statistical analysis (calculating mean and standard deviation) to evaluate the implementation status of teaching management in each dimension.

### Stage 2: Qualitative Research (Guideline Construction)

**Interview Objects:** Six external experts with rich experience in the integration of AI and teaching management were selected via purposive sampling, including 2 professors, 2 associate professors, 1 lecturer, and 1 teaching assistant, covering both engineering and liberal arts disciplines.

**Research Instrument:** A semi-structured interview outline was developed, focusing on the two lowest-scoring indicators in each of the four research dimensions, involving decision-making loop optimization, data security protection, personalized talent training, and deepening industry-education integration.

**Data Analysis:** The interview recordings were transcribed into a 30,000-word text corpus. Content analysis combined with grounded theory was adopted for coding analysis, following a four-level coding framework: core theme → sub-theme → key viewpoint → practical plan. The inter-coder reliability Kappa coefficient reached 0.87, indicating a high level of coding consistency and reliability.

## Research Results

### Quantitative Results of the Current State

The overall mean score of AIT's teaching management in the AI era is 3.54 (SD = 1.00), which is rated "Good". The detailed results of the four dimensions are shown in Table 1. The data indicate that AIT has achieved initial results in the construction of teaching management in the AI era, but there are obvious imbalances in the development of each dimension: AI-empowered personalized learning support performs the best, while digital-intelligent teaching model innovation is the weakest, reflecting the unbalanced development characteristics of the university's intelligent teaching management construction.



**Table 1**

*Mean, SD and Implementation Status and Ranking of Overall and Four Dimensions*

| Dimension                                       | Mean (M)    | Standard Deviation (SD) | Implementation Status | Ranking |
|-------------------------------------------------|-------------|-------------------------|-----------------------|---------|
| AI-empowered personalized learning support      | 3.56        | 1.01                    | Good                  | 1       |
| Intelligent teaching management decision-making | 3.54        | 1.00                    | Good                  | 2       |
| Precise allocation of teacher resources         | 3.54        | 1.00                    | Good                  | 2       |
| Digital-intelligent teaching model innovation   | 3.53        | 0.98                    | Good                  | 4       |
| <b>Total</b>                                    | <b>3.54</b> | <b>1.00</b>             | <b>Good</b>           |         |

**Intelligent Teaching Management Decision-making:** The strengths lie in the construction of a unified data platform (M = 3.58) and the provision of data analysis training for teachers (M = 3.60). The weaknesses are the insufficient optimization of the decision-making closed loop (M = 3.47) and the imperfection of data security protection mechanisms (M = 3.48).

**AI-empowered Personalized Learning Support:** The outstanding advantages include the construction of modular courses (M=3.61), the timely update of personalized learning resources (M=3.61), and the building of virtual simulation teaching platforms (M=3.60), which are highly aligned with the training goal of "on-site engineers". The weaknesses involve insufficient personalized practical training tasks (M=3.52) and low alignment between learning resources and students' career planning (M=3.52), indicating the need for further improvement in practical training design and career orientation guidance.

**Digital-intelligent Teaching Model Innovation:** As the weakest dimension, its core deficiencies are the insufficient connection between teaching and enterprise actual projects (M=3.44) and the uneven inter-departmental sharing of digital teaching resources (M=3.49). The only advantage is the clear formulation of incentive policies for teaching innovation (M=3.59), reflecting the university's policy support for teaching model reform while the practical implementation effect is insufficient.

**Precise Allocation of teacher resources:** The advantages are the deep integration of school-enterprise teachers (M=3.58) and the formulation of incentive mechanisms for interdisciplinary teaching (M=3.58), which are in line with the application-oriented school-running positioning. The weaknesses are the homogenized training mode for double-qualified teachers (M=3.45) and the imperfect access standards for enterprise part-time teachers (M=3.46), which is consistent with the fact that only 12% of teachers meet the AI application competency standards in the university.

#### **Qualitative Results of Operational Guidelines**

Based on expert interviews, targeted operational guidelines for the four dimensions were formulated, adhering to the principles of localization, low cost and engineering adaptability :

**Intelligent Teaching Management Decision-making:** Establish a lightweight closed-loop mechanism of "weekly data collection - monthly analysis - quarterly optimization", with departments as feedback subjects; adopt a "minimum permission + privacy computing" strategy for data security, and form an algorithm verification team for quarterly sampling.

**AI-empowered Personalized Learning Support:** Design hierarchical training tasks based on engineering skill frameworks; track students' operational data via AI tools; expand dual-dimensional data collection (learning behavior + career interest) to optimize resource recommendation algorithms.

**Digital-intelligent Teaching Model Innovation:** Establish an "enterprise project pool + curriculum docking" mechanism to integrate regional industrial projects; build a university-level interdisciplinary collaborative platform to promote cross-departmental resource sharing.

**Precise Allocation of Teaching Resources:** Implement discipline-based hierarchical training for dual-qualified teachers; formulate three-dimensional access standards (professional skills + teaching ability + industry experience) for enterprise teachers, with dynamic evaluation mechanisms.

## Discussion and Conclusion

### Discussion on Teaching Management Status

The overall "Good" performance of AIT's teaching management can be attributed to the "Smart AIT" project, which laid key infrastructure such as a unified teaching big data center and 5G campus network. This aligns with Wang's (2025) finding that infrastructure investment is a prerequisite for the intelligent transformation of local universities. The strong performance of AI-empowered personalized learning ( $M = 3.56$ ) reflects AIT's success in aligning technology with its "on-site engineer" training goal, supporting Gong's (2025) emphasis on practice-oriented personalized resources in industry-education integration.

The low score for digital-intelligent teaching model innovation ( $M = 3.53$ ) highlights a critical gap: the lack of a "curriculum-project-talent" coupling mechanism in school-enterprise cooperation ( $M = 3.44$  for enterprise project connection). This echoes Wang and Wang's (2025) observation of superficial industry-education integration in application-oriented universities. The homogenized training for dual-qualified teachers ( $M = 3.45$ ) contradicts Jiang's (2025) conclusion that disciplinary adaptation is key to training effectiveness, as it ignores the distinct AI tool needs of engineering versus non-engineering fields. Additionally, the incomplete decision-making closed-loop ( $M = 3.47$ ) stems from a lack of systematic feedback, leading to disconnection between policy and practice—an issue also noted by Yang (2025) in her study of AI-driven management.

### Discussion on Operational Guidelines

The proposed guidelines demonstrate strong local adaptability by addressing AIT's resource constraints. For example, the "weekly collection - monthly analysis - quarterly optimization" closed-loop mechanism leverages existing data platforms, avoiding costly technical overhauls—consistent with He's (2024) recommendation that local universities prioritize low-cost, practical solutions. Theoretically, the guidelines draw robust support:

The "enterprise project pool" mechanism is grounded in Gong's (2025) industry-education integration theory, which emphasizes real production projects as the core of engineering education.

The data security strategy of "minimum permission + privacy computing" aligns with digital ethics risk prevention theory (Lin, 2024), balancing data utilization with privacy protection.

The discipline-based teacher training model responds to Jiang's (2025) call for disciplinary adaptation in AI training, addressing the homogenization gap identified in the quantitative results.

Practically, the guidelines address common dilemmas faced by local application-oriented universities (insufficient funds, weak technical strength, shallow industry-education integration) and offer lightweight, actionable solutions. For instance, the three-dimensional access standards for enterprise teachers address the need for quality control while minimizing administrative burden, and the interdisciplinary collaborative platform directly tackles resource silos.

### Conclusion

Based on empirical findings, three main conclusions are drawn:

1. AIT's teaching management in the AI era is overall "Good" ( $M=3.54$ ), with AI-empowered personalized learning as the strongest dimension and digital-intelligent teaching model innovation as the weakest.
2. Core weaknesses include superficial industry-education integration, homogenized teacher training, and incomplete decision-making feedback loops, reflecting common challenges of local application-oriented engineering universities.
3. The proposed "localized, low-cost, and engineering-adapted" operational guidelines provide targeted solutions for the four dimensions, effectively promoting intelligent transformation in similar institutions.

### Suggestions

#### Practical Application Suggestions

**Improve intelligent decision-making systems:** Establish a hierarchical feedback mechanism; strengthen data classification and federated learning application; organize regular algorithm verification.

**Deepen personalized learning support:** Build a three-tier engineering training skill map; achieve 80% personalized training coverage for engineering majors by 2026; expand dual-dimensional data collection to optimize resource recommendation.

**Promote teaching model innovation:** Establish a regional school-enterprise cooperation alliance and enterprise project pool; require each professional course to embed at least one enterprise project; build an interdisciplinary collaborative platform.

**Optimize teacher resource allocation:** Link hierarchical training results with promotion; formulate enterprise teacher access standards and compile teaching guides; establish dynamic evaluation systems based on student feedback and peer review.



**Strengthen guarantee measures:** Issue specialized management policies; increase investment in smart classrooms (coverage  $\geq 60\%$  in two years); set up a special fund ( $\geq 5\%$  of annual teaching funds); form a 10-person digital support team.

### Suggestions for Future Research

1. Expand research perspectives to include students, administrators, and enterprise mentors, constructing a multi-actor collaborative governance system..
2. Conduct a two-year pilot study in 1-2 departments to verify and optimize the guidelines.
3. Conduct discipline-specific studies to explore characteristic paths for intelligent teaching management across engineering and non-engineering majors.
4. Conduct regional comparative studies of three types of application-oriented universities in Henan to provide policy references for provincial education authorities.

### References

- Gong, C. Y. (2025). Practice of teaching management in university-industry integration under the new era. *Journal of Harbin Vocational & Technical College*, (1), 41-43. <https://doi.org/10.16145/j.cnki.cn23-1531/z.2025.01.012>.
- He, Y. L. (2024). Exploring optimized pathways for the informatization of university teaching management. *China Computer & Communication (Theory Edition)*, (20), 141-143.
- Henan Provincial People's Government. (2023). *Henan Province AI Talent Development Report 2023*. Zhengzhou: Henan People's Publishing House.
- Jiang, D. C. (2024). Application of artificial intelligence in the informatization construction of university teaching management. *China New Telecommunications*, (2), 71-73.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607-610. <https://doi.org/10.1177/001316447003000308>.
- Lin, Y. (2024). Practical paths of university teaching management reform under the background of artificial intelligence. *Journal of Higher Education Management*, (3), 51-54.
- Li, P. F. (2024). Research on the reform of university teaching management in the artificial intelligence era. *Journal of Xinjiang Normal University (Philosophy and Social Sciences Edition)*, (06), 135-137.
- Ministry of Education of the People's Republic of China. (2018). *Action plan for artificial intelligence innovation and development in higher education*. People's Education Press.
- Office of Informatization Construction and Management, Anyang Institute of Technology. (2024). *Annual report on the construction of "Smart AIT" project (2024)*. Anyang Institute of Technology Press.
- Office of the President, Anyang Institute of Technology. (2024). *School-running white paper of Anyang Institute of Technology (2024)*. Anyang Institute of Technology Press.
- Owoc, M., Sawicka, M., & Weichbroth, P. (2021). Artificial intelligence in education: Challenges and opportunities for teaching and learning. *Journal of Educational Technology & Society*, 24(1), 1-24.
- People's Government of Henan Province. (2023). *Construction plan of "Skilled Henan" (2023-2025)*. Henan People's Publishing House.

- Reich, J., & Ruipérez-Valiente, J. A. (2021). Predicting student success with learning analytics: A systematic review and meta-analysis. *Journal of Educational Psychology*, 113(1), 1-21. <https://doi.org/10.1037/edu0000479>.
- Salas-Pilco, M. A., & Yang, J. (2022). Artificial intelligence applications in higher education in Latin America: A systematic review. *Computers & Education*, 181, 104264. <https://doi.org/10.1016/j.compedu.2022.104264>.
- Sanabria-Navarro, M., et al. (2023). The impact of artificial intelligence on university teaching management: A bibliometric analysis. *Scientometrics*, 128(1), 93-103. <https://doi.org/10.1007/s11192-022-04568-9>.
- State Council of the People's Republic of China. (2017). *New generation artificial intelligence development plan*. People's Publishing House.
- Teaching Research and Evaluation Office, Anyang Institute of Technology. (2025). *Annual report on teaching quality of Anyang Institute of Technology (2025)*. Anyang Institute of Technology Press.
- Vinichenko, O., Melnichuk, O., & Karácsony, J. (2020). AI in higher education: Teacher motivation and incentives. *Computers & Education*, 155, 103968. <https://doi.org/10.1016/j.compedu.2020.103968>
- Wang, X., & Wang, G. Z. (2025). Research on the current status and influencing factors of teaching management quality in application-oriented undergraduate institutions. *Proceedings of the 2025 Higher Education Development Forum*, 90-91.
- Wang, X. (2025). The opportunity and challenge of artificial intelligence integration in university teaching management. *Journal of Higher Education Research*, (3), 28-30.
- Wang, Y., & Wang, H. (2023). The reshaping of higher education by generative artificial intelligence. *Journal of Tsinghua University (Education Science)*, (4), 27-29.
- Wei, H. X. (2025). Research on the trinity teaching management model of higher vocational colleges in the AI era. *Vocational Education Research*, (2), 77-79.
- Yang, H. (2025). In-depth integration and practical exploration of artificial intelligence in university teaching and management. *Journal of Chinese Higher Education*, (4), 64-66.
- Zhou, H. T. (2022). Deep-seated dilemmas and breakthroughs in university teaching reform in the popularization stage. *Higher Education Research*, (3), 18-20.

## The Current Situation of Bel Canto in Chinese Art Songs at Xi'an Conservatory of Music

Ma Jing<sup>1</sup> Natthawat Khositditsayan<sup>2</sup> & Thanapon Teerachai<sup>3</sup>

<sup>1</sup>Ph.D. Student in Music Education, Faculty of Education, Buriram Rajabhat University, Thailand, Email: 660427093011@bru.ac.th

<sup>2</sup>Major Advisor (Assistant Professor Dr.), Graduate School, Buriram Rajabhat University, Thailand, Email: natthawat@bru.ac.th

<sup>3</sup>Co-advisor (Dr.), Graduate School, Buriram Rajabhat University, Thailand, Email: thanapon@bru.ac.th

### Abstract

This study examines undergraduate vocal music education at Xi'an Conservatory of Music, drawing upon teaching practices within the Conservatory's Vocal Music Department. It comprehensively reviews the current state of undergraduate vocal music curricula, teaching methodologies, assessment frameworks, and textbook utilisation. Employing a mixed-methods research design, this study systematically analysed the disconnect between existing teaching practices and contemporary vocal performance demands through participant observation, student questionnaires, and interviews with vocal teachers. Findings reveal: the selection and suitability of repertoire for teaching Chinese art songs using bel canto technique within the undergraduate vocal programme are inadequate; some faculty members favour foreign opera repertoire while neglecting the unique value of Chinese art songs, resulting in students' inadequate comprehension and interpretative skills regarding Chinese works; course imbalance exists, such as insufficient supporting language and performance courses; certain instructors evaluate solely based on technical difficulty, disregarding students' ability to interpret cultural connotations and emotional expression within works, leading to one-sided assessments that fail to comprehensively reflect students' vocal proficiency. Current vocal pedagogy suffers from insufficient teacher engagement, outdated and limited textbook content, and an overemphasis on foreign repertoire at the expense of mastering Chinese art songs. This fails to meet the demands for cultivating locally relevant vocal talent. This paper aims to provide theoretical foundations and practical guidance for optimising undergraduate vocal teaching systems through status analysis, aligning them with the goal of cultivating 'advanced, versatile musical professionals' to meet the practical requirements of vocal teaching positions.

**Keywords:** Current Situation; Bel Canto; Chinese Art Songs; Xi'an Conservatory of Music;



## Introduction

In the late 1950s, the National Vocal Teaching Conference for the first time clearly pointed out the training direction of "bel canto singing": it is necessary to inherit and develop traditional Chinese singing, while also nationalizing European bel canto singing. In the early 1960s, guided by the policy of "using foreign art for Chinese purposes and ancient art for modern use", many domestic art groups were formed and began to go abroad for artistic exchanges. They used bel canto singing Chinese art songs, allowing more foreign music groups to understand Chinese music and promoting exchanges between Chinese and foreign music cultures. In addition to artistic exchanges, some vocalists and singers also go abroad for further studies and learn advanced international vocal techniques. (Chen, 2019, pp1-24)

With the continuous development and prosperity of education in our country, singing and vocal teaching in art education have also been deeply developed, and have achieved considerable theoretical achievements, laying a good foundation for the cultivation of artistic talents. Vocal teaching mainly focuses on bel canto singing, while also taking into account some singing works with ethnic characteristics and conducting corresponding professional singing performances. Therefore, the integration of bel canto in singing and vocal teaching is of great significance. It not only helps students improve their vocal performance level, but also standardizes their vocal performance, enabling them to better handle different types of works. Therefore, singing and vocal teaching should actively change the traditional teaching mode. Scientifically integrating bel canto into singing and vocal teaching, effectively transforming one's traditional singing and vocal teaching concepts, and continuously improving the quality of singing and vocal teaching. Deeply explore the integration of bel canto singing techniques in singing and vocal education from aspects such as breath, resonance, enunciation, and emotion, achieve scientific integration, enable students to master correct vocal skills and artistic expression, and lay a solid foundation for the long-term development of art education in China. (Xiao, 2020, pp37-38).

## Research Objective

To investigate and analyze the current situation of bel canto in Chinese art songs at Xi'an Conservatory of Music.

## Research Methodology

### Key informants

The subjects of this study comprised two groups from Xi'an Conservatory of Music: five vocal teachers and third-year undergraduate students specialising in vocal performance. All participants were directly involved in either teaching or learning Italian bel canto-style Chinese art songs within the undergraduate vocal curriculum.

### Vocal Teachers Group

This group comprised vocal teachers primarily responsible for guiding undergraduates in performing Chinese art songs using the bel canto technique. These instructors possessed professional vocal performance and teaching experience, were well-versed in the bel canto teaching methodology, and demonstrated proficiency in the technical requirements and linguistic conventions of teaching Chinese art song vocal performance.

Third-year undergraduate students majoring in music education

To facilitate the smooth conduct of this research, we first selected third-year undergraduate students majoring in vocal music at the School of Music Education, Xi'an Conservatory of Music, as our research subjects. On the one hand, these students need to lay a solid foundation for their vocal music studies; on the other hand, selecting these students is of great significance for the systematization, standardization, and scientification of vocal music teaching.

### **Research Instruments**

Researchers employed participatory observation, utilising three research instruments: participatory observation, questionnaires for undergraduate vocal education students, and semi-structured interviews with vocal teachers. Participatory observation centred on systematic observation and documentation by researchers observing other teachers' lessons. It focused on teaching issues concerning the application of bel canto techniques when instructing early 20th-century Chinese art songs, encompassing dimensions such as the use of bel canto techniques, vocal production standards, stylistic requirements, and performance preparation. The student questionnaire emphasised understanding learners' interests and difficulties in studying Chinese art songs, while the interviews aimed to explore teachers' pedagogical practices and challenges when employing bel canto techniques to teach early 20th-century Chinese art songs.

### **Data Collection**

Data from participant observation were gathered by the researcher personally observing other teachers' lessons, recording relevant issues concerning both teachers and pupils. Questionnaire data were collected during regular class periods to ensure consistency in the learning context. All participating pupils completed the questionnaires voluntarily. Teacher interviews were conducted as individual face-to-face discussions, recorded with participants' consent to facilitate accurate transcription and analysis.

### **Data Analysis**

Based on event records collected through participant observation and classroom documentation, qualitative analysis was employed to scrutinise the nuances of teacher-student interaction, classroom atmosphere, and the timely feedback teaching strategy applied during practical singing sessions. This approach supplemented and quantified the contextual details absent from the quantitative data. Descriptive statistical methods were employed to analyse student questionnaire data, identifying common patterns within students' learning experiences. Teacher interview materials were transcribed and subjected to thematic analysis, synthesising recurring core issues pertinent to teaching vocal techniques for Chinese art songs in the bel canto style. The integration of quantitative and qualitative data provides a foundation for comprehensively understanding current teaching practices.

### **Results**

This section takes the vocal music courses of the School of Music Education, Xi'an Conservatory of Music as the research subject. Through participatory observation, student questionnaires and interviews with vocal music educators, it explores themes such as teaching methods, teaching contents and teaching priorities, aiming to comprehensively assess the current teaching situation of interpreting Chinese art songs with bel canto techniques.

### Participant Observation Method

This section presents the specific issues observed by researchers during classroom observations. Through systematic analysis, the problems are categorised and summarised from multiple dimensions, including teachers, students, teaching methods, teaching content, repertoire selection, teaching priorities, classroom atmosphere and student performance. The core issues identified are as follows.

The participant observation of undergraduate bel canto courses reveals prominent problems in multiple dimensions. Teachers overemphasize vocal techniques and foreign operas while neglecting Chinese art songs and artistic interpretation. Teaching methods are relatively monotonous, lacking heuristic guidance and systematic training. The curriculum content is irrational, with insufficient supporting courses and outdated teaching materials. Repertoire selection is heavily biased toward foreign works, with inappropriate and insufficient Chinese art songs. The classroom atmosphere is rigid with inadequate interaction, and students show low initiative, poor comprehension of Chinese works, and insufficient expressive ability. These problems jointly restrict the cultivation of students' comprehensive vocal competence and local artistic accomplishment, which is not conducive to training advanced and versatile musical professionals. Therefore, it is necessary to optimize the teaching system, teaching content, repertoire structure and evaluation mode.

**Table 1**

*Problems Identified from Participant Observation of Undergraduate Bel canto Courses*

| Observation Dimension | Specific Problems                                                                                                                                                                                                                                                                                                                |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Teachers              | Overemphasis on bel canto technical training while neglecting cultural connotation and emotional interpretation of works; preference for foreign operas over Chinese art songs; insufficient targeted guidance for individual students; lack of real-time feedback on students' performance                                      |
| Students              | Weak foundation in Italian/German pronunciation (for foreign works) and Mandarin articulation (for Chinese works); superficial understanding of work backgrounds and emotional connotations; passive learning attitude, low participation in classroom interaction; inadequate stage performance skills and emotional expression |
| Teaching Methods      | Dominated by "demonstration-imitation" model, lacking heuristic and interactive teaching; insufficient integration of stage practice into classroom teaching; no personalised training plans for students with different levels                                                                                                  |
| Teaching Content      | Overfocus on vocal techniques (breath, resonance, range) while ignoring supporting courses (music theory, language phonetics, performance aesthetics); outdated content that is disconnected from contemporary bel canto performance demands                                                                                     |
| Repertoire Selection  | Over-reliance on classic foreign operas/arias, insufficient quantity of Chinese art songs; mismatched difficulty (either too advanced or too simple) for students' current level; poor adaptability of selected Chinese works to bel canto singing style                                                                         |



| Observation Dimension | Specific Problems                                                                                                                                                                                                   |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Teaching Priorities   | Overemphasis on technical accuracy rather than artistic expression and cultural interpretation; neglect of students' aesthetic cultivation and stage presence training                                              |
| Classroom Atmosphere  | Rigid and serious, lacking positive interaction and encouraging feedback; insufficient communication between teachers and students; students feel pressured to express themselves freely                            |
| Student Performance   | Inattentive in class, low participation in group activities; mechanical imitation of vocal techniques without understanding work connotations; weak emotional transmission and stage confidence during performances |

### Student Questionnaire Survey Method

This survey targeted 20 junior students majoring in Vocal Music at the School of Music Education, Xi'an Conservatory of Music. A questionnaire employing a five-point Likert scale (Very Satisfied, Satisfied, Neutral, Dissatisfied, Very Dissatisfied) was administered. Data were analyzed using descriptive statistical methods, with results presented as percentages. The sum of percentages across all dimensions equals 100%, ensuring the data accurately reflect students' actual learning experiences and existing issues within the curriculum.

**Table 2**

*Summary of Student Questionnaire Results for Vocal Music Courses (Percentages)*

| Survey Dimension                            | Very satisfied (%) | Satisfied (%) | Average (%) | Dissatisfied (%) | Very dissatisfied (%) |
|---------------------------------------------|--------------------|---------------|-------------|------------------|-----------------------|
| Acceptance of the Bel Canto Teaching Method | 5                  | 20            | 40          | 25               | 10                    |
| Acceptance of Teaching Content              | 5                  | 15            | 40          | 30               | 10                    |
| Difficulty of Performing Chinese Art Songs  | 0                  | 10            | 45          | 35               | 10                    |
| Practical Singing Difficulty                | 5                  | 15            | 35          | 35               | 10                    |
| Applied to Teaching                         | 5                  | 20            | 40          | 25               | 10                    |

Student questionnaire results show overall dissatisfaction with the current undergraduate bel canto curriculum. Most students hold neutral or negative attitudes toward teaching methods, content, repertoire arrangement, and practical singing difficulty. In particular, students perceive extremely high challenges in Chinese art song performance, with nearly half expressing dissatisfaction.

These findings confirm that the curriculum places excessive emphasis on vocal techniques and foreign works, while lacking effective support for Chinese art song teaching. Such problems seriously affect students' learning experience and comprehensive vocal development, highlighting the urgency to optimize teaching methods, adjust repertoire structure, and improve the overall teaching system.

#### Semi-structured Interview Method for Teachers

This interview consisted of five vocal music teachers from the School of Music Education at Xi'an Conservatory of Music. These teachers possess extensive professional experience in vocal performance and pedagogy, and are thoroughly familiar with the technical requirements for teaching musical works of different genres, themes, and types. To delve into the current state of vocal music teaching at Xi'an Conservatory of Music, the researchers designed the following semi-structured interview questions. Subsequently, a thematic analysis was conducted based on the interview results, and a frequency summary table was generated (frequency indicates the number of teachers among the five who mentioned the topic).

Through transcription and thematic analysis of interviews with five teachers, five core themes were identified. Typical insights and their frequency of mention for each theme were clearly defined, with frequency representing the number of teachers among the five who mentioned the viewpoint. The findings are consistent with the actual teaching problems in the university's vocal music curriculum.

**Table 2**

*Summary of Interview Topics and Frequency with Undergraduate Vocal Performance Teachers at Xi'an Conservatory of Music*

| Theme Category                                   | Typical Insight                                                                                                                                                                                                                          | Frequency<br>(among 5<br>mentors) |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| Teaching Methods                                 | Vocal technique employing bel canto singing                                                                                                                                                                                              | 5                                 |
| Repertoire<br>Selection                          | The selected works mainly combine Chinese and foreign pieces, with a focus on representative works of Chinese art songs from the early 20th century.                                                                                     | 5                                 |
| Student Learning<br>Difficulties                 | Students lack the ability to analyze Chinese art songs on their own, emphasizing singing style while ignoring the difficulty of pronunciation, resulting in inadequate interpretation of the works.                                      | 5                                 |
| Stage Performance<br>and Emotional<br>Expression | Students often fail to grasp the emotional nuances of Chinese art songs effectively during their performances; therefore, training in Chinese art songs should be emphasized.                                                            | 4                                 |
| Teaching<br>Evaluation<br>Criteria               | Current teaching often emphasizes bel canto technique training while neglecting the integration of cultural connotations from Chinese works, resulting in a significant lack of artistic expression and national flavor in performances. | 4                                 |
| Course<br>optimization                           | Advocate for personalized training, stage courses, and linguistic strengthening                                                                                                                                                          | 5                                 |

The interviews with five undergraduate vocal performance teachers at Xi'an Conservatory of Music revealed consistent insights across key thematic areas. All five

mentors (100%) identified that teaching methods are centered on bel canto vocal technique, and that repertoire selection combines Chinese and foreign pieces, with a focus on representative early 20th-century Chinese art songs. They also unanimously noted that students struggle to independently analyze Chinese art songs, often prioritizing singing style over pronunciation challenges, which leads to inadequate work interpretation. Additionally, all teachers advocated for course optimization through personalized training, stage courses, and linguistic strengthening. Four out of five teachers (80%) highlighted that students frequently fail to grasp the emotional nuances of Chinese art songs during performances, emphasizing the need for targeted training in this area. The same proportion of teachers also critiqued the current teaching evaluation criteria, stating that an overemphasis on bel canto technique training neglects the integration of cultural connotations from Chinese works, resulting in performances lacking artistic expression and national flavor. These findings collectively indicate a need to balance technical training with cultural and linguistic support to enhance students' interpretation and performance of Chinese art songs.

## Conclusion and Discussion

### Discussion

The present study, using participant observation, student questionnaire, and teacher interview, consistently reveals structural contradictions and practical dilemmas in undergraduate bel canto curriculum at Xi'an Conservatory of Music. The convergence of data from multiple perspectives confirms that the current teaching model is still dominated by Western bel canto techniques and foreign repertoire, while the cultivation of Chinese art song performance, linguistic expression, emotional interpretation, and cultural connotation transmission is relatively insufficient.

The problems identified—monotonous teaching methods, unreasonable curriculum structure, unbalanced repertoire selection, rigid classroom atmosphere, and overemphasis on skills in evaluation—are not isolated phenomena but reflect a common challenge in the localization of bel canto education. Students' high perceived difficulty and low satisfaction with Chinese art songs suggest that simply adding Chinese works cannot achieve effective integration; instead, systematic support in language training, cultural interpretation, and stylistic guidance is required. The unanimous views from teachers further illustrate that technical training and cultural education must be balanced.

These results highlight the necessity and urgency of promoting the localized development of bel canto education. Optimizing teaching methods, enriching curriculum content, adjusting the proportion of Chinese and foreign repertoire, and improving evaluation mechanisms will help enhance students' comprehensive artistic literacy and national cultural awareness. Such reforms are conducive to cultivating versatile music talents who can skillfully apply bel canto techniques to express the cultural charm and emotional depth of Chinese art songs, thereby better realizing the educational value of vocal music.

### Conclusion

Based on the three research methods—participant observation, student questionnaire, and teacher interviews—the study reaches the following conclusions: prominent systemic problems exist in the undergraduate bel canto curriculum at Xi'an Conservatory of Music. Classroom observations show that teaching overemphasizes vocal techniques and foreign operas, with monotonous teaching methods, outdated content, and a rigid classroom atmosphere, resulting in insufficient student initiative and artistic expression. The student questionnaire reveals low overall satisfaction, with most students holding neutral or negative attitudes toward teaching methods, content, repertoire arrangement, and singing difficulty, especially regarding the high challenges and inadequate support in learning Chinese art



songs. Teacher interviews further confirm that although the curriculum includes both Chinese and foreign works, students generally lack the ability to independently analyze, handle language, and interpret emotions in Chinese art songs, and the current evaluation system prioritizes technique over cultural connotation and national flavor. These problems jointly restrict the development of students' comprehensive vocal competence and local artistic accomplishment. Therefore, it is urgent to optimize the teaching system, adjust the repertoire structure, and balance technical training with cultural and linguistic instruction to cultivate high-quality, versatile musical professionals.

## Suggestions

### Research Findings Suggest

Based on the findings of this study, several suggestions are proposed to improve vocal technique instruction for undergraduate vocal music majors at Xi'an Conservatory of Music. In teaching practice, greater emphasis should be placed on combining bel canto singing with Chinese vocal techniques and pronunciation. Clearly defining the key points and difficulties in pronunciation during technical training will help students achieve more stable vocal production when singing Chinese art songs. (E, D. 2022, pp130-132).

The close integration of technical guidance and repertoire instruction is equally significant. By more systematically incorporating early 20th-century Chinese art songs into the technical training system, students can apply the technical principles of bel canto singing to the performance of Chinese art songs, thus enabling the singing of Chinese art songs to reach an international level. (Zheng, 2016, pp54)

Furthermore, the teaching manual helps students better understand the vocal techniques of bel canto singing and the characteristics of early 20th-century Chinese art songs, enabling them to apply these skills to their own performances. Teachers can continuously reflect on student feedback to optimize teaching strategies and improve teaching effectiveness. The teaching manual's guidance is two-way: it guides learning and also informs music education students' teaching after graduation. (Yu, J., & Yu, L. 2024, pp106-109).

### Future Research Directions

Chinese art songs are a perfect blend of poetry and music, serving as an excellent vehicle for learning traditional Chinese culture and enhancing humanistic qualities. Studying Chinese art songs cultivates students' musical expression, language processing skills, and artistic imagination, making it an essential course for becoming a well-rounded musician. Introducing Chinese art songs allows vocal instruction to transcend technical training and reach deeper cultural and aesthetic dimensions. Introducing art songs allows vocal instruction to transcend technical training and reach deeper cultural and aesthetic dimensions. Even its importance, future research will focus on teaching manuals for Chinese art songs using the bel canto singing method. This will provide both systematic instruction and support for students. (Sun, 2024, pp160-162).

## Acknowledgement

The successful completion of this study would not have been possible without the meticulous guidance of my mentors and the strong support from various circles. First and foremost, I would like to extend my highest respect to Professor Natthawat Natthawat Khositditsayan (my Major Advisor) and Professor Thanapon Teerachat (my Co-Advisor) at Buriram Rajabhat University, Thailand. I am deeply grateful for their earnest instructions during the topic selection and conceptualization phases, as well as for helping me clarify my research direction, optimize the thesis structure, and improve work standards through their rigorous scholarly spirit.

Secondly, I would like to express my thanks to the teachers and students of the School of Music Education at the Xi'an Conservatory of Music. The data collection for this study benefited greatly from the active cooperation of everyone in the questionnaire surveys and interviews. The professional perspectives and valuable opinions of every participant served as the cornerstone for the precise execution of this research, and I will forever keep this in mind.

Finally, I am grateful to my family and friends for their comprehensive support and spiritual encouragement throughout the research period, which was a vital driving force that enabled me to successfully complete this thesis.

## References

- Chen, M. (2019, August,1-24). A conjecture of singing Chinese repertoire with the Italian bel canto technique. *Music Research*.
- E, D. (2022). Study on breathing skills and training of bel canto singing. *Drama House*, 2022(21), 130–132. (Original work published 1007-0125(2022)21-0130- 03)
- Sun, W. (2024, March,160-162). Innovation of teaching methods of music education in colleges and universities in China under the background of diversification. *Higher Education Forum*.
- Xiao, W. (2020). On the development of bel canto in China. *Art of Singing*, 2020(15), 37–38. (Original work published 1007-0125(2020)15-0037-02)
- Yu, J., & Yu, L. (2024, July,106-109). Change and persistence: Reflections on the talent training mode of contemporary higher music education in China. *Education Modernization*.
- Zheng, T. T. (2016,). *A study on singing Chinese art songs with Bel Canto technique*. Huanghe Zhi Sheng Press,54

## Investigating the context of learning and singing Mozart Tenor Concert Arias among undergraduates at the Xi'an Conservatory of Music, China.

Ma Linrui <sup>1</sup> Panasin Sriviset <sup>2</sup> and Akachai Teerapuksiri <sup>3</sup>

<sup>1</sup> *Ph.D Student in Music Education, Faculty of Education, Buriram Rajabhat  
University, Thailand,*

*E-mail: 660427093003@bru.ac.th*

<sup>2</sup> *Advisor, Music Education Program, Buriram Rajabhat University, Thailand,*

*E-mail: panansin.sv@bru.ac.th*

<sup>3</sup> *Co-Advisor, Music Education Program, Buriram Rajabhat University, Thailand,*

*E-mail: akachai.tp@bru.ac.*

*asterisk denoting the corresponding author*

### Abstract

This study aimed to investigate the learning and singing contexts of Mozart's Tenor Concert Arias among undergraduate students at the Xi'an Conservatory of Music, China. A qualitative research approach was employed. Data were collected through semi-structured interviews with seven university vocal teachers, three professional stage performers, and five undergraduate vocal students from different academic levels and institutions in China. The interview data were analyzed thematically, focusing on teaching practices, learning experiences, technical requirements, stylistic interpretation, and learning resources. The findings indicate that Mozart's Tenor Concert Arias have substantial pedagogical and artistic value in undergraduate vocal training, particularly for developing breath control, timbre management, and linguistic accuracy. However, due to their technical and stylistic complexity, these arias are generally better suited to students at the upper undergraduate level. The study also identifies limitations in learning resources, including a lack of annotated scores and insufficient reference audio materials, which may hinder effective learning. Based on these findings, the study suggests developing a systematic instructional guide to support the teaching and learning of Mozart's Tenor Concert Arias in undergraduate vocal education.

**Keywords:** Mozart concert arias, Tenor singing techniques, Development Manual

### Introduction

Wolfgang Amadeus Mozart (1756-1791) was a famous Austrian composer in the Classical period. In his short 35 years, he wrote a significant number of musical works of various types, spanning almost all musical genres. Vocal works, including operas, art songs, religious songs, etc., are all important areas of his creation. His 54 concert arias also occupy a place among the many works he left behind, with their rich creative qualities, gorgeous melodic lines, and distinctive style (Zhang Mengxuan, 2021: p. 5).

Concert arias, a unique type of Mozart's vocal music, differ from opera arias in that they are not limited to specific dramatic situations or storylines; they stand as independent musical works. These works often feature complete structures, rich emotional depth, and extended lengths, providing singers with a broad performance space and a platform to showcase their skills. Mozart's concert arias, whether in the beauty of melody, the richness



of harmony, or the depth of emotion, demonstrate his extraordinary talent as a composer and his deep understanding of the human voice's potential.

Compared with opera arias, concert arias are the same in singing techniques and emotions, and both have the function of expressing the inner feelings of characters. The difference between them is that opera arias are mainly used to express the characters' emotions, whereas drama arias cannot fully describe the drama's plot. It must be in a complete opera, with the help of stage presentation methods such as stage scenery, props, and costumes, together with singing forms such as duets, choruses, and recitatives, through the interpretation of the characters in the play, to jointly outline the plot of the drama and promote the development of the plot. Their relationship is complementary and indispensable. Concert arias have relatively independent and complete plots, and most of them are relatively longer than opera arias. The performance form is mainly concentrated, without the need for more stage presentation methods. Therefore, in concerts, concert arias are relatively better than opera arias in interpreting the complete plot of the drama. In performance, they can be free of the constraints of the stage and fully showcase the artistic charm of arias in concert. (Xie zhiyong, 2014:p.2)

Mozart's musical style is unique and distinctive, and his concert arias embody the refinement and elegance of classical music. However, in the current bel canto education of professional music colleges in China, due to the relatively few teaching materials on Mozart's concert arias on the market, there is a relative lack of teaching resources, which leads to the fact that most research and teaching resources in the curriculum are concentrated on opera works, while concert arias are relatively neglected. This phenomenon has limited the development of teaching and restricted students' opportunities to fully and deeply understand Mozart's vocal art.

This paper aims to explore a teaching manual for undergraduate music students at Xi'an Conservatory of Music to learn Mozart Tenor Concert Arias. It is hoped that by conducting an in-depth analysis of Mozart's tenor concert arias, further studying and mastering its musical style and formulating a teaching guide, undergraduate students majoring in music at Xi'an Conservatory of Music will realize the importance of learning to sing Mozart Tenor Concert Arias, effectively improve their ability to sing Mozart Tenor Concert Arias, and gradually apply this teaching guide to future tenor vocal teaching, thereby establishing a model suitable for the teaching and training of Mozart Tenor Concert Arias, thereby providing more paths and methods for future vocal teaching and laying a more solid foundation for students. Through this instruction manual, students can learn singing skills and methods without a teacher's guidance and improve their practical skills. At the same time, the instruction manual is suitable not only for tenors but also for other voices (soprano, alto, bass) in developing technical skills such as breath control, body language, and work processing.

## **Research Objective**

To investigate the context of learning and singing of Mozart Tenor Concert Arias among undergraduates of Xi'an Conservatory of Music, China.

## **Research Methodology**

This paper adopts a qualitative research approach and is structured around a Literature Review, Expert Interviews, Data Analysis, and other methods.

## **Samples**

Given that performing Mozart's concert arias requires a certain level of vocal foundation and ability, and based on the aforementioned talent-training program, this study selected 5

male tenors from the Bel Canto major in the Thal Department at Xi'an Conservatory of Music as the sample group. The key informants in this study were 7 professional teachers who teach vocal music at Chinese universities and 3 active singers.

## **Research Instruments**

### **Collection and Survey of Related Texts**

To provide better theoretical support and gather information on Mozart's tenor concert arias, researchers collected and organized relevant materials, including scores, recent academic journal articles, and audio and video recordings. This helps researchers understand the existing research outcomes.

### **Interview Guide**

Interview forms include structured interviews and unstructured interviews.

In the following order, the researchers will create the questionnaire:

1. Design the questions and contents of the questionnaire scientifically and reasonably based on the existing literature.
2. Submit the contents of the questionnaire to the tutor for review, and then start the next step after the tutor agrees. If the tutor provides good suggestions and directions, make further revisions and then finalize the questionnaire's contents.
3. Select 10 key informants (7 college teachers and 3 singers) to interview using the finalized questionnaire. The interview content includes, but is not limited to, the questionnaire. It is expected that these ten key informants can modify the inappropriate content in the questionnaire and make better suggestions.
4. According to the expert interview records, revise the opinions and suggestions put forward by the experts in the questionnaire again to form the final interview report.

The following is the information of these 15 key informants, 7 of whom are engaged in university vocal education, 3 are stage singers, and 5 students

1. Cai Junjun, lecturer of the Vocal Department of Xi'an Conservatory of Music
2. Ma Jun, lecturer of the School of Music of Shaanxi Normal University
3. Wang Yani, lecturer of Sichuan Conservatory of Music
4. Ye Cheng, lecturer of Sichuan Conservatory of Music
5. Xiao Qianwen, lecturer of the School of Music Education of Xi'an Conservatory of Music
6. Ren Yaokai, School of Music and Dance of Jingdezhen University of Jiangsu Province
7. Jiao Yang, lecturer of the Vocal Department of Xi'an Conservatory of Music
8. Xu Xuewen, tenor soloist of Shaanxi Provincial Song and Dance Theater
9. Cai Jing, soprano soloist of Jiangsu Provincial Song and Dance Theater
10. Xin Wenpeng, baritone soloist of Xi'an Song and Dance Theater
11. Zhang Yifan: Lyric tenor, four years of vocal training, currently consolidating his skills.
12. Wei Peng: Light lyric tenor, five years of vocal training, currently preparing for his graduation recital.
13. Chen Siqi: Dramatic lyric tenor, seven years of vocal training, focusing on Chinese and Italian classical works during his undergraduate studies.
14. Peng Yutian: Lyric tenor, eight years of vocal training, with extensive experience singing art songs.
15. Niu Mingyi: Light lyric tenor, 9 years of vocal training, aiming to apply for opera singing, and currently preparing a repertoire for job applications.

### **Data Collection**

Researchers designed data collection procedures in this study. The order of these steps is as follows:

#### **Preliminary preparations**

1. A letter of certification issued by the Graduate School of Buriram Rajabhat University.
2. Identify the teachers and singers who need to be interviewed online and offline, and understand the personal hobbies and customs of the interviewees in advance to conduct the interviews better
3. Contact the research group of the research topic, prepare a self-introduction and research purpose, and establish a long-term good relationship with the students
4. Prepare various equipment required for the interview, such as mobile phones, cameras, and things needed for text recording.

#### **Data Collection Procedure**

1. Collect relevant books, articles, journals, and textbooks through online and offline resources, including libraries and websites, analyze and study the content related to Mozart's tenor concert arias in the existing materials, and use them as the theoretical basis for the research.
2. Select research subjects according to the research objectives, interview 7 vocal teachers 3 professional singers, and 5 students from universities at different levels, and conduct special research on the current teaching status of undergraduate higher music colleges in China, the problems and techniques in vocal singing, and Mozart's tenor concert arias. This information will serve as an important basis for compiling a teaching manual on Mozart's tenor concert arias, and a written interview report will be prepared from their interviews.

#### **Data Analysis**

In this study, the researchers used qualitative research to analyze the data. Data analysis in qualitative research is time-consuming and difficult. Through this process, researchers systematically search for and organize data to deepen their understanding and present the results to others. Specifically, it includes the following aspects:

##### **Analyze the text**

The first stage of analyzing qualitative data here refers to text analysis. By analyzing the text of relevant papers and books, computing their scores, and summarizing and inducing from them, we will be able to analyze the relevant data on this topic.

##### **Interview information analysis**

The second step of data analysis is for researchers to obtain data from interviews with teachers and students. Through interviews with teachers and students, the relevant status quo, singing techniques, teaching methods, and related factors are sorted and analyzed. Through interviews with professional singers, relevant stage practices, music performances, emotions, and movement processing are analyzed. Through communication and interviews with students, relevant learning goals, learning strategies, and learning feelings are analyzed. In this step, irrelevant data is reduced, the required data is included, and a practical, concise interview report is produced.



## Results

Through in-depth interviews with 7 vocal teachers, 3 professional singers, and 5 students, the author will conclude the following dimensions and directions.

Suitable Grades and Stages for Singing Mozart's Tenor Concert Arias.

Through interviews, the author concluded that among the seven teachers, only one had never taught Mozart's Tenor Concerto Aria (Majun). As a teacher at a teacher training college, this teacher found that their students' overall performance was not as good as that of students at music colleges, with weaker foundations and a greater emphasis on improving their overall skills. Furthermore, they believed that the most suitable grade for learning Mozart's Tenor Concert Arias is at least the third year of college, primarily for graduate students. This suggests that they believe the Mozart Tenor Concert Arias is still somewhat challenging and unsuitable for first- and second-year undergraduates to learn and sing. This view was also reflected in interviews with students, with a sophomore stating that they had never sung the Mozart Tenor Concert Arias and that their teacher had prohibited them from doing so because of their difficulty.

What are the three most popular pieces for teachers and students to learn and sing?

Based on the interviews, researchers categorized their work and concluded that the three most popular pieces were: 1. "Va dal furor portata" 2. "Per pietà, non cercate" 3. "Si mostra la sorte"

Key Techniques to Focus on When Singing Mozart's Tenor Concert Arias.

Singing Mozart's tenor concert arias requires precise mastery of several core techniques. Most teachers agree that the most important thing is to use a long, steady breath to achieve absolute vowel continuity (Legato), ensuring an even and smooth flow of sound. Furthermore, the dynamics of the voice must be carefully controlled, ensuring that transitions between strong and weak are supported rather than superficial or abrupt. Second, it is important to overcome difficulties in vocal transitions to achieve seamless unity and eliminate timbre discontinuities. Third, one must go beyond basic pronunciation and deeply grasp the nuances of Italian, such as double consonants and vowel sounds, to achieve a seamless fusion of voice and music. Furthermore, singing requires the coordinated movement of the entire body, striving for the ultimate economy of achieving optimal resonance with minimal energy consumption. Finally, the interpretation of ornaments must strictly adhere to the historical stylistic norms of the Classical period, avoiding haphazard Romantic manipulation, thereby fully presenting the elegance, restraint, and balance characteristic of Mozart's music.

The Value of Singing Mozart's Tenor Concert Arias

Mozart's tenor concert arias hold multiple, irreplaceable core values in vocal education. Their primary value lies in their role as a touchstone for technique and an introductory guide to aesthetics. Their clear, transparent textures reveal every subtle flaw in breath, pitch, and vowel notes, forcing students to pursue ultimate precision while also fostering a deep understanding of the balanced, elegant, and restrained style of Classicism and a high standard of aesthetic appreciation. Secondly, they serve as a bridge between technique and artistry, cultivating students' ability to transform pure vocal technique into a profound musical narrative and emotional expression, enabling them to move from "craftsman" to "artist." Thirdly, they possess profound educational and character-building capabilities. Through the patience, focus, and control required during the learning process, they temper students' character, cultivate their craftsmanship, and help them resist impulsive tendencies. Ultimately, they are considered the "gold standard" and "diagnostic mirror" for measuring comprehensive vocal ability, comprehensively examining and profoundly improving a singer's technical, linguistic, and artistic cultivation, laying a solid foundation for a long-term artistic career.

How to best perform Mozart's Tenor Concert Arias on stage.

First, internal construction is crucial. Fill the stage with imagination: Leverage your powerful imagination to construct the dramatic scenes and characters in your mind, establishing a core "action image" that will inspire all external performance from within. Second, external expression must be precise, subtle, and profound, avoiding exaggeration and employing refined, precise micro-expressions and micro-movements. Eye contact is the primary tool for expression. All body language must seamlessly align with the music's rhythm and the lyrics' meaning. Local performance elements can be carefully incorporated to enhance the performance's appeal. Finally, focus on coordination with the piano accompaniment, viewing the pianist as a "partner" rather than an accompaniment. Rehearsals should align all musical treatments (breathing, punctuation, and Rubato), establish a tacit understanding of nonverbal communication, and foster collaboration in artistic creation to achieve a true duet.

Modules and key content to focus on when developing a manual.

Manual development requires a break from tradition and the construction of a multi-dimensional, three-dimensional teaching support system. The content should highlight: 1. In-depth interpretation of the core repertoire: Each selected piece should be accompanied by historical context, emotional guidance, a breakdown of technical difficulties, and a database of common errors, directly addressing teaching pain points. 2. Interdisciplinary language solutions: Incorporating in-depth grammatical and rhetorical analysis, contrastive phonetics training, and vowel modification guidance to address the language difficulties faced by Chinese students fundamentally. 3. Tiered and differentiated teaching support: Providing phased objectives, standardized teaching progress templates, and alternative solutions for different voices. 4. A fusion of academic and modern approaches: Incorporating original manuscript research, a stylistic comparison terminology dictionary, and extensive use of QR codes linking to demonstration audio and video, an online database, and self-assessment checklists, the manual will achieve "dynamic growth," ensuring both authoritative academic depth and intuitive, engaging practical value.

Students' Difficulties and Confusions in Singing Mozart's Tenor Concert Arias.

Interviews and analysis of five students revealed that their difficulties and confusions in singing Mozart's concert arias can be attributed to two key aspects: technical and artistic. On the technical level, the core pain points are highly concentrated. Breath support is the biggest obstacle, and students generally struggle to manage long musical phrases, resulting in trembling, drifting pitch, or fragmented phrases. Language is another major challenge. Italian's legato, the connection between double consonants and vowels, and their integration with melody, pose a significant challenge for native Chinese speakers. Furthermore, maintaining consistent timbre during transitions and controlling high-quality pianissimo are common bottlenecks for students as they advance to advanced techniques. At the artistic level, the confusion is even more profound. Primarily, there's the question of the proper balance of style. Students struggle to balance classical restraint with emotional depth, unable to express themselves with restraint rather than sensationalism. Secondly, there's the challenge of character development and dramatic expression. Without the context of opera, students struggle to quickly establish their characters' persuasiveness and maintain the dramatic unity between recitative and aria. Finally, there's the cultural gap. Especially with comedies, finding the right balance and timing for humor without resorting to farce presents an aesthetic chasm that students struggle to overcome.

## Conclusion and Discussions

Based on the interviews, the following conclusions were drawn:

Mozart's tenor concert arias are the "gold standard" and "touchstone" of vocal education, possessing irreplaceable value. They are not only excellent teaching materials for honing core techniques such as breath support, register unity, and vowel articulation (legato), but also serve as a bridge for cultivating students' classical aesthetics (restraint, elegance, and balance) and musical cultivation. Learning these arias is essential because they systematically address students' multifaceted challenges, from technical to artistic, laying a solid foundation for singing more complex operatic repertoire. They are a necessary stage in the vocal learning journey to maturity. Teachers and students generally agree that the following areas and technical challenges should be emphasized in teaching: First, on the technical level, sustained breath support for phrases, smooth transitions between voice changes, high-quality pianissimo control, and precise and musical processing of Italian pronunciation. Second, at the stylistic level, strict adherence to classical ornamentation standards is crucial to ensure a balance between restraint and depth in emotional expression. Finally, at the performance level, imagination is required to construct dramatic situations, and through precise micro-expressions and body language, a vivid "drama without drama" can be achieved on the concert stage. Currently, the application of Mozart's tenor concert arias in Chinese music teaching faces several challenges and limitations. First, there is currently no comprehensive teaching manual in China to help students select the right Mozart tenor concert aria for their needs. Second, there are currently no published books or recordings of Mozart's tenor concert arias in China, which limits teaching resources and prevents students from accessing them.

In summary, this study has thoroughly explored the current status of Mozart's tenor concert arias in music teaching in my country and identified some of the difficulties and questions encountered in learning them. The resulting teaching manual is hoped to provide vocal teachers with a theoretical foundation and practical experience, offering a useful reference for university vocal teachers to better utilize Mozart's tenor concert arias in music teaching. We welcome your criticism and any corrections to any shortcomings.

## Suggestion

1. I suggest conducting in-depth research into the classical style norms and historical context of Mozart's tenor concert arias, ensuring that vocal performances accurately reflect the artistic characteristics and aesthetic requirements of the Classical period.

2. I believe a systematic, phased teaching guide for Mozart's tenor concert arias should be compiled and developed to address the current shortage of relevant teaching resources in vocal education.

3. I suggest establishing a multi-dimensional resource database of Mozart's tenor concert arias, integrating annotated scores, demonstration audio and video, and analyses of common singing mistakes, to provide comprehensive learning support for vocal students at different stages of their studies.

## References

- Akınç, M. Ş. (2022). *Examination of Tenor Arias in the Opera Works Composed by Wolfgang Amadeus Mozart*. International Journal of Education Technology and Scientific Research, 7(18), 1396-1427.
- Bao W. (2016) *Mozart in the heart*(Master's Thesis). Shanghai Conservatory of Music.
- Clark, Thomas J. (2024), *"Harmonizing Voices: Vocal Pedagogy in 21st Century Music Education"*. (Doctoral Dissertations)



- Liu, D. (2023). *Style exploration and singing analysis of Mozart's Concert aria*(Master's Thesis). Inner Mongolia Institute of Arts.
- Ren, Q. (2015). *Mozart's Concert Aria*.(Master's Thesis)Tianjin Conservatory of Music.
- Sing, C. (2008 ). *Mozart's theory on the definition of "Concert aria"* [J]. Music and Arts (Journal of Shanghai Conservatory of Music) (03): 115
- Xie, Z. (2014). *On Mozart tenor Concert aria—— Take" Please don't listen to my pain, reason for example "* (Master's Thesis)—Shanghai Conservatory of Music.
- Zhang, M. (2021). *Analysis and singing study of Mozart concert arias—takes three soprano works as examples*. (Master's Thesis). Shaanxi Normal University.
- Zheng Y & Bai E. (2018). Review of Western bel canto [J]. art education. (19):97-98.



# The Composition Model of Participatory Sports Affairs Management in Higher Vocational Colleges in Puyang City, Henan Province, People's Republic of China

การพัฒนารูปแบบการจัดการกีฬาแบบมีส่วนร่วมของวิทยาลัยอาชีวศึกษา

ในเมืองผู้หยาง มณฑลเหอหนาน สาธารณรัฐประชาชนจีน

Ma Nan<sup>1</sup> Somsak Jeewattana<sup>2</sup> and Pittaya Pantachai<sup>3</sup>

<sup>1</sup>Ph.D. (Candidate). Educational Administration, Buriram Rajabhat University, Thailand,  
Lecturer, Southwest University of Political Science & Law, China

E-mail: 660427090010@bru.ac.th

<sup>2</sup>Major Advisor, Assistant Professor Dr., Buriram Rajabhat University, Thailand

E-mail: somsak.je@bru.ac.th

<sup>3</sup>Co-advisor, Assistant Professor Dr, Buriram Rajabhat University, Thailand

E-mail: pittaya.pa@bru.ac.th

## Abstract

The purpose of this study is to investigate the influencing factors underlying the construction of participatory sports management models in higher vocational colleges in Puyang City, Henan Province. Based on a comprehensive review of relevant literature, the influencing factors of participatory sports management in higher vocational colleges are summarized, and four primary indicators and twelve secondary indicators are ultimately identified. The primary indicators include sports governance, stakeholder participation, sports and leisure activity administration, as well as evaluation and sustainability.

**Keywords:** students of higher vocational colleges, participatory sports affairs management, and composition model

## INTRODUCTION

In recent years, the state has continuously increased its emphasis on vocational education, injecting new momentum into the development of physical education in higher vocational colleges. As a core component of quality education, the high-quality development of physical education is a key lever for advancing the "Healthy China 2030" plan and the strategy of integrating physical education with education. Against this backdrop, the state has issued a series of policies to guide the reform of physical education management in higher vocational colleges: the "Opinions on Deepening Education and Teaching Reform and Comprehensively Improving the Quality of Compulsory Education" (2019) issued by the CPC Central Committee and the State Council explicitly requires strengthening students' physical exercise and improving the physical health monitoring system; the "Opinions on Further Strengthening School Sports Work" (Jiao tiyi [2012] No. 5) issued by the Ministry of Education emphasizes the need to strengthen the teaching and management mechanisms of physical education courses; the "National Vocational Education Reform Implementation Plan" (Guo fa [2019] No. 4) proposes improving the governance structure of vocational colleges and establishing a sound mechanism for teacher and student participation in management; and the "14th Five-Year Plan for Sports Development" further highlights the reform orientation of "multi-party participation and collaborative governance," providing solid policy support for the transformation of physical education management in higher

vocational colleges from a traditional administrative-led model to a multi-participation model.

However, the current practice of physical education management in higher vocational colleges in my country still faces many bottlenecks. Nationwide, common problems exist, including a single management model, low student and teacher participation, and inefficient resource allocation. The traditional top-down administrative decision-making model fails to stimulate the initiative of students and teachers, leading to rigid forms of physical activities and physical fitness tests becoming mere formalities. This problem is particularly prominent in Henan Province. As a populous province and a key area for vocational education, although Henan has issued the "Overall Plan for Deepening the Reform of Education Evaluation in the New Era (2021)," proposing to build an evaluation mechanism centered on student development to improve physical literacy, some higher vocational colleges still suffer from inconsistent implementation standards and weak student participation. The shortcomings are even more pronounced in prefecture-level vocational education areas such as Puyang City.

Research shows that sports management in vocational colleges in Puyang City suffers from specific problems, including a single responsible entity, weak student sports organizations, and insufficient teacher voice. These issues directly restrict the effectiveness of physical education and lead to low pass rates in physical fitness tests and a declining overall physical fitness rate among vocational college students, exposing deep-seated flaws in the sports management system. Theoretical and practical explorations offer feasible paths to solving these problems. Theoretically, Arnstein's "ladder of citizen participation" theory provides a core analytical framework for participatory management. In practice, participatory management, as a co-construction and co-governance model, has shown effectiveness in enterprises, public governance, and higher education, proving to enhance teachers' and students' sense of responsibility and institutional acceptance, and improve the quality of sports activities and student participation. Exploration by some vocational colleges in China through student sports associations and joint teacher-student meetings also demonstrates that participatory management can significantly improve students' interest in sports, the efficiency of school sports operations, and student satisfaction.

Therefore, this study focuses on higher vocational colleges in Puyang City, Henan Province, to explore the construction of a participatory sports affairs management model adapted to regional development. This research is both a grassroots response to national vocational education and sports reform policies, providing first-hand experience and data support for policy improvement. It also offers replicable practical solutions for addressing common challenges in higher vocational sports management, accelerating the reform process of higher vocational sports management nationwide. Moreover it has significant practical implications for improving students' physical fitness and overall quality, creating distinctive regional vocational education brands, and serving local economic development.

## LITERATURE REVIEWS

### Sports Management

Wang Kai (2021: p. 12) argues that sports management is a public governance process aimed at achieving public interests, involving multi-party collaboration among government, market, and social organizations to plan, organize, coordinate, and supervise sports resources.

Liu Guoyong (2020: p. 10) believes that sports management is a practical vehicle for implementing the national strategy of fitness for all. Its core is to meet the multi-level sports needs of the people through standardized service provision, intelligent facility configuration, and equitable resource allocation.



Sports management integrates and optimizes sports resources through multi-party collaboration, data-driven approaches, and standardized construction, achieving a collaborative system encompassing national fitness, school sports, event operation, industrial development, and community governance.

### **Stakeholders**

Du Mei (2023:pp.38-52) systematically explored the interactive relationships and collaborative paths among multiple stakeholders, including the government, social organizations, market enterprises, and the public, in the implementation of mass sports policies in my country. This provides strong comprehensive evidence of the composition and collaboration of stakeholders in sports governance.

Zhang Wei (2021, pp. 91–95) posits that in establishing a sports governance evaluation system, the present study inevitably integrates the participation, satisfaction, and collaboration of diverse stakeholders as core evaluative dimensions, thereby verifying and affirming the applicability and significance of stakeholder theory at the methodological level.

Stakeholders refer to any individual, group, or institution that can influence the achievement of an organization's goals or is influenced by the process of achieving those goals.

### **Sports and Leisure Activity Management**

Wang Yue (2023: p. 153) points out that activities need to be inclusive and cater to the needs of different groups in order to enhance their influence and vitality.

Liu Yang (2021: p. 56) argues that the participation behavior of people engaged in physical exercise is not the result of a single factor, but rather driven by multiple dimensions such as individual characteristics, environmental support, activity characteristics, and policy promotion.

In the context of sports and leisure activity management, this refers to the process of planning, organizing, coordinating, and controlling resources, personnel, and activity processes to achieve a safe, efficient, and inclusive sports activity experience in order to meet the public's participation needs.

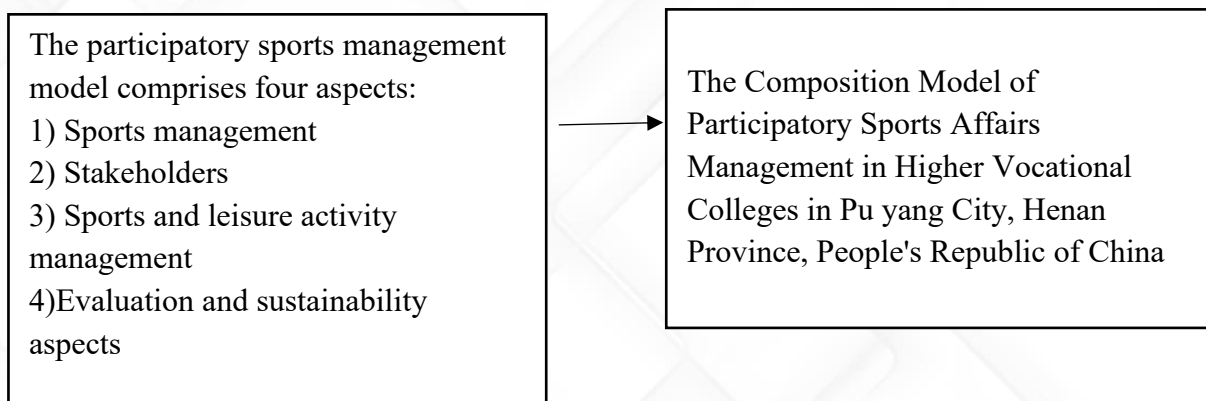
### **Regarding assessment and sustainability**

Zhang Jianhui and Liu Bing (2022: p. 89), through structural equation modeling analysis, found that institutional support is the fundamental guarantee; technological support significantly improves management efficiency; and resource allocation directly affects service coverage. Chen Hong and Fan Bingyou (2020: p. 33), in a case study, showed that Shenzhen achieved a 41% increase in the efficiency of public sports service supply through institutional innovation, technological empowerment, and resource allocation.

In terms of assessment and sustainability, "assessment" refers to establishing scientific indicators to measure the effectiveness of management processes, results, and impacts; "sustainability" refers to the ability of the model to self-improve, operate continuously, and generate long-term benefits through institutional solidification, capacity building, resource guarantees, and cultural cultivation.

From the literature review, the conceptual framework can be drawn as shown in Figure 1.

**Figure 1**  
*Conceptual Framework*



## RESEARCH METHODOLOGY

### Sample

The overall study population consisted of 2016 sports administrators, physical education teachers, and student club members from three higher vocational colleges in Puyang City, Henan Province, China. The sample comprised 327 sports administrators, physical education teachers, and student club members from the same three higher vocational colleges in Puyang City, Henan Province, China.

### Research instruments

The research instrument was a questionnaire, which was divided into two parts.

Part 1: General information about the respondents, and data were collected through a checklist questionnaire.

Part 2: This study focuses on the student participatory sports management model in vocational colleges in Puyang City, Henan Province, China. A five-point scale was used to collect data. Using the Index of Item-Objective Congruence (IOC) (Rovinelli & Hambleton, 1997) to assess the validity of the questionnaire's content, and the overall reliability of the questionnaire was assessed using Cronbach's alpha coefficient (alpha-coefficient) (Wiersma & Jurs, 2009: 335). The results showed that the questionnaire had an item-objective congruence index (IOC) of 0.5-1.00 and a Cronbach's alpha coefficient of .986. Therefore, the questionnaire is a reliable and trustworthy research instrument.

### Data analysis

The statistics for quantitative data analysis were percentage, mean, standard deviation and validity index and qualitative data were analyzed through content analysis. The data were presented in tabular form and the significance of the mean is as follows:

- 4.51-5.00 has the highest operationalization.
- 3.51-4.50 has high operationalization.
- 2.51-3.50 has medium operability.
- 1.51-2.50 low operability.
- 1.00-1.50 lowest operability.

## RESEARCH RESULTS

### 1. Primary Indicators of the Participatory Sports Affairs Management Model for Students in Vocational Colleges in Puyang City, Henan Province, People's Republic of China

**Table 1**

*Components of the Participatory Sports Affairs Management Model for Students in Vocational Colleges in Puyang City, Henan Province, China*

| Components of a participatory sports affairs management model: | $\bar{X}$ | S.D.  | Interpretation |
|----------------------------------------------------------------|-----------|-------|----------------|
| 1) Sports Management                                           | 4.033     | 0.834 | High           |
| 1.1 Strategic Planning                                         | 4.049     | 0.869 | High           |
| 1.2 Organizational Structure and Operation                     | 4.028     | 0.863 | High           |
| 1.3 Control and Evaluation                                     | 4.025     | 0.841 | High           |
| 2) Stakeholders                                                | 4.061     | 0.792 | High           |
| 2.1 Collaborative Planning and Decision-Making                 | 4.085     | 0.796 | High           |
| 2.2 Participation in the Implementation Process                | 4.058     | 0.818 | High           |
| 2.3 Tracking and Evaluation                                    | 4.042     | 0.819 | High           |
| 3) Management of sport sand leisure activities                 | 4.072     | 0.785 | High           |
| 3.1 Activity Planning and Design                               | 4.077     | 0.805 | High           |
| 3.2 Organization and implementation of activities              | 4.070     | 0.805 | High           |
| 3.3 Tracking Evaluation and Development                        | 4.071     | 0.80  | High           |
| 4) Assessment and Sustainability Aspects                       | 4.074     | 0.789 | High           |
| 4.1 Evaluation of Activity Effectiveness                       | 4.050     | 0.806 | High           |
| 4.2 Experience Extraction and Development                      | 4.075     | 0.802 | High           |
| 4.3 Sustainability Construction                                | 4.10      | 0.803 | High           |

According to Table 1, all four primary indicators and twelve secondary indicators of the student participatory sports affairs management model in vocational colleges in Puyang City, Henan Province, have high operability. Among them, the primary indicator with the highest operability is "assessment and sustainability" ( $x = 4.074$ ), and the lowest is "sports management" ( $x = 4.033$ ).

Among the operational secondary indicators, the highest is "Sustainability Construction" ( $x=4.1$ ), and the lowest is "Control and Evaluation" ( $x=4.025$ ).

### 2. Strategic Planning

**Table 2**

*Components of the Participatory Sports Affairs Management Model for Vocational Colleges in Puyang City, Henan Province; Level II Indicators and Averages and Standard Deviations of Each Component (Sports Management and Strategic Planning)*

| Strategic Planning                                                                                  | $\bar{X}$ | S.D.  | Interpretation | Ranking |
|-----------------------------------------------------------------------------------------------------|-----------|-------|----------------|---------|
| 1) Assessing the organization's internal and external environment is crucial for strategic planning | 3.96      | 0.982 | High           | 5       |
| 2) Clearly defining the organization's mission                                                      | 4.06      | 0.923 | High           | 3       |



| Strategic Planning                                                                                    | $\bar{X}$ | S.D.  | Interpretation | Ranking |
|-------------------------------------------------------------------------------------------------------|-----------|-------|----------------|---------|
| and core values helps clarify its development direction                                               |           |       |                |         |
| 3) Setting long-term goals has a significant impact on the organization's overall success.            | 4.09      | 0.907 | High           | 1       |
| 4) Developing core policies and action plans helps improve the organization's operational efficiency. | 4.05      | 0.919 | High           | 4       |
| 5) Rationally prioritizing resource allocation is crucial for achieving strategic goals.              | 4.08      | 0.941 | High           | 2       |

According to Table 2, the operability of each level of indicators in the student participatory sports affairs management model of vocational colleges in Puyang City, Henan Province is relatively high. The highest score is 3 ( $x = 4.09$ ), and the lowest score is 1 ( $x = 3.96$ ).

### 3. Organizational Structure and Operation

**Table 3**

*Components of the Participatory Sports Affairs Management Model for Students in Higher Vocational Colleges in Puyang City, Henan Province. Secondary indicators and their average and standard deviation*

| Organizational Structure and Operation                                                                                                    | $\bar{X}$ | S.D.  | Interpretation | Ranking |
|-------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------|----------------|---------|
| 6) Clearly defining internal units or organizational structure helps the organization achieve its established objectives                  | 4.05      | 0.922 | High           | 2       |
| 7) Establishing specialized committees or professional bodies helps improve the organization's operational efficiency                     | 4.07      | 0.914 | High           | 1       |
| 8) Developing appropriate work models is crucial for organizational success                                                               | 4.03      | 0.933 | High           | 3       |
| 9) Coordination and cooperation between internal units or across organizational networks affect work outcomes.                            | 3.98      | 0.973 | High           | 5       |
| 10) Clearly defining who is responsible, what work methods are used, and how to implement them is essential for organizational management | 4.01      | 0.927 | High           | 4       |

According to Table 3, the operability of each level of indicators in the student participatory sports affairs management model of vocational colleges in Puyang City, Henan Province is relatively high. The highest score is 7 ( $x = 4.07$ ), and the lowest score is 9 ( $x = 3.98$ ).

#### 4. Control and Evaluation

**Table 4**

*Components of the Participatory Sports Affairs Management Model for Vocational Colleges in Puyang City, Henan Province. Secondary indicators for sports management and control evaluation, along with the average and standard deviation of each indicator*

| Control and Evaluation                                                                                                 | $\bar{X}$ | S.D.  | Interpretation | Ranking |
|------------------------------------------------------------------------------------------------------------------------|-----------|-------|----------------|---------|
| 11) Effective control over organizational operations helps improve management efficiency                               | 4.02      | 0.916 | High           | 4       |
| 12) Performance appraisal is an important tool for achieving strategic goals                                           | 3.97      | 0.936 | High           | 5       |
| 13) Continuous follow-up on participatory management models helps improve work performance                             | 4.03      | 0.939 | High           | 2       |
| 14) Implementing effective control and performance appraisal helps reduce errors in the operational process            | 4.08      | 0.910 | High           | 1       |
| 15) Continuously conducting performance appraisals has a significant impact on the overall success of the organization | 4.02      | 0.889 | High           | 3       |

According to Table 4, the operability of each level of indicators in the student participatory sports affairs management model of vocational colleges in Puyang City, Henan Province is relatively high. The highest score is 14 ( $x = 4.08$ ), and the lowest score is 12 ( $x = 3.97$ ).

#### 5. Collaborative Planning and Decision-Making

**Table 5**

*Stakeholders and Level II Indicators of Collaborative Planning and Decision-Making in the Participatory Sports Affairs Management Model for Students of Higher Vocational Colleges in Puyang City, Henan Province, along with the mean and standard deviation of each indicator*

| Collaborative Planning and Decision-Making                                                                                   | $\bar{X}$ | S.D.  | Interpretation | Ranking |
|------------------------------------------------------------------------------------------------------------------------------|-----------|-------|----------------|---------|
| 16) Joint decision-making between members and the leadership team helps to clarify the organization's development direction. | 4.11      | 0.855 | High           | 1       |
| 17) The implementation of equal consultation mechanisms can promote cooperation within the organization                      | 4.06      | 0.874 | High           | 5       |
| 18) Jointly formulating goals and action plans helps to improve organizational operational efficiency                        | 4.07      | 0.870 | High           | 4       |

| Collaborative Planning and Decision-Making                                                                        | $\bar{X}$ | S.D.  | Interpretation | Ranking |
|-------------------------------------------------------------------------------------------------------------------|-----------|-------|----------------|---------|
| 19) Decentralization and shared responsibility can enhance members' active participation                          | 4.09      | 0.867 | High           | 3       |
| 20) Joint decision-making mechanisms help to shift the organization's operational mode from passive to innovative | 4.09      | 0.862 | High           | 2       |

According to Table 5, the operability of each level of indicators in the student participatory sports affairs management model of vocational colleges in Puyang City, Henan Province is relatively high. The highest score is 16 ( $x = 4.11$ ), and the lowest score is 17 ( $x = 4.06$ ).

## 6. Participation in the Implementation Process

**Table 6**

*Stakeholders and Participation Process of the Components of the Participatory Sports Affairs Management Model for Students of Higher Vocational Colleges in Puyang City, Henan Province, and the Mean and Standard Deviation of Each Component*

| Participation in the Implementation Process                                                                                                                                                            | $\bar{X}$ | S.D.  | Interpretation | Ranking |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------|----------------|---------|
| 21) Social organizations in the sports field play an important role in flexible governance mechanisms                                                                                                  | 4.05      | 0.894 | High           | 4       |
| 22) Service delivery mechanisms are an important way for social organizations in the sports field to participate in governance                                                                         | 4.03      | 0.857 | High           | 5       |
| 23) Collaboration between government departments and market departments can improve the efficiency of responding to sports needs                                                                       | 4.08      | 0.889 | High           | 2       |
| 24) Interaction and cooperation between different departments have a significant impact on the successful implementation of sports policies.                                                           | 4.06      | 0.895 | High           | 3       |
| 25) Complementary collaboration between government departments, market departments, and social organizations in the sports field is an important factor in achieving sustainable development in sports | 4.08      | 0.881 | High           | 1       |

According to Table 6, the operability of each level of indicators in the student participatory sports affairs management model of vocational colleges in Puyang City, Henan Province is relatively high. The highest score is 25 ( $x = 4.08$ ), and the lowest score is 22 ( $x = 4.03$ ).



## 7. Tracking and Evaluation

**Table 7**

*Stakeholders and process level 2 indicators of the participatory sports affairs management model for students in vocational colleges in Puyang City, Henan Province, and the mean and standard deviation of each indicator*

| Tracking and Evaluation                                                                                                           | $\bar{X}$ | S.D.  | Interpretation | Ranking |
|-----------------------------------------------------------------------------------------------------------------------------------|-----------|-------|----------------|---------|
| 26) Tracking and monitoring mechanisms are an important tool for reflecting the progress of sports management                     | 4.03      | 0.884 | High           | 5       |
| 27) Performance evaluation helps to clarify the roles of various stakeholders and their level of participation                    | 4.04      | 0.909 | High           | 4       |
| 28) Stakeholders involved in the tracking and evaluation process typically receive appropriate feedback                           | 4.05      | 0.892 | High           | 3       |
| 29) The tracking and evaluation process functions as a governance and oversight mechanism in sports management                    | 4.05      | 0.873 | High           | 1       |
| 30) Tracking and evaluation play a crucial role in creating value and promoting the sustainable development of the sports system. | 4.05      | 0.876 | High           | 2       |

According to Table 7, the operability of each level of indicators in the student participatory sports affairs management model of vocational colleges in Puyang City, Henan Province is relatively high. The highest score is 29 ( $x = 4.05$ ), and the lowest score is 26 ( $x = 4.03$ ).

## 8. Activity Planning and Design

**Table 8**

*Components of the Participatory Sports Affairs Management Model for Students of Higher Vocational Colleges in Puyang City, Henan Province: Second-level indicators of the process of sports and leisure activity management and activity planning and design, as well as the average and standard deviation of each indicator*

| Activity Planning and Design                                                                                  | $\bar{X}$ | S.D.  | Interpretation | Ranking |
|---------------------------------------------------------------------------------------------------------------|-----------|-------|----------------|---------|
| 31) Sports activity planning is a process that embodies systems thinking                                      | 4.08      | 0.895 | High           | 3       |
| 32) Activity design clearly reflects a forward-looking vision                                                 | 4.07      | 0.857 | High           | 4       |
| 33) The establishment of organizational structure and resource allocation are implemented in a systematic way | 4.08      | 0.867 | High           | 2       |
| 34) Scientific planning contributes to the successful implementation of sports and leisure activities         | 4.10      | 0.869 | High           | 1       |

| Activity Planning and Design                                                                                     | $\bar{X}$ | S.D.  | Interpretation | Ranking |
|------------------------------------------------------------------------------------------------------------------|-----------|-------|----------------|---------|
| 35) The planning and design process of an activity has a significant impact on the quality of its implementation | 4.05      | 0.914 | High           | 5       |

According to Table 8, the operability of each level of indicators in the student participatory sports affairs management model of vocational colleges in Puyang City, Henan Province is relatively high. The highest score is 34 ( $x = 4.10$ ), and the lowest score is 4 ( $x = 4.05$ ).

## 9. Management of Sports and Leisure Activities

**Table 9**

*Components of the Participatory Sports Affairs Management Model for Students of Higher Vocational Colleges in Puyang City, Henan Province: Level II Indicators for the Management of Sports and Leisure Activities and the Organization and Implementation of Activities, along with the Average and Standard Deviation of Each Component*

| Management of Sports and Leisure Activities                                                         | $\bar{X}$ | S.D.  | Interpretation | Ranking |
|-----------------------------------------------------------------------------------------------------|-----------|-------|----------------|---------|
| 36) The organizational management process helps to translate planning into practical action         | 4.07      | 0.866 | High           | 4       |
| 37) Resource coordination is crucial to the success of an activity                                  | 4.07      | 0.863 | High           | 3       |
| 38) Process control helps ensure the smooth running of an activity                                  | 4.08      | 0.883 | High           | 2       |
| 39) Human resource management has a significant impact on the efficiency of activity implementation | 4.03      | 0.880 | High           | 5       |
| 40) Organizational management and activity implementation help achieve activity goals               | 4.10      | 0.875 | High           | 1       |

According to Table 9, the operability of each level of indicators in the student participatory sports affairs management model of vocational colleges in Puyang City, Henan Province is relatively high. The highest score is 40 ( $x = 4.10$ ), and the lowest score is 39 ( $x = 4.03$ ).

## 10. Tracking Evaluation and Development

**Table 10**

*Components of the Participatory Sports Affairs Management Model for Students in Higher Vocational Colleges in Puyang City, Henan Province: Second-level indicators of the process of sports and leisure activities management and tracking evaluation and development, as well as the average and standard deviation of each indicator*

| Tracking Evaluation and Development                                        | $\bar{X}$ | S.D.  | Interpretation | Ranking |
|----------------------------------------------------------------------------|-----------|-------|----------------|---------|
| 41) Conduct data collection in a systematic way for performance evaluation | 4.05      | 0.876 | High           | 4       |
| 42) Analyze activity effectiveness from multiple dimensions                | 4.06      | 0.859 | High           | 3       |
| 43) Reflect deeply on the results and analyze their causes                 | 4.02      | 0.886 | High           | 5       |
| 44) Implement knowledge management and systematically store relevant data  | 4.11      | 0.858 | High           | 2       |
| 45) Establish a feedback mechanism and continuously improve it             | 4.11      | 0.853 | High           | 1       |

According to Table 10, the operability of each level of indicators in the student participatory sports affairs management model of vocational colleges in Puyang City, Henan Province is relatively high. The highest score is 45 ( $x = 4.11$ ), and the lowest score is 43 ( $x = 4.02$ ).

## 11. Evaluation of Activity Effectiveness

**Table 11**

*Components of the Participatory Sports Affairs Management Model for Students of Higher Vocational Colleges in Puyang City, Henan Province: Secondary Indicators for the Process of Sports and Leisure Activity Management and Activity Effectiveness Evaluation, and the Average and Standard Deviation of Each Component*

| Evaluation of Activity Effectiveness                                                       | $\bar{X}$ | S.D.  | Interpretation | Ranking |
|--------------------------------------------------------------------------------------------|-----------|-------|----------------|---------|
| 46) Systematic indicators and methods are used to evaluate activity effectiveness          | 4.08      | 0.878 | High           | 2       |
| 47) A holistic assessment covering the impact on organizational operations is conducted    | 4.01      | 0.879 | High           | 4       |
| 48) An assessment reflecting the physical and mental benefits to participants is conducted | 4.07      | 0.871 | High           | 3       |
| 49) Social and economic impacts are considered during the assessment process               | 4.08      | 0.847 | High           | 1       |
| 50) Assessments supporting environmental sustainability are carried out                    | 4.01      | 0.895 | High           | 5       |

According to Table 11, the operability of each level of indicators in the student participatory sports affairs management model of vocational colleges in Puyang City, Henan Province is relatively high. The highest score is 49 ( $x = 4.08$ ), and the lowest score is 50 ( $x = 4.01$ ).

## 12. Experience Extraction and Development

**Table 12**

*Components of the Participatory Sports Affairs Management Model for Students in Vocational Colleges in Puyang City, Henan Province: Level II Indicators of the Process of Sports and Leisure Activity Management and Experience Extraction and Development, and the Average and Standard Deviation of Each Component*



| Experience Extraction and Development                                                                                     | $\bar{X}$ | S.D.  | Interpretation | Ranking |
|---------------------------------------------------------------------------------------------------------------------------|-----------|-------|----------------|---------|
| 51) Practical experience is summarized and knowledge is transformed through experience summarization (results extraction) | 4.09      | 0.832 | High           | 1       |
| 52) Relevant standards are established to enable the replication and further promotion and expansion of activities        | 4.06      | 0.882 | High           | 5       |
| 53) An experience summarization mechanism is established to support organizational learning                               | 4.07      | 0.860 | High           | 4       |
| 54) Continuous improvement is carried out, and systematic reviews and retrospectives are implemented                      | 4.08      | 0.881 | High           | 2       |
| 55) Continuous improvement is carried out, and systematic reviews and retrospectives are implemented                      | 4.08      | 0.898 | High           | 3       |

According to Table 12, the operability of each level of indicators in the student participatory sports affairs management model of vocational colleges in Puyang City, Henan Province is relatively high. The highest score is 51 ( $x = 4.09$ ), and the lowest score is 52 ( $x = 4.06$ ).

### 13. Sustainability Construction

**Table 13**

*The process level two indicators of sports and leisure activity management and sustainability construction of each component of the student participatory sports affairs management model in Puyang City, Henan Province, and the average and standard deviation of each indicator*

| Sustainability Construction                                                                                                        | $\bar{X}$ | S.D.  | Interpretation | Ranking |
|------------------------------------------------------------------------------------------------------------------------------------|-----------|-------|----------------|---------|
| 56) Sustainable development mechanisms related to participatory governance structures are built                                    | 4.08      | 0.861 | High           | 4       |
| 57) Organizational capacity building is carried out to support the sustainable development of activities                           | 4.08      | 0.877 | High           | 5       |
| 58) Optimizes resource utilization to improve efficiency and sustainability                                                        | 4.09      | 0.866 | High           | 3       |
| 59) Accumulates social capital, enabling sports activities to achieve self-support and self-development                            | 4.10      | 0.867 | High           | 2       |
| 60) Establishes sustainable development mechanisms to ensure that sports activities demonstrate integrated value in the long term. | 4.15      | 0.861 | High           | 1       |

According to Table 13, the operability of each level of indicators in the student participatory sports affairs management model of vocational colleges in Puyang City, Henan Province is relatively high. The highest score is 60 ( $x = 4.15$ ), and the lowest score is 57 ( $x = 4.08$ ).

## DISCUSSION & RECOMMENDATIONS

### Discussion

1. In the sample survey, the mean score for sports management was relatively high ( $x = 4.033$ ), indicating that the sample considered teaching and learning to be constituent elements of the student participatory sports affairs management model in vocational colleges in Puyang City, Henan Province. This aligns with scholar Liu Guoyong's (2020: p.10) view that sports management is a practical vehicle for implementing the national strategy of fitness for all, and that sports management integrates and optimizes sports resources through multi-party collaboration, data-driven approaches, and standardized construction to achieve a collaborative system encompassing fitness for all, school sports, event operation, industrial development, and community governance.

2. In the sample survey, the mean score for stakeholder participants was relatively high ( $x = 4.061$ ), indicating that the sample considered stakeholder participants to be an important component of the student participatory sports affairs management model in vocational colleges in Puyang City, Henan Province. This aligns with scholar Zhang Wei's (2021: pp.91-95) proposal in constructing a sports governance evaluation system, which suggests that the participation, satisfaction, and collaboration of multiple stakeholders should be taken as core evaluation dimensions. This approach, at the methodological level, encompasses and confirms the applicability and importance of stakeholder theory.

3. In the sample survey, the mean score for sports and leisure activities was relatively high ( $x = 4.072$ ), indicating that the sample considered "sports and leisure activities" to be an important component of the participatory sports affairs management model for vocational college students in Puyang City, Henan Province. This aligns with the view of scholar Wang Yue (2023: p. 153), namely that vocational college student activities should be inclusive and cater to the needs of different groups to enhance their influence and vitality. These activities include campus group counseling activities, classroom activities, and cultural construction. This is consistent with the concept of creating a high-quality learning and cultural environment through extensive and diverse activities.

4. In the sample survey, the mean score for evaluation and sustainability was relatively high ( $x = 4.074$ ), indicating that the sample considered evaluation and sustainability to be constituent elements of the participatory sports affairs management model for vocational college students in Puyang City, Henan Province. This aligns with the findings of Zhang Jianhui and Liu Bing (2022: p.89) through structural equation modeling analysis, which revealed that institutional support is the fundamental guarantee; technological support significantly improves management efficiency; and resource allocation directly affects service coverage.

This study analyzed the constituent elements of student participation in sports affairs management in vocational colleges in Puyang City, Henan Province, and arranged them in descending order of average score. The primary indicators of the student participation model in sports affairs management in Puyang City include: sports management, stakeholder participation, sports and leisure activity management, and evaluation and sustainability. The secondary indicators include: strategic planning, organizational structure and operation, control and evaluation, collaborative planning and decision-making, participation in the implementation process, tracking and evaluation, activity planning and design, activity organization and implementation, tracking evaluation and development, activity

effectiveness evaluation, experience extraction and development, and sustainability construction. Both the primary and secondary indicators are highly operational, as are the components of the secondary indicators.

## Recommendations

1. Researchers can develop a guideline for participatory sports management models in higher vocational colleges in Puyang City, Henan Province, China, and provide this guideline to sports administrators and teachers in these colleges to improve the effectiveness of participatory sports management.

2. Researchers can collaborate with relevant industry training institutions to develop training courses for participatory sports management in higher vocational colleges, providing targeted training for participatory sports managers to improve the methods of managing recreational activities for physical education teachers and promote the role of participatory sports management education.

3. Researchers can also conduct surveys of sports administrators to understand the views of education authorities on participatory sports management in higher vocational colleges, strengthening strategic planning to prepare for continuous improvement and updating of the manual.

## REFERENCES

- Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Institute of Planners*, 35(4), 216–224.  
<https://doi.org/10.1080/01944366908977225>
- Chen, H., & Fan, B. Y. (2020). Institutional innovation and practice for improving the supply efficiency of public sports services: A case study of Shenzhen. *Sports & Science*, 41(4), 33–40.
- Du, M. (2023). A study on the interaction and collaborative paths of multiple subjects in the implementation of mass sports policies in China. *Journal of Beijing Sport University*, 46(5), 38–52.
- General Administration of Sport of China, Ministry of Education, et al. (2021). 14<sup>th</sup> Five-Year Plan for Sports Development.  
<http://www.sport.gov.cn/n316/n336/c922122/content.html>
- Henan Provincial People's Government. (2021). Overall plan for deepening the reform of education evaluation in the new era.  
<http://www.henan.gov.cn/2021/10/26/106069251.shtml>
- Liu, G. Y. (2020). Core logic and practical paths of sports management under the national strategy of national fitness. *Sport Science*, 40(2), 10–18.
- Liu, Y. (2021). A study on the multi-dimensional driving factors of participation behavior among physical exercise groups. *Journal of Wuhan Sports University*, 55(3), 56–63.
- Ministry of Education of the People's Republic of China. (2012). Several opinions on further strengthening school physical education work (Jiaoti Yi (2012) No. 5).  
[http://www.moe.gov.cn/srcsite/A17/moe\\_943/201210/t20121022\\_143169.html](http://www.moe.gov.cn/srcsite/A17/moe_943/201210/t20121022_143169.html)
- State Council of the People's Republic of China. (2019). National vocational education reform implementation plan (Guo Fa (2019) No. 4).  
[http://www.gov.cn/zhengce/zhengceku/2019-02/13/content\\_5365341.htm](http://www.gov.cn/zhengce/zhengceku/2019-02/13/content_5365341.htm)
- State Council of the People's Republic of China & Central Committee of the Communist Party of China. (2016). Healthy China 2030 Plan Outline.  
[http://www.gov.cn/zhengce/zhongyao/zhengcewenjian/201610/25/content\\_5124174.htm](http://www.gov.cn/zhengce/zhongyao/zhengcewenjian/201610/25/content_5124174.htm)



- State Council of the People's Republic of China & Central Committee of the Communist Party of China. (2019). Opinions on deepening the reform of education and teaching to comprehensively improve the quality of compulsory education. [http://www.gov.cn/zhengce/zhengceku/201906/23/content\\_5409427.htm](http://www.gov.cn/zhengce/zhengceku/201906/23/content_5409427.htm)
- Wang, K. (2021). A study on the multi-stakeholder collaboration mechanism of sports management from the perspective of public governance. *Sports Culture Guide*, (8), 12–17.
- Wang, Y. (2023). Organization and management strategies of sports and leisure activities under the concept of inclusiveness. *Journal of Chengdu Sport University*, 49(4), 153–158.
- Zhang, J. H., & Liu, B. (2022). An empirical study on the influencing factors of sports management efficiency: An analysis based on structural equation modeling. *Journal of Tianjin University of Sport*, 37(2), 89–96.
- Zhang, W. (2021). Construction and application of a sports governance evaluation system. *Journal of Xi'an Physical Education University*, 38(6), 91–95.



# Gender and Spending Levels as Factors of Customers' Satisfaction: Evidence from Thai Restaurants in Chongqing, China

Mingye Lu and Pankaewta lakkanawanit

## Abstract

This research examines how different types of diners experience Thai restaurants in Chongqing, China. While Thai food is more popular than ever, most studies emphasise on the general market rather than comparing specific groups like men and women or different levels of spenders. This paper employs a survey of 403 respondents to find out whether or not gender and spending ability change how people feel about their meals. The study utilises t-tests and a One-Way ANOVA to analyse the data. The results indicate that gender does not make a major difference in levels of customers' satisfaction. Male and female customers mostly feel the same way about the food and service. However, spending levels are a very important driver of quality. The study establishes that as spending increases, the overall experience significantly improves. Specifically, diners in the mid-to-high spending groups reported much higher scores for food quality, service, and perceived value compared to budget diners. Most importantly, higher spending is strongly linked to higher loyalty. Even at premium price points, customers felt that the experience was worth the money, thereby increasing a significantly higher intention to revisit the restaurant in the future. These findings suggest that for Thai restaurants in Chongqing, providing a high-value, premium experience is the most effective way to build a loyal customer base.

**Keywords:** Chongqing, Customers' Satisfaction, Revisit Intention, Spending Levels, Thai Restaurants.

## Introduction

### Background and Rationale

Thai cuisine has established itself as the most prominent Southeast Asian culinary presence in China, evolving into a dominant segment within the national food market (Jin & Fu, 2023). In metropolitan areas like Chongqing, the Thai restaurant market has seen rapid expansion, achieving growth rates that surpass the national average (Hongcanwang, 2023). This development has integrated Thai food deeply into Chinese urban dining culture, moving beyond traditional formats to include diverse concepts like Thai hot pot and tea restaurants. However, as the industry evolves and competition increases, business sustainability relies heavily on understanding the factors that drive customer revisit intention (Jang & Namkung, 2009).

### Research Gap

Whilst extensive research has investigated general predictors of restaurant success, such as food quality and service, there remains a gap in understanding the specific performance of Thai restaurants within the unique local culture of Chongqing (Riva, 2025). Specifically, existing literature rarely considers how satisfaction antecedents drive revisit intention among different consumer segments, such as those divided by gender or spending power, in a non-tourist urban setting (Yasami et al., 2022). Most studies focus on the overall market, leaving a lack of detailed insight into how demographic factors and budget levels influence the post-dining evaluation process.

## Objectives and Research Questions

This study aims to investigate the influence of gender and spending power on the dining experience to provide a segmented view of consumer behavior along with the following research questions:

RQ1: To what extent are there differences between male and female customers regarding their satisfaction and intention to revisit Thai restaurants?

RQ 2: How do varying levels of spending per bill affect the perceived quality and loyalty of customers in the Chongqing Thai restaurant market?

### Significance of the Study

This research is significant as it provides a framework to understand ethnic restaurant behavior by focusing on specific consumer segments. Practically, the findings offer empirical evidence to help restaurant managers identify high-value segments and optimize their service strategies to strengthen customer retention (Anderson & Sullivan, 1993). By exploring how spending levels correlate with satisfaction, the study assists restaurateurs in designing policies for sustainable growth in a competitive market.

## Literature Review

### Relevant Theories

The theoretical foundation of this study is grounded in the Expectancy Confirmation Theory (ECT). Developed by Oliver (1980), ECT suggests that a consumer's satisfaction is determined by the relationship between their initial expectations and the actual performance of the product or service. If the performance meets or exceeds expectations, "confirmation" occurs, leading to satisfaction and a higher likelihood of revisit intention (Anderson & Sullivan, 1993). In the context of ethnic dining, this process is particularly complex as expectations are formed not only by service standards but also by cultural authenticity and perceived value (Chen et al., 2020). This study applies ECT to determine if expectations and satisfaction levels shift significantly across different demographic segments.

### Empirical Studies

Previous research in the hospitality field has consistently identified food quality, service quality, and atmosphere as the primary drivers of restaurant satisfaction, acting as the fundamental pillars of the overall dining experience (Kivela & Crofts, 2006; Ryu & Jang, 2008). However, as the restaurant industry becomes increasingly saturated and consumers become more sophisticated, the impact of price fairness and perceived value has gained significant academic attention. This shift is particularly evident in highly competitive urban markets like Chongqing, where diners are no longer just looking for sustenance but are increasingly seeking a specific balance between authentic ethnic flavors and economic justification (Chen et al., 2020).

When examining demographic influences on these factors, empirical evidence suggests that gender plays a subtle but noteworthy role in how the dining environment is evaluated. For instance, some studies indicate that female diners often place a higher priority on service quality and the emotional or aesthetic aspects of the experience, such as the restaurant's décor, cleanliness, and overall mood (Jin & Fu, 2023). In contrast, male diners may focus more heavily on the functional and quantitative aspects of the meal, such as portion sizes and the transparency of the pricing structure. Understanding these distinctions is vital for ethnic restaurants that aim to tailor their branding and service delivery to meet the distinct psychological needs of different consumer groups.



Furthermore, the relationship between a customer's budget and their ultimate satisfaction remains a critical, yet under-explored, factor in urban dining research. Research by Jang and Namkung (2009) indicates that as consumers spend more per bill, their expectations for "extra-functional" items—such as a unique cultural atmosphere and highly personalized service—increase accordingly. Our analysis of the current market suggests the existence of a "quality threshold" or a specific tipping point in consumer perception. Satisfaction and the likelihood of returning appear to increase significantly once spending moves beyond the basic budget level of approximately 100 RMB. This suggests that premium diners are not merely paying for a meal, but for a superior, high-value experience that directly strengthens their loyalty to the brand (Riva, 2025). Ultimately, in the Thai restaurant segment of Chongqing, a higher financial investment by the customer often results in a deeper sense of expectancy confirmation and perceived value.

### **Conceptual Framework**

This study utilizes a comparative framework to analyze how the relationship between restaurant attributes and revisit intention varies across different customer groups. Rather than looking at the market as a single unit, this framework focuses on demographic determinants to identify specific patterns of consumer behavior in Chongqing.

The framework is organized as follows:

Service Attributes and Revisit Intention: Food Quality, Service Quality, Atmosphere, Price Fairness, Perceived Value (based on ECT) and Revisit Intention.

Demographic Determinants (Segmentation): Gender (Male vs. Female) and Spending Levels (10-99 RMB, 100-199 RMB, and 200+ RMB).

## **Methodology**

### **Research Design**

This study uses a quantitative approach to compare how different groups of people feel about their dining experiences. Instead of just looking at general trends, the research is designed to find specific differences between groups. By using a survey-based method, we can collect data from a large number of people and use statistical tests to see if gender or spending levels truly change how a person views a restaurant. This comparative design helps us understand the specific "gaps" in satisfaction that might not be visible in a general study.

### **Population and Sample**

The people invited to take part in this study were diners in Chongqing who had eaten at a Thai restaurant recently. We used a convenience sampling method to reach active consumers through local social media and dining groups. In the end, we collected 403 valid responses that were complete and fit the research criteria. This sample size is large enough to give a clear picture of the market, especially since it includes a mix of students, office workers, and young professionals who are the main customers for Thai food.

### **Instruments**

The main tool for this research was a clear and simple questionnaire. It was based on established ideas from previous studies about how people judge their meals and whether they plan to return. The survey had three sections. The first part asked for basic info like gender and how much the person usually spends on a meal. The second part asked them to rate things like food taste, staff service, and the restaurant's vibe. Finally, the third part asked if they would go back to that restaurant. We used a 6-point scale for these ratings so that people had to make a clear choice rather than just picking a "neutral" middle answer.

### Data Collection Procedures

We collected the data online to make it easy for people to participate using their mobile phones. Before starting the survey, everyone had to answer a "screening" question to make sure they had actually eaten Thai food in Chongqing in the last few months. We also made sure to tell everyone that their answers were private and would only be used for this academic project.

### Data Analysis

Once we had all the responses, we used a few different statistical tests to find the answers to our questions. First, we looked at the average scores for the whole group to see the general mood of the customers. To compare men and women, we used a "t-test" to see if their scores were actually different or just about the same. For the spending groups, we used a test called "ANOVA" to compare three categories: the budget group (under 100 RMB), the middle group (100–199 RMB), and the premium group (over 200 RMB). If the ANOVA showed a difference, we used a post-hoc test to find out exactly which two groups were different.

## Results

### Overview of Customer Perceptions

The first part of the analysis looks at how customers generally feel about Thai restaurants in Chongqing. As shown in Table 1, the average scores for all categories are quite high, falling into the "Agree" range. Service Quality received the highest score ( $M = 4.54$ ), followed closely by the restaurant's Atmosphere ( $M = 4.52$ ). While Revisit Intention had the lowest average score ( $M = 4.40$ ), it still shows a positive trend. Overall, these numbers suggest that most diners are happy with their experience, particularly with how they are treated by the staff and the vibe of the restaurant.

**Table 1**  
*Descriptive Statistics of Research Variables*

| Variable          | Mean Score | Std. Deviation | Interpretation |
|-------------------|------------|----------------|----------------|
| Service Quality   | 4.540      | 0.750          | Agree          |
| Atmosphere        | 4.520      | 0.880          | Agree          |
| Food Quality      | 4.480      | 0.800          | Agree          |
| Price Fairness    | 4.470      | 0.860          | Agree          |
| Perceived Value   | 4.440      | 0.830          | Agree          |
| Revisit Intention | 4.400      | 0.970          | Agree          |

### Comparison by Gender

To see if men and women have different opinions, we used a t-test to compare their average scores. The results, found in Table 2, show that there are no significant differences between the two groups for any of the variables. Whether it was food quality, price, or the desire to return, men and women in Chongqing seem to share very similar views. Because all p-values were much higher than 0.05, we can conclude that gender does not play a major role in how satisfied a customer feels or whether they plan to come back.

**Table 2**  
*Independent Samples t-test Results by Gender*

| Variable          | Male Mean (N=173) | Female Mean (N=230) | t-value | p-value | Result                        |
|-------------------|-------------------|---------------------|---------|---------|-------------------------------|
| Atmosphere        | 4.480             | 4.550               | -0.820  | 0.413   | Not Statistically Significant |
| Food Quality      | 4.500             | 4.460               | 0.578   | 0.563   | Not Statistically Significant |
| Service Quality   | 4.510             | 4.570               | -0.705  | 0.481   | Not Statistically Significant |
| Price             | 4.480             | 4.460               | 0.243   | 0.808   | Not Statistically Significant |
| Perceived Value   | 4.410             | 4.460               | -0.615  | 0.539   | Not Statistically Significant |
| Revisit Intention | 4.360             | 4.430               | -0.709  | 0.479   | Not Statistically Significant |

### Comparison by Spending Levels

While gender did not show a major impact on customer views, the amount of money a person spent on their meal made a significant difference. To understand this, we used an ANOVA test to compare three distinct groups: the budget group (under 100 RMB), the middle group (100–199 RMB), and the premium group (over 200 RMB). As shown in Table 3, almost every category—including food quality, service, and revisit intention—showed a highly significant difference with p-values of 0.000. The only variable that did not reach this level of significance was Atmosphere ( $p = 0.057$ ), suggesting that while the vibe is important, it is felt more consistently across all budget levels.

**Table 3**  
*One-Way ANOVA Results by Spending Levels*

| Variable          | G1: 10–99 (N=202) | G2: 100–199 (N=154) | G3: 200+ (N=47) | F-value | p-value |
|-------------------|-------------------|---------------------|-----------------|---------|---------|
| Atmosphere        | 4.430             | 4.650               | 4.490           | 2.893   | 0.057   |
| Food Quality      | 4.270             | 4.720               | 4.590           | 15.346  | 0.000   |
| Service Quality   | 4.360             | 4.750               | 4.680           | 13.721  | 0.000   |
| Price Fairness    | 4.280             | 4.730               | 4.430           | 12.617  | 0.000   |
| Perceived Value   | 4.280             | 4.640               | 4.500           | 8.441   | 0.000   |
| Revisit Intention | 4.130             | 4.690               | 4.630           | 17.507  | 0.000   |

To specify which groups were different, we conducted a follow-up analysis presented in Table 4. The finding shows the wide satisfaction gap between the budget group and the two higher-spending categories. Customers who spent more than 100 RMB were significantly more satisfied with the food, service, and overall value than those in the lowest spending bracket.

Interestingly, the data reveals a quality threshold near the 100 RMB mark. There was no statistically significant difference in satisfaction or return intent between the middle group



(100–199 RMB) and the premium group (over 200 RMB). This suggests that once a diner invests at least 100 RMB, they perceive a major jump in the quality of their experience, but spending even more does not necessarily lead to a further increase in happiness. Most importantly, loyalty is much higher for anyone spending above 100 RMB, proving that providing a high-value, premium experience is the most effective way to ensure customers come back to Thai restaurants in Chongqing.

**Table 4**  
*Post-Hoc Test for Spending Groups*

| Dependent Variable | (I) Spending Group | (J) Spending Group | Mean Diff. (I-J) | p-adj | Result                        |
|--------------------|--------------------|--------------------|------------------|-------|-------------------------------|
| Food Quality       | 10–99 RMB          | 100–199 RMB        | -0.447           | 0.000 | Statistically Significant     |
|                    | 10–99 RMB          | 200+ RMB           | -0.322           | 0.027 | Statistically Significant     |
|                    | 100–199 RMB        | 200+ RMB           | 0.126            | 0.590 | Not Statistically Significant |
| Service Quality    | 10–99 RMB          | 100–199 RMB        | -0.395           | 0.000 | Statistically Significant     |
|                    | 10–99 RMB          | 200+ RMB           | -0.32            | 0.019 | Statistically Significant     |
|                    | 100–199 RMB        | 200+ RMB           | 0.075            | 0.813 | Not Statistically Significant |
| Price Fairness     | 10–99 RMB          | 100–199 RMB        | -0.448           | 0.000 | Statistically Significant     |
|                    | 10–99 RMB          | 200+ RMB           | -0.146           | 0.528 | Not Statistically Significant |
|                    | 100–199 RMB        | 200+ RMB           | 0.302            | 0.078 | Not Statistically Significant |
| Perceived Value    | 10–99 RMB          | 100–199 RMB        | -0.356           | 0.000 | Statistically Significant     |
|                    | 10–99 RMB          | 200+ RMB           | -0.216           | 0.232 | Not Statistically Significant |
|                    | 100–199 RMB        | 200+ RMB           | 0.14             | 0.559 | Not Statistically Significant |
| Revisit Intent     | 10–99 RMB          | 100–199 RMB        | -0.562           | 0.000 | Statistically Significant     |
|                    | 10–99 RMB          | 200+ RMB           | -0.501           | 0.003 | Statistically Significant     |
|                    | 100–199 RMB        | 200+ RMB           | 0.061            | 0.917 | Not Statistically Significant |

*For the results of statistically significant, author may consider adding the star (\*) to show levels of significance.*

## **Discussion**

### **Interpretation of Results**

The findings of this study provide a clear picture of how different factors influence the Thai dining experience in Chongqing. The most notable result is the lack of significant difference between male and female diners across all categories. This suggests that in a metropolitan city like Chongqing, the satisfaction gap between genders is closing, and both groups now share similar perception for food and service. However, the data regarding spending levels reveals a much more complex explanation. The significant differences found in the ANOVA and Post-Hoc tests highlight a quality threshold around the 100 RMB mark. Customers in the budget group (under 100 RMB) reported the lowest satisfaction and loyalty, while those in the middle and premium groups were much more positive. However, the shift from the middle to the premium group did not show a significant increase in satisfaction, suggesting that once the 100 RMB barrier is crossed, customers seem to feel that they have reached a level of quality that led to their loyalty.

## The background and current situation of shanxi folk songs, People's Republic of china

Qao LiangDong<sup>1</sup> Natthawat khositditsayanan<sup>2</sup> and Thanapon teerachat<sup>3</sup>

PhD student, Music Education, Faculty of Education, Buriram Rajabhat University<sup>1</sup>

Music Education, Faculty of Education, Buriram Rajabhat University<sup>2</sup>

Music Education, Faculty of Education, Buriram Rajabhat University<sup>3</sup>

Corresponding author,

Qiao LiangDong@bru.ac.th

### Abstract

Shanxi folk songs are a form of folk art with a long historical tradition. To better learn and inherit them, it is necessary to understand their development background and current situation. This is because their development has been continuously advanced and innovated by musicians of successive dynasties, gradually forming unique musical characteristics and styles.

Shanxi folk songs should not only inherit the essence of traditional music but also integrate local and ethnic characteristics. As a form of China's traditional music, Shanxi folk song art possesses unique musical features and cultural depth. Therefore, when learning to perform Shanxi folk songs, it is essential to understand their historical development and the current emphasis on their preservation.

**Keywords :**background current situation shanxi folk song

### Introduction

Shanxi, located in the north of China, is a province with a long history and profound cultural heritage. Its terrain is complex and diverse, with higher elevations in the north and lower ones in the south, featuring a unique natural geographical environment formed by the interplay of mountains, hills, and plains. This geographical environment not only nurtures abundant natural resources but also provides fertile ground for the emergence and development of Shanxi folk songs. At the same time, Shanxi's dialectal habits are highly distinctive. The Shanxi dialect belongs to the Jin language area of northern dialects and can be further subdivided into multiple dialect groups. The diversity and differences among these dialects undoubtedly add rich linguistic colors to the stylistic characteristics of Shanxi folk songs.(Chen Fang Fang. (2011).)

The study of Shanxi folk songs helps reveal the intrinsic connection between regional culture and folk song styles. By analyzing their musical styles, lyrics, and performance forms, we can gain deeper insights into the natural environment, dialectal customs, and folk traditions of Shanxi. This further explores how regional culture influences and shapes folk song styles. Such research not only enhances our understanding of the unique charm of Shanxi folk songs but also advances the study and development of regional culture.

As a vital component of China's outstanding traditional culture, Shanxi folk songs hold significant importance for preserving and promoting this cultural heritage. Through systematic excavation, organization, and research, we can safeguard this precious cultural legacy, enabling more people to appreciate the artistic charm of Shanxi folk songs and further advancing the inheritance and development of China's traditional culture. Moreover, studies on Shanxi folk songs can provide valuable references for folk song research in other



regions, fostering the exchange and integration of folk song cultures across the nation.(Chen Jian Ying. (1999).)

The study of Shanxi folk songs plays a positive role in promoting innovation and development in music creation and performance art. By examining the musical elements, expressive techniques, and vocal skills of Shanxi folk songs, we can draw inspiration and material for modern music composition, fostering diversity and innovation in musical creation. Meanwhile, the performance forms and styles of Shanxi folk songs provide rich resources and references for contemporary performance art, contributing to its innovation and development.(Cheng Shao Hua. (2014). )

## Research Objective

To investigate and analyze the background and current situation of shanxi folk songs.

## Research Methodology:

Five experts were selected to evaluate the research findings. Lesson plans were developed, and three students were chosen for live teaching demonstrations and student presentations.

Performance Presentation: “Peach Blossoms and Apricot Flowers”  
Research Methodology: An interview-based approach was adopted to conduct interviews with five experts, evaluate classroom performance, collect data on research questions based on their recommendations, summarize and refine the teaching model, and develop a learning manual.

The learning manual includes:

Teaching the singing techniques of national singing style.

Teaching the singing skills of Shanxi folk songs.

And a comparative study of the two.

Quality control of research tools:

Submit the study manual to five China vocal music experts for evaluation, checking the accuracy and feasibility of the teaching content, language structure, and teaching objectives in the study manual.

According to the advice of vocal music experts, revise the instruction manual to use the IOC formula for content verification.

Laryngeal singing technique

Ethnic singing style: Lathong singing

Shanxi Folk Song: The Focus is on the Throat

Singing support

Ethnic vocal technique: The center of gravity is placed on the dantian pivot, with the chest cavity also serving as a support point.

Shanxi Folk Song: The Focus is Mainly on the Dantian, High Throat Position, and the Center of the Brow as the Support Point

Articulation and Rhyme

Ethnic singing style: articulation in a specific state, which means articulating on the basis of opening each vocal cavity, and articulating and rhyming at the philtrum.

Shanxi Folk Song: First Rhyme, Then Voice, No Need for Too Much Vocalization

Reflection: The expression of flavor in ethnic singing style is somewhat inferior, as the singing technique makes the performance appear slightly clumsy, lacking in charm and vitality. However, it is precisely this unique singing style of Shanxi folk songs that makes us feel the singing technique is not entirely scientific. Both singing styles have their advantages and disadvantages.

### **The Melody of Singing:**

The singing of Shanxi folk songs attaches great importance to the singing flavor, which is much more rich than the national singing style. The whole song requires Shanxi dialect, the tone is emotional, and the verbs are sung "lively".

1. "Shanxi Folk Songs". The singing style is flexible, with rich and varied vocal tones that are delicate and melodious. The lyrics are highly narrative, featuring dense articulation.

2. "Yi Yin" (intonation embellishment). It is a decorative prosodic feature in language, characterized by a relatively high and resonant vocal quality that renders the lyrics more colloquial while harmonizing the tones of lyrics with different melodies. It is commonly employed to embellish and accentuate the onset and coda of syllables.

3. Glissando. It is mainly used to enhance vocal expression, closely integrated with the natural modulation of the lyrics to achieve clear articulation.

4. "Tongue-tapping sound". The vocal technique of "tongue-tapping sound" is highly compatible with the lyrics, perfectly aligning with the melodic rhythm of the singing, effectively conveying a cheerful mood.

Furthermore, a key aspect of Shanxi folk song performance is the use of vocal variations to convey characters' emotional states or narrate storylines. During the performance, various singing techniques are employed to depict character traits, thereby creating vivid and distinctive artistic portrayals.

The interviewees were nine teachers from undergraduate institutions at different levels, as listed below:

Niu Baolin, Second-Class Professor, Shanxi Provincial Song and Dance Theatre

Shi Zhanming, a famous singer and inheritor of Shanxi folk songs

Wang Min, First-class Artist of HuaXia ZhiGen Art Troupe, Shanxi Province

Zhou Na, Professor, School of Music, Shanxi University

Luo ShengJun, Director of Suide Cultural Center in Shaanxi, Provincial-level Folk Song Inheritor

Qiao JianZhong, Professor and Researcher, Chinese National Academy of Arts

Zhang HongLi, First-class Artist of Shanxi Huaxia Zhigen Art Troupe

Guo Liangliang, Shanxi HuaXia ZhiGen Art Troupe, Second Grade Actor

Meng LiDong Lecturer, Northwest A&F University

### **Data Collection Tools**

1. Research and collect literature, journals, and information related to the study of Shanxi folk song performance;

2. Designing the questionnaire questions;

3. Based on the experts' confirmed issues and recommendations, revise your questionnaire to finalize it.

### **Results**

Analysis of the Musical Form of "Peach Blossoms Red and Apricot Flowers White"

1. simple form: The song "Peach Blossoms Red, Apricot Flowers White" follows a one-phrase structure, consisting of two concise musical phrases. This form features a single independent musical section that can be a single phrase or a combination of three or more phrases. The song employs a dual-phrase structure, where the upper phrase serves as a metaphorical introduction and the lower phrase directly addresses the theme. This straightforward approach eliminates the need for complex layers or substructures, allowing listeners to instantly grasp the emotional entanglement between the couple, their pursuit of love, and their yearning for a better life. The continuous melody throughout the song makes

it easy for listeners to memorize and even hum along, significantly enhancing its popularity and widespread appeal.

See Example 2-1

**桃花红杏花白**

(刘改鱼演唱)

山西民歌

1 =  $\flat B \frac{2}{4}$

**222 12 | 5 6  $\dot{1}$  3 | 222 17 |  $\dot{6}$  5 . | 1 . 2 33 | 232 11 |**

1. 桃花花 你就 红 来, 杏花花 你就 白, 爬 山 过岭 寻你 来呀,  
2. 榆树来 你就 开 花, 圪枝枝 你就 多, 你 的 心眼 比俺 多呀,  
3. 锅儿来 你就 开 花, 下上个 你就 米, 不 想 旁人 光想 你呀,  
4. 金针 你就 开 花, 六瓣瓣 你就 黄, 盼望和 哥哥 结成 双呀,

**$\underline{356} \underline{7227} | \overset{\circ}{5} - :|| 112 33 | 232 11 | \underline{356} \underline{7227} | \overset{\circ}{5} - |$**

啊 哈 呀 呀 呆。 盼望和 哥哥 结成 双呀, 啊 哈 呀 呀 呆。

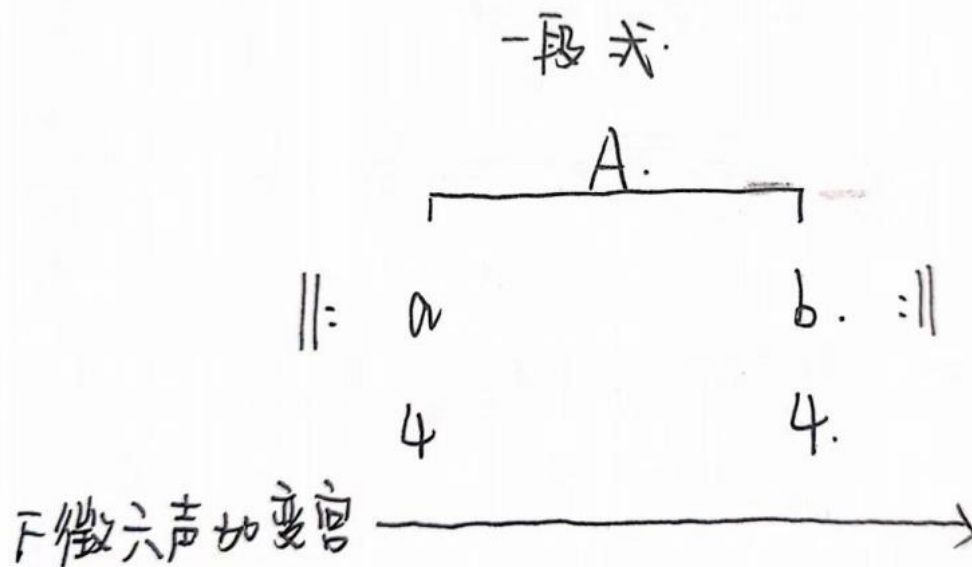
渐慢

**$\underline{356} \underline{7227} | \overset{\circ}{5} - | 5 - ||$**

啊 哈 呀 呀 呆。

sunzp制谱20140802.  
本曲谱上传于 中国曲谱网 7





The song "Peach Blossoms Red, Apricot Flowers White" employs a "strophic song" structure, where the same melody is repeated with varying lyrics in each section. Each section maintains similar word count and rhythmic patterns. Originating from folk traditions, this form is widely used in folk songs. By singing the same melody through multiple verses, it deeply imprints the musical theme and motifs in listeners' minds, making it easier to remember and pass on. Similarly, the strophic song form is frequently used in Western folk music.

## 2. characteristics of second mode:

The musical mode of "Peach Blossoms Red and Apricot Flowers White" is the E major six-tone mode with a modified Gong (a Chinese modal element). This mode radiates brightness, openness, and grandeur, evoking joy and celebration. Commonly used in narrative themes, the song features extensive chromatic progression akin to Western major scales, yet retains the lyrical grace, fluidity, and softness characteristic of traditional Chinese pentatonic modes. Centered on the fifth note (Zheng), the melody is structured around this core, culminating in the same note for a strong tonal identity. Occasional chromatic notes (modified Gong seventh) add subtle nuances to the composition.

### Melodic and Rhythmic Characteristics

The song "Peach Blossoms and Apricot Flowers" is primarily narrative and emotional, with minimal dramatic elements and a smooth melody. Originating from folk traditions and reflecting everyday life, its musical mode aligns with popular aesthetic preferences and vocal range, eventually becoming a staple in vocal training. The occasional use of large leaps in pitch harmonizes with Shanxi dialects. In Zuo Quan's folk songs, these leaps are frequently employed to convey emotional fluctuations, enhancing the song's emotional resonance. (As shown in the diagram, red indicates stepwise progression while purple represents large leaps.)

The song employs a 2/4 time signature to establish a steady and structured rhythmic foundation, ideal for lyrical storytelling and emotional expression. The rhythmic pattern is

rooted in the linguistic features of the Zuoquan dialect, where the frequent use of reduplicated words is reflected in the rhythm. For instance, the phrase "taohua'er" (peach blossoms) is pronounced as "tao" (fourth tone) and "huer" (light tone) in Zuoquan dialect, with the stress on "tao." Thus, the opening phrase "taohua hua" (peach blossoms) in "Taohua Hong Xinghua Bai" (Peach Blossoms, Red Apricot Flowers, White Apricot Flowers) follows an 8/16 rhythm, aligning with the stress on "tao" in the Zuoquan dialect.

To understand the practice of Shanxi folk song singing by music undergraduates in China.

To gain a more objective understanding of the practice of Shanxi folk song performance among music undergraduates, a questionnaire survey was conducted among researchers, and interviews were carried out with 9 vocal music teachers from regular universities. The list of interviewed teachers and the time are as follows:

### graph 3

*List of Interviewees and Time:*

| interviewee    | Time       | Place           |
|----------------|------------|-----------------|
| Niu BaoLin     | 2024.10.26 | Taiyuan, Shanxi |
| Shi ZhanMing   | 2024.10.28 | Taiyuan, Shanxi |
| WangMin        | 2024.10.28 | Taiyuan, Shanxi |
| Zhou Na        | 2024.10.29 | Taiyuan, Shanxi |
| Luo ShengJun   | 2024.5.30  | Yulin ,Shan     |
| QiaoJianZhong  | 2025.5.31  | Xian shanxi     |
| Zhang HongLi   | 2024.10.20 | Taiyuan, Shanxi |
| Guo LiangLiang | 2024.11.25 | Taiyuan, Shanxi |
| Meng LiDong    | 2025.6.5   | Xian shanxi     |

The interview covered nine questions, categorized into three main types: 1) Teachers 'and students' perceptions of Shanxi folk song works; 2) Challenges faced by teachers in teaching Shanxi folk song performance and their cultivation methods; 3) The professional benefits students gain from learning Shanxi folk song performance. Through these interviews, researchers gathered valuable insights as outlined below:

There are three questions regarding the recognition level of China Shanxi folk song performances by teachers and students, namely: your students are enthusiastic about

Learning to sing Shanxi folk songs in China? For students, from which grade do they usually start learning and getting familiar with folk song works? Which folk song works do you usually have students learn first? The interview results are as follows:

### graph 4

| interviewee | Question 1 | Question2                                 | Question3                                    |
|-------------|------------|-------------------------------------------|----------------------------------------------|
| NiuBaoLin   | Yes        | Bachelor's degree in third or fourth year | "Peach Blossoms Red, Apricot Blossoms White" |
| ShiZhanMing | Yes        | Undergraduate third year                  | "Peach Blossoms Red, Apricot Blossoms White" |
| WangMin     | Yes        | Undergraduate sophomore or above          | "Peach Blossoms Red, Apricot Blossoms White" |

| interviewee   | Question 1 | Question2                                 | Question3                                    |
|---------------|------------|-------------------------------------------|----------------------------------------------|
| ZhouNa        | Yes        | Second year of undergraduate studies      | "Peach Blossoms Red, Apricot Blossoms White" |
| LuoShengJun   | Yes        | Bachelor's degree in third or fourth year | "Peach Blossoms Red, Apricot Blossoms White" |
| QiaoJianZhong | Yes        | Bachelor's degree in third or fourth year | "Peach Blossoms Red, Apricot Blossoms White" |
| ZhangHongLi   | Yes        | Junior year of undergraduate studies      | "Peach Blossoms Red, Apricot Blossoms White" |
| GuoLiangLiang | Yes        | Bachelor's degree in third or fourth year | "Peach Blossoms Red, Apricot Blossoms White" |
| MengLiDong    | Yes        | Bachelor's degree in third or fourth year | "Peach Blossoms Red, Apricot Blossoms White" |

The problems of teaching and training methods used by teachers. This category comprises five key questions: How can beginners be guided to understand and master the essential techniques of Shanxi folk song performance? What are the distinctive features of Shanxi folk song singing? How do you help students accurately convey these characteristics in teaching? What are the most common challenges students face when learning to perform Shanxi folk songs? What specific training methods do you typically employ when teaching students to sing Shanxi folk songs? How does Shanxi folk song performance differ from traditional ethnic singing styles? Based on practical observations and interview findings, this section summarizes the frequent issues encountered by teachers in Shanxi folk song instruction and their practical teaching approaches. The results are summarized in the table below:

#### graph 5

*Interview situations for some questions*

| interviewee   | Part1                                                                          | Part2                                                      |
|---------------|--------------------------------------------------------------------------------|------------------------------------------------------------|
| NiuBaoLin     | Breathe and open your mouth to deliver the lyrics smoothly.                    | Emotional expression and skill practice                    |
| ShiZhanMing   | Articulation, Support Point and Emotional Expression                           | The transmission of oral tradition                         |
| WangMin       | The practice of high vocal registers and the articulation of falsetto.         | Breathing exercises and training of breath support points  |
| ZhouNa        | The standard training of voice, emotional expression and breathing expression. | Staccato practice, stage performance.                      |
| QiaoJianZhong | The works are introduced and the style of some works is introduced.            | The flavor of the song and the language.                   |
| LuoShengJun   | The vocal training of folk songs and the style of works.                       | Position training, high-position sound activation training |



| interviewee   | Part1                                                                                    | Part2                                                                       |
|---------------|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| ZhangHongLi   | The singing of Shanxi folk songs and the style grasp.                                    | oral teaching that inspires true understanding within                       |
| GuoLiangLiang | High Pitch Training and Articulation Practice of Shanxi Folk Songs                       | High-position coordination with breathing, Dantian and brow-point training. |
| MengLiDong    | The training of the flavor of the song and the explanation of the aesthetic of the work. | Technology and emotion training, stage performance training.                |

## Discuss

The following points are discussed based on the results of the study:  
The vocal techniques of Shanxi folk singing primarily involve the throat and upper vocal regions, with the key focus being the flexibility of the mouth. Maintaining proper breath control and a high vocal placement are crucial, as the singing position must be positioned forward to produce a clear and resonant sound. The technical requirements for Shanxi folk singing differ from those of traditional Chinese folk singing. In Shanxi folk performances, singers must integrate various performance elements—singing, recitation, instrumental playing, martial arts, and acting—into a unified artistic process.

## Suggestion

Researchers conducted an in-depth analysis of the Shanxi folk song "Peach Blossoms Red, Apricot Blossoms White" and drew conclusions based on interviews with nine vocal instructors. Vocal performance requires performers to master essential techniques, which are crucial for conveying musical emotions and evoking audience resonance. By continuously refining their skills, performers can deliver flawless musical interpretations. Proper vocal positioning ensures sustained sound production, while mastering breathing techniques—particularly the "air exchange" process—guarantees accurate singing. This technique is especially vital for fast-paced or long-duration songs. In opera training, breathing techniques form a core component of vocal education. Resonance techniques, though complex, produce mellow and pleasant tones when mastered. Key resonance cavities include the chest, throat, nasal cavity, and head cavity. For clear high-pitched notes, upper chest resonance is essential. Proper resonance techniques enable singers to develop a distinctive, rounded vocal timbre that enhances vocal recognition.

## References

- Erjian, M., & Chuangprakhon, S. (2023). Transmission of yugu folk song knowledge in Sunan County, Gansu Province, China.
- Mok, RT (1966) "The Atonal in Chinese Folk Music", Journal of the International Council of Folk Music, 18, pp. 14-23. doi: 10.2307/834636.
- Ni,D.(2024). Harmonious Tradition: Cultural Integration Through Piano Arrangements of Chinese Folk Songs. Baltic Journal of Law and Social Sciences, (1),149-155.
- Chen Fang Fang. (2011). On the Influence of Bel canto Singing Techniques on Ethnic Singing Techniques (Master's Thesis, Yunnan Arts University)
- Chen Jian Ying. (1999). A Brief Discussion on the Mastery and Application of Singing Breath. Journal of Fujian Normal University (Philosophy and Social Sciences Edition) (03)

Cheng Shao Hua. (2014). On the Technical Differences Between Bel canto and Shanxi Original Ecological Singing. The Voice of the Yellow River (17),92-93



## A Study of the History and Characteristics of "XibEIFeng" Music from 1980 to 1989

Renyifei<sup>1</sup> Panasin Sriviset<sup>2</sup> and Akachai Teerapuksiri<sup>3</sup>

<sup>1</sup>Ph.D Music Education, Faculty of Education, Buriram Rajabhat University, Thailand,  
E-mail: 660427093004@bru.ac.th

<sup>2</sup> Advisor, Music Education Program, Buriram Rajabhat University, Thailand,  
E-mail: Panasin.sv@bru.ac.th

<sup>3</sup> Co-Advisor, Music Education Program, Buriram Rajabhat University, Thailand,  
E-mail: akachai.tp@bru.ac.th

### Abstract

This study aims to explore the history and characteristics of "*XibEIFeng*" music from 1980 to 1989. The study employs a literature review approach, analyzing historical documents and policy papers from China's reform and opening-up period, as well as media materials such as live concerts, television programs, films, recordings, and lyrics. Furthermore, it utilizes basic musicological analysis methods to examine melodic structure, modal usage, rhythmic features, and stylistic expression.

The results indicate that the emergence of "*XibEIFeng*" music is closely related to two major social factors: first, the awakening of cultural roots and the pursuit of spiritual liberation following economic reforms; and second, the significant role played by mass media in disseminating and promoting this musical style. "*XibEIFeng*" music blends folk music elements from Northwest China (particularly Shaanxi and Gansu) with rhythms from Western pop music and disco, forming a unique style that is distinctive, simple yet powerful, and expresses emotions directly and easily understood.

**Keywords:** "*XibEIFeng*" "Cultural Roots". "Reform and Opening Up"

### Introduction

This chapter explores the musical characteristics and essence of "*XibEIFeng*" music by examining its historical background, musical features, and humanistic spirit. The author employs qualitative research methods, including extensive literature review, musical form analysis, expert interviews, and surveys, to conduct a final evaluation.

The rise of "*XibEIFeng*" music was not accidental, but rather the result of multiple factors during China's social transformation in the 1980s. Against the backdrop of reform and opening up, the cultural sphere exhibited characteristics of collision between tradition and modernity, and fusion of local and foreign cultures, which were concentrated in musical creation. "*XibEIFeng*" is a unique popular music style that emerged in China in the mid-to-late 1980s. Based on the music of ethnic minorities in Northwest China, such as those in Shaanxi and Gansu, it incorporates disco rhythms and arrangements from Western pop music. Its characteristics include a warm and rugged style, with melodies primarily based on ethnic folk tunes and Shang modes. (Wang Wei, 2017: 1-2) When the melody of "*Huangtugaopo*" was sung by six singers in the 1988 CCTV Young Singer Grand Prix, a music craze called "*XibEIFeng*" had swept across the country (Zhaole, 2012: 6) The most notable feature of "*XibEIFeng*" music in terms of artistic form is the creative combination of traditional Chinese folk music elements and modern pop music techniques, forming a musical language that is rooted in local culture and has a sense of the times. This fusion is mainly reflected in the melody structure, singing style, and arrangement and instrumentation.



In terms of accompaniment, light music bands became an important model for popular songs, and electronic keyboards, electric guitars, and drums were used. The performance mechanism was relatively flexible, and "group performance" became a new performance mode. In terms of communication, tape recorders and tapes were the most important means of communication at that time. In terms of creation, some middle-aged composers began to learn pop song creation techniques from Hong Kong and Taiwanese songs. In terms of production, multi-track recording technology was not yet mature, and the album was recorded primarily using the band's collective recording method. The arrangement was mainly to imitate Hong Kong and Taiwanese songs, and "tape-copying" became the main way for many musicians to learn pop arrangements. In summary, at the beginning of the revival of mainland pop music, it was basically a transition from half-understood learning to exploring the characteristics and rules of pop music. It was not until the late 1980s that it began to mature. (Youjingbo, 2015: 355-357) The singer's style broke the norms of traditional folk and early popular singing, creating a highly tense "shouting" style. Fan Linlin is a representative singer. The lyrics express the theme in two ways: on the one hand, they depict a realistic picture of rural China, and on the other, they echo the spirit of the early days of reform and opening up. Cultural root-seeking consciousness: Lyrics often use images such as the "Yellow River" and the "Huangtugaopo" to symbolize the roots of Chinese civilization. (Wangwei, 2017: 3-4) Although "*Xibefeng*" as a music trend did not last long, it left an indelible mark on the history of contemporary Chinese music and culture. Its influence extends far beyond the music itself, touching on multiple levels, including cultural identity and industrial construction. "*Xibefeng*" marks that mainland China's pop music has broken away from cover imitation and entered the original stage.

## Research Objective

To study the history and characteristics of "*Xibefeng*" music between 1980 and 1989.

## Research Methodology

The researcher carried out the study according to the following steps:

1. Literature review and research on the historical background, location, people, dissemination, and musical characteristics of "*Xibefeng*" music from 1980 to 1989.
2. Through interviews with music teachers and popular music teachers in some universities, understand the humanistic influence of "*Xibefeng*" music.
3. Summarize the interview results and systematically integrate the data of "*Xibefeng*" music.
4. Think about and formulate a teaching guidebook based on "*Xibefeng*" music.

## Samples

We interviewed three musicology professors, three popular music professors, and two popular music singers from Chinese universities. These teachers and singers have extensive teaching and performance experience, have published numerous papers, and have achieved remarkable results in both teaching and research.

## Research Instruments

This study will adopt qualitative research methods. Based on the research purpose and the content of each part, it will use targeted research methods, including a literature review, an interview survey, and a music form analysis. Comprehensive research methods will be used to ensure the scientific authenticity and effectiveness of the research.

### **Literature search**

To understand and gather relevant information about the music and background of "*Xibefeng*", the researchers will read existing literature, books, journals, and related textbooks.

### **Interview questionnaire**

Interview forms include structured interviews and unstructured interviews. In the following order, the researchers will create the questionnaire and assess its quality:

What is the background of the "*Xibefeng*" works?

What are the difficulties in performing "*Xibefeng*" works?

In what areas is the influence of the "*Xibefeng*" period most evident?

Do you think there is any overlap between the essence of music from the "*Xibefeng*" period and popular music in the development of Chinese pop music?

What educational value do you believe *Xibefeng* music has in popular music education?

Does the content of the guide adequately cover the necessary teaching skills?

Does the local cultural content incorporated into the guide facilitate student learning?

Is the guide structure clear and suitable for classroom teaching?

What are your thoughts on the assessment strategies provided in the guide?

Do you recommend continuing to use the guide in future popular music courses? Why?

### **Interview Analysis**

Based on the interview results, this paper summarizes and analyzes the social background and humanities of the "*Xibefeng*" music period, and also analyzes the form structure, lyrics, and singing techniques of representative "*Xibefeng*" music.

### **The process of coordination for conducting research.**

1) A letter of request for certification from the Graduate School of Buriram Rajabhat University.

2) Make contact to introduce oneself and discuss the study's goals.

3) Speak with authorities and resource people for interviews.

4) Establish a good rapport with the information source.

5) Prepare all kinds of equipment needed for the interview.

### **Basic data collection process**

1) Check the basic data on the social background and characteristics of "*Xibefeng*" music from various sources of books, articles, journals, and related textbooks from 1980 to 1989 as the basis for research.

2) Find relevant information, such as a brief history of Chinese pop music, a collection of Chinese pop music scores and their applications, etc.

3) Select research subjects according to research objectives. Interview 5 vocal music teachers and music professors from different levels of colleges and universities to understand the sociological and humanistic influences from 1980 to 1989, as well as suggestions on "*Xibefeng*" music and practical teaching applications. This information will serve as an important basis for researchers to select representative text materials for in-depth research.

4) Summarize the interview results and analyze the history, humanistic spirit, music, and other aspects from 1980 to 1989.

5) Form an analysis report and summarize the analysis of the characteristics of "*Xibefeng*" music and its teaching application.

### **Field data collection procedures**

1) First interview: The researcher goes to the field to collect data to understand the type of knowledge found. The data collection method should be selected based on the actual situation of the researcher and the interviewee.

2) Interview questionnaires are used for interviews with general interviewees. The basic data of this study were obtained through interviews with five pop music teachers and musicology professors.

3) The interview format adopts structured and unstructured interviews, and its elements are as follows: Structured interview: The researcher will prepare questions for this interview method in advance. Specific answers for the research objectives characterize these questions.

The interview is divided into two parts. The first covers the social background, humanistic spirit, and status of Chinese pop music from 1980 to 1989, and analyzes the birth of "Xibeifeng" music in 1988.

The second part is about the characteristics of "Xibeifeng" music.

### **Data Analysis**

We analyze and discuss the data obtained from the interviews and music analysis. According to the research purpose, the summary data is presented, and the results are discussed in a descriptive analysis.

1) Use IOC to perform statistical analysis on the questions in the interview questionnaire.

2) Summarize the interview records to form text data and conduct an in-depth analysis of the interview results.

3) Combined with the research data, through the analysis of the historical background of Chinese pop music from 1980 to 1989 and the "Xibeifeng" music in 1988, we can summarize more objective and practical suggestions.

### **Result**

#### **Investigate the development process of Chinese pop music from 1980 to 1989 and the development process of the birth of "Xibeifeng" music in 1988.**

To better understand the history and characteristics of pop music, the researchers developed a questionnaire and interviewed five pop music teachers and music professors at undergraduate colleges. The interview questions mainly include three categories:

The interview involved five questions in total, which can be summarized into three categories:

1) The development background and development trend of Chinese pop music from 1980 to 1989.

2) The development status of people's thoughts and attitudes towards music culture from 1980 to 1989.

3) What role and influence does "Xibeifeng" music have on the development of Chinese pop music?

Through the interviews on these issues, the researchers obtained some valuable information, as follows:

The development background and development trend of Chinese pop music from 1980 to 1989.

The early 1980s marked the beginning of the revival of pop music in mainland China. Due to the long-term separation from pop music and the influence of critical theories such as "pornographic songs" and "decadent music" in the early years, the music industry had a relatively superficial understanding of pop music. It was very vague about the criteria for judging pop music. It mainly used traditional music standards to judge pop songs, so some



singers and works with strong personalities and characteristics were not recognized. In summary, at the beginning of the revival of pop music in mainland China, it largely explored the characteristics and rules of pop music through half-understood learning, and it was not until the late 1980s that it gradually matured.

At the same time, Hong Kong and Taiwanese songs were introduced to the mainland during China's reform and opening up, and with them came a dizzying array of new things. Tape recorders were popular on the mainland in the 1980s, and Hong Kong and Taiwan songs were also introduced there with their arrival. At the same time, Hong Kong pop music has entered a relatively prosperous period. *Xu Guanjie*, *Luo Wen*, *Xu Xiaofeng*, and others have had an important influence on the Hong Kong music scene; after experiencing the folk song movement, Taiwan pop music has gradually tended to commercial development. Campus folk songs have had a huge impact in Taiwan. *Qi Yu*, *Cai Qin*, *Ye Jiaxiu*, *Li Jianfu*, and others are well known in the Taiwanese music scene. Several campus songs, such as "Wai po de peng hu wan" "Wo niu yu huang li", and "Lan hua cao" have had a wide impact on society. In the early 1980s, with the implementation of reform and opening up, Hong Kong and Taiwan songs spread rapidly in the mainland like mushrooms after rain. For a time, Hong Kong and Taiwanese songs began to gain mainstream traction on the mainland music scene, and Hong Kong and Taiwanese singers became the objects of imitation by mainland singers. For example, *Deng Lijun*, *Liu Wenzheng*, *Feng Feifei*, *Zhang Di*, *Xu Xiaofeng*, and other Hong Kong and Taiwan singers quickly became idols of mainland audiences. Especially after 1983, with the broadcast of the Hong Kong TV series "*Huo Yuanjia*", the theme song "The Great Wall Will Never Fall" became popular overnight; then, Zhang Mingmin's song "My Chinese Heart" at the CCTV Spring Festival Gala in 1984 further promoted the influence of Hong Kong and Taiwan songs on mainland pop music. In the early 1980s, mainland China's pop music was still in its exploratory stage, and the concept of copyright had not yet taken shape, so covering songs from Hong Kong and Taiwan became a hot topic. For example, *Cheng Lin* was famous for imitating *Deng Lijun*, and *Xie Lisi* and *Wang Jieshi* became popular for covering Taiwanese campus songs. In the early 1980s, mainland pop music began to develop under the influence of Hong Kong and Taiwan songs, so it had a strong "Hong Kong and Taiwan flavor".(You Jingbo,2015:355-357)

From 1986 to 1990, China's economy and society developed rapidly. With the stable development of society and economy, pop music has also been further promoted. In terms of music style, there was a gradual trend towards diversification, with European and American styles such as rock and disco beginning to be integrated into mainland pop songs; in terms of performances, competition between "state-run institutions" and "individuals" made the performance market unprecedentedly active, and "going out for a walk" began to become an important performance model; in terms of communication, television began to demonstrate its important role, with TV drama theme songs giving a huge boost to the spread of pop songs. TV evening parties are becoming an important way for singers to become famous. During this period, cultural exchanges between Hong Kong, Taiwan, and the mainland became more frequent. In 1987, the two sides of the Taiwan Strait resumed civil exchanges, and the influence of Taiwanese singers on the mainland gradually surfaced from the "underground". In November 1987, Taiwanese singer *Gao Lingfeng* came to Beijing to film the TV program "Eight Thousand Miles of Clouds and Moon". In 1987, CCTV invited Taiwanese singer *Fei Xiang* to participate in the "Spring Festival Gala" performance, and the song "A Fire in Winter" became popular all over the country. Since then, Taiwanese singers such as *Bao Nana* and *Pan Anbang* have also appeared on the "Spring Festival Gala" stage in 1988 and 1989, respectively, further strengthening cultural exchanges between the two sides of the Taiwan Strait. The exchanges between the mainland and Hong Kong also

became more frequent. Singers such as *Yip Lai-yee* and *Xu Xiaofeng* appeared on the "Spring Festival Gala" stage in 1987 and 1989, respectively. Singers such as *Tan Yonglin* and *Zhang Guorong* began to gain popularity in mainland China. At this time, mainland pop songs also began to be sold back to the Hong Kong market, forming a cultural convection. In 1989, "Blood-stained Style" and "Nothing" won the "Excellent Mandarin Song Award" of the "Hong Kong Top Ten Chinese Golden Songs Award", and mainland pop songs were recognized in the Hong Kong market. In 1989, China officially introduced Hong Kong, Taiwan, and overseas records. *Qi Qin's "Wolf I"* and *Su Rui's "Follow the Feeling"* were the earliest officially released versions, and the audiovisual market began to gradually get back on track. At the same time, foreign culture began to influence mainland pop music. In 1985, the British band Wham held a concert on the mainland, becoming the first foreign pop band to perform there. Their arrival broadened the horizons of mainland pop music practitioners and inspired them. In 1985, the American music industry held a charity concert for African refugees. The song "We Are The World," recorded by 45 singers, inspired mainland musicians. The following year, the first concert of 100 singers was held, and the theme song "Let the World Be Full of Love" became popular. In the late 1980s, karaoke, invented by the Japanese, began to spread to the mainland and became popular nationwide, making dance hall culture an important pillar of the mainland entertainment industry. The shift in social opinion during this period greatly improved the growth environment of pop songs. From the official sector to the private sector, voices criticizing pop music gradually declined, and reasonable guidance and the strengthening of theoretical construction became the music industry's mainstream attitude toward pop music. (You Jingbo, 2015:357-359)

The development status of people's thoughts and attitudes towards music culture from 1980 to 1989.

In the early 1980s, people's minds were increasingly liberated, and shifts in ideology led to the transformation of cultural forms. The original revolutionary and mass songs could no longer meet public needs, and lyrical songs came to be loved by the public. In 1980, the Art Department of China National Radio and the editorial department of Song jointly held the "Listeners' Favorite Radio Songs" selection activity, which produced the famous "Fifteen Lyrical Songs". These songs expressed the public's true feelings and reflected the Chinese public's counterattack against the "high-pitched and hard-sounding" music concept during the "Cultural Revolution". Although they had long been constrained in expressing emotions, with the implementation of reform and opening up, people's minds began to be liberated, and public demand for emotional expression also increased.

On May 9, 1986, at the first "One Hundred Singers Concert" held at the Capital Gymnasium, *Cui Jian* and his band made a strong impression on the audience with the song "Nothing". At that time, people were still immersed in the softness and euphemism of lyrical songs and Hong Kong and Taiwan songs. *Cui Jian* shouted out the first sound of Chinese rock with an unstoppable force. Since then, rock music has emerged as a new force in mainland pop music. With the rise of rock music, the ideology of mainland pop music has come to the fore, and its influence has begun to touch society, culture, and the human spirit.

In the mid-to-late 1980s, the "cultural root-seeking fever" prevalent in Chinese literary and art circles led literary, fine arts, and film works to reveal a strong sense of local consciousness. Under the social trend of "cultural root-seeking", the popularity of "Xibefeng" music shows that this generation of young musicians, influenced by Hong Kong, Taiwan, and Western culture, has begun to reflect an awakening of local cultural consciousness. It is the first combination of local and foreign cultures in mainland pop music at this stage of its development. It is also a concentrated outbreak of a long-accumulated traditional culture under the influence of pop music. It is also a conscious embodiment of the art form of music in the "cultural root-seeking" trend. The popularity of "Xibefeng"



reflects the shift in the creative direction of mainland pop music and in the audience's aesthetic psychology.

What role and influence does "*Xibefeng*" music have on the development of Chinese pop music?

"*Xibefeng*" marks the transition of mainland China's pop music from cover songs to original creation. Prior to this, the mainland music scene mainly relied on re-recording Hong Kong and Taiwan songs (such as *Denglijun's* works), lacking local originality. "*Xibefeng*" musicians systematically explored folk music resources for the first time, creating a pop music paradigm with Chinese characteristics. As scholars have said: "This is the first original climax of Chinese pop music... The spring of mainland pop music is coming with its own beat" (Yangshiwang, 2010). This original spirit laid the foundation for the subsequent development of Chinese pop music. The "campus folk songs" (such as "*Tongzhuodeni*") and "urban folk songs" of the 1990s can be regarded as echoes of it.

"*Xibefeng*" is the concentrated embodiment of the cultural reflection movement in 1980s music. It transforms the image of "yellow earth" into a symbol of cultural identity, echoing the "root-seeking literature" in literature, the "western films" in film, and the "local realism" in art (Renminyinyue, 2011, p. 12). This kind of cultural root-seeking is not mere nostalgia but an attempt to reconstruct cultural subjectivity during modernization, exemplified by the metaphor of cultural tolerance in the lyrics of "*Huangtugaopo*," "whether it is the northwest wind or the southeast wind." Music scholars pointed out: "*Xibefeng*" is a 'declaration' of the establishment of local consciousness in mainland pop music, reflecting the singer's sincere love for his hometown" (Wangjiayue, 2008).

Through the spread of mainstream platforms such as the CCTV Spring Festival Gala and the Youth Song Competition, "*Xibefeng*" has achieved the leap from the edge to the center of pop music. Before this, pop music was often denigrated as "decadent music" and difficult to gain public acceptance (Xieyuntao, 2015). However, works by "*Xibefeng*" have been recognized by official media for their national cultural roots and their expression of the spirit of the times. In 1988, the Youth Song Competition established a popular singing group for the first time, marking the legal status of pop music in national art competitions and its inseparable connection to the promotion of "*Xibefeng*".

Although "*Xibefeng*" as a trend faded after 1989, its artistic elements continue to influence subsequent creations. *Zheng Jun's* "*Huidaolasa*" in the 1990s, *Dao Lang's* Western-style songs in the 2000s, and even *Tan Weiwei's* "*Huayinlaoqiangyishenghou*" in the 2010s can all be seen as contemporary echoes of elements of Northwest music. In 2017, the Chinese Musicians Association selected "30 Most Influential Songs in 30 Years of Reform and Opening Up", and "*Rangshijiechongmanai*", "*Huangtugaopo*", "*Tongyishouge*", and other "*Xibefeng*" era works were selected, showing the confirmation of their historical status.

### Music Analysis of "*Xibefeng*."

According to the research objectives, the author chose to analyze the music of the "*Xibefeng*" song "*Huangtugaopo*", specifically including five aspects: mode, form, orchestration, lyrics, and singing.

#### Mode and scale structure

"*Huangtugaopo*" adopts the B Zhi Qingyue mode, which is a variant of the Han pentatonic scale. Its scale structure is based on "Zhi (so)-Yu (la)-Gong (do)-Shang (ri)-Jiao (mi)", but it innovatively strengthens the use of the partial tone "Qingjiao (fa)" - this tone not only appears in the strong beat position, but also has a longer duration (such as the "zhu" in the first sentence "*Wojiazhezai*" falls on the extended Qingjiao tone), breaking the traditional pentatonic mode's practice of avoiding partial tones. This treatment not only



preserves the desolate charm of Northwest folk songs but also heightens the harmonic tension.

The following table shows the characteristics of its scale structure:

| Pitch         | level Functional attribute | Appearance position    | Expression function            |
|---------------|----------------------------|------------------------|--------------------------------|
| Zhi (so)      | Mode tonic                 | End of phrase          | Stable tonality                |
| Shang (ri)    | Main tone                  | Melody skeleton        | Create a sense of spaciousness |
| Qingjiao (fa) | Partial tone               | Strong beat long tone  | Create a sharp feeling         |
| Yu (la)       | Color tone                 | Transitional paragraph | Enhance lyricism               |

#### Form and rhythm design

The song adopts a re-enactment single three-part form: introduction-A-A1-B-A2, creating a dramatic contrast through changes in speed and texture:

##### Introduction (8 bars):

Free rubato rhythm, drum roll, and an electric guitar's distorted tone push beneath the string foundation, evoking the vastness of the wind and sand and laying the groundwork for it.

##### Section A (16 bars):

In a medium-speed 4/4 beat, the melody is characterized by repeated homophonic passages and large leaps (such as the octave jump in the word "Gaopo"). The electronic synthesizer simulates the string background, and the electronic keyboard and *Suona* sound are interspersed, highlighting the regional color of the northwest.

##### Section A1 (16 bars):

The speed is accelerated, and the electric guitar's syncopated accents and disco rhythms are infused with rock power. The continuous beating of the drum cymbals strengthens the rhythm, echoing the fusion of "Xibefeng" with European and American popular rhythms.

##### Section B (12 bars):

The rhythm is widened, and the density of lyrics is reduced. The melody of repetitive motives (such as "Sijifengcongposhangguaguo") enhances the lyrical narrative, while the large syncopated rhythm sustains the pop feel.

##### A2 section (variation and reproduction):

The theme is reproduced in the high-pitched area, and the highest note, E2 (the "Gao" in "Huangtugaopo"), is sung in a shouting style. At the end, the drum roll and the distorted electric guitar return, reinforcing the rock's temperament.

Introduction → A (theme presentation) → A1 (rock variation) → B (lyrical contrast) → A2 (climax reproduction)

##### Instrumentation and acoustic characteristics

The arrangement uses multi-layered electroacoustic fusion:

Base layer: 4/4 beats of drums, drum beats provide a sense of power

Harmony layer: electronic synthesizers simulate string music to create a sense of space

Color layer: distorted electric guitar strings (introduction), electronic keyboard sound (interlude)

Vocal layer: rough voice lines and instrumental music form a texture echo

This design allows folk music materials to obtain modern acoustic reconstruction. The sound symbolizes the loess cultural gene, while the disco rhythm and electroacoustic sound become acoustic metaphors for the urban spirit of the 1980s.

#### Lyrics Analysis

The lyrics construct the loess spirit through triple spatial images:

Natural images: "strong wind", "four seasons wind", "sand" symbolize the harsh living environment

Humanistic images: "cave dwelling", "cow", "oil bun" point to the essence of farming life

Time images: "eight hundred years", "ten thousand years", "generations" strengthen the historical depth

Particularly noteworthy is the breakthrough of its critical perspective. The first sentence, "Wojiazhuzaishuangtugaopo," is a straightforward statement without romanticization, unlike the traditional hymn-style local writing.

#### Singing style analysis

Let us take pop singer *Fan Linlin* as an example. Her singing is recognized as the most typical of "*Xibefeng*". Her voice is based on:

Straight voice: the vocal tract is completely open, and the sound goes straight out of the mouth without resonance in the head cavity, producing a "straight voice" texture

Hoarse component: the edge of the vocal cord vibrates to produce a rough-edged sound, simulating the natural image of wind and sand erosion.

Chest and abdominal breathing: the breath support point is deep to the diaphragm, ensuring the strength to sustain continuous shouting at a high pitch.

We use *Fan Linlin's* version and *Hang Tianqi's* version to compare the paragraph processing:

| Music section | Fan Linlin's version                                                                 | Hang Tianqi's version                       |
|---------------|--------------------------------------------------------------------------------------|---------------------------------------------|
| Introduction  | Subthalveolar word change technique, heavy start                                     | Nasal resonance enhances softness           |
| A1 section    | Real voice, strong articulation, "po" word blast prominent                           | Mixed voice transition, smooth articulation |
| B section     | Hoarse filler word "he" extended to 3 beats                                          | Breathy decoration, reduce roughness        |
| A2 section    | Full real voice impact e2 high pitch, deliberately expose the crack of voice change. | Head voice mixed in, smooth high pitch.     |

The core techniques of singing “*Xibefeng*” can be summarized into three modes:

(1) Shouting singing: originated from the emotional catharsis of rock music (such as the backing word "Ha" in section B), the vocal cords close strongly, the airflow impact is strong, and a tearing feeling is produced.

(2) Straight singing: straight tone processing (such as the repeated homophones in section A), reducing vibrato, and simulating the original ecological singing of “*Xintianyou*”.

(3) Changing words below the throat: the high pitch area is pronounced 1-2 inches below the throat, keeping the throat open, so that the sound penetrates vertically.

## Conclusion and Discussions

To sum up, the artistic characteristics of “*Xibefeng*” music are consistent with the loess winds and mountainous terrain of Northwest China, which have sparked a rapid and intense music craze, providing people with a suitable outlet for emotional release after years of emotional suppression. The high-pitched and loud singing style expresses people's handling of different emotions. This musical trend has propelled Chinese pop music to a peak, so the cultural value and applications of “*Xibefeng*” music will continue.

## Suggestions

1. The history of other Chinese popular music forms with different characteristics should be studied in depth.
2. Original songs should be researched and developed into teaching models.
3. They should be researched and preserved as a database to benefit a new generation lacking knowledge of Chinese popular music.

## Acknowledgement

I would like to express my sincere gratitude to my principal supervisor, Professor Panasin Sriviset and my co-supervisor, Professor Akachai Teerapuksiri, at Buriram Rajabhat University, Thailand, for their immense assistance throughout the research and writing process. They continuously helped me refine my research direction and teaching methods, provided rigorous academic guidance, and offered invaluable suggestions. I would also like to express my special thanks to every expert teacher and student who participated in my research, whose data provided was of great help to this study. I am very grateful to



everyone who helped me; without their sharing and assistance, my research could not have been completed accurately and reliably. Finally, I would like to thank my family and all my friends for their support and help. Thank you.

## References

- You, J(2015). "A Brief History of Chinese Popular Music" 345-355
- Zhao, L(2017). Loess Plateau roars out the "*Xibeifeng*" trend
- Wang, W. (2017). Musicological analysis of the song and performance of "*Xibeifeng*."
- Hou, D(1988). "The Development of Pop Music towards Nationalization is Inevitable - A Conversation with Mr. Hou Dejian" (8) 42
- Wu, H (2019). A brief analysis of the inheritance and development of Mongolian music elements in popular music (13) 222.



## The Development of Achievement in Job-seeking through Cooperative Learning with Jigsaw Teaching Techniques in the Employment Guidance Course for Third-year College Students

Shaoyong Chen<sup>1</sup>, Pornpirom Lhongsap<sup>2\*</sup>, Rossarin Jermtaisong<sup>2</sup>,  
Pacharaporn Suphakit<sup>2</sup>, Kongkiat Khunasathitchai<sup>3</sup>, Monchai Pongsakornnaruwong<sup>4</sup>

<sup>1</sup> Master of Education Program in Curriculum and Learning Management Innovation,  
Faculty of Technical Education, Rajamangala University of Technology Thanyaburi

<sup>2</sup> Faculty of Technical Education, Rajamangala University of Technology Thanyaburi

<sup>3</sup> Faculty of Liberal Arts, Rajamangala University of Technology Thanyaburi

<sup>4</sup> NakhonPathom Technical College

\*Corresponding author, E-mail: Pornpirom\_L@rmutt.ac.th

### Abstract

The purposes of this research were to: 1) analyze the achievement in job-seeking of third-year college students before using cooperative learning with jigsaw teaching techniques in the employment guidance course, 2) analyze the achievement in job-seeking of third-year college students after using cooperative learning with jigsaw teaching techniques in the employment guidance course, and 3) compare the achievement in job-seeking of third-year college students before and after using cooperative learning with jigsaw teaching techniques in the employment guidance course. The research design was a quasi-experimental one-group pretest-posttest design. The samples of this research were 50 third-year college students in the Foreign Languages and Trade College of Shunde Polytechnic, China, selected by using cluster random sampling. The research instruments consisted of: 1) learning management plans using cooperative learning with jigsaw teaching techniques, and 2) achievement in job-seeking tests. The data were analyzed using mean, standard deviation, and t-test. The research results revealed that: 1) the achievement in job-seeking of third-year college students after using cooperative learning with jigsaw teaching techniques was significantly higher than that before at the .001 level, and 2) cooperative learning with jigsaw teaching techniques was proven effective in enhancing students' employability and learning motivation in the employment guidance course.

**Keyword:** Achievement in job-seeking, Cooperative learning with jigsaw teaching techniques, Employment guidance course

### Introduction

In 2023, China's Ministry of Education issued a notice emphasizing the need to "further improve the employment and entrepreneurship service system for college graduates and promote high-quality full employment of college graduates". Currently, China's job market shows an oversupply trend. The number of college graduates reached 11.79 million in 2024, an increase of 3.05 million compared to 2020. Meanwhile, under the impact of COVID-19, employment positions have sharply decreased, resulting in cyclical unemployment.

Universities must implement effective Employment Guidance Courses to help students improve job-seeking success rates. However, current employment guidance courses have obvious defects: lack of practicality (Ginevra et al., 2015), lagging content updates (Schunk, 2008), single teaching methods (Hughes, 2016), and insufficient personalized guidance (Fouad et al., 2010). The core issue is selecting which teaching method can effectively focus on students and practice to help students improve their achievements in job-seeking.

Research shows that cooperative learning with jigsaw teaching techniques can effectively improve students' learning motivation and participation (Cohen, 2014) . This method breaks learning content into smaller parts, allowing students to deeply understand each part through group collaboration and ultimately integrate knowledge (Baird, 1994). It meets the needs of students with different learning styles, making Employment Guidance Courses more inclusive (Cohen, 1994) while helping students develop social skills such as teamwork.

Therefore, this study aims to reveal the effectiveness of cooperative learning with jigsaw teaching techniques in implementing Employment Guidance Courses by comparatively analyzing changes in students' achievement in job-seeking before and after using this method, to improve the employment rate of students at Shunde Polytechnic and contribute to alleviating employment pressure for Chinese college students.

## Research Objectives

- 1.To analyze third-year college students' achievement in job-seeking before cooperative learning with jigsaw teaching techniques in the Employment Guidance Course.
- 2.To analyze third-year college students' achievement in job-seeking after cooperative learning with jigsaw teaching techniques in the Employment Guidance Course.
- 3.To compare third-year college students' achievement in job-seeking before and after cooperative learning with jigsaw teaching techniques in the Employment Guidance Course.

## Research Hypothesis

- 1.Third-year college students have a low achievement in job-seeking before cooperative learning with jigsaw teaching techniques in the Employment Guidance Course.
- 2.Third-year college students have a high achievement in job-seeking after cooperative learning with jigsaw teaching techniques in the Employment Guidance Course.
- 3.Third-year college students cooperative learning with jigsaw teaching techniques in the Employment Guidance Course have higher achievement in job-seeking than before.

## Literature Review

### Cooperative Learning with Jigsaw Teaching Techniques

The effectiveness of the Jigsaw Classroom in promoting active learning. Each student prepares a specific segment, transforming them into 'experts,' which enhances engagement and promotes a sense of responsibility. The method is adaptable across various subjects, making it a valuable tool for educators seeking to create dynamic and interactive classroom environments (Griffin, 2023, pp. 30).

Perkins & Saris (2020, pp. 83-91) explored how differences in student readiness and group composition affect the success of cooperative learning with jigsaw teaching techniques. It noted that teachers need to carefully consider the grouping of students and the complexity of the material to optimize learning outcomes.

Chen, W (2021, pp. 34-36) pointed out that cooperative learning with jigsaw teaching techniques encourages active learning and helps students develop critical thinking skills. Conversely, they mention that it may require more preparation and planning from teachers to ensure effective implementation, which can be a barrier in some educational settings .

In conclusion, cooperative learning with jigsaw teaching techniques enhances classroom participation and responsibility. Its effectiveness is influenced by student preparation, group composition, and content complexity, requiring thorough pre-class preparation and well-designed lesson plans from the teacher.



### **Achievement in Job-seeking**

Achievement in Job-seeking can be defined as successfully obtaining employment or achieving significant milestones in the job search process, such as getting an interview, a job offer, or making networking connections. Research shows that individuals who are able to effectively set goals and use self-regulation skills generally have greater success in their job searches (Colin Beard, 2023).

According to research by Jennifer (2023, pp.145-160), when helping students prepare for job-seeking, educators should integrate career preparation into courses and enhance students' employability skills through experiential learning.

Wu (2022, p.30-35) pointed that students who participated in the college's career counseling workshops exhibited higher confidence during interviews and greater adaptability in competitive job markets.

In conclusion, achievement in job-seeking refers to successfully obtaining employment or reaching key milestones in the job search, such as interviews, job offers, or networking. Colleges can support students by integrating career preparation into their curriculum and providing career counseling, all of which can enhance students' employability in a competitive and ever-changing job market.

### **Relevant Research**

Safkolam, El Islami, and Sari (2023, pp.37–42) explored the effects of jigsaw teaching techniques on learning achievement and retention among second-year science education students in a Thai Rajabhat university. Research results showed that after implementing the jigsaw technique in the teaching process, students' post-test scores improved significantly compared to their pre-test scores, and learning retention was also maintained after two weeks. The study concluded that the jigsaw technique positively affected both students' immediate learning performance and long-term knowledge retention.

Kamphirom, Rittidet, and Suikraduang (2023, pp.233–248) conducted a study on the application of cooperative learning with jigsaw teaching techniques in a Thai History course for Mathayomsuksa 3 students in Roi Et province. They found that by creating small learning groups and using the jigsaw model, students became more engaged in classroom activities. Learning achievement improved significantly, and students also developed better group cooperation and communication skills. The study emphasized that the jigsaw technique encouraged participation and was well-received by the learners.

Cooperative learning with jigsaw teaching techniques can increase students' motivation and sense of responsibility, accommodate different learning styles, and encourage students to learn independently. In employment guidance, this method can help students explore various career paths more effectively and enhance their understanding of the job market by participating in discussions and demonstrating different roles (Knowledge Universe Online, 2024.12).

Research on cooperative learning with jigsaw teaching techniques in improving students' achievement in job-seeking has shown positive results. Cooperative learning jigsaw teaching techniques is a way for students to learn collaboratively in groups, with each student taking charge of a specific topic and then teaching it to their peers. This technique helps students develop the collaboration, communication, and problem-solving skills necessary for the workplace (Gordon, H., 2018).

In conclusion, cooperative learning with jigsaw teaching technique improves students' learning achievement, knowledge retention, and engagement by having each student become responsible for a specific topic and share it with peers. This method fosters collaboration, communication, problem-solving skills, and independent learning, accommodates different learning styles, and enhances students' motivation and sense of responsibility. Beyond

academics, jigsaw-based cooperative learning can support students in career preparation by helping them explore career paths, participate actively in discussions, and develop skills essential for the workplace.

### Research Framework

As the figure 1, this research used one-group pretest-posttest design, and the framework below served as the researcher's guide in the conduct of the study.

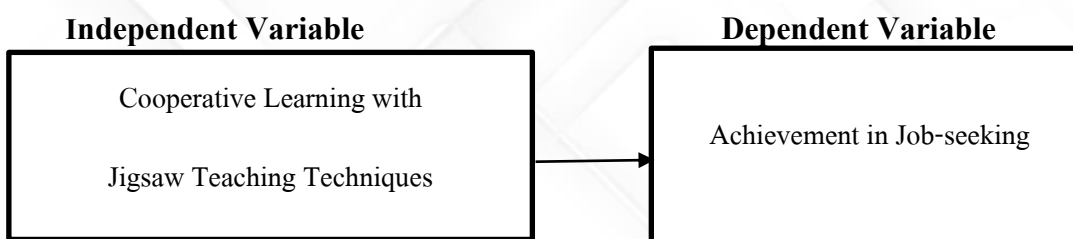


**Figure 1** Conceptual Research Framework

## Methodology

### Population and Samples

#### Population

The population consisted of 183 third-year college students from 6 classrooms at the Foreign Languages and Trade College of Shunde Polytechnic.

#### Samples

A total of 50 students from 1 classroom were selected by using cluster random sampling.

#### Design

As the table 1, the study employed a quasi-experimental research design, specifically a one-group Pretest-Posttest design. This design allowed for the comparison of students' achievement in job-seeking before and after the implementation of cooperative learning with jigsaw teaching techniques.

**Table 1**

*One-Group Pretest-Posttest Design (Best & Kahn, 2003)*

| pre-test       | Independent variable | post-test      |
|----------------|----------------------|----------------|
| T <sub>1</sub> | X                    | T <sub>2</sub> |

Symbols Used in experimental design

T<sub>1</sub> = Pretest

X = Cooperative learning with jigsaw teaching techniques

T<sub>2</sub> = Posttest

### Instruments

1. Learning Management Plans for cooperative learning with jigsaw teaching techniques, which were designed to implement cooperative learning with jigsaw teaching techniques in the Employment Guidance Course. The course consisted of four units:

Unit 1: Employment Situation and Employment Concept ( 2 hours );

Unit 2: Employment Policy and Employment Rights ( 2 hours );

Unit 3: Psychological Adjustment of College Students ( 2 hours );

Unit 4: Training of College Students' Job-hunting Ability ( 2 hours ).

2. Achievement in job-seeking test, including pre-test and post-test, was developed to measure students' achievement in job-seeking. The test consisted of 4 sections. Each section contains 10 multiple-choice questions, with a total of 40 items. Each correct answer was 2.5 points, yielding a maximum score of 100 points. A score of 60 or above was considered a pass. The test was verified through a multi-step process: expert review and Item–Objective Congruence (IOC) analysis ensured content validity; pilot testing with 30 non-sample students and item analysis confirmed acceptable difficulty and discrimination indices; and internal consistency reliability reached Cronbach's  $\alpha = 0.80$ . Therefore, the final 40-item test was considered valid and reliable for measuring students' job-seeking achievement.

### Data Collection

The data collected from March to June ,2025. The researchers collected data in the following sequence of steps:

1. Preparation step: Contact was made with Shunde Polytechnic, Guangdong Province, China to request permission for data collection from the sample group.

2. Experimental Steps: Pretest ( $T_1$ ): The achievement in job-seeking test was administered to the students before the implementation of cooperative learning with jigsaw teaching techniques; Intervention (X): Cooperative learning with jigsaw teaching techniques were implemented over a period of 8 hours, covering the four units of the Employment Guidance Course; Post-test ( $T_2$ ): The achievement in job-seeking test was administered again after the completion of the intervention to measure the changes in students' achievement.

3. Summary Steps: The data collected from the pre-test and post-test were analyzed to compare the students' achievement in job-seeking before and after the cooperative learning with jigsaw teaching techniques.

### Data Analysis

In the data analysis, the researcher used a software program to analyze the data. The following data analysis was conducted:

1. Quality Analysis of the Tools: Content validity of the learning management plans was assessed using the Item–Objective Congruence (IOC) method ( $IOC = 0.86$ ). Content validity of the achievement in job-seeking test was also evaluated using IOC analysis ( $IOC = 0.90$ ). Reliability of the achievement test was determined using Cronbach's alpha coefficient.

2. Analysis Used data of the test: A paired t-test was conducted to compare third-year students' achievement in job-seeking before (pre-test) and after (post-test) cooperative learning with jigsaw teaching techniques. This tested whether the intervention significantly improved outcomes; Mean (M) and standard deviation (SD) were calculated for pre-test and post-test scores to quantify overall performance trends.

### Results

A descriptive analysis was conducted on third-year college students' achievement in job-seeking before cooperative learning with jigsaw teaching techniques. The results are shown in Table 2.

**Table 2**

*Descriptive analysis of third-year college students' achievement in job-seeking before cooperative learning with jigsaw teaching techniques in the Employment Guidance Course*



| Subscale | n  | Min   | Max   | Mean  | SD    |
|----------|----|-------|-------|-------|-------|
| Before   | 50 | 17.50 | 75.00 | 50.15 | 15.11 |

Table 2 shows that before using cooperative learning with jigsaw teaching techniques, the mean of third-year college students' achievement in job-seeking was far below the passing score of 60. The overall total score averaged 50.15 out of a possible 100 points (SD = 15.11), falling below the 60-point passing threshold.

A descriptive analysis was conducted on third-year college students' achievement in job-seeking after cooperative learning with jigsaw teaching techniques. The results are shown in Table 3.

**Table 3**

*Descriptive analysis of third-year college students' achievement in job-seeking after cooperative learning with jigsaw teaching techniques in the Employment Guidance Course*

| Subscale | n  | Min   | Max | Mean  | SD   |
|----------|----|-------|-----|-------|------|
| After    | 50 | 72.50 | 100 | 89.50 | 8.27 |

Table 3 shows that after using cooperative learning with jigsaw teaching techniques, the mean of third-year college students' achievement in job-seeking was significantly above the passing score of 60. The overall total score averaged 89.50 out of a possible 100 points (SD = 8.27), well above the 60-point passing threshold.

A paired t-test was conducted to compare third-year college students' achievement in job-seeking before and after cooperative learning with jigsaw teaching techniques. The results are shown in Table 4.

**Table 4**

*Comparative analysis of third-year college students' achievement in job-seeking before and after cooperative learning with jigsaw teaching techniques in the Employment Guidance Course*

| Cooperative learning with jigsaw teaching techniques | n  | $\bar{x}$ | S.D.  | df | t-test  | Sig. (2-tailed) |
|------------------------------------------------------|----|-----------|-------|----|---------|-----------------|
| Before                                               | 50 | 50.15     | 15.11 | 49 | 27.83** | 0.000           |
| After                                                | 50 | 89.50     | 8.27  |    |         |                 |

Table 4 shows that there were statistically significant differences of third-year college students' achievement in job-seeking before and after cooperative learning with jigsaw teaching techniques. The total score comparison yielded the highest t-value ( $t = 27.83$ ,  $p < 0.001$ ).

## Conclusion and Discussion

### Conclusion

The following was a discussion on the use of cooperative learning with jigsaw teaching techniques to improve job-seeking achievement among third-year college students.

1. Based on Research Hypothesis 1, third-year college students have a low achievement in job-seeking before cooperative learning with jigsaw teaching techniques in the Employment Guidance Course, with an overall total score of 50.15 out of 100 ( $SD = 15.11$ ), falling below the 60-point passing threshold.

2. Based on Research Hypothesis 2, third-year college students have a high achievement in job-seeking after cooperative learning with jigsaw teaching techniques in the Employment Guidance Course, with an overall total score of 89.5 out of 100 ( $SD = 8.27$ ), well above the passing threshold.

3. Third-year college students cooperative learning with jigsaw teaching techniques in the Employment Guidance Course have higher achievement in job-seeking than before at the 0.001 level.

### Discussion

According to the research results, cooperative learning with jigsaw teaching techniques significantly improved the job-seeking achievement of third-year college students in the Employment Guidance Course. This section discusses the findings in three aspects:

Before the implementation of cooperative learning with jigsaw teaching techniques, the job-seeking achievement of third-year college students was at a low level, with the mean of 50.15 out of 100 and a standard deviation of 15.11, which was below the passing threshold. This result reflects the limitations of traditional employment guidance teaching methods that rely heavily on one-way lecture formats. In such settings, students are often passive recipients of information, with minimal chances for application, reflection, or discussion. This passivity may hinder their understanding and retention of essential employability skills. According to Lestar (2019), effective career readiness instruction requires active participation and individualized support. Without these components, students may struggle to develop the self-efficacy and decision-making abilities required for job searching. Savickas (2013) also stressed that students need career interventions that are narrative and experiential in nature—features that are often missing in conventional classroom environments. Therefore, the low achievement observed prior to intervention may stem from the disconnect between lecture-based instruction and the applied nature of job-seeking tasks.

After the implementation of cooperative learning with jigsaw teaching techniques, the job-seeking achievement of students markedly improved. The post-test mean was 89.50, with a standard deviation of 8.27, well above the passing threshold of 60. This reflects a strong mastery of relevant job-seeking knowledge and skills. The jigsaw method provided students with active roles in the learning process. By dividing content into manageable subtopics and assigning each student the role of an “expert,” the method ensured deep engagement and peer interaction, which are essential in job-preparation contexts. Jennifer (2023) emphasized that cooperative learning increases academic achievement through structured interdependence and mutual responsibility. In the jigsaw approach, students must understand and explain content clearly to peers, a process that enhances comprehension and retention. Aronson (1978) highlighted that students in jigsaw classrooms often develop greater empathy, confidence, and responsibility. These qualities are directly transferable to job-seeking scenarios, where communication, collaboration, and initiative are highly valued. Therefore, the high post-test achievement suggests that the jigsaw approach effectively supports employment-related education.

A comparison of students' pre-test and post-test scores further confirms the effectiveness of cooperative learning with jigsaw teaching techniques. The mean increased from 50.15 to 89.50, and the paired sample t-test produced a result of  $t = 27.83$ , with statistical significance at the  $p < .001$  level. This substantial difference indicates that the teaching intervention had a powerful impact. Unlike traditional methods, which often emphasize content delivery over skill application, the jigsaw technique integrates both cognitive and social learning. Students must communicate, collaborate, and take responsibility—just as they would in real job settings. Song (2023) found that cooperative learning methods consistently outperform conventional strategies in terms of learning gains, particularly when they incorporate clear roles, shared goals, and mutual accountability. Griffin, (2023) also reported that students in cooperative environments show enhanced problem-solving abilities, critical thinking, and motivation. In the current study, students not only demonstrated improved knowledge acquisition but also enhanced soft skills such as public speaking and peer feedback, both essential in employment contexts. These findings provide strong evidence that the jigsaw technique is a valuable instructional method for improving employability.

In conclusion, the use of cooperative learning with jigsaw teaching techniques in the Employment Guidance Course proved to be an effective strategy for enhancing both academic and practical aspects of students' job-seeking competence. This method facilitated deeper learning, fostered active student engagement, and promoted interpersonal skills vital for employment. Compared with conventional instruction, the jigsaw approach not only improved test performance but also developed transferable skills relevant to career readiness. Hence, educators and institutions should consider integrating cooperative methods like jigsaw into employment-oriented curricula. Future research could investigate how different student characteristics (e.g., learning styles, academic background) influence the effectiveness of jigsaw strategies in job-seeking education.

## Suggestions

### Suggestions to apply in the field

1. Based on the findings, the cooperative learning with jigsaw teaching techniques requires instructors to enhance their ability to design and manage group learning activities effectively. Teachers should be trained in structuring jigsaw tasks, facilitating peer collaboration, and guiding students in their roles as “experts” to maximize learning outcomes.

2. It is necessary to integrate cooperative learning strategies with traditional teaching methods flexibly to meet diverse student needs. Combining jigsaw techniques with lectures, discussions, and practical exercises can enrich the Employment Guidance Course and improve students' engagement and job-seeking skills.

3. Teachers should attention to students' individual differences and provide timely support for those struggling with cooperative tasks or content comprehension. Supplementary resources such as job-seeking guides, practice interviews, and career counseling can help consolidate learning and enhance students' confidence and competence.

### Suggestions for the future research

1. Future studies could explore the application of cooperative learning with jigsaw techniques in other subjects or skill areas related to career readiness, such as communication skills, resume writing, or interview techniques, to examine the broader impact of this method.



2. Researchers will encourage to investigate how various learner characteristics—such as motivation levels, learning styles, and prior knowledge—affect the effectiveness of jigsaw teaching techniques, to better tailor interventions for diverse student populations.

3. Additionally, longitudinal studies could assess the long-term effects of cooperative learning on students' job-seeking success and career development after graduation, providing deeper insights into the sustained benefits of such pedagogical approaches.

## References

- Aronson, E., Blaney, N., Stephan, C., Sikes, J., & Snapp, M. (1978). The jigsaw classroom. *The Social Psychology of Schooling*, 74(14), 438–463.
- Baird, J. (1994). The effectiveness of jigsaw learning in a university setting. *Journal of Educational Psychology*, 86(1), 55–62.
- Best, J. W., & Kahn, J. V. (2003). *Research in education* (9th ed.). Allyn and Bacon.
- Cohen, E. G. (1994). *Designing groupwork: Strategies for the heterogeneous classroom*. Teachers College Press.
- Cohen, E. G., & Lotan, R. A. (2014). *Designing groupwork: Strategies for the heterogeneous classroom* (3rd ed.). Teachers College Press.
- Chen, W. (2021). Theory and Practice of Employment Capability Development. Higher Education Press, 34-36.
- Colin Beard, John Wilson. (2023). Experiential Learning: A Handbook for Education, Training, and Coaching. Kogan, 26-28.
- Fouad, N. A., Cotter, K. N., & Kantamneni, N. (2010). The role of work experience in career development. *The Career Development Quarterly*, 58(3), 229–239.
- Ginevra, M. C., Nota, L., & Soresi, S. (2015). The role of career guidance in improving employability. *International Journal for Educational and Vocational Guidance*, 15(4), 371–386.
- Gordon, H., & Murray, J. (2018). Collaborative learning and employability skills: A classroom approach. *Teaching in Higher Education*, 23(4), 505-521.
- Griffin, L. H. (2023). *Active learning with the jigsaw classroom*. Retrieved August 5, 2025, from <https://www.davinci-ed.com>
- Hughes, K. (2016). The impact of teaching strategies on student engagement in employability skills. *Journal of Vocational Education & Training*, 68(1), 36–51.
- Jennifer, L. J., & Smith, R. W. (2023). Experiential learning in career counseling: A review and future directions. *Journal of Career Assessment*, 30(2), 145–160.
- Kamphirom, N., Rittidet, P., & Suikraduang, A. (2023). The development of cooperative learning management Jigsaw on Thai history in the Rattanakosin period of Mathayomsuksa 3 students. *Journal for Developing the Social and Community*, 10(1), 233–248.
- Knowledge Universe Online. (2024.12.). The puzzle technique in the classroom. Retrieved from <https://knowledgeuniverseonline.com/puzzle-technique-classroom>.
- Ministry of Human Resources and Social Security, Ministry of Education, & Ministry of Finance. (2024). *Notice on employment and entrepreneurship of 2024 national college graduates*. Retrieved from [https://www.gov.cn/zhengce/zhengceku/202312/content\\_6918529.htm](https://www.gov.cn/zhengce/zhengceku/202312/content_6918529.htm)
- Perkins, & Saris. (2020). Enhancing College Students' Employment Skills through Experiential Learning. *Education and Teaching Forum*, 11, 83-91.
- Wu, L. (2022). Experiential Learning and Career Readiness in Higher Education. *Journal of Experiential Education*, 46(2), 30-35.

- Savickas, M. L. (2013). Career construction theory and practice. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (2nd ed., pp. 147–183). John Wiley & Sons.
- Schunk, D. H., Pintrich, P. R., & Meece, J. L. (2008). *Motivation in education: Theory, research, and applications* (3rd ed.). Pearson/Merrill Prentice Hall.
- Song, Z. (2023). Development of career services in Chinese higher education institutions. *China Higher Education Research*, 9, 15–22.
- Safkolam, R., El Islami, R. A. Z., & Sari, I. J. (2023). The effects of Jigsaw technique on learning achievement and retention of science teacher students. *Shanlax International Journal of Education*, 11(3), 37–42.



## **An Analysis of the Competency Elements of Grassroots Administrative Personnel at Vocational Colleges in Zhengzhou, Henan Province, China**

**Shi Huanhuan<sup>1</sup> Somsak Jeewattana<sup>2</sup> and Pittaya Pantachai<sup>3</sup>**

<sup>1</sup>Ph. D. Student in Educational Administration, Buriram Rajabhat University, Thailand,  
E-mail: 660427090009@bru.ac.th

<sup>2</sup>Assist. Prof. Dr., Faculty of Science, Buriram Rajabhat University, Buriram, Thailand

<sup>3</sup> Assist. Prof. Dr., Buriram Rajabhat University, Buriram, Thailand

### **Abstract**

This study aims to clarify the composition and current state of competency elements of grassroots administrative personnel in vocational colleges in Zhengzhou City, Henan Province, China, and to identify existing deficiencies, for providing empirical support for optimizing the construction of this talent team. Using stratified random sampling, 379 respondents, including administrative supervisors and full-time teachers, were surveyed through a self-designed questionnaire covering five competency dimensions: personality traits, knowledge and skills, management skills, professional ethics, and interpersonal communication. The instrument demonstrated good validity and reliability (Cronbach's  $\alpha = 0.950$ ). Descriptive statistical analysis indicated that the overall competency level was high ( $\bar{X} = 4.02$ ). The five dimensions were ranked in descending order as follows: knowledge and skills, personality traits, management skills, interpersonal communication, and professional ethics. Although grassroots administrative personnel demonstrated strong professional knowledge and execution ability, relatively weaker performance was observed in proactive service awareness, cross-departmental coordination, digital governance capability, and feedback mechanisms. The findings provide empirical evidence for optimizing competency development and strengthening talent team construction in vocational colleges in the context of educational reform and intelligent governance.

**Keywords:** competency, grassroots administrative personnel, vocational colleges

### **Introduction**

With the rapid development of vocational education, vocational colleges play a crucial role in cultivating high-quality technical and skilled talent. As the "nerve endings" of vocational colleges' management systems, grassroots administrative personnel undertake fundamental tasks such as teaching assistance, student management, logistical support, and inter-departmental coordination. Their work efficiency and service quality directly impact on the colleges' operational level and development outcomes.

Currently, with the in-depth implementation of the "Double High Plan," the widespread application of AIGC technology, and the acceleration of vocational education internationalization, vocational colleges are facing multiple challenges, including expanding enrollment, reforming talent cultivation models, and advancing intelligent governance. These changes have imposed higher requirements on the competency of grassroots administrative personnel. However, in practice, some grassroots administrative personnel in vocational colleges face issues such as weak service awareness, insufficient professional



competence, and job burnout, which hinder improvements in colleges' management efficiency (Fang, 2019).

Although prior research in China has examined the competencies of university administrators and teachers, empirical studies focusing specifically on grassroots administrative personnel in vocational colleges remain scarce. Most existing studies are primarily theoretical, highlighting a notable gap in empirical evidence that merits further investigation. Against this backdrop, it is of considerable practical significance to examine the competency components and current status of grassroots administrative personnel in vocational colleges.

## Objectives

This study aims to clarify the composition and current status of competency elements of grassroots administrative personnel in vocational colleges in Zhengzhou City, Henan Province, China, and to identify existing deficiencies, for providing empirical support for optimizing the construction of this talent team.

## Research Methodology

### Population and Sample

The research population consisted of 575 administrative supervisors and 27,765 full-time teachers from 45 vocational colleges in Zhengzhou City, Henan Province, China, with a total of 28,340 individuals. Based on Krejcie and Morgan's sample size determination table (Suwannarak, 2013: 148-149), the required sample size was determined to be 379 respondents (61 administrative supervisors and 318 full-time teachers). Stratified random sampling was adopted to select the sample.

### Research Instruments

Through extensive literature analysis, the study developed a self-designed questionnaire consisting of two parts. The first part includes general information about the respondents, while the second part assesses the current competency status of grassroots administrative personnel in vocational colleges in Zhengzhou City, Henan Province, China. The assessment items cover five competency dimensions: personality traits, knowledge and skills, management skills, professional ethics, and interpersonal communication, with a total of 43 questions. The questionnaire uses a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree) for measurement. Five experts verified the content validity of the questionnaire, and the Item-Objective Congruence (IOC) values ranged from 0.6 to 1.0. The Cronbach's  $\alpha$  coefficient was 0.950, which is higher than 0.80, indicating good reliability of the research instrument (Guan, 2009).

### Data Analysis

In this study, statistical software was used for statistical analysis of the questionnaire data. The statistical indicators included frequency, percentage, mean, and standard deviation. Quantitative data were analyzed by comparing mean value ranges. Interpretations of mean value ranges are as follows:

| Mean Range | Interpretation |
|------------|----------------|
| 4.51-5.00  | The highest    |
| 3.51-4.50  | High           |
| 2.51-3.50  | Moderate       |
| 1.51-2.50  | Low            |
| 1.00-1.50  | The lowest     |

## Results

First-Level Indicators of Competency Elements for Grassroots Administrative Personnel in Vocational Colleges in Zhengzhou City, Henan Province, China

**Table 1**

*Competency Elements of Grassroots Administrative Personnel in Vocational Colleges in Zhengzhou City, Henan Province, China*

| Elements of administrative competency      | $\bar{X}$   | S.D.        | Interpretation |
|--------------------------------------------|-------------|-------------|----------------|
| <b>1. Personality Traits</b>               | <b>4.06</b> | <b>0.71</b> | <b>High</b>    |
| 1.1 Proactiveness and Enterprise           | 4.09        | 0.71        | High           |
| 1.2 Emotional Control                      | 4.03        | 0.70        | High           |
| <b>2. Knowledge and Skills</b>             | <b>4.13</b> | <b>0.70</b> | <b>High</b>    |
| 2.1 Professional Knowledge                 | 4.17        | 0.71        | High           |
| 2.2 Office Automation                      | 4.09        | 0.70        | High           |
| <b>3. Management Skills</b>                | <b>4.01</b> | <b>0.73</b> | <b>High</b>    |
| 3.1 Execution Ability                      | 4.05        | 0.75        | High           |
| 3.2 Organizational Coordination Ability    | 3.98        | 0.71        | High           |
| <b>4. Professional Ethics</b>              | <b>3.95</b> | <b>0.72</b> | <b>High</b>    |
| 4.1 Sense of Responsibility                | 3.91        | 0.71        | High           |
| 4.2 Service Awareness                      | 3.99        | 0.72        | High           |
| <b>5. Interpersonal Communication</b>      | <b>3.96</b> | <b>0.70</b> | <b>High</b>    |
| 5.1 Communication and Coordination Ability | 3.95        | 0.70        | High           |
| 5.2 Unity and Cooperation                  | 3.98        | 0.69        | High           |
| <b>Total</b>                               | <b>4.02</b> | <b>0.71</b> | <b>High</b>    |

As shown in Table 1, the overall competency level of grassroots administrative personnel in vocational colleges in Zhengzhou is high (Total  $\bar{X}$  = 4.02). Among the first-level indicators, the highest average score is Knowledge and Skills ( $\bar{X}$  = 4.13), while the lowest is Professional Ethics ( $\bar{X}$  = 3.95). Among the second-level indicators, the highest average score is Professional Knowledge ( $\bar{X}$  = 4.17), and the lowest is Sense of Responsibility ( $\bar{X}$  = 3.91).

**Table 2**

*Proactiveness and Enterprise Content of Secondary Indicators for Competency Elements of Grassroots Administrative Personnel in Vocational Colleges in Zhengzhou City, Henan Province, China*

| Proactiveness and Enterprise                                                                        | $\bar{X}$ | S.D. | Interpretation | Ranking |
|-----------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 1. Grassroots administrative personnel possess a positive and optimistic mindset.                   | 4.12      | 0.74 | High           | 2       |
| 2. Grassroots administrative personnel have the willingness to actively pursue progress and growth. | 4.28      | 0.63 | High           | 1       |
| 3. Grassroots administrative personnel are willing to face challenges.                              | 3.96      | 0.72 | High           | 5       |

|                                                                              |             |             |             |   |
|------------------------------------------------------------------------------|-------------|-------------|-------------|---|
| 4. Grassroots administrative personnel possess lofty ideals and clear goals. | 4.08        | 0.76        | High        | 3 |
| 5. Grassroots administrative personnel make efforts to achieve their goals.  | 4.02        | 0.70        | High        | 4 |
| <b>Total</b>                                                                 | <b>4.09</b> | <b>0.71</b> | <b>High</b> |   |

As shown in Table 2, the level of proactiveness and enterprise (a secondary indicator of competency) among grassroots administrative personnel in Zhengzhou's vocational colleges is high. Among the items, the highest mean score is item 2 ( $\bar{X} = 4.28$ ) and the lowest is item 3 ( $\bar{X} = 3.96$ ).

**Table 3**

*Emotional Control Content of Secondary Indicators for Competency Elements of Grassroots Administrative Personnel in Vocational Colleges in Zhengzhou City, Henan Province, China*

| Emotional Control                                                                                                                                                                     | $\bar{X}$   | S.D.        | Interpretation | Ranking |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|----------------|---------|
| 6. Grassroots administrative personnel can remain calm and handle conflicts rationally.                                                                                               | 4.04        | 0.73        | High           | 2       |
| 7. Grassroots administrative personnel possess a certain degree of resilience to stress and can maintain a stable mindset in the face of negative emotions and work-related pressure. | 3.88        | 0.74        | High           | 4       |
| 8. Grassroots administrative personnel possess strategies and skills for emotional regulation.                                                                                        | 4.20        | 0.63        | High           | 1       |
| 9. Grassroots administrative personnel possess a mindset of calmly facing challenges and difficulties.                                                                                | 3.98        | 0.73        | High           | 3       |
| <b>Total</b>                                                                                                                                                                          | <b>4.03</b> | <b>0.70</b> | <b>High</b>    |         |

As shown in Table 3, the level of emotional control (a secondary indicator of competency) among grassroots administrative personnel in Zhengzhou's vocational colleges is high. Among the items, the highest mean score is item 8 ( $\bar{X} = 4.20$ ) and the lowest is item 7 ( $\bar{X} = 3.88$ ).

**Table 4**

*Professional Knowledge Content of Secondary Indicators for Competency Elements of Grassroots Administrative Personnel in Vocational Colleges of Zhengzhou City, Henan Province, China*

| Professional Knowledge                                                                                               | $\bar{X}$ | S.D. | Interpretation | Ranking |
|----------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 10. Grassroots administrative personnel must possess systematic theoretical knowledge necessary for their positions. | 4.26      | 0.69 | High           | 1       |
| 11. Grassroots administrative personnel must possess the ability                                                     | 4.07      | 0.72 | High           | 2       |



| Professional Knowledge                                | $\bar{X}$   | S.D.        | Interpretation | Ranking |
|-------------------------------------------------------|-------------|-------------|----------------|---------|
| to accumulate relevant experience in their positions. |             |             |                |         |
| <b>Total</b>                                          | <b>4.17</b> | <b>0.71</b> | <b>High</b>    |         |

As shown in Table 4, the level of professional knowledge (a secondary indicator of competency) among grassroots administrative personnel in Zhengzhou's vocational colleges is high. Among the items, the highest mean score is item 10 ( $\bar{X} = 4.26$ ) and the lowest is item 11 ( $\bar{X} = 4.07$ ).

**Table 5**

*Office Automation Content of Secondary Indicators for Competency Elements of Grassroots Administrative Personnel in Vocational Colleges in Zhengzhou City, Henan Province, China*

| Office Automation                                                                                                                                      | $\bar{X}$   | S.D.        | Interpretation | Ranking |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|----------------|---------|
| 12. Grassroots administrative personnel must be proficient in using various office software applications.                                              | 4.10        | 0.74        | High           | 2       |
| 13. Grassroots administrative personnel must be proficient in using office automation equipment, such as printers, copiers, fax machines and scanners. | 4.23        | 0.64        | High           | 1       |
| 14. Grassroots administrative personnel must be proficient in operating school management systems and possess data analysis skills.                    | 3.95        | 0.73        | High           | 3       |
| <b>Total</b>                                                                                                                                           | <b>4.09</b> | <b>0.70</b> | <b>High</b>    |         |

As shown in Table 5, the level of office automation (a secondary indicator of competency) among grassroots administrative personnel in Zhengzhou's vocational colleges is high. Among the items, the highest mean score is item 13 ( $\bar{X} = 4.23$ ) and the lowest is item 14 ( $\bar{X} = 3.95$ ).

**Table 6**

*Execution Ability Content of Secondary Indicators for Competency Elements of Grassroots Administrative Personnel in Vocational Colleges in Zhengzhou City, Henan Province, China*

| Execution Ability                                                                                                                                | $\bar{X}$ | S.D. | Interpretation | Ranking |
|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 15. Grassroots administrative personnel can accurately understand work objectives and organizational intentions.                                 | 4.12      | 0.74 | High           | 2       |
| 16. Grassroots administrative personnel must possess the ability to implement policies and transform superior directives into specific measures. | 4.10      | 0.75 | High           | 3       |

| Execution Ability                                                                                         | $\bar{X}$   | S.D.        | Interpretation | Ranking |
|-----------------------------------------------------------------------------------------------------------|-------------|-------------|----------------|---------|
| 17. Grassroots administrative personnel must possess the ability to arrange various affairs effectively.  | 4.04        | 0.76        | High           | 4       |
| 18. Grassroots administrative personnel must possess the ability to respond quickly to unexpected issues. | 3.97        | 0.79        | High           | 5       |
| 19. Grassroots administrative personnel must ensure that work tasks are implemented effectively.          | 4.19        | 0.71        | High           | 1       |
| 20. Grassroots administrative personnel must provide timely feedback on the implementation of tasks.      | 3.85        | 0.74        | High           | 6       |
| <b>Total</b>                                                                                              | <b>4.05</b> | <b>0.75</b> | <b>High</b>    |         |

As shown in Table 6, the level of execution ability (a secondary indicator of competency) among grassroots administrative personnel in Zhengzhou's vocational colleges is high. Among the items, the highest mean score is item 19 ( $\bar{X} = 4.19$ ) and the lowest is item 20 ( $\bar{X} = 3.85$ ).

**Table 7**

*Organizational Coordination Ability Content of Secondary Indicators for Competency Elements of Grassroots Administrative Personnel in Vocational Colleges in Zhengzhou City, Henan Province, China*

| Organizational Coordination Ability                                                                                                              | $\bar{X}$   | S.D.        | Interpretation | Ranking |
|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|----------------|---------|
| 21. Grassroots administrative personnel must possess the ability to set clear goals and complete specific tasks.                                 | 3.91        | 0.70        | High           | 5       |
| 22. Grassroots administrative personnel must possess the ability to establish organizational structures.                                         | 3.94        | 0.72        | High           | 4       |
| 23. Grassroots administrative personnel must possess the ability to clearly define their rights and responsibilities.                            | 3.98        | 0.67        | High           | 2       |
| 24. Grassroots administrative personnel must possess the ability to allocate and integrate resources effectively according to task requirements. | 4.11        | 0.75        | High           | 1       |
| 25. Grassroots administrative personnel must possess the ability to mobilize the enthusiasm of all parties at work.                              | 3.97        | 0.70        | High           | 3       |
| <b>Total</b>                                                                                                                                     | <b>3.98</b> | <b>0.71</b> | <b>High</b>    |         |

As shown in Table 7, the level of organizational coordination ability (a secondary indicator of competency) among grassroots administrative personnel in Zhengzhou's vocational colleges is high. Among the items, the highest mean score is item 24 ( $\bar{X} = 4.11$ ) and the lowest is item 21 ( $\bar{X} = 3.91$ ).

**Table 8**

*Sense of Responsibility Content of Secondary Indicators for Competency Elements of Grassroots Administrative Personnel in Vocational Colleges in Zhengzhou City, Henan Province, China*

| Sense of Responsibility                                                                                                           | $\bar{X}$   | S.D.        | Interpretation | Ranking |
|-----------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|----------------|---------|
| 26. Grassroots administrative personnel strictly abide by the school's rules and regulations and work processes.                  | 3.85        | 0.77        | High           | 3       |
| 27. Grassroots administrative personnel must clearly understand their job responsibilities and be willing to take responsibility. | 3.96        | 0.66        | High           | 2       |
| 28. Grassroots administrative personnel must possess a rigorous and responsible work attitude.                                    | 4.03        | 0.72        | High           | 1       |
| 29. Grassroots administrative personnel pay close attention to details to ensure the high-quality completion of tasks.            | 3.80        | 0.69        | High           | 4       |
| <b>Total</b>                                                                                                                      | <b>3.91</b> | <b>0.71</b> | <b>High</b>    |         |

As shown in Table 8, the level of sense of responsibility (a secondary indicator of competency) among grassroots administrative personnel in Zhengzhou's vocational colleges is high. Among the items, the highest mean score is item 28 ( $\bar{X} = 4.03$ ) and the lowest is item 29 ( $\bar{X} = 3.80$ ).

**Table 9**

*Service Awareness Content of Secondary Indicators for Competency Elements of Grassroots Administrative Personnel in Vocational Colleges in Zhengzhou City, Henan Province, China*

| Service Awareness                                                                                                                                         | $\bar{X}$   | S.D.        | Interpretation | Ranking |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|----------------|---------|
| 30. Grassroots administrative personnel must be student-centered and teacher-centered and proactively understand the needs of both.                       | 4.18        | 0.66        | High           | 1       |
| 31. Grassroots administrative personnel should be able to anticipate problems in advance, communicate proactively, and take the initiative to solve them. | 3.77        | 0.70        | High           | 4       |
| 32. Grassroots administrative personnel must handle teacher and student affairs meticulously to avoid any omissions.                                      | 3.99        | 0.75        | High           | 3       |
| 33. Grassroots administrative personnel must provide quality services to teachers and students with a positive attitude.                                  | 4.02        | 0.76        | High           | 2       |
| <b>Total</b>                                                                                                                                              | <b>3.99</b> | <b>0.72</b> | <b>High</b>    |         |



As shown in Table 9, the level of service awareness (a secondary indicator of competency) among grassroots administrative personnel in Zhengzhou's vocational colleges is high. Among the items, the highest mean score is item 30 ( $\bar{X} = 4.18$ ) and the lowest is item 31 ( $\bar{X} = 3.77$ ).

**Table 10**

*Communication and Coordination Ability Content of Secondary Indicators for Competency Elements of Grassroots Administrative Personnel in Vocational Colleges in Zhengzhou City, Henan Province, China*

| Communication and Coordination Ability                                                                                                                                            | $\bar{X}$   | S.D.        | Interpretation | Ranking |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|----------------|---------|
| 34. Grassroots administrative personnel should possess the ability to express themselves clearly, concisely, and accurately.                                                      | 4.00        | 0.69        | High           | 3       |
| 35. Grassroots administrative personnel should master effective communication methods and coordination skills.                                                                    | 4.15        | 0.69        | High           | 1       |
| 36. Grassroots administrative personnel should be able to effectively collect, transmit, and share information.                                                                   | 3.91        | 0.70        | High           | 4       |
| 37. Grassroots administrative personnel should be able to effectively resolve contradictions and defuse conflicts.                                                                | 4.01        | 0.74        | High           | 2       |
| 38. Grassroots administrative personnel must allocate resources effectively, break down departmental barriers, and optimize resource allocation.                                  | 3.79        | 0.72        | High           | 6       |
| 39. When deviations occur at work, grassroots administrative personnel must be able to communicate and correct them in a timely manner to facilitate the smooth progress of work. | 3.83        | 0.69        | High           | 5       |
| <b>Total</b>                                                                                                                                                                      | <b>3.95</b> | <b>0.70</b> | <b>High</b>    |         |

As shown in Table 10, the level of communication and coordination ability (a secondary indicator of competency) among grassroots administrative personnel in Zhengzhou's vocational colleges is high. Among the items, the highest mean score is item 35 ( $\bar{X} = 4.15$ ) and the lowest is item 38 ( $\bar{X} = 3.79$ ).

**Table 11**

*Unity and Cooperation Content of Secondary Indicators for Competency Elements of Grassroots Administrative Personnel in Vocational Colleges in Zhengzhou City, Henan Province, China*

| Unity and Cooperation                                                                                         | $\bar{X}$ | S.D. | Interpretation | Ranking |
|---------------------------------------------------------------------------------------------------------------|-----------|------|----------------|---------|
| 40. Grassroots administrative personnel must proactively communicate and collaborate with colleagues at work. | 4.05      | 0.72 | High           | 2       |

|                                                                                                                                                                   |             |             |             |   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|-------------|---|
| 41. Grassroots administrative personnel must actively cooperate with colleagues or other departments in their work.                                               | 4.12        | 0.66        | High        | 1 |
| 42. Grassroots administrative personnel must establish good relationships with teachers and students and work collaboratively to solve problems.                  | 3.91        | 0.70        | High        | 3 |
| 43. Grassroots administrative personnel must be oriented toward the overall goals of the team or organization, rather than solely focusing on personal interests. | 3.84        | 0.71        | High        | 4 |
| <b>Total</b>                                                                                                                                                      | <b>3.98</b> | <b>0.69</b> | <b>High</b> |   |

As shown in Table 11, the level of unity and cooperation (a secondary indicator of competency) among grassroots administrative personnel in Zhengzhou's vocational colleges is high. Among the items, the highest mean score is item 41 ( $\bar{X} = 4.12$ ) and the lowest is item 43 ( $\bar{X} = 3.84$ ).

## Discussion

This study explored the competency composition and current status of grassroots administrative personnel in vocational colleges in Zhengzhou City. The findings indicated that the overall competency level was high ( $\bar{X} = 4.02$ ), suggesting that grassroots administrative personnel generally possess solid professional qualities and are capable of supporting the routine operation and reform development of vocational colleges. However, differences among competency dimensions reveal structural imbalances that deserve further attention.

First, Knowledge and Skills ranked highest among the five first-level indicators ( $\bar{X} = 4.13$ ), with Professional Knowledge ( $\bar{X} = 4.17$ ) scoring the highest among all second-level indicators. This indicates that knowledge and skills are not only an important component of administrative competence but also a necessary prerequisite for effective administrative management. This is consistent with the viewpoint of Hou (2012), who believes that managers need to have sufficient knowledge and professional skills to fulfill their responsibilities in order to effectively carry out their work and achieve organizational goals. This is also consistent with the viewpoint of Li (2024), who believes that knowledge and skills are the fundamental factors of managerial performance, as the nature of work is related to administrative work and the operational processes of the system. For example, administrative tasks include file management, teacher and student services, and statistical data preparation. Lack of such professional knowledge may significantly reduce management performance. This reflects that knowledge and skills are fundamental conditions for improving school management efficiency.

Second, the research found that the mean score of the personality traits dimension of grassroots administrative personnel in Zhengzhou's vocational colleges is high ( $\bar{X} = 4.06$ ), reflecting a high degree of alignment between the core requirements of grassroots administrative work in vocational colleges and the personality traits of grassroots administrative personnel. Personality traits have thus become a core psychological guarantee for grassroots administrative personnel to maintain stability in their positions and effectively fulfill their responsibilities. This is consistent with the views of Liu et al. (2022), who found that grassroots administrative personnel score significantly higher on personality indicators such as "emotional stability, patience and meticulousness, and sense of responsibility" than on other ability indicators, and that these personality traits are strongly positively correlated

with work efficiency. Emotionally stable personnel demonstrated significantly improved performance in handling emergency affairs, while those who are patient and meticulous show a 37% reduction in transactional errors.

Third, in terms of management skills, the mean score of execution ability is high, indicating that execution ability is crucial in administrative work. This is consistent with the viewpoint of Rong (2013), who argues that management skills are the core components of the competency characteristics of university administrative personnel, and that university grassroots administrative personnel must possess excellent execution ability.

In addition, in terms of interpersonal communication, the lowest mean score is for Item 38: “Grassroots administrative personnel must effectively allocate resources, break down departmental barriers, and optimize resource allocation.” This reflects that some grassroots administrative personnel lack cross-departmental collaboration skills and that there are obvious barriers between departments. This is consistent with the viewpoint of Wang (2023), who argues that grassroots administrative personnel have long focused on intra-departmental affairs, have formed a “department-centric” mindset, lacked overall awareness and cross-departmental collaboration capabilities, and thus shown obvious shortcomings in resource coordination and barrier-breaking.

Finally, in terms of service awareness, Item 31 received the lowest mean score: “Grassroots administrative personnel should be able to anticipate problems in advance, communicate proactively, and resolve issues effectively.” This finding suggests that some grassroots administrative personnel still operate at the basic level of passive rule compliance, and that forward-looking awareness, proactive service orientation, and a strong sense of commitment have not been fully internalized. This is consistent with the viewpoint of Hu and Huang (2022), who argue that grassroots administrative personnel generally adopt a department-based mindset, positioning themselves as executors of superior instructions rather than as active service promoters. They often lack both the awareness and capability to anticipate problems proactively and to engage in cross-departmental communication. Their professional practice largely remains at the level of rule compliance and error avoidance, reflecting a limited proactive orientation.

Overall, the competency structure is characterized by strong professional knowledge and execution ability but relatively weaker proactive service awareness, collaborative governance capacity, and digital competence. These findings suggest that while current competencies support routine management, further enhancement is necessary to meet the evolving demands of vocational education reform and intelligent transformation.

## Conclusion

Descriptive statistical analysis confirmed that the overall competency level of grassroots administrative personnel in vocational colleges in Zhengzhou City was high ( $\bar{X} = 4.02$ ). The five competency dimensions were ranked in descending order of mean scores as follows: knowledge and skills, personality traits, management skills, interpersonal communication, and professional ethics. Among them, knowledge and skills ranked highest, particularly professional knowledge, whereas professional ethics, especially sense of responsibility, ranked comparatively lower.

Although grassroots administrative personnel demonstrated strong execution ability and solid technical competence, relatively weaker performance was identified in proactive service awareness, cross-departmental coordination, digital governance capability, and feedback mechanisms. These areas require systematic improvement through institutional optimization. The findings provide empirical support for refining competency development strategies and strengthening grassroots administrative talent construction in vocational colleges under the broader context of educational reform and intelligent governance.



## Suggestion

In response to the shortcomings identified in this study, vocational colleges should implement targeted improvement strategies. First, institutions should strengthen digital governance training by enhancing competencies in information system operation and data analysis to support intelligent campus development. Second, to address cross-departmental collaboration barriers, colleges should establish regular inter-departmental communication mechanisms and collaborative task systems to foster organizational integration. Third, to improve proactive service awareness, institutions should reinforce service-oriented education and case-based training, encouraging forward-looking thinking and proactive engagement. Fourth, performance evaluation systems should be refined to clarify assessment indicators and strengthen accountability, thereby enhancing sense of responsibility and attention to detail. Additionally, incentive mechanisms should be optimized to stimulate intrinsic motivation and professional commitment.

At the same time, this study has certain limitations. The research sample was limited to vocational colleges in Zhengzhou City, which may restrict the generalizability of the findings. Future research should expand the geographical scope and include different types of vocational institutions to further explore the influencing factors and structural relationships among competency dimensions. Such efforts would provide more comprehensive theoretical and practical guidance for strengthening grassroots administrative talent development in vocational colleges.

## References

- Fang, J. Q. (2019). Research on the capacity building of grassroots administrative personnel in universities from the perspective of human capital—taking T university as an example. *Heihe Journal*, (3), 16–18.
- Guan, S. Y. (2009). A review on the research of Cronbach's  $\alpha$  coefficient. *Psychological Science*, 32(3), 685–687.
- Hou, T. (2012). A Brief Discussion on the Cultivation Path of Quality and Ability of Administrative Management Personnel in Colleges and Universities under the New Situation. *Management Observation*, (8), 96–97.
- Hu, J. J., & Huang, M. Y. (2022). Construction of professional ability evaluation index system for grassroots administrative personnel in vocational colleges. *Contemporary Vocational Education*, (2), 103–112.
- Li, J. (2024). Empirical study on the competence of administrative management personnel in vocational colleges under the background of Double High. *Vocational and Technical Education*, 45(12), 45–50.
- Liu, Y. S., Chen, J. S., He, Y. G., Yu, W. J., Tang, M. J., & Su, X. (2022). A study on the work efficiency of grassroots administrative personnel in vocational colleges: A case study of a vocational and technical college in Sichuan Province. *Journal of Lanzhou Vocational and Technical College*, 38(1), 63–66.
- Rong, Z. W. (2013). Construction of university administrative management personnel system based on competency model. *Academic Forum*, (8), 222–225.
- Suwannarak, P. (2013). *Behavioral and social research methodology* (10th ed.). Buriram: Faculty of Humanities, Ratchapath buriram University.
- Wang, W. J. (2023). Exploring the capacity enhancement of grassroots administrative management personnel in vocational colleges under the background of Double High. *Tianjin Vocational College Joint Journal*, 25(6), 73–77.

# Investigate the Background of Undergraduate Students in the Department of Music at Shaanxi University of Science and Technology in China in Learning and Singing Chinese Classical Poetry and Art Songs

Su Qi <sup>1</sup> Akachai Teerapuksiri <sup>2</sup> and Panasin Sriviset <sup>3</sup>

<sup>1</sup> Ph.D in Music Education Program, Buriram Rajabhat University, Thailand,  
E-mail: 660427093012@bru.ac.th

<sup>2</sup> Advisor, Music Education Program, Buriram Rajabhat University, Thailand,  
E-mail: akachai.tp@bru.ac.th

<sup>3</sup> Co-Advisor, Music Music Education Program, Buriram Rajabhat University, Thailand,  
E-mail: panansin.sv@bru.ac.th

## Abstract

Chinese art songs based on classical poetry are an important component of Chinese vocal art. They integrate traditional poetic culture with modern compositional techniques and hold unique artistic value and cultural significance in the teaching of music majors in universities. Taking undergraduate students in the Music Department of Shaanxi University of Technology as research subjects, this paper employs a combination of questionnaires and semi-structured interviews to systematically examine students' learning background, cognitive understanding, practical experience, and the main difficulties they face in the process of studying and performing Chinese art songs of classical poetry. The study finds that most students hold a positive attitude toward the cultural value of such works, but they experience obvious confusion in areas such as understanding the poetry, grasping performance style, handling language, and expressing emotion. Based on data analysis, this paper discusses the related issues and proposes corresponding pedagogical implications.

**Keywords:** Chinese art songs of classical poetry; music education; undergraduates; vocal pedagogy; Shaanxi University of Technology

## Introduction

Chinese classical poetry art songs represent an important musical genre that integrates the artistic imagery of traditional Chinese poetry with modern vocal composition techniques. They not only embody the profound spiritual heritage of Chinese culture but also possess distinctive aesthetic value and pedagogical significance within contemporary vocal music education. With the continuous development of vocal education in China, classical poetry art songs have gradually become an essential component of undergraduate music training, contributing positively to the enhancement of students' linguistic expressiveness, musical understanding, and cultural identity.

As a regional comprehensive university, Shaanxi University of Technology is to some extent representative in cultivating application-oriented and interdisciplinary musical talents through its undergraduate vocal music program. However, in actual teaching and learning processes, differences remain in students' levels of exposure to, depth of understanding of, and performance ability in Chinese classical poetry art songs. Related aspects such as the allocation of teaching resources, curriculum design, and learning support also require further

exploration. Therefore, it is necessary to conduct a systematic investigation to gain a comprehensive understanding of the current background and the challenges faced by undergraduate students in the university's music department regarding the study and performance of Chinese classical poetry art songs.

Accordingly, this study takes undergraduate students in the Music Department of Shaanxi University of Technology as the research subjects and employs a combination of questionnaire surveys and interviews to analyze their learning experiences, cognitive attitudes, performance abilities, and difficulties. The aim is to provide references for optimizing curriculum design and teaching strategies for Chinese classical poetry art songs in higher vocal music education, and to further promote the inheritance and development of traditional culture within contemporary music education.

## Objective

Investigate the Background of Undergraduate Students in the Department of Music at Shaanxi University of Science and Technology in China in Learning and Singing Chinese Classical Poetry and Art Songs

## Research Methodology

This study adopts qualitative research methods, structured around literature review, expert interviews, and data analysis.

### Sample

The research subjects are sophomore to senior undergraduate students in the Music Department of Shaanxi University of Technology. A total of 60 questionnaires were distributed, and 55 valid questionnaires were collected. Among the respondents, approximately 70% are female and 30% are male; vocal majors constitute the main body, covering both bel canto and national vocal styles. In addition, 10 students were randomly selected for in-depth interviews to ensure the representativeness and depth of the data.

### Research Instruments

#### Questionnaire Design

The questionnaire mainly includes the following sections:

Basic information about the students (grade level, vocal specialization, years of study);

Channels and frequency of exposure to Chinese art songs of classical poetry;

Perceptions of the artistic value and educational significance of such works; Major problems encountered in the process of learning and performing.

The questionnaire combines multiple-choice questions with short-answer questions.

### Interview Guide

The interview format includes structured and unstructured interviews.

The researcher will create the questionnaire in the following order:

Design the questions and content of the questionnaire in a scientific and reasonable way based on existing literature.

Submit the questionnaire to the supervisor for review, and proceed to the next step after obtaining approval. If the supervisor provides useful suggestions and guidance, further revisions will be made, and the questionnaire content will then be finalized.

Select 10 key informants (10 students from the Music Department of Shaanxi University of Technology) to be interviewed using the finalized questionnaire. The interview content includes, but is not limited to, the questionnaire items. It is hoped that these 10 key



informants can revise any inappropriate content in the questionnaire and provide better suggestions.

Based on the expert interview records, revise again according to the opinions and suggestions raised in the questionnaire, and form the final interview report.

The following are the details of the 15 key informants, among whom 4 are engaged in vocal education in higher institutions, 1 is a stage singer, and 10 are students from the Music Department of Shaanxi University of Technology.

Liu Du, Professor, Xi'an Conservatory of Music

Seng Wenli, Professor, Music Department, Shaanxi University of Technology

Li Jichao, Associate Professor, Music Department, Shaanxi University of Technology

Ma Bin, Associate Professor, Music Department, Shaanxi University of Technology

Cai Jing, Soprano Soloist, Jiangsu Performing Arts Group

Liu Ziyang, senior student, soprano, 5 years of vocal training

Long Meixu, senior student, soprano, 6 years of vocal training

Cao Gaowei, senior student, tenor, 5 years of vocal training

Li Shang, junior student, soprano, 5 years of vocal training

Chen Jiahao, junior student, baritone, 4 years of vocal training

Chen Liubing, sophomore student, soprano, 3 years of vocal training

Wang Chong, sophomore student, tenor, 3 years of vocal training

Li Bo, freshman student, tenor, 2 years of vocal training

Niu Hanghang, freshman student, tenor, 2 years of vocal training

Wang Ruiyin, freshman student, soprano, 2 years of vocal training

The interviews mainly focused on the following questions:

Through what channels did you first come into contact with Chinese art songs of classical poetry?

Which aspects do you find most difficult in the process of learning or performing them?

How do you understand the poetic imagery and artistic conception in these works?

Is the teacher's guidance on such works sufficient in class?

Which teaching methods do you think help to improve performance effectiveness?

### **Data Collection**

The researcher designed the following data collection procedures, carried out in this order:

#### **Preparatory Stage**

Obtain a letter of certification issued by the Graduate School of Buriram Rajabhat University.

Identify the students to be interviewed and become familiar in advance with their personal interests and customs in order to conduct the interviews more effectively.

Contact the research group of the project, prepare a self-introduction and a statement of research objectives, and establish long-term, positive relationships with the students.

Prepare the necessary equipment for the interviews, such as mobile phones, cameras, and materials needed for written recording.

#### **Data Collection Procedures**

Collect relevant books, articles, journals, and textbooks through online and offline resources, including libraries and websites. Analyze and study the content related to Chinese art songs of classical poetry in the existing literature, and use it as the theoretical foundation of the research.

Select research subjects according to the research objectives, and interview students from different grades and levels regarding the current teaching situation in the Music Department of Shaanxi University of Technology, problems and techniques in vocal performance, and special issues related to Chinese art songs of classical poetry. This information will serve as an important basis for compiling a teaching manual on Chinese art songs of classical poetry for the Music Department of Shaanxi University of Technology, and an interview report will be written based on the interview content.

### **Data Analysis**

In this study, the researcher uses qualitative research methods to analyze the data. Data analysis in qualitative research is time-consuming and challenging. Through this process, the researcher systematically searches and organizes the data to deepen understanding and present the results to others. Specifically, it includes the following aspects:

#### **Text Analysis**

The first stage of qualitative data analysis here refers to text analysis. By examining and summarizing the texts of previous relevant theses, assessment reports, and books, we are able to extract and synthesize relevant data on this topic.

#### **Analysis of Interview Information**

The second step of data analysis involves obtaining data through interviews with teachers and students. By interviewing teachers and students, we sort out and analyze information on the current situation, vocal techniques, and teaching methods. By interviewing professional singers, we analyze relevant aspects of stage practice, musical performance, and the handling of emotion and movement. Through communication and interviews with students, we examine their learning objectives, learning strategies, and learning experiences. In this step, irrelevant data are reduced, necessary data are retained, and a practical and concise interview report is produced.

### **Results**

Based on interviews and questionnaire analyses involving four vocal teachers, one professional stage singer, and ten students, it was found that although most students have encountered Chinese classical poetry art songs in their professional courses, their exposure remains limited. More than 60% of the students recognize the significant cultural value of these works, yet only about 30% feel confident in performing them. Further interview results indicate that the main difficulties faced by students include insufficient understanding of the language and cultural background of classical poetry, challenges in balancing poetic expression with vocal technique during performance, a lack of systematic work analysis and demonstrative teaching, and an unclear grasp of the national and artistic stylistic characteristics of the repertoire.

### **Discussion and Conclusion**

Based on the interviews, the following conclusions can be drawn:

The survey of undergraduate students in the Music Department of Shaanxi University of Technology shows that Chinese art songs of classical poetry enjoy a high level of recognition in vocal teaching, yet students still face multiple challenges in the process of learning and performance. These problems stem not only from students' insufficient cultural accumulation, but are also closely related to teaching methods and curriculum design.

Therefore, in future teaching practice, it is necessary to strengthen systematic explanations of the cultural background of classical poetry, emphasize the integration of

work analysis and performance practice, and at the same time guide students to embody the characteristics of the Chinese language and national aesthetics in technical training. By introducing diversified teaching approaches, students' understanding and performance level of Chinese art songs of classical poetry can be effectively improved.

### **Suggestion**

- Strengthening cultural literacy in classical poetry and text interpretation.
- Constructing a teaching model that integrates poetic expression with vocal technique.
- Improving the repertoire analysis system and the development of teaching resources.

### **Acknowledgement**

The completion of this thesis would not have been possible without the care, support, and assistance received throughout the process of study and research. At every stage of topic investigation, data collection, and thesis writing, I have benefited from a positive academic environment and a rigorous scholarly atmosphere, which enabled me to deepen my understanding, refine my thinking, and successfully accomplish this research. I am also grateful for the rich teaching resources and academic exchange opportunities encountered during my studies, as these experiences provided an important theoretical foundation and practical inspiration for the formation of this thesis. I hereby express my sincere respect and gratitude.

### **References**

- Xia, Y. (2025). The Creation of Artistic Conception and Cultural Aesthetics in the Singing of Chinese Art Songs of Classical Poetry: From a Cross-cultural Perspective. *Sino-Foreign Culture & Tourism Exchange* (18), 172–174.
- Song, P. (2025). Artistic Conception Construction and Vocal Treatment in Chinese Art Songs of Classical Poetry. *Art Panorama* (36), 101–103.
- Zong, L. (2025). Integration of Art Songs of Classical Poetry and Cultural Literacy in Vocal Teaching. *Contemporary Music* (11), 47–49.
- Wang, Y. (2025). On the Role of Art Songs of Classical Poetry in the Reconstruction of Vocal Teaching Models. *Drama Home* (30), 176–178.  
DOI:10.26959/j.cnki.CN42-1410/J.2025.30.051.
- Guo, H. (2025). An Aesthetic Analysis of Chinese Art Songs of Classical Poetry. *Young Litterateur* (30), 87–89.



# An Investigation of Pitch Organization Teaching for Undergraduate Composition Majors in the People's Republic of China

Wang Anjun<sup>1</sup>, Thiti Panya-in<sup>2</sup> & Jiranuwat Khuntajan<sup>3</sup>

<sup>1</sup> Ph.D. student in Music Education, Faculty of Education, Buriram Rajabhat University, Thailand.

E-mail: wang.anjun@bru.ac.th

<sup>2</sup> Major Advisor, Assistant Professor, Faculty of Education, Buriram Rajabhat University, Thailand.

E-mail: thiti.py@bru.ac.th

<sup>3</sup> Co-Advisor, Assistant Professor, Faculty of Education, Buriram Rajabhat University, Thailand.

E-mail: jiranuwat.kh@bru.ac.th

## Abstract

This study examines the teaching of pitch organization in undergraduate composition programs in China, revealing systemic deficiencies that hinder students' stylistic competence and control of pitch logic. Using literature analysis, field investigations, and questionnaires with faculty and students, the research identifies problems of fragmented curricula, inadequate resources, and dispersed teaching methods. Findings indicate that the absence of a dedicated pitch organization course is a key contributing factor associated with stylistic imbalance and the overgeneralized application of atonal techniques in student works. In response, the study proposes the compilation of a Pitch Organization Teaching Manual and the establishment of a specialized undergraduate course. These measures aim to strengthen students' creative capacity, enhance stylistic discernment, and promote the systematic development of composition education in China.

**Keywords:** pitch organization, undergraduate composition majors, composition pedagogy, curriculum reform, stylistic competence

## Introduction

### Research Background

Contemporary composition programs in higher education face a persistent pedagogical tension: how to cultivate students' individual artistic voice while also ensuring systematic technical training. Synthesizing these perspectives, this study investigates current needs and challenges in undergraduate composition instruction related to pitch organization, and it proposes a structured instructional response aligned with contemporary composition pedagogy. To ensure methodological completeness, the study employs a mixed-methods design integrating qualitative interviews and quantitative survey data (Creswell & Creswell, 2023), with qualitative themes developed through thematic analysis (Braun & Clarke, 2022) and questionnaire dimensions grounded in scale-development principles (DeVellis & Thorpe, 2022).

## Objectives

1) To investigate the teaching of pitch organization for undergraduate composition majors in the People's Republic of China.

2) To propose curriculum and teaching resource development recommendations for improving pitch organization instruction in undergraduate composition programs, based on the identified deficiencies.

## Literature Review

Recent research on tertiary composition teaching highlights the centrality of “composer voice” and the teacher’s role in structuring critique–revision cycles without reducing creativity to unfocused intuition (Lörch & Huovinen, 2024). At the same time, conservatoire and university contexts continue to debate what composition teaching should prioritize and how curricular structures can support both craft and originality (Devaney, 2022).

Within this broader discussion, pitch organization can be framed as a teachable core competence that connects analytical understanding with compositional decision-making. In post-tonal contexts, pedagogy that combines analysis with “model composition” offers a practical pathway for transforming abstract theoretical ideas into concrete compositional procedures (Myler & Bernstein, 2023). Complementing such approaches, post-tonal analytical resources that emphasize clear, visually guided explanations can support students’ comprehension of how musical passages “work” and how pitch structures project coherence (Straus, 2022).

Moreover, composition pedagogy has increasingly emphasized learning environments that support creativity through embodied interaction, iterative experimentation, and reflective feedback. Evidence suggests that movement-based and embodied approaches can stimulate musical creativity and expand the ways students generate and organize pitch materials during composition tasks (Nijs et al., 2024).

## Research Methodology

### Research Design

This study adopted a mixed-methods design integrating qualitative and quantitative approaches (Creswell & Creswell, 2023). Qualitative data were collected through literature analysis and semi-structured interviews with experts and composition instructors. Quantitative data were obtained through a structured questionnaire survey administered to undergraduate composition students.

### Participants and Data Sources

The qualitative component included interviews with 24 participants, comprising composition professors, instructors, and graduate students from nine representative music institutions across China. These institutions were selected to reflect geographical and institutional diversity.

The quantitative survey involved 99 total respondents, including 75 undergraduate composition students and 24 academic affairs secretaries and composition faculty members. The sample was designed to capture perceptions of curriculum structure, theoretical integration, and practical application related to pitch organization instruction.

**Table 1**  
*Overview of Questionnaire Respondents (n = 99)*

| Institution                                         | Location     | Academic Affairs Secretaries | Composition Faculty | Undergraduate Composition Students |    |
|-----------------------------------------------------|--------------|------------------------------|---------------------|------------------------------------|----|
| Central Conservatory of Music                       | Beijing      | 1                            | 1                   | 8                                  |    |
| China Conservatory of Music                         | Beijing      | 1                            | 1                   | 6                                  |    |
| Xi'an Conservatory of Music                         | Shaanxi      | 2                            | 2                   | 8                                  |    |
| Zhejiang Conservatory of Music                      | Zhejiang     | 2                            | 3                   | 9                                  |    |
| Shanghai Conservatory of Music                      | Shanghai     | 1                            | 1                   | 8                                  |    |
| Wuhan Conservatory of Music                         | Hubei        | 1                            | 1                   | 8                                  |    |
| Haerbin Conservatory of Music                       | Heilongjiang | 1                            | 1                   | 8                                  |    |
| Henan Conservatory of Music at Zhengzhou University | Henan        | 1                            | 2                   | 12                                 |    |
| Xinghai Conservatory of Music                       | Guangzhou    | 1                            | 1                   | 8                                  |    |
| Total                                               |              | 11                           | 13                  | 75                                 | 99 |

### Research Instruments and Reliability

The questionnaire consisted of multiple dimensions addressing teaching content, instructional methods, theoretical integration, and student learning outcomes. Responses included both Likert-type rating items and binary (yes/no) items, depending on the dimension being assessed. The questionnaire dimensions were developed following established scale-development principles (DeVellis & Thorpe, 2022).

Internal consistency reliability analysis yielded a Cronbach's alpha coefficient of 0.85, indicating satisfactory reliability for descriptive analysis.

### Data Analysis

Qualitative interview data were analyzed using thematic analysis (Braun & Clarke, 2022) to identify recurring pedagogical and structural issues. Quantitative data were analyzed using descriptive statistics to summarize distributional tendencies and perceived instructional challenges. As the study aimed to provide a structural overview rather than causal inference, inferential statistical testing was not employed.

Ethical procedures, including informed consent and confidentiality assurance, were strictly observed throughout the data collection process.

### Results

The study employed multiple data sources. Literature samples were retrieved from publishers, core journals, official media, and institutional archives (Jan–Mar 2025), with three experts' writings selected for thematic analysis. Interview samples included 24 participants (composition professors, instructors, and graduate students) from nine institutions, collected via face-to-face and online formats (Mar–Jun 2025; 100% completion). Questionnaire samples comprised 24 faculty and 75 undergraduate composition students, yielding 99 valid responses (100% response rate). As a descriptive survey, no experimental grouping or crossover design was used. Baseline questionnaire data showed



that secretaries ( $n = 11$ ) were familiar with curriculum systems, faculty ( $n = 13$ ) covered core and foundational courses, and students ( $n = 75$ ) were mainly seniors. Institutions spanned nine major conservatories across eastern, western, southern, northern, and central China, ensuring representativeness. Baseline information was used only for stratified description. Qualitative analysis applied open coding to expert texts and interviews under preset categories (“curriculum–content–methods–resources–integration”), while quantitative analysis reported proportions of binary “yes/no” questionnaire items without significance tests or effect sizes.

### **Results of Expert Literature Analysis**

#### **The Central and Pivotal Role of Tonality/Pitch Organization**

Emphasizes the crucial significance of “tonality studies” for understanding Western music and transcending the limitations of traditional modal theory, advocating for the construction of contemporary compositional language supported by new tonal pitch organization concepts.

Zhou Qinru stated: “Tonality studies are not only central to understanding Western music, but also a vital foundation for breaking through the limitations of traditional modal theory and constructing contemporary compositional language” (Zhou Qinru, 2017, *Cultivating Chinese Composition Talents for the Future*, Journal of the Central Conservatory of Music). This perspective explicitly views tonality as a bridge between tradition and contemporary creation, carrying methodological significance.

#### **Creative Value Orientation and Cultural Ecology**

Proposes that composition teaching should have a clear value orientation to prevent a disconnect between creative purpose and socio-cultural context.

Zhao Jiping emphasized: “Composition should serve the people, not aliens,” warning that “if the purpose of creation becomes disconnected from the socio-cultural environment, it will affect students’ creative value orientation and aesthetic judgment” (Zhao Jiping, 2014, *Art Creation: For the People or for Aliens?*, Huashang Daily/Phoenix Net). This view reflects the necessity for interaction between composition teaching and the socio-cultural environment.

#### **A Gradual Pathway for Integrating Tradition and Modernity**

Opposes the premature introduction of highly complex modern techniques before students have a solid foundation; advocates for the gradual integration of traditional and post-tonal resources, taking into account students’ psychological and aesthetic development. Shi Wanchun noted: “Modernism should not become the mainstream in academic composition teaching. When students’ foundations are not yet solid, the rash introduction of complex modern techniques will not only cause difficulties in technical mastery but may also lead to an unstable creative aesthetic” (Shi Wanchun, 2023, *Modernism Should Not Become the Mainstream in Academic Composition Teaching—Reflections Triggered by the First ‘Voice of China’ Composition Competition*, Music Composition). This stance underscores the importance of aligning the pace of teaching with students’ cognitive development.

### **Interview Results**

This section summarizes themes derived from semi-structured interview materials with composition professors, instructors, and graduate students (24 participants in total) from nine institutions. In accordance with the conventions of the “Results” section, only factual and

consistent viewpoints are presented below, without normative judgments or teaching recommendations.

Curriculum level: Absence of a systematic “Pitch Organization” course at the undergraduate level; existing content is fragmented. Textbook level: Lack of systematic textbooks; limited suitability across academic years. Method level: Insufficient training in analysis/construction/design; individual guidance is mainly focused on score revision. Output level: Greater tendency for imbalance between style and organization in complex pitch system compositions.

### Questionnaire Results

Overall, the survey reveals significant deficiencies in the teaching of pitch organization in undergraduate composition programs, which can be summarized as follows:

#### Teaching Content

Only 15% of respondents indicated that current teaching explains scales, tonality, harmony, and melody construction from the perspective of pitch organization. Thirty percent believed it emphasizes cultivating students’ ability to perceive and design multi-part pitch organization relationships, and 20% felt that it balances tradition and modernity. However, 95% noted that courses are overly technical and formalized, neglecting students’ holistic development and creative individuality. Merely 3% considered the status of pitch organization in the curriculum to be high, while 96% agreed that teaching resources are severely insufficient, and nearly all (96%) affirmed the need to increase pitch organization courses in the future (see Table 2).

**Table 2**

*Survey on Teaching Content (n = 99)*

| No. | Question                                                                                                                                                       | Yes (%) | No (%) |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--------|
| 1   | Is the current teaching explaining scales, tonality, harmony, and melody construction from the perspective of pitch organization?                              | 15%     | 85%    |
| 2   | Does the current teaching emphasize cultivating students’ ability to perceive and design multi-part pitch organization relationships?                          | 30%     | 70%    |
| 3   | Does the current teaching content balance tradition and modernity, guiding students to improve pitch organization ability through diverse training?            | 20%     | 80%    |
| 4   | Is there a phenomenon of courses being overly technical and formalized, neglecting the balance between overall student development and creative individuality? | 95%     | 5%     |
| 5   | Is the positioning of pitch organization teaching in the composition curriculum system currently high?                                                         | 3%      | 97%    |
| 6   | Are teaching materials and resources for pitch organization in the current composition major sufficient?                                                       | 4%      | 96%    |
| 7   | Will there be a need to increase pitch organization courses in the future?                                                                                     | 96%     | 4%     |

#### Composition Teaching

Only 8% of respondents felt that current teaching emphasizes expressing musical intentions through pitch organization according to stylistic requirements, 5% believed it highlights the coherence and expressiveness of pitch organization and harmony, and 15% reported that it encourages students to use more complex pitch organizations to enhance artistic quality. Just 6% indicated that traditional tonal pitch organization is taught systematically. These findings demonstrate that training in pitch organization within composition teaching is highly inadequate.

### Integration of Tradition and Modernity

Only 18% of respondents stated that current teaching systematically integrates traditional modal/tonal instruction with modern post-tonal approaches, 9% believed it systematically teaches the historical development and construction methods of traditional pitch organization, and 30% reported systematic instruction in post-tonal categories and methods. This reflects a clear lack of integration between traditional and modern approaches (see Table 3).

**Table 3**

*Integration of Traditional Tonality and Modern Pitch Organization (n = 99)*

| No. | Question                                                                                                                                                    | Yes (%) | No (%) |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--------|
| 1   | Does the current teaching systematically integrate the instruction of traditional modal/tonal pitch organization with modern post-tonal pitch organization? | 18%     | 82%    |
| 2   | Does the current teaching systematically teach the development history and construction methods of traditional pitch organization?                          | 9%      | 91%    |
| 3   | Does the current teaching systematically teach the categories and methods of pitch organization in post-tonal music?                                        | 30%     | 70%    |

### Teaching Methods

A large majority (96%) confirmed that the prevailing practice is to deliver theory in group lessons while offering individual guidance for specific works. However, only 12% reported the assignment of analysis, construction, and design tasks, and just 9% indicated that in-class teaching involved in-depth logical reasoning or demonstrations of pitch organization development. This shows that current methods remain focused on theoretical lecturing and score revision, lacking systematic constructive training.

In summary, the questionnaire results demonstrate that pitch organization occupies a marginal position in undergraduate composition teaching, with no systematic course, insufficient teaching materials, weak methodological innovation, and inadequate integration of traditional and modern approaches. Consequently, students struggle to develop stable pitch logic and stylistic control in their creative work.

### Conclusion and Discussion

This section interprets the findings in relation to existing literature, outlines curricular and pedagogical implications, and discusses limitations and future research directions. It is organized into four parts: main findings, literature comparison, pedagogical implications, and limitations.

#### Main Findings

Drawing on expert literature, interviews from nine institutions, and 99 questionnaires, this study identifies structural deficiencies in pitch organization teaching in undergraduate composition programs in China. Although 96% of respondents agreed that more pitch organization courses are needed, only 3% recognized its high curricular status, and 4% considered teaching resources sufficient. Only 12% reported analysis–construction–design assignments, and 9% indicated systematic in-class reasoning. Integration of traditional and modern approaches was limited, with 18% perceiving systematic instruction. Interviews further revealed the absence of independent courses, reliance on self-compiled materials, revision-centered training, and instability in stylistic positioning and material organization in polytonal/atonal writing.



### Interpretation and Literature Comparison

These findings align with expert perspectives. Zhou Qinru emphasized the centrality of tonal studies, highlighting the disconnection between tonality and post-tonality observed in this study. Shi Wanchun advocated gradual integration of traditional and modern techniques, consistent with the identified fragmentation of curricular modules. Zhao Jiping stressed alignment between creative value and cultural ecology, supporting the observation that insufficient style–pitch correspondence contributes to stylistic drift. While expert discourse emphasizes structural continuity, institutional practice remains fragmented and task-disconnected.

### Curriculum and Teaching Implications

Curriculum positioning should shift from dispersed embedding to explicit modularization, establishing a progressive pathway from tonality to polytonality to post-tonality, consistent with contemporary composition pedagogy frameworks (Kaschub, 2024). Task design should move from revision-centered instruction toward closed-loop analysis–construction–design training. Assessment should emphasize stylistic–pitch correspondence to reduce instability in student compositions.

### Research Limitations

As a non-experimental cross-sectional survey, the study is limited by sample scope, binary questionnaire items, and potential interview bias. Terminological differences and institutional contexts may also have influenced responses. Future research should expand sampling, adopt longitudinal designs, and incorporate objective coding of student works to strengthen explanatory depth.

### Suggestions

Suggestions: Conceptual reform: Establish a pitch-organization-centered philosophy balancing tradition and modernity; Curriculum development: Provide independent or modular pitch organization courses; Method optimization: Implement project-based, closed-loop training with style–pitch matching tasks; Resource development: Develop textbooks and digital resources, including a Pitch Organization Teaching Manual, promote inter-institutional sharing, and integrate national modes with contemporary idioms.

### Acknowledgements

The author would like to express sincere gratitude to the academic advisors at Buriram Rajabhat University for their valuable guidance throughout the research process. Appreciation is also extended to the academic affairs secretaries, composition faculty members, and undergraduate students from the participating institutions for their cooperation and support in data collection. Any remaining errors are the sole responsibility of the author.

### References

- Braun, V., & Clarke, V. (2022). *Thematic analysis: A practical guide*. SAGE.
- Creswell, J. W., & Creswell, J. D. (2023). *Research design: Qualitative, quantitative, and mixed methods approaches* (6th ed.). SAGE.
- DeVellis, R. F., & Thorpe, C. T. (2022). *Scale development: Theory and applications* (5th ed.). SAGE.
- Devaney, K. (2022). Heads of composition perspectives of the role of composition teaching in UK music conservatoires composition department. *Music Education Research*, 24(5), 611–624. <https://doi.org/10.1080/14613808.2022.2118248>

- Ferrando, P. J., & Lorenzo-Seva, U. (2025). Using Likert response scales in psychometric research: Problems and recommendations. *Frontiers in Psychology*, 16, 1468801. <https://doi.org/10.3389/fpsyg.2025.1468801>
- Kaschub, M. (Ed.). (2024). *The Oxford handbook of music composition pedagogy*. Oxford University Press.
- Lörch, L., & Huovinen, E. (2024). Fostering composer voice in tertiary teaching of contemporary music composition. *Journal of Research in Music Education*. Advance online publication. <https://doi.org/10.1177/00224294241255579>
- Myler, D. J., & Bernstein, Z. (2023). Model composition in the post-tonal classroom. *Journal of Music Theory Pedagogy*, 37, Article 11.
- Nijs, L., Grinspun, N., & Fortuna, S. (2024). Developing musical creativity through movement: Embodied interaction in composition pedagogy. *Creativity Research Journal*. Advance online publication. <https://doi.org/10.1080/10400419.2023.2299159>
- Straus, J. N. (2022). *The art of post-tonal analysis: Thirty-three graphic music analyses*. Oxford University Press.



## Analyze the musical form and technical characteristics of Zhu Di's performance in the Shaanxi music style through “Qinchuan Shuhuai”.

Wang Kai<sup>1</sup> Akachai Teerapuksiri<sup>2</sup> and ThitiPanya-in<sup>3</sup>

<sup>1</sup> M.A. Students, Music Education Program, Buriram Rajabhat University,  
Thailand,

E-mail: 670426025003@bru.ac.th

<sup>2</sup> Advisor, Music Education Program, Buriram Rajabhat University,  
Thailand,

E-mail: akachai.tp@bru.ac.th

<sup>3</sup> Co-advisor, Music Education Program, Buriram Rajabhat University,  
Thailand,

E-mail: thiti.py@bru.ac.th

asterisk denoting the corresponding author

### Abstract

This study aims to analyze the musical form and technical characteristics of Zhu Di's performance in the Shaanxi music style through “Qinchuan Shuhuai”. A qualitative research approach was employed, including score-based musical analysis and performance technique analysis, supported by a review of relevant literature on Guanzhong folk culture and Shaanxi operatic traditions. The results reveal that the work is deeply rooted in Guanzhong folk aesthetics, incorporating idiomatic musical elements derived from Qinqiang and Wanwanqiang. Stylistically, the piece constructs dramatic tension through the contrast between bright, uplifting “joyful tones” and profound, melancholic “bitter tones,” thereby embodying a distinctive “Qin-style” musical character that balances strength and gentleness within a narrative-lyrical framework. Technically, Qinchuan Shuhuai employs the finger-rolling technique to simulate the expressive timbre of the banhu, combined with half-hole control, a Qinqiang-style glissando, and air vibrato. These techniques enable precise coordination between pitch variation and emotional expression. Overall, the study demonstrates that Qinchuan Shuhuai integrates regional cultural connotations with Zhu Di performance practice, refines the technical paradigm of the Shaanxi KaiSchool, and serves as an important reference for localized Zhu Di composition and performance.

**Keywords:** Zhu Di performance; Shaanxi School; Guanzhong folk music; Qinchuan Shuhuai; performance techniques

### Introduction

As one of the oldest traditional Chinese musical instruments, the ZhuDi boasts an 8,000-year developmental history. The excavation of the Jiahu Bone Flute confirms its profound historical heritage. During its long evolution, shaped by regional cultural influences and artistic innovations of performers, the ZhuDi has evolved into distinctive regional schools with divergent styles. (ShenHanyang, 2022, p. 65). Academically, traditional ZhuDi has long been recognized as forming two core schools: the Jiangnan Style, featured by freshness and grace, and the Northern Style, characterized by vigor and boldness. However, the Shaanxi style of ZhuDi emerged in the 1980s, breaking this traditional binary pattern with its rich Qin regional charm and becoming an important branch of Chinese ZhuDi art. Its rise is no



accident, rooted in the profound cultural deposits of Shaanxi—including the rugged Loess Plateau landscape, the tenacious character of local people, and precious folk art forms such as Qin Opera, Wanwanqiang Opera, and Shaanxi folk songs—while driven by the innovative exploration of generations of ZhuDi performers and composers (Liu Ruibing, 2020, pp. 45). This school has not only enriched the developmental ecology of ZhuDi schools but also opened a new path for the regionalized development of traditional Chinese instrumental music, exerting a far-reaching influence on the evolution of ZhuDi art in the 20th century and beyond (Zhang Ning 2019, p. 27).

Among the representative works of the Shaanxi style of ZhuDi, QinChuan ShuHuai composed by Ma Di in 1980 stands out as a milestone that marks the maturity of the school. As a pivotal figure in Shaanxi-style ZhuDi art, Ma Di drew on his profound understanding of Qin regional culture and professional training under masters such as Yuan Xiuhe, integrating musical elements from Qin Opera, Wanwanqiang Opera, and Shaanxi folk songs (e.g., Embroidery Pouch) into this debut work (Zhang Bo, 2021, p. 89). The piece has remained enduringly popular since its creation, designated as a compulsory repertoire for major domestic and international ZhuDi competitions and included in the teaching curricula of professional music. Existing research has explored the piece's use of folk music materials, individual performance techniques, and cultural connotations, but there remains a lack of systematic analysis that integrates stylistic features, technical principles, and regional cultural roots. To address this gap, this study takes QinChuan ShuHuai as the core research object, adopting literature research and interview methods to dissect the integration of Qin Opera's "Huan Yin" (Bright Mode) and "Ku Yin" (Plaintive Mode), the functional logic of core techniques such as Finger Vibrato, Glissando, and Circular Breathing, and the internal connection between technical innovation and stylistic formation.

The research aims to construct a comprehensive analytical framework for the Shaanxi style of ZhuDi, enrich the theoretical system of regional ZhuDi schools, and provide practical guidance for performers and educators, while promoting the inheritance and innovation of Qin regional musical culture.

## Objectives

Analyze the musical form and technical characteristics of Zhu Di's performance in the Shaanxi music style through "Qinchuan Shuhuai".

## Research Methods

This study adopts qualitative research methods.

### Key Interviewees

Five ZhuDi experts are selected as interviewees to comprehensively collect data on technical details, cultural context and academic perspectives:

Professor Ma Di, ZhuDi Major, Xi'an Conservatory of Music

Professor Meng Fanzhen, Xi'an Conservatory of Music

Associate Professor Qiu Feng, School of Music, Shaanxi Normal University

Associate Professor Wang Hui, Weinan Normal University

Associate Professor Zhang Shuo, Huaqing College, Xi'an University of Architecture and Technology

### Research Tools

Literature retrieval tools: China National Knowledge Infrastructure and Google Scholar, for collecting research literature on regional culture, Shaanxi ZhuDi and Expressing Sentiments of the Qinchuan Shuhuai;

Reference materials: Audio and video recordings of Ma Di's performance of Expressing Sentiments of the Qinchuan Shuhuai, classic audio and video materials of Qin Opera and Wanwanqiang Opera;

Interview tools: Semi-structured interview outline, recording equipment, note-taking software.

### **Data Collection**

Literature collection: Retrieve literature related to the Shaanxi style of Zhu Di, Expressing Sentiments of the Qinchuan Shuhuai and Qin regional folk music, extract key points on the influence of regional culture on the school's style, research on techniques such as Finger Vibrato, and gaps in existing studies;

Interview collection: Conduct 40–60 minute semi-structured interviews with 5 key interviewees, focusing on the connection between techniques and style, the influence of Qin regional culture, and document the discussions.

### **Data Analysis**

Through content analysis, academic literature is systematically classified into three research dimensions: regional cultural tracing, specialized technique analysis and artistic connotation interpretation, to sort out the common laws and gaps of existing research and provide a theoretical basis for cross-dimensional analysis;

Analyze the piece from three dimensions: mode, technique and emotion, to highlight the unique characteristics of the Shaanxi style;

Analyze interview transcripts, extract the core concept of techniques serving style, verify research conclusions and interpret technical details in combination with the creative background.

### **Research Summary**

This study adopts the research path of literature review and interview verification, systematically integrating the literature research method and interview method to construct a trinity analytical framework of Culture-Technique-Style.

By using first-hand data from key interviewees combined with objective analysis of musical scores and audio-video materials, the authenticity and reliability of research conclusions are ensured; the regional characteristics of the Shaanxi style are highlighted, making up for the limitation of binary separation in existing research. Finally, this methodological system comprehensively analyzes the stylistic and technical characteristics of Expressing Sentiments of the Qinchuan Shuhuai, reveals their internal connection, and demonstrates the core logic of regional culture empowers artistic expression, and technical innovation shapes stylistic development, providing theoretical support and practical references for the research and inheritance of the Shaanxi style of Zhu Di.

## **Results**

### **The Dual Expression of Qin Mode and Qin Style:**

The musical style of Qinchuan Shuhuai is deeply grounded in the Qin regional modal system, which serves as the fundamental framework for expressing the Shaanxi School identity. The work prominently contrasts two characteristic tonal categories: the bright and uplifting “joyful tones” and the restrained, melancholic “bitter tones.” The “joyful tones,” primarily associated with the D Gong mode and the emphasis on E and A pitches, dominate the fast-paced sections of the piece. Their strong dynamic articulation and rhythmic vitality create a sense of forward momentum and emotional brightness. In contrast, the slow sections rely heavily on the reduced B pitch, which accounts for approximately 42% of the tonal

material. This pitch, combined with subtle timbral fluctuations, produces a somber, introspective atmosphere. Through the interplay of these two tonal domains, the composition embodies the Qin aesthetic principle of balancing strength and gentleness, integrating vigorous rhythmic energy with lyrical melodic gestures to convey the cultural essence of the Qin region.

### **Construction of Innovative Techniques and a Collaborative Technical System:**

The technical framework of Qinchuan Shuhuai is characterized by targeted innovation and systematic collaboration among performance techniques. At the core of this system is Ma Di's pioneering finger-rolling technique, which simulates the expressive nuances of Qin Opera and the banhu through controlled rolling motion between the half-hole C and flat B. This technique functions not merely as a decorative effect but as a structural device that shapes melodic contour and emotional intensity. Supporting techniques, including refined half-hole control and circular breathing, are used selectively based on the musical context. Rather than being used uniformly throughout the piece, these techniques are segmented and purpose-driven, ensuring that each technical gesture serves a specific stylistic or expressive function. As a result, the work establishes a coherent technical system in which individual techniques interact dynamically, forming a virtuous cycle in which the technique consistently serves musical style and expressive intent.

### **The Three-in-One Transmission of Technique, Style, and Culture:**

The findings further demonstrate that Qinchuan Shuhuai achieves an integrated transmission of technique, style, and cultural meaning. Technical devices are closely aligned with modal adaptation, timbral imitation, and emotional reinforcement, enabling performers to convey Qin musical identity with precision and depth. Through this integration, performance technique functions as a bridge between abstract musical structure and concrete cultural expression. This three-in-one transmission model not only reflects the artistic ideals of the Shaanxi School but also provides a compelling paradigm for other regional traditions of Chinese instrumental music. By aligning technical innovation with stylistic authenticity and cultural symbolism, the work exemplifies a successful approach to preserving and developing localized musical schools within contemporary performance practice.

The musical style of "Qin Chuan Shu Huai" is deeply rooted in the Qin region's modal system. Its distinctive Shaanxi School features "joyful tones" (D Gong mode, emphasizing E and A) and "bitter tones" (reduced B and raised F). In the fast-paced sections, the predominant use of E and A notes with strong dynamics conveys a brisk tempo, while the slow movements, where reduced B notes account for 42%, evoke melancholy through their fluctuating timbres. The composition interprets Qin style through a harmonious blend of strength and gentleness, intertwining vigorous rhythms with lyrical glissandos to fully express the essence of Qin culture.

#### **Construction of Innovative Techniques and Collaborative Systems**

The technical core lies in "targeted innovation" and "collaborative application". Ma Di pioneered the "finger-rolling technique," replicating the essence of Qin Opera and banhu (a traditional Chinese fiddle) through the rolling motion between a half-hole C and a flat B. Auxiliary technique such as half-hole control and circular breathing each have their specialized applications. The segmented application of techniques forms a virtuous cycle of "technique serving style".

#### **The Three-in-One Transmission of Technology, Style, and Culture**

Technology and style are deeply integrated, achieving precise transmission of Qin music through modal adaptation, flavor replication, and emotional reinforcement. The technical approach bridges style and culture, realizing a trinity of communication that



highlights the artistic pursuit of Shaanxi's musical school and offers a successful paradigm for regional schools of traditional instruments.

## Discussion and Conclusion

### Discussion

The technical system of the Shaanxi music style Zhu di is built on the principles of "layered structure, targeted application, and coordinated execution," deeply validated by its "core techniques + auxiliary techniques" framework. The composition is divided into four sections: introduction, slow movement, fast movement, and coda, each with clearly defined technical functions. The introduction employs staccato accents to emphasize stress, aligning with the robust "shouting" style of Qin Opera. The slow movement's "finger-rolling technique" requires alternating half-hole movements between the index and middle fingers at a moderate frequency to preserve musicality and refine practical standards. The fast movement and coda employ double-tonguing that highlights the coordination of fingers, tongue, and mouth shape, demonstrating how these techniques serve the overall style.

The core technique "finger vibrato" embodies the principle of "conveying musical resonance through vibrato." By cyclically vibrating the half-hole C and lowered B notes, it recreates the distinctive tones of the bowl-shaped Qiang and banhu, blending the essence of traditional opera with modal expression. The delicate transition of "wrist-driven rolling" highlights the innovative essence of "creating resonance through finger techniques." Auxiliary techniques include: precise half-hole control to achieve "ascending F and descending B when D is the palace note," resolving the challenge of bitter and micro-intervals; slow-slide glissandos that avoid appoggiaturas, aligning with the Qin opera's characteristic of "smooth yet not cloying" glissandos; and cyclic breathing to emphasize coordinated mouth-nose coordination, ensuring breath and emotional continuity in 25-beat sustained notes.

The Le School's principle of "style as the core, technique as the wings" is realized in modal articulation and Qin-style transmission. Using E-diao bangdi (a traditional Chinese Zhu di) and full press to produce D (in the Zheng mode), the "bitter tones" employ half-hole circular vibrato to convey desolation, while the "two variations" amplify tension through vibrato. The "joyful tones" achieve a brisk stylistic adaptation through rapid, forceful high notes, continuous double tonguing, and ascending slides.

The Qin-style musical essence of "harmonizing strength and gentleness" is powerfully conveyed through technical contrasts: the "strength" derives from the staccato in the introduction, the marcato (short, deep breaths) in the allegro, and the high-pitched notes, which embody the majestic spirit of the Loess Plateau. The "gentleness" emerges from the soft glissando in the adagio, moderate vibrato, and subtle dynamics, conveying the delicate emotions of the Qin people. This dynamic interplay of "strength and gentleness"—such as the 25-beat sustained note's progression from "strong, gradually weaker, weak, gradually stronger, strong"—enriches the music's emotional layers, perfectly capturing the essence of Qin-style music: "majestic yet refined."

### Conclusion

The Shaanxi style Zhu di, rooted in the Qin-style tradition, employs a modal system that alternates between "joyful tones" and "melancholic tones" to convey contrasting emotions—vibrant and uplifting versus somber and profound. Its character embodies a harmonious blend of strength and gentleness, combining the soaring intensity of Qin opera with the delicate subtlety of folk music. The artistic conception achieves a seamless integration of

narrative and lyrical expression, constructing an emotional thread through a progression of "nostalgia, emotional release, exaltation, and transcendence."

The technical essence centers on "targeted innovation" and "collaborative application". The core technique, "finger kneading sound", replicates the mournful tones of Qin Opera and the distinctive charm of banhu (a traditional Chinese fiddle) through alternating finger movements of the index and middle fingers. Supporting techniques include half-hole control and a Qin Opera-style glissando, with segmented application in which each segment emphasizes a specific technique. This integration manifests in three dimensions: modal adaptation, tonal reproduction, and emotional amplification, transforming regional culture into a musical language that is audible and perceptible. The paper establishes a tripartite analytical framework of "technique, style, and culture", filling existing research gaps and providing pedagogical guidance for performance instruction.

### Suggestion

1. Repertoire Expansion: Future studies may extend the analysis beyond Qinchuan Shuhuai by including other representative works of the Shaanxi School, such as Qin Yin and Xiang Ge, to identify shared stylistic and technical characteristics.
2. Quantitative and Acoustic Approaches: Integrating acoustic analysis with performance practice research may help clarify the relationship between technical parameters (e.g., finger vibrato frequency and glissando speed) and stylistic expression, providing more objective empirical support.

### References

- Zhang, N. (2019). On the Performance Style and Techniques of Qinchuan Shuhuai. *China Music*, (4), 27.
- Li, R. (2020). Geographical Characteristics of Shaanxi Folk Music. *Human Geography*, (2), 45.
- Zhang, B. (2021). Analysis of Performance Techniques for the ZhuDi Piece Qinchuan Shuhuai. *New Voices of Yuefu*, (4), 89
- Shen, H. (2022). A Preliminary Study on Qin Dialect in Qinchuan Shuhuai. *Northern Music*, (12), 65.
- Xu, K. & Pang, Z. (2021). Technical Points and Style Control of the ZhuDi Piece Qinchuan Shuhuai. *Music Creation*, (5), 96.

## The Current Situation and Problem of Chinese Folk Vocal Music at Sichuan Conservatory of Music

Wang Yani<sup>1</sup> Chao Kanwicha<sup>2</sup> and Chalermkit kengkaew<sup>3</sup>

<sup>1</sup>PhD Students, Music Education Program, Buriram Rajabhat University, Thailand

E-mail: Wang Yani@bru.ac.th

<sup>2</sup>Advisor, Music Education Program, Buriram Rajabhat University, Thailand

E-mail: chao@bru.ac.th

<sup>3</sup>Dr, Music Education Program, Buriram Rajabhat University, Thailand

E-mail: chalermkit.kk@bru.ac.th

### Abstract

To explore the actual development status and core problems of the folk vocal music major at Sichuan Conservatory of Music in depth, this study adopted a semi-structured interview method to conduct an in-depth investigation with 5 front line teaching experts in this major. By means of an interview questionnaire covering four dimensions—teaching system, student cultivation, discipline development, and development challenges—quantitative data and qualitative suggestions were collected and subjected to mixed-methods analysis. The results demonstrate that the major has achieved remarkable outcomes in fostering students' professional skills and delivering practical teaching, with students excelling in vocal music competitions at all levels. Nevertheless, prominent issues remain, including inadequate integration of traditional folk vocal music techniques with bel canto concepts, delayed textbook updates, weak theoretical research on folk vocal music, and a lack of innovation capacity. Based on these findings, this study proposes targeted recommendations from the perspectives of teaching system optimization, textbook resource development, theoretical research enhancement, and the deepening of intangible cultural heritage (ICH) inheritance. These recommendations aim to provide decision-making references for the high-quality development of this major and offer a valuable benchmark for the construction of related majors in peer institutions.

**Keywords:** Sichuan Conservatory of Music; Folk vocal music; Folk vocal music teaching plan; Talent cultivation

### Introduction

As an important carrier of traditional Chinese culture, folk vocal music stands as one of the core majors for talent cultivation in higher music institutions. As a benchmark of music education in Southwest China, Sichuan Conservatory of Music has endowed its folk vocal music major with profound regional cultural heritage and a solid teaching foundation, endowing the major with significant national influence among its counterparts. In recent years, with the advancement of the cultural power strategy, the diversified development of art education, and the shifting market demand for vocal music talents, the folk vocal music major is confronted with the dual challenges of traditional inheritance and modern innovation. How to balance the integration of traditional vocal techniques and Western singing concepts, how to enhance the timeliness of textbooks and the depth of theoretical research, and how to strengthen ICH inheritance and students' practical abilities have become pressing issues for the professional development of the major. Against this backdrop, conducting an empirical investigation from the perspective of front-line teaching



experts is of great practical significance for clarifying the current development status of the major and addressing its development dilemmas.

## Research Objectives

- 1.To systematically explore the current development status of the Ethnic Vocal Music major at Sichuan Conservatory of Music;
- 2.To accurately identify the existing problems of the Ethnic Vocal Music major at Sichuan Conservatory of Music;
- 3.To compile a teaching manual for the vocal singing techniques of the Ethnic Vocal Music major at Sichuan Conservatory of Music.

## Research Methodology

### Research Participants

Purposive sampling was employed in this study, with 5 front line teaching experts from the Department of Folk Vocal Music at Sichuan Conservatory of Music selected as interviewees. All participants possessed more than 10 years of teaching experience, covering two academic ranks (professor and associate professor) and core vocal categories (tenor, soprano, baritone). Their teaching expertise spans multiple fields including traditional folk vocal music and bel canto integrated teaching, which ensures the comprehensiveness, representativeness, and professionalism of the research perspective (see Table 1 for detailed information).

| Name       | Ye Zheng           | Yu Xinyu       | Zhou Weiwei    | Kang Yanlong | Bai Juye        |
|------------|--------------------|----------------|----------------|--------------|-----------------|
| Voice Part | Bel canto baritone | Ethnic soprano | Ethnic soprano | Ethnic tenor | Bel canto tenor |

### Research Instrument

Based on literature analysis and expert consultation and combined with the regional characteristics and actual teaching practice of the folk vocal music major at Sichuan Conservatory of Music, the Interview Questionnaire on Folk Vocal Music Performance at Sichuan Conservatory of Music was designed. The questionnaire comprises 15 questions divided into four modules: Teaching System and Curriculum Design (4 questions), Student Cultivation and Development (4 questions), Discipline Construction and Academic Research (3 questions), and Challenges and Development Suggestions (3 questions). Among them, 12 are objective multiple-choice questions (adopting an 1-5 five-point rating scale) and 3 are subjective open-ended questions, enabling the complementary collection of quantitative data and qualitative information. The questionnaire was reviewed and revised by two doctoral supervisors in the field of vocal music education to ensure its scientific rigor and practical applicability.

### Data Collection and Analysis

#### Data Collection

A mixed approach of face-to-face interviews and questionnaire completion was adopted, with data collection finalized on March 10, 2025, over a one-month research period.

Prior to the interviews, experts were fully informed of the research purpose, questionnaire filling rules, and information confidentiality principles. Supplementary opinions and in-depth insights from the experts were recorded synchronously during the interviews. Upon recovery, all questionnaires were cross-checked and organized by two researchers to ensure the authenticity and completeness of the data (the effective recovery rate of the questionnaire was 100%).

### Data Analysis

**Quantitative Analysis:** For objective questions, a five-point scoring system (1-5) is adopted, with 5 being the highest and 1 the lowest.

## Results

### 1. Overall Expert Scoring Results

The ratings given by the five experts all showed positive characteristics (see Table 2), indicating that the expert group held a positive attitude towards the overall development trend of this major. However, the development balance across different dimensions was insufficient, with significant disparities observed.

**Table 2**

*Descriptive Statistics of Total Questionnaire Scores of the Five Experts*

| Name          | Ye Zheng | Yu Xinyu | Zhou Weiwei | Kang Yanlong | Bai Juye |
|---------------|----------|----------|-------------|--------------|----------|
| Expert Rating | 4        | 4        | 5           | 3            | 5        |

### Verbatim Interview Transcripts (Categorized by Questionnaire Sections)

#### 1. Teaching System and Curriculum Design

Interviewer: Dear teachers, do you think the current curriculum design of our major can meet the training needs for ethnic vocal music talents? How is the integration of traditional techniques and bel canto concepts?

Bai Juye (Professor): Overall, the curriculum design basically covers the required content, and the proportion of practical teaching is reasonably allocated – it can be rated as "basically meeting the needs" and "reasonably proportioned". However, the integration of traditional ethnic vocal music techniques and bel canto singing concepts is indeed inadequate; I would rate it as "minimally integrated", which is a notable shortcoming.

Ye Zheng (Associate Professor): I agree with Professor Bai. In addition, there are issues with teaching materials – their selection and update cannot keep pace with the teaching rhythm. My satisfaction with this aspect is "fairly dissatisfied", a point that many other teachers have also raised.

Yu Xinyu (Associate Professor): That's correct. The curriculum and practical teaching are generally acceptable, but these two problems are prominent and require priority adjustment.

#### 2. Student Training and Development

Interviewer: What are your views on our students' professional proficiency, cultural inheritance performance, as well as their employment and award-winning outcomes? This is also the section that received the highest scores from all of you.

Kang Yanlong (Associate Professor): Our students' professional skills are definitely "leading in the province", and their understanding and inheritance of cultural connotations are also "quite good". In recent years, they have achieved certain results in national and provincial competitions and won awards occasionally, which is a decent performance.

Zhou Weiwei (Associate Professor): The employment direction of our graduates is quite aligned with the training objectives, which can be described as "fairly consistent". Such achievements are inseparable from the teaching strength of our major, and this aspect is indeed worthy of recognition.

Bai Juye (Professor): That's right. This is our strength – both students' capabilities and employment quality are at a good level overall, which is why this section received universally high scores.

### **3. Disciplinary Development and Academic Research**

Interviewer: Then, how would you evaluate the performance of our major in terms of disciplinary theoretical research, exchanges and cooperation, as well as the inheritance and innovation of intangible cultural heritage (ICH)?

Ye Zheng (Associate Professor): Theoretical research is indeed weak in this major; I would rate it as "underdeveloped". There are some exchanges and cooperation with other colleges, universities and art groups, but they are not in-depth – it can be described as "having certain exchanges and cooperation".

Yu Xinyu (Associate Professor): The inheritance and innovation of ICH are not well executed, with few outstanding achievements to showcase, so I would rate it as "poor". As for the disciplinary development plan for the next five years, I personally think it is "moderate" and not particularly clear.

Kang Yanlong (Associate Professor): I agree with this assessment. Theoretical research and ICH innovation are our two major shortcomings, and there is also room for improvement in exchanges and cooperation.

### **4. Challenges Faced and Development Suggestions**

Interviewer: What do you think is the biggest challenge for the current development of our major? Which aspects need the most improvement? Are there any specific suggestions?

Bai Juye (Professor): The biggest challenges are mainly the optimization of teaching resources, the inadequate integration of traditional and modern elements, and the weakness in theoretical research. The aspect that needs the most improvement should be the curriculum design, followed by practical opportunities and teaching methods.

Zhou Weiwei (Associate Professor): Let me add a few specific suggestions. First, we need to strengthen the integration of traditional and modern elements – for example, sort out the vocal techniques of Chuanyao Haozi (Sichuan River Work Songs) and Sichuan Qingyin (Sichuan Light Tunes), and combine them with contemporary creative songs to teach students how to adapt and apply these techniques.

Ye Zheng (Associate Professor): We can establish a teaching case database, categorized by technical difficulties such as vocal range types, high note breakthroughs, and articulation and vowel formation. Including typical student problems and their solutions in the database will make it more practical. In addition, comparative teaching of Chinese and Western vocal music is a must – the differences in breathing, resonance and emotional expression should be clearly explained to prevent students from confusing them.



Kang Yanlong (Associate Professor): Interdisciplinary linkage is also important. For example, we can teach the emotional processing of art songs in combination with poetry appreciation, and improve students' stage expression through opera movement training, which can broaden the dimensions of teaching. We can also add guidelines for the use of digital teaching tools, such as recommending audio analysis software and online resource platforms, to facilitate students' independent learning after class.

Yu Xinyu (Associate Professor): Today's young students are fond of pop elements, so we can add teaching cases of pop songs integrated with ethnic elements to arouse their interest. In addition, beginners tend to make mistakes in vocal placement and breath control – creating a thematic section of "Common Misunderstandings" with graphic comparisons will be very helpful for them.

Bai Juye (Professor): There are two more points. First, we need to take into account the diversity of regional styles – in addition to Sichuan's local characteristics, we can also incorporate key teaching points of Northern Shaanxi folk songs and Jiangnan folk tunes. Second, a chapter on vocal health care should be added, covering the protection of vocal organs and vocal rehabilitation training. Scientific vocal use is crucial for students' long-term learning.

Zhou Weiwei (Associate Professor): Finally, we should also mention teacher-student communication skills. Young teachers need to adjust their teaching language when facing students with different personalities (such as introverted and impetuous students), which can help them adapt to the teaching rhythm more quickly.

## Discussion and Conclusion

### 1. Current Status of the Ethnic Vocal Music Performance Major at Sichuan Conservatory of Music

Sichuan Conservatory of Music is one of the eleven independent conservatories of music in China with a long history of running schools. Rooted in southwest China, it cultivates professional music education talents and practitioners for the country. As of September 2025, the Sichuan Conservatory of Music has a total of 60 teachers in the professional of ethnic vocal music and 280 enrolled students majoring in ethnic vocal singing. All students receive one-on-one in-person instruction from their professional teachers of ethnic vocal singing.

#### Outstanding Talent Training Quality

Survey results indicate that the professional skill level and competition performance of students in this major are in a leading position in the region. This is closely associated with the solid teaching foundation of the professional faculty team and the systematic skill training system. As a highland of music education in Southwest China, SCM possesses high-quality teaching resources such as the National Vocal Music Experimental Teaching Demonstration Center and provincial key disciplines. Coupled with a strong atmosphere of artistic practice, these resources provide robust platform support for students' professional growth. (Zhang Xiaonong, 2015:37)

#### Solid Practical Teaching System

Experts' high recognition of the proportion of practical teaching confirms the major's teaching philosophy of "promoting learning through performances and enhancing training through competitions". The existing diversified practical forms—including concert performances, participation in professional competitions, and grassroots cultural services—effectively connect classroom teaching with stage practice. These initiatives have improved students' stage performance ability, artistic appeal, and comprehensive literacy, aligning with

the training orientation of ethnic vocal music towards "practical and application-oriented talents".(Jin Tielin,2014:10)

## 2. Core Problems in Professional Development

Imbalanced integration of traditional and modern techniques: The inadequate integration of traditional folk vocal music techniques and bel canto singing concepts has led to a polarization among some students, who either lack national artistic charm or adopt unscientific vocalization methods. This imbalance restricts the diversification of singing styles and the improvement of artistic expressiveness.

Delayed update of textbooks and teaching resources: Most existing textbooks focus on classic repertoires, with insufficient incorporation of recent new works, theories and techniques in folk vocal music. Additionally, there is a lack of systematic teaching content for folk vocal music resources. The low penetration rate of digital teaching tools (e.g., recording analysis software, online training platforms) also prevents modern educational technology from fully exerting its auxiliary teaching role.(Yi Shuchu,2014:145)

Weak theoretical research and ICH inheritance: The research team for folk vocal music theory is small in scale with scattered research directions, and there is a shortage of systematic academic achievements focusing on Sichuan's local vocal music culture. Moreover, the translation of folk vocal music research into teaching practice is insufficient, with a prevalent tendency of emphasizing performance over inheritance, which fails to fully tap into the advantages of ethnic culture.

Insufficient disciplinary exchanges and market alignment: The low frequency and shallow depth of academic exchanges with top domestic music institutions and art troupes have restricted the academic vision of the major. There is a misalignment between the talent cultivation program and market demand, resulting in insufficient employability of graduates in fields such as art education and the cultural industry. The fit between graduates' employment directions and the professional training objectives thus needs to be further improved.(Karamanova, M. Л., & Асриян, А. Г.,2023:38)

## 3. Underlying Causes of the Identified Problems

Teaching philosophy constrained by traditional models: Some teachers still adhere to the traditional master-apprentice teaching model, with low acceptance and willingness to practice innovative educational concepts such as the integration of tradition and modernity and interdisciplinary linkage, leading to a lack of motivation for teaching method innovation.

Inadequate resource investment and policy support: The university's insufficient investment in folk vocal music theoretical research, characteristic textbook development and relevant policy support has resulted in slow progress and limited effectiveness of related work.

Lack of systematic discipline development planning: There is a lack of clear top-level design for the major's development positioning, core objectives and implementation paths for the next five years. Medium and long-term planning are also deficient in aspects such as theoretical research directions, intercollegiate cooperation mechanisms, and market connection channels.

## Conclusion

Through in-depth interviews with 5 front line teaching experts of the folk vocal music major at Sichuan Conservatory of Music, this study systematically reveals the major's current development status, core advantages and prominent problems.

The study confirms that the folk vocal music major at Sichuan Conservatory of Music has formed notable strengths in cultivating students' professional skills and constructing a practical teaching system, presenting a sound overall development trend. However, obvious bottlenecks exist in the integration of traditional and modern techniques, the update of textbook resources, the innovation of theoretical research, the translation of ICH inheritance into teaching practice, as well as disciplinary exchanges and market alignment. The existence of these problems not only hinders the sustainable development and core competitiveness enhancement of the major but also restricts the further optimization of talent cultivation quality and social service capacity. Therefore, it is imperative to promote the high-quality and characteristic development of the major through systematic measures, including teaching system reconstruction, textbook resource upgrading, theoretical research enhancement and the expansion of disciplinary exchanges.

## Suggestions

Based on the research results and expert recommendations, and combined with the development trend of the folk vocal music major and regional cultural characteristics, the following optimization suggestions are proposed:

### Construct a Teaching System of Tradition-Modernity Integration

Strengthen integrated technique teaching: Collaborate with a group of vocal music educators to compile the Teaching Manual of Chinese Folk Vocal Music, which analyzes the vocal techniques of folk vocal music by chapters, clarifies the integration paths with bel canto breathing, resonance and articulation techniques, and improves students' integrated application ability through typical case teaching. Optimize curriculum structure: Add courses such as Folk Vocal Music Inheritance, Modern Folk Vocal Music Creation and Cross-cultural Music Comparison, and construct a trinity curriculum system of professional skills + cultural literacy + practical ability.

### Enhance the Construction of Textbooks and Teaching Resources

Compile characteristic textbooks: Organize front line teachers and academic experts to jointly compile the Teaching Manual of Chinese Folk Vocal Music, which includes folk vocal music materials, cases of modern creative songs and solutions to typical teaching problems. A dynamic textbook update mechanism (revised every 3 years) will be established to ensure its timeliness. Promote digital teaching reform: Build a digital teaching resource library (including audio of classic repertoires, technique teaching videos, etc.), and construct a blended teaching model integrating in-class teaching and after-school independent learning.(Ting Fangming,2024:41)

### Expand Disciplinary Exchanges and Market Alignment

Build a diversified exchange platform: Establish a normalized academic exchange mechanism with top domestic music institutions such as the Central Conservatory of Music and the China Conservatory of Music, and carry out activities including joint teaching, academic seminars and teacher-student performances. Cooperate with local art troupes and cultural enterprises to build practice and employment bases, providing more practical and employment opportunities for students. Optimize talent cultivation objectives: Adjust the cultivation program based on market demand, and add application-oriented courses such as Vocal Music Pedagogy, Art Management and Folk Vocal Music Industry Marketing. The goal is to cultivate compound talents with integrated abilities in singing, teaching, and market adaptation.

### Improve the Construction of the Teaching Faculty



Strengthen teachers' professional training: Regularly organize teachers to participate in academic exchanges and teaching seminars, and encourage them to conduct teaching reform research and innovative practice. Establish an incentive mechanism: Incorporate textbook construction and scientific research achievements into the teacher assessment and evaluation system, and set up a special reward fund to stimulate teachers' enthusiasm and innovation motivation in teaching and scientific research. (Wang Li,2024:1024)

## References

- Jin Tielin.(2014)."Chinese Conservatory of Music: Folk Vocal Music,"China Youth Publishing House.11:9-14.
- Karamanova, M. Л., & Асриян, А. Г. (2023). "Pierre van Houwe and his concept of "playing music" in the history of music education,"International Journal of Music.(4):34-41.
- Ting Fangming. (2024).“On the singing characteristics and inheritance and development of the "flying song" of the Miao people in Taijiang, Guizhou, China,”Cultural and Art Innovation·International Academic Forum.3(6):40-42.
- Wang Li.(2024).“Theoretical research on the development of Chinese vocal art in China,”Journal of Roi Kaensarn Academi.9(6):1010–1020.
- Yi Shuchu (2021). "Sichuan Conservatory of Music won the 13th China Music Golden Bell Award." Music Exploration.04:145.
- Zhang Xiaonong.(2015)."History of Chinese Vocal Art," Shanghai Music Publishing House.04:36-41.



## Analyze the musical form and vocal technical characteristics of the popular song “An Xiang”.

Wang Yibo <sup>1</sup>, Akachai Teerapaksiri <sup>2</sup>, and Jiranuwat Khuntajan <sup>3</sup>

<sup>1</sup> M.Ed. Students, Music Education Program, Buriram Rajabhat University, Thailand  
E-mail: 670426025004@bru.ac.th

<sup>2</sup> Advisor, Music Education Program, Buriram Rajabhat University, Thailand,  
E-mail: akachai.tp@bru.ac.th

<sup>3</sup> Co-Advisor, Music Education Program, Buriram Rajabhat University, Thailand,  
E-mail: Jiranuwat.Kt@bru.ac.th

asterisk denoting the corresponding author

### Abstract

This study aims to analyze the musical form and vocal technical characteristics of the popular song “An Xiang”. A qualitative research approach was adopted, incorporating score-based formal analysis and vocal performance analysis to examine melodic structure, phrasing, register transitions, and technical demands. Relevant literature on popular vocal music and college-level vocal pedagogy was reviewed to support the analytical framework. The findings reveal that “An Xiang” features a clear sectional structure and relies on scientifically grounded breath management, particularly abdominal-diaphragmatic control, to support sustained lyrical phrasing. The song requires flexible use of mixed voice across different registers, refined dynamic control in volume and tempo changes, and precise coordination between diction and emotional expression. Stylistically, “An Xiang” creates a gentle, restrained lyrical atmosphere, combining traditional Chinese aesthetic sensibilities with contemporary popular vocal expression. The emotional progression develops gradually from subtle introspection to heightened expressiveness. These results clarify the intrinsic relationship between musical form and vocal technique in “An Xiang”, providing an analytical foundation for further research and pedagogical application in popular vocal music studies.

**Keywords:** An Xiang; popular singing; vocal technique analysis; musical form

### Introduction

In the deepening of the diversified reform of contemporary college music education, popular vocal music education, as a core sector for cultivating well-rounded musical talents, is directly linked to the dual improvement of students' artistic expression and market adaptability. However, the long-standing problem of "rigid classification of singing styles" in the industry has become a key bottleneck restricting teaching innovation and students' development. Empirical research indicates that the strict boundaries between China's three major singing styles, bel canto, national, and popular, have led to a chain reaction of "segmented curriculum settings, single training methods, and limited artistic expression." More than 68% of the surveyed students stated that "due to the restrictions of singing style classification, it is difficult to master cross-style works flexibly." This status quo is seriously disconnected from the development trend of "integration and innovation" in popular music, and also leads students into a growth dilemma of "single technology and vague style." The research further emphasizes that breaking the barriers of singing style classification and promoting the in-depth integration of technology and style are the core breakthroughs to

improve the quality of popular vocal music teaching, which provides important theoretical guidance for the teaching practice of classic popular works (Zhang Ruijia, 2023, pp.10-12).

As a typical model linking technical training and stylistic expression, An Xiang's teaching value has been widely recognized in academic circles. Through teaching experiments, this work's singing training effectively addresses the teaching pain point of "disconnection between technology and style." The common problems of students singing An Xiang are detailed in the research: 72% of beginners can master basic breathing skills, but there are obvious shortcomings in the combination of weak mixed voice transition and emotional expression; 35% of intermediate and advanced learners can complete vocal range jumps, but ignore the "proportion control of breathy voice and modal voice," resulting in the lack of the unique soft texture of the work in their singing. The research confirms that singing "An Xiang" requires core techniques, such as scientific breath support and mixed-voice transitions, and emphasizes the deep interplay between emotion and style. Its characteristic of "technology serving expression" makes it an ideal carrier for correcting the teaching deviation of "valuing technology over style" (Yao Shuai, 2025, pp. 62-63).

The work's singing difficulty and artistic value are closely related to the sophistication of its creative techniques. By dissecting Sha Baoliang's original performance sentence by sentence, it is shown that An Xiang's emotional expression follows a four-stage logic of "forbearance-progression-outbreak-precipitation," and each stage corresponds to a specific singing technique. The verse needs to convey loneliness and forbearance through weak voice processing of "words wrapped in breath," the chorus enhances emotional tension through "increased proportion of chest voice," the bridge achieves emotional outbreak through "strong mixed voice sustained notes," and the ending returns to weak voice to create a lingering aftertaste. The research specifically notes that the singing of key words such as "An Xiang" (secret fragrance) and "Chong Sheng" (rebirth) in the work should balance the clarity of initial consonants with the musicality of prolonged vowels. This requirement of "unity of sound and meaning" aligns with the core goal of "unifying technical precision and emotional sincerity" in popular vocal music teaching (He Ying, Zhou Xin, 2022, pp. 79-80).

The artistic charm of An Xiang not only stems from its singing expression but is also rooted in its unique musical ontology. The musical form, structure, and melodic characteristics of the work are systematically dissected in the study. It is clearly pointed out that the work adopts a ternary form with recapitulation. The A section takes the "343" minor second back-and-forth as the core motif, constructing an emotional progression of "soft sigh straightforward expression" through widened intervals and changed note values; the B section breaks the common "melodic ascending" climax mode of popular songs, promoting emotional layers through "tortuous large leap downward" melodic design, and this structural innovation accounts for less than 15% of popular songs. In addition, the tonal conversion of the work between a minor and d minor, as well as the melodic recapitulation echoing the beginning and end, not only increases the technical difficulty of singing but also provides clear structural support for emotional expression, making it an excellent teaching case connecting musical ontology and singing practice (Ye Maoqing., 2016, pp. 89-90).

As a theme song for a film and television drama, the in-depth integration of An Xiang's artistic characteristics with the plot's connotations further enhances its educational value. It is noted that the work is a theme song tailored to the TV drama *The Story of a Noble Family*, and its creation fully serves the core theme of "aristocratic rise and fall and love tragedy" in the plot. The lyrics use classical images, such as "When petals leave the flower, the secret fragrance remains," to metaphorically capture the emotional trajectory of Leng Qingqiu and Jin Yanxi from falling in love to separation; the frequent minor-second intervals in the melody aptly convey the plot's contradictions and regrets. The research emphasizes that singing An Xiang is not only a presentation of technology but also a secondary interpretation



of the plot's emotions. This artistic characteristic, "synchronization of sound and image," can help students understand the core logic of "style originates from connotation," thereby avoiding the empty expression of "singing without feeling" in their performances (Wang Chengzhang, 2024, pp. 6-9).

Although existing studies have explored the value of An Xiang from different dimensions, there is still a limitation of "more single-dimensional analysis and less systematic integration research" on the whole. Through literature review, it is found that existing studies either focus on technical decomposition (Yao S., He Y.), or focus on musical ontology (Ye M.Q.), or pay attention to film and television relevance (Wang C.Z.), but lack the construction of a complete logical chain of "musical ontology singing technology stylistic connotation teaching transformation." The research further notes that although the concept of "breaking singing style classification" proposed by Zhang R.J. offers a direction for teaching innovation, it has not been integrated into the teaching practice of specific works, such as "An Xiang", resulting in a disconnect between theory and practice. This research status still lacks a practical path of "integrated technical training, stylistic grasp, and emotional expression" in college teaching, making it difficult to fundamentally address the core dilemma of "proficient technology but vague style" (Li Yunheg, 2023, pp. 127-128).

This paper takes the classic popular song "An Xiang" as its research object. Through literature research and expert interviews, it briefly outlines the background of "An Xiang" and the creative characteristics of the composer San Bao and the lyricist Chen Tao, clarifying that its musical form is ternary with a recapitulation, and thus deepens the understanding of the work. By conducting a comparative analysis of performance versions by different singers (such as Sha Baoliang's original version and cover versions by music majors), this paper clarifies the subtle differences in vocal technical processing (breath control, mixed voice application, articulation handling) and emotional expression among different performers, thereby better grasping the connotation, stylistic characteristics and aesthetic implication of the work. This paper enhances understanding of the emotional expression logic of "An Xiang" and, in combination with the practical teaching needs of college-level popular vocal music, analyzes and summarizes the key and challenging points of this work's vocal techniques.

## Objective

To analyze the musical form and vocal technical characteristics of the popular song "An Xiang".

## Research Methodology

### Key Informants

Key informants were selected using purposive sampling based on their professional experience in vocal performance and popular vocal instruction, as well as their familiarity with the repertoire and performance practice of An Xiang:

Wu Shuang, Deputy Director, Music Department, Xi'an University of Architecture and Technology, Huaqing College

Kou Xiaohan, Music Department teacher, Xi'an University of Architecture and Technology, Huaqing College

Liu Chaoyue, Music Department teacher, Xi'an University of Architecture and Technology, Huaqing College

Li Xuanchen, Music Department teacher, Xi'an University of Architecture and Technology, Huaqing College

Chen Yujin, Music Department teacher, Xi'an University of Architecture and Technology, Huaqing College

Their role in this study is to validate analytical interpretations of form and technique and to provide professional insights into vocal execution in “An Xiang”.

### **Research Instruments**

To ensure alignment with Objective 1, the following instruments were used:

**Document Review Form:** a structured template for extracting key points from academic papers, theses, and monographs (e.g., vocal technique descriptors, structural descriptions of the song, terminology used for registers and breath support).

**Video Observation Checklist:** an observation sheet for consistent analysis across performance videos (e.g., phrasing, breath points, register transitions, dynamic shaping, diction clarity).

**Semi-Structured Interview Guide:** a set of open-ended questions designed specifically around a) musical form (sections, phrasing, climaxes) and b) vocal technique (breath support, register strategy, mixed voice usage, articulation).

**Recording and Transcription Tools:** voice recorder and note-taking software for accurate capture of interview data.

### **Data Collection**

Data collection focused strictly on evidence that supports formal analysis and vocal technique analysis.

**Literature Collection:** A total of 23 documents (journal articles, dissertations, and monographs) related to An Xiang, popular singing technique, and analytical discussions of vocal execution were collected to establish a theoretical and conceptual foundation. Extracted content included: (a) definitions and descriptions of relevant vocal techniques, (b) formal-structural discussion patterns used in music analysis, and (c) commonly reported technical challenges in popular vocal works.

**Video Collection:** Three representative performance versions of An Xiang were selected, including the original singer’s stage performance and music-major students’ practice/teaching performance recordings.

Videos were used to capture observable performance evidence related to: section boundaries, breath planning, register transitions, mixed voice usage, dynamic control, tempo flexibility, diction, and expressive timing.

**Expert Interviews:** One-on-one semi-structured interviews were conducted with the five informants to obtain professional judgments on: the formal organization of An Xiang (e.g., sectional design, phrase structure, melodic climax points), and the key vocal techniques required for effective performance (e.g., breath support strategy, register coordination, articulation, and text delivery). Interview responses were recorded and transcribed for analysis.

### **Data Analysis**

All data were analyzed in accordance with Objective 1, using qualitative coding and cross-source triangulation.

**Musical Form Analysis:** The song was analyzed for sectional structure (e.g., intro–verse–chorus patterns or equivalent sectional divisions), phrase segmentation, cadential/closure points, and climactic design.

Findings from literature and expert interviews were compared with evidence from video observations to confirm section boundaries and performance-dependent formal shaping (e.g., rubato and phrasing decisions that influence perceived form).

**Vocal Technical Characteristics Analysis:** Interview transcripts and literature findings were coded to identify core technique categories (e.g., breath management, mixed-voice strategy, register-transition methods, dynamic control, diction/articulation).

Video analysis was used to verify the technique's execution through observable indicators such as breath points, phrasing length, transitions across pitch ranges, volume shaping, tempo changes, and consonant and vowel clarity.

Codes were consolidated into a final framework describing the primary vocal technical demands of An Xiang and how they relate to its musical structure.

**Triangulation and Credibility:** The consistency of findings across the literature, video evidence, and interview data was checked. Where interpretations differed, the analysis reported the range of expert viewpoints and used video evidence to clarify performance practice.

In summary, this study employs a qualitative, triangulated methodology combining literature review, structured video observation, and expert interviews to analyze the musical form and vocal technical characteristics of An Xiang. This approach ensures that conclusions are grounded in both scholarly discourse and practical performance evidence, thereby providing a reliable analytical description of the song's structural design and the vocal technique demands it places on singers.

## Results

### 1. Core Vocal Technical System and Its Expressive Function

The findings confirm that the vocal expression of An Xiang is built on a set of interrelated, logically coherent technical systems that collectively underpin the work's artistic appeal. Abdominal breath control functions as the primary technical support throughout the song. In the verse sections, gentle, sustained abdominal breathing supports "breath-wrapped words," producing a delicate, restrained timbre. In contrast, the octave leaps and expanded mixed-voice passages in the chorus require stronger breath support to ensure vocal stability and projection. This differentiated application of breath control reflects the scientific nature of vocal technique and corresponds closely to the emotional transition from restraint to intensity.

Flexible use of mixed voice plays a central role in bridging vocal registers and enriching expressive layers. The verse predominantly employs a light mixed voice with a higher proportion of falsetto to convey suppressed emotion, while the chorus increases chest-voice components to enhance power and sincerity. The bridge section achieves emotional climax through a strengthened mixed voice with fuller vocal fold closure. Smooth transitions among these mixed-voice states ensure continuity of expression and avoid fragmentation in vocal delivery.

Dynamic and tempo control further refine emotional expression. A wide dynamic range from pp to ff, combined with selective use of sf, highlights emotional focal points, while subtle rubato in the verse and a more stable tempo in the chorus balance narrative flow and emotional tension. Additionally, emotional articulation that integrates sound and meaning embodies the unity of form and spirit. Clear consonants and elongated vowels maintain linguistic intelligibility, while emphasized keywords such as "An Xiang" and "Chong Sheng" achieve deep integration of pronunciation and emotion. These techniques function as a unified expressive system rather than isolated mechanical skills.

### 2. Stylistic Characteristics: Integration of Tradition, Modernity, and Emotional Logic

The stylistic charm of An Xiang emerges from the organic integration of lyrical conception, cultural inheritance, and emotional logic. At the level of artistic conception, the



song creates a soft, distant lyrical atmosphere through a breathy timbre, a light mixed voice, and a slow tempo, evoking an aesthetic deeply rooted in traditional Chinese literary and artistic sensibilities. This restrained expression conveys emotions such as loneliness, persistence, and longing, resonating with Chinese audiences' cultural psychology.

At the level of aesthetic fusion, the work combines pentatonic melodic elements and emotion-driven expression derived from traditional Chinese music with contemporary popular vocal techniques such as mixed voice and breathy tone. These fusions dissolve the boundary between tradition and modernity, creating a stylistic identity that is both culturally grounded and aesthetically contemporary.

Emotionally, the song follows a clear trajectory of “restraint–outburst–sublimation.” The verse remains introspective and reserved, the chorus expresses sincerity and emotional release, and the bridge achieves dramatic sublimation. This emotional progression is closely aligned with corresponding changes in vocal technique, resulting in a unified relationship between stylistic expression and technical execution. Moreover, as a theme song for a television drama, An Xiang demonstrates a synchronization between musical expression and narrative imagery, further enriching its stylistic meaning.

#### Research Contribution and Pedagogical Implications

This study addresses a gap in previous research on An Xiang, which often focused on isolated aspects such as technique, musical ontology, or audiovisual function. By constructing an integrated analytical framework linking musical form, vocal technique, and stylistic meaning, the study confirms that the artistic value of An Xiang arises from the unity of technical precision, stylistic distinctiveness, and emotional sincerity.

From a pedagogical perspective, the findings offer a practical response to the common instructional issue of separating technique from style in college-level popular vocal instruction. Using An Xiang as a representative case, hierarchical technique training, contextualized stylistic instruction, and a “technique–style–emotion” teaching chain can guide students toward integrated vocal expression rather than fragmented skill acquisition.

In summary, the vocal technical system of “An Xiang,” centered on abdominal breath control and flexible mixed-voice application, and its stylistic connotations, which integrate traditional and modern aesthetics and feature progressive emotional rendering, together constitute the work's unique artistic value. The research conclusions not only fully achieve the objective of “analyzing the work's vocal technique features and stylistic elements” but also provide important theoretical and practical support for the innovative development of college popular vocal music education.

## Discussion and Conclusion

### Discussion

The results of this study highlight the inseparable relationship between vocal technique and stylistic expression in popular vocal works. Consistent with contemporary vocal pedagogy, the findings demonstrate that technical elements such as breath support, mixed-voice coordination, and dynamic control do not operate independently but are shaped by stylistic and emotional demands. In An Xiang, technical choices are closely aligned with musical form and emotional structure, supporting previous theoretical views that effective vocal performance requires the integration of physiological technique and expressive intention.

Furthermore, the fusion of traditional Chinese aesthetics with modern popular vocal techniques reflects broader trends in contemporary Chinese popular music, where cultural inheritance and innovation coexist. This integration suggests that popular vocal pedagogy should move beyond purely technical drills and incorporate stylistic awareness and cultural

context into vocal training. By situating technique within musical form and emotional logic, singers can achieve more authentic and artistically convincing performances.

### Conclusion

This study analyzed the musical form and vocal technical characteristics of the popular song An Xiang and clarified the intrinsic relationship between vocal technique and stylistic expression. The findings reveal that abdominal breath control, flexible mixed-voice application, dynamic and tempo regulation, and emotionally driven articulation collectively form a coherent technical system that supports the song's expressive and stylistic identity. Stylistically, An Xiang integrates traditional Chinese aesthetic sensibilities with modern popular vocal expression through a clear emotional progression from restraint to sublimation. These results not only fulfill the research objective of analyzing vocal technique and style but also provide theoretical support and practical insights to advance college-level popular vocal music education.

### Suggestion

**Vocal Technique Teaching:** Vocal instruction should adopt a hierarchical approach. Beginners should focus on abdominal breath control and basic mixed-voice transitions. At the same time, intermediate and advanced students should emphasize flexible mixed-voice balance and dynamic control, using selected sections of An Xiang for practice. Technical training should always be linked to musical context to avoid mechanical skill execution.

**Stylistic Expression Guidance:** Teachers should guide students to understand the lyrical imagery and emotional atmosphere of An Xiang, encouraging restrained and subtle expression. Comparing different performance versions can help students develop sensitivity to stylistic nuances and expressive depth.

### References

- Yao, S. (2025). A Study on the Performance of the Popular Music Work, An Xiang. *Chinese Music*, (01), 62-64.
- He, Y., Zhou, X. (2022). Analysis of the Creative and Performance Techniques of An Xiang. *Music Art*, 04, 79-80.
- Li, Y. (2023). Artistic Features and Performance Analysis of An Xiang. *Music Exploration*, (03), 126-128.
- Ye, M. (2016). A Preliminary Study on the Composition and Performance Techniques of Popular Songs — A Case Study of An Xiang. *Music Exploration*, (04), 89-91.
- Wang, C. (2024). A Brief Discussion on the Artistic Characteristics of San Bao's Film and Television Music Work, An Xiang. *Drama House*, (04), 6-9.

## A Study of Wang Zhixin Teaching Process of Ethnic Vocal Music in Guangdong Province

Wang Zhenhao<sup>1</sup>, Jiranuwat Khuntajan<sup>2</sup> and Thanapon Teerachatch<sup>3</sup>

<sup>1</sup>M.A. Student, Music Education Program, Buriram Rajabhat University, Thailand  
E-mail: 670426025005@bru.ac.th

<sup>2</sup>Advisor, Music Education Program, Buriram Rajabhat University, Thailand  
E-mail: Jiranuwat.kh@bru.ac.th

<sup>3</sup>Co-Advisor, Music Education Program, Buriram University, Thailand  
E-mail: thanapon@bru.ac.th

### Abstract

This study aims to explore the pedagogical concepts employed by Wang Zhixin in teaching ethnic vocal music in Guangdong Province and to obtain Wang Zhixin's teaching guidelines. Through in-depth interviews with Wang Zhixin himself, his artistic mentor, and five students, the researcher systematically examined the integration of Wang Zhixin's teaching methods with ethnic vocal music practice, as well as his teaching guidelines. The interviews centered on four core themes that collectively form the framework embedded in his teaching process: concepts of vocal music aesthetics, the teaching philosophy of "cultivating through beauty", the teaching process itself, and Wang Zhixin's teaching guidelines.

**Keyword:** Teaching Process, Ethnic Vocal Music, Wang Zhixin

### Introduction

Ethnic vocal music, represented by the ethnic vocal music programs in Chinese music academies, differs from folk songs, rap, and opera singing. It is a distinctive new form of ethnic vocal art that inherits and develops the essence and characteristics of these traditional singing arts while drawing upon and incorporating the theoretical principles and strengths of Western bel canto singing techniques. This art form embodies scientific rigor, ethnic identity, artistic expression, and contemporary spirit. Its performance approach is broad and adaptable. Beyond interpreting works with strong ethnic stylistic features such as folk songs and operas, it can also perform various newly composed vocal pieces-including art songs-as well as traditional ethnic vocal repertoire and opera arias. (Liu, 2019, p. 6)

Currently, the faculty for ethnic vocal music education faces a generational gap. A group of veteran experts and senior teachers are quietly exploring and diligently cultivating through their teaching experience. Meanwhile, some young teachers, lacking both systematic textbooks and experience, struggle to know where to begin. They can essentially only "teach as their own teachers once taught them." Under these circumstances, cultivating an outstanding ethnic vocal music singer would likely be nothing more than a fluke. Our vocal art is rooted in the soil of national culture; the emotions we sing are those of the Chinese nation. While music knows no borders, music devoid of national character does not exist in the world, and style is the lifeblood of a nation. Two elements constitute style: first, spiritual factors including national character, aesthetics, emotions, habits, customs, and temperament; second, linguistic factors. The distinct linguistic patterns and structures of different ethnic groups result in significant stylistic differences. In vocal pedagogy, it is essential to



recognize that Chinese national vocal art represents the perfect synthesis of these time-honored, diverse musical styles and the universal stylistic characteristics of a nation's vocal tradition. (Yao, 2009, p. 53)

As a renowned Chinese ethnic tenor, Wang Zhixin has taught since 2003. He tailors instruction to each student's specific circumstances, significantly elevating their professional proficiency. His students have consistently achieved outstanding results in various competitions (Lu, 2012, pp. 1-2). Based on the researcher's personal learning experience and literature review, Wang Zhixin possesses extensive stage performance experience and years of teaching expertise. In ethnic vocal performance, he demonstrates both precise mastery of traditional vocal techniques and contemporary artistic expression, forging a distinctive artistic style. In teaching practice, he consistently explores the principles and methodologies of ethnic vocal pedagogy, emphasizing aesthetic education. The researcher believes his teaching philosophy and practical achievements hold broad influence and reference value within the field.

## **Objective**

To study Wang Zhixin's ethnic vocal music teaching process in Guangdong Province and obtain Wang Zhixin's teaching guidelines.

## **Research Methodology**

### **Key Informants**

The primary key informant for this study is Wang Zhixin, followed by piano accompanists and student groups. Critical insights into this research were derived from information provided by these sources.

### **Research Tools**

Interviews served as the core qualitative research tool. The researcher conducted structured and semi-structured interviews with Wang Zhixin, accompanists, and students under her tutelage. These interviews aimed to document detailed, multidimensional perspectives on her teaching process, methodologies, instructional guidelines, and educational impact.

### **Data Collection**

Interviews gathered information on Wang Zhixin's personal background, artistic development, representative works, and teaching experience. In-depth structured and semi-structured interviews were conducted with Wang Zhixin and student representatives. These discussions explored their perspectives on ethnic vocal pedagogy, teaching methodologies, and perceptions of student learning outcomes.

### **Data Analysis**

Textual analysis of interview data was conducted using qualitative content analysis to transcribe and analyze feedback from interviews with Wang Zhixin and students. Key themes and patterns related to ethnic vocal music, teaching methods, and learner experiences were identified and categorized according to research questions.

## **Results**

The research findings revolve around four core themes that collectively form the framework embedded in his teaching process:

### **Concepts of Vocal Music Aesthetics**

Understanding vocal aesthetics empowers singers to convey a work's beauty through performance. A singer's ability to accurately convey emotional layers and artistic essence hinges on their dual comprehension of aesthetics as both a technical vehicle and an emotional medium. Unlike the mere pursuit of vocal technique, Wang Zhixin advocates for grasping the intrinsic and extrinsic beauty of ethnic vocal music. To express the complete aesthetic of ethnic vocal music, one must achieve both the standard of external beauty and the depth of internal beauty. Singers who genuinely grasp a piece's intrinsic beauty will master their vocal techniques to interpret the work's holistic aesthetic. This approach not only enables performers to convey emotional expressions within ethnic vocal music but also helps them understand the true meaning of singing.

As evidenced by researchers' interviews with students, cultivating aesthetic appreciation and independent learning plays a pivotal role in enhancing vocal aesthetic awareness. This confirms that aesthetic discernment requires not only systematic study but also continuous refinement through persistent practice and critical listening. The path to mastering aesthetic emotion involves both rational exploration and emotional resonance, demanding ongoing refinement and proactive inquiry.

### **The Educational Philosophy of "Nurturing Through Beauty"**

"Nurturing Through Beauty" employs "beauty" to cultivate individuals, representing Wang Zhixin's approach to teaching ethnic vocal music. Wang Zhixin emphasizes that this beauty encompasses inner beauty, outer beauty, vocal beauty, visual beauty, intellectual beauty, and moral beauty-all of which are harnessed to develop vocal talents. In vocal performance, elements that can be directly perceived through sight or sound alone should be evaluated as external. Conversely, the emotional expression that cannot be grasped through direct sensory input-requiring the synthesis and sequential integration of all elements, along with accumulated experience to comprehend and appreciate-represents the intrinsic value of vocal performance art. The pleasant sensations conveyed by external elements constitute external beauty, while the "realm", "intent" and lingering "charm" embodied by intrinsic value represent the internal beauty of vocal performance art.

Through researchers' interviews with students, it is evident that the teaching philosophy of "cultivating through beauty" is crucial for the expression of ethnic vocal art. Effective instructional guidance combined with students' active participation further promotes the sustained development of artistic literacy. Under the guidance of Wang Zhixin, comprehensive enhancement of aesthetic literacy was achieved through precise teaching, demonstration, and reflective feedback.

### **Teaching Process**

Based on interviews with students, Wang Zhixin's ethnic vocal pedagogy centers on "educating through beauty" as its most crucial principle. His teaching process integrates this philosophy by employing artistic beauty, natural beauty, and the beauty of social life to cultivate students correct aesthetic perspectives. This approach enhances their ability to perceive, appreciate, express, and create beauty. This approach transcends mere technical instruction, emphasizing the shaping of sound character and elevation of spiritual horizons through the perception, appreciation, and creation of beauty. Through artistic immersion and aesthetic experiences, it cultivates students' moral integrity, cultural confidence, and refined sensibilities, nurturing individuals with warmth and depth of feeling. Students learn to discover and create beauty in daily life, enriching their existence and fostering a healthy, elegant lifestyle.

### Wang Zhixin's Teaching Guidelines

Researchers obtained Wang Zhixin's teaching guidelines through interviews. His guidelines have significantly aided ethnic vocal music instruction. Following standardized textbooks, he trains students progressively from simple to complex techniques, emphasizing the integration of theory and practice, as well as stage performance and practical application. This approach highlights the systematic and standardized nature of Wang Zhixin's ethnic vocal music teaching process.

**Table 1**

*Wang Zhixin's teaching process in part*

| Learning Stage                                          | Teaching Focus                                                                                                                               | Suitable Repertoire                                                                                                                                                                                                           |
|---------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| First year of undergraduate study (Semesters 1-2)       | Master fundamental breathing and resonance techniques, become familiar with Mandarin pronunciation, and establish a basic singing foundation | <ul style="list-style-type: none"> <li>- The mulberry tree serves as a lampstand.</li> <li>- Sing a mountain song for the party</li> <li>- In that distant land</li> <li>- The sun never sets over the grasslands.</li> </ul> |
| Second-year to third-year undergraduate (Semesters 3-6) | Enhance vocal range integration and artistic interpretation skills and explore performing diverse repertoire styles.                         | <ul style="list-style-type: none"> <li>- Longing</li> <li>- Luhua</li> <li>- To be perfectly honest</li> <li>- I love you, China</li> </ul>                                                                                   |
| Fourth Year of Undergraduate Study (Semesters 7-8)      | Master advanced techniques, enhance stage presence, and develop personalized artistic expression.                                            | <ul style="list-style-type: none"> <li>- Birds sing in the wind unable to fulfil my duty to my mother</li> <li>- I feel deeply guilty</li> </ul>                                                                              |

### Discussion and Conclusion

Wang Zhixin embraces “cultivating through beauty” as a guiding principle in ethnic vocal music education. This concept holds significant importance in the field of education, aiming to foster students' aesthetic abilities and humanistic literacy through aesthetic education, thereby promoting their holistic development. “Cultivating through beauty” represents an educational approach that subtly nurtures growth, allowing education to return to life's essence. It empowers students to become individuals with aesthetic discernment, creativity, and humanistic sensibilities, infusing their lives with the power of beauty. Integrating “cultivating through beauty” into teaching cultivates students' sound aesthetic perspectives while enhancing their abilities to perceive, appreciate, express, and create beauty. It transcends mere technical instruction, emphasizing the shaping of sound character and elevation of spiritual horizons through the perception, appreciation, and creation of beauty. This resonates with Li (2024, p. 110) perspective, who observes that contemporary Chinese vocal artists place particular emphasis on expressing emotion and sentiment in their creative work and performances, infusing aesthetic sensibility throughout the process. This approach enables artists to effectively perceive and articulate their emotions, fully leverage artistic expression, and organically integrate the emotional resonance and artistic conception of a piece. Consequently, it reveals the work's unique charm while strengthening the effective transmission of emotional messages.

The core methodology employed by Wang Zhixin in teaching ethnic vocal music in Guangdong Province aligns with the Kodály approach, echoing the principles articulated by Allaniyazov (2024, p. 64). He states that the fundamental tenets of the Kodály method include: 1. Singing as the foundation: The core philosophy holds that singing is the most natural and effective means for individuals to develop musical abilities. Singing helps students internalize musical concepts, develop auditory skills, and form emotional connections with the music they learn. 2. Systematic, progressive teaching: The Kodály



Method follows a carefully designed sequence of musical concepts, with each stage building upon and deepening the previous one. Students begin with simple songs and activities, gradually mastering more complex musical elements as their skills advance. 3. Folk Music and Cultural Heritage: Kodály regarded folk music as a vital component of a nation's cultural heritage and advocated for its central role in music education. By integrating multicultural folk songs into the curriculum, students gain exposure to diverse musical traditions while connecting with their own cultural roots. 4. Active Musical Practice: The Kodály Method emphasizes active musical engagement through singing, body movement, and instrumental performance. Students are encouraged to immerse themselves physically and emotionally in the music they learn, deepening their understanding and appreciation of musical expression. 5. Ear Training: Cultivating acute pitch and rhythmic perception is central to the Kodály approach. Through training activities, students develop the ability to recognize and reproduce musical patterns, becoming more confident and precise performers. 6. Musical Literacy: The Kodály method places high importance on developing musical literacy, teaching students the skills of reading and writing music. Mastering these abilities enables students to communicate musically and engage with a rich and diverse repertoire. 7. Interdisciplinary Integration: This methodology recognizes the intrinsic connections between music and other subjects. Teachers can integrate music into language, mathematics, history, and other disciplines, providing students with a holistic educational experience. By adhering to these core principles, the Kodály Method strives to deliver comprehensive music education that nurtures musical talent, stimulates creativity, and cultivates a lifelong love for music. Wang Zhixin's teaching process aligns closely with the seven points outlined in the above literature.

## Suggestions

1. The research findings provide valuable reference for ethnic vocal music learners to enhance their singing skills and deepen their understanding of the role of Wang Zhixin's teaching philosophy of "cultivating beauty through education" in the instructional process.
2. These discoveries also offer guidance for designing and implementing ethnic vocal music classroom instruction, aiding in the development of more efficient teaching practices and stage performances imbued with musical aesthetics.
3. Future research should focus on exploring and strengthening innovative teaching models within ethnic vocal music education to meet evolving pedagogical demands.
4. Within the field of ethnic vocal music, further investigation into diverse teaching strategies centered on "aesthetic education" is recommended to support the sustained development and refinement of ethnic vocal music education.

## References

- Allaniyazov, B. K. (2024). "The use of Kodály method in teaching music". *International Journal of Pedagogy*, 4(2), 64.
- Li, N. (2024). "The aesthetic characteristics and cultural value of Chinese ethnic vocal music arts". *Bohai University Journal*, 5(4), 110.
- Liu, H. (2019). *Chinese ethnic vocal music tutorial* (4th ed). People's Music.
- Lu, H. (2012). "Genuine feelings, kind heart, beautiful voice-impressions of young singer Wang Zhixin". *Music Life*, 14(11) 6.
- Yao, X. L. (2009). *An experimental discussion on the diversified development of ethnic vocal music in China today*. (Master's Thesis). Hunan Normal University.

## Effects of Problem-Based Learning Management on Health Promotion for Grade 4-6 Students at Samakkhi Meechai Witthaya School, Mueang District, Buriram Province.

Wiangping Taweepoon

Department of Pediatric and Adolescent Nursing, Faculty of Nursing,  
Buriram Rajabhat University, Thailand  
Email: Wiangping.tw@bru.ac.th

### Abstract

This quasi-experimental study aimed to develop teachers' knowledge and skills in designing Problem-Based Learning (PBL) and to examine the effects of PBL on health knowledge and health behaviors among Grade 4–6 students at Samakkhi Meechai Witthaya School. The sample consisted of 20 teachers, 60 students, and 60 parents. The research instruments included a PBL curriculum for student health promotion, an instructional manual, six-step lesson plans, a teachers' PBL knowledge and instructional design skills assessment form, and a student health knowledge and behavior assessment. Data were analyzed using mean, standard deviation, and a dependent-samples t-test.

The results indicated that teachers' knowledge and instructional design skills significantly improved after the intervention compared to before the intervention ( $p < .01$ ). In addition, students demonstrated significantly higher levels of health knowledge and health behaviors following the intervention, at the .01 level of statistical significance. These findings suggest that PBL is effective in promoting active learning and meaningful improvements in students' health behaviors, particularly in small-scale school contexts.

**Keywords:** Problem-Based Learning (PBL), Health Behavior, Primary Students, Health Promotion

### Introduction

Children's health is a fundamental factor influencing educational development and learning outcomes, particularly during the primary school years when the brain and body undergo rapid growth and development. Children who are physically, mentally, intellectually, and socially healthy are more likely to be ready for learning, demonstrate better concentration, and achieve higher academic performance. However, the current health status of primary school children has become increasingly concerning due to social and technological changes. These changes have led to unhealthy lifestyle behaviors, including inappropriate dietary habits such as frequent consumption of fried foods, fast foods, and sugar-sweetened beverages, as well as excessive engagement in digital games and mobile phone use, resulting in insufficient physical activity. Consequently, the prevalence of overweight and obesity among school-aged children has continued to rise.

According to data from the Department of Health, Ministry of Public Health, Thailand, between 2021 and 2023, the prevalence of overweight and obesity among school-aged children aged 6–14 years was reported at 11.09%, 13.10%, and 13.40%, respectively. Thailand is ranked among the top three countries in ASEAN with the highest prevalence of childhood overweight and obesity. Moreover, it is projected that by 2030, the prevalence of overweight and obesity among the population under 20 years of age will increase by nearly 50% (Department of Health, Ministry of Public Health, 2024). In addition, the annual health

examination conducted in 2024 at the target school revealed that 13.27% of students were classified as overweight or obese (Samakkhi Meechai Witthaya School, 2024).

Childhood overweight and obesity have significant adverse effects on physical health, increasing the risk of chronic conditions such as diabetes mellitus, hyperlipidemia, hypertension, cardiovascular diseases, obstructive airway disorders, and snoring. These conditions also affect children's psychological and social well-being, leading to negative self-image, reduced self-confidence, and difficulties in interpersonal relationships. Furthermore, overweight and obesity are associated with an increased risk of cognitive impairment, which may adversely affect educational development and learning processes. Previous studies have shown that children with health problems often experience learning difficulties and reduced attention spans, resulting in lower academic achievement compared to their peers. Some children may also have limited access to quality education due to frequent school absenteeism caused by illness (Thongseiratch & Chandeying, 2020). These issues may ultimately have long-term negative consequences on educational development. Emphasizing children's health is therefore essential and should not be overlooked, as good health not only supports educational development but also contributes positively to overall growth and development across all dimensions of life in the future. Promoting the health of school-aged children is critically important to ensure their physical, mental, spiritual, and social well-being, which in turn enhances their capacity for effective learning and academic achievement.

Although school health promotion has been continuously encouraged at the policy level, instructional practices in many schools remain predominantly focused on content-based knowledge transmission. As a result, meaningful and sustainable changes in students' health-related behaviors have not been effectively achieved. This challenge is particularly evident in small-sized schools, where limitations in resources and instructional approaches constrain the implementation of comprehensive health promotion activities. Therefore, there is a pressing need to develop and adapt instructional strategies that are appropriate for school contexts in order to promote students' health and learning in a more effective and sustainable manner.

Problem-Based Learning (PBL), based on the conceptual framework of Barrows (1994), emphasizes "process over content." This approach posits that cultivating reasoning processes and self-directed learning skills is more vital than the rote memorization of facts. In the context of health education, knowledge is most effective when students analyze real-world problems rather than relying solely on textbooks. Consequently, PBL has been developed to foster healthy students capable of critical thinking and adaptive behaviors. By utilizing authentic health-related situations as learning catalysts, students achieve a deeper understanding of the subject matter, enabling them to bridge the gap between theory and practice and effectively apply knowledge to resolve health issues (Karimi et al., 2019). Furthermore, the collaborative nature of PBL enhances teamwork, communication, and coordination—essential skills for their future professional lives.

Therefore, this study aims to develop and evaluate the effects of Problem-Based Learning management on health promotion at Samakkhi Meechai Witthaya School, Mueang District, Buriram Province. The primary objectives are to enhance teachers' competencies in implementing PBL and to improve students' health knowledge and behaviors. This initiative seeks to ensure students achieve optimal physical, mental, spiritual, and social well-being, thereby increasing their readiness for learning and academic achievement. Ultimately, this approach aims to equip students with essential life skills to confidently navigate future challenges and grow into healthy, high-quality adults.



## Research Questions

1. Can the workshop training effectively develop teachers' knowledge and skills in managing Problem-Based Learning (PBL) for student health promotion?
2. How does the implementation of Problem-Based Learning affect the health knowledge and behaviors of Grade 4-6 students?

## Research Hypotheses

1. Teachers who participate in the training will demonstrate significantly higher knowledge and instructional design skills in PBL than before the training.
2. Students receiving PBL-based instruction will achieve significantly higher mean scores in health knowledge and health behaviors after the intervention compared to before the intervention.

## Research Objectives

1. To develop teachers' knowledge and skills in designing Problem-Based Learning management for student health promotion.
2. To study the effects of Problem-Based Learning management on the health knowledge and behaviors of Grade 4-6 students.

## Literature Review

Problem-Based Learning (PBL), based on the conceptual framework of Barrows (1994), prioritizes "process over content." This approach asserts that cultivating a "reasoning process" and "self-directed learning skills" is more critical than the rote memorization of factual data. PBL is grounded in the principles of situated learning, where learning occurs within contexts that mimic reality. Challenging, authentic problems are believed to stimulate human curiosity more effectively than traditional textbook-based instruction. The core of PBL lies in utilizing problems as the primary drivers of learning, beginning with a question or puzzle that students are motivated to resolve. Key characteristics of PBL include: 1) Student-Centeredness, where learners take responsibility for their own education; 2) Small Groups (typically 5–8 students) to foster social and collaborative skills; 3) Tutors as Facilitators, where teachers act as guides rather than lecturers; 4) Authentic Problems that simulate real-life situations; and 5) Problem as a Tool for acquiring new knowledge rather than merely reviewing previously learned material. The PBL process comprises six steps: 1) Encountering the Problem, 2) Problem Analysis (brainstorming and hypothesizing), 3) Self-Directed Learning (independent research), 4) Synthesis and Application (knowledge sharing and solution finding), 5) Presentation and Reflection, and 6) Integration of Knowledge (connecting learning to daily life).

The literature review reveals that Barrows (1980, 1985) initially developed PBL for medical education to address the limitations of traditional curricula that focused on memorization but failed to equip students for real-world clinical problem-solving. Research consistently shows that PBL improves academic achievement and analytical skills. Consequently, PBL has gained global recognition and been adapted across various educational levels. In higher education, studies include PBL applications for undergraduate education students (Prasan, 2016), integrated PBL and Team-Based Learning for medical students (Rungrattanacha et al., 2022), and the development of critical thinking and knowledge among nursing students (Chatrung et al., 2024), which demonstrated that PBL significantly enhances critical thinking skills.

Furthermore, PBL has been widely applied in primary education. Karimi et al. (2019) investigated a PBL-based health literacy program to improve health-promoting behaviors among female students, finding significant increases in both health literacy and health-

promoting behaviors during post-test and three-month follow-up periods. Similarly, Mahahmad (2018) found that PBL significantly improved academic achievement and problem-solving abilities among Grade 10 students compared to traditional instruction ( $p < .05$ ). These findings align with the work of Kheawnamchoom (2020), whose study on Grade 2 students showed significant learning gains post-intervention ( $p < .01$ ), with problem-solving skills reaching moderate to high levels.

In conclusion, the evidence suggests that Problem-Based Learning effectively enhances academic achievement, critical thinking, health literacy, and positive behavioral changes compared to traditional teaching methods. PBL facilitates a concrete connection between theoretical knowledge and real-world application. Therefore, PBL is an ideal pedagogical model for developing 21st-century competencies, particularly analytical thinking, systematic reasoning, and the ability to navigate real-life challenges across diverse age groups and educational contexts.

### Research Conceptual Framework

The conceptual framework of this study is grounded in the Problem-Based Learning (PBL) model proposed by Barrows (1994). This model was adapted to enhance health promotion among Grade 4-6 students at Samakkhi Meechai Witthaya School. The instructional process was structured into the following six systematic steps:

**Encountering the Problem:** Following Barrows' principle that learning should begin with an ill-structured problem, real-world health scenarios—such as the prevalence of obesity and sedentary lifestyles within the school—were presented. Students were tasked with identifying "what they already know" and "what further information is needed" to address the situation.

**Problem Analysis:** Students engaged in collaborative brainstorming to formulate hypotheses and analyze the underlying causes of the health issues, reflecting the reasoning process essential to the PBL framework.

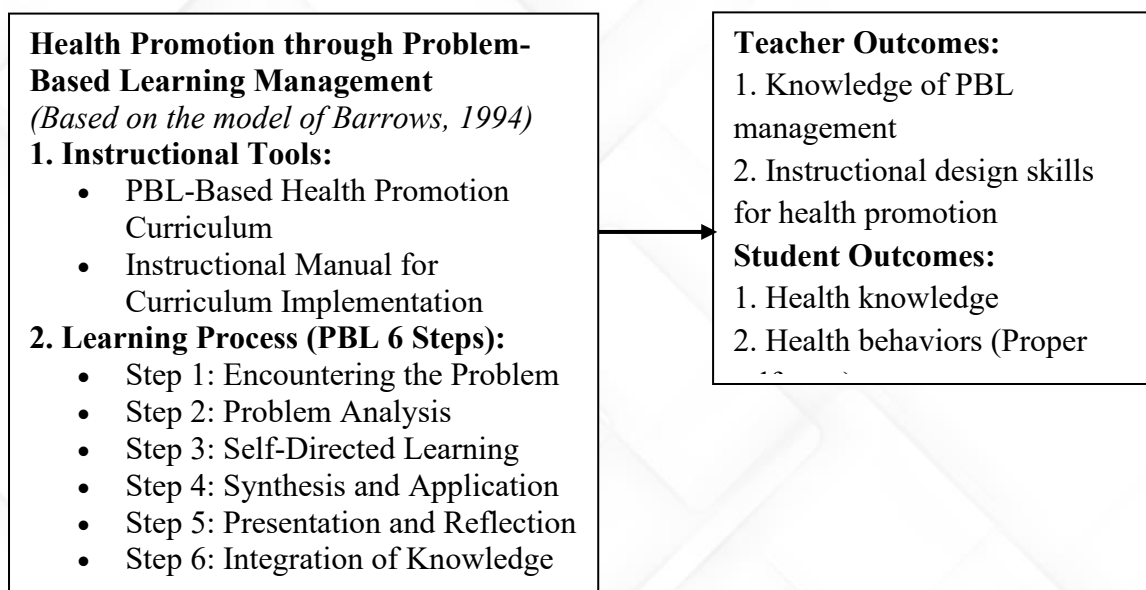
**Self-Directed Learning:** In accordance with the self-directed learning component of PBL, students independently researched various resources, including textbooks, internet databases, and available school media, to acquire the necessary knowledge to solve the problem.

**Synthesis and Application:** The newly acquired information was brought back to the small groups, where students synthesized the data and applied it to develop practical health promotion strategies.

**Presentation and Reflection:** Groups presented their proposed solutions and health promotion plans to the class. Consistent with Barrows' emphasis on meta-cognition, this stage included peer discussions and reflections on the learning process to enhance communication and evaluate analytical thinking skills.

**Integration of Knowledge:** In the final stage, students summarized their findings and established concrete connections between the lessons learned and their practical application in daily life to ensure long-term healthy behaviors as shown in Figure 1

**Figure 1**  
*Research Conceptual Framework*



## Methodology

### Research Design

This study employed a quasi-experimental design, specifically a one-group pretest-posttest design. The primary objective was to evaluate the effects of the Problem-Based Learning (PBL) intervention on teachers' instructional management and its subsequent impact on students' health knowledge and health behaviors.

### Population and Sample

**Population:** The population for this study consisted of 20 teachers and 60 students in Grades 4–6 at Samakkhi Meechai Witthaya School.

**Sample:** The sample was obtained using purposive sampling, comprising all 20 teachers and 60 students from Grades 4–6 at Samakkhi Meechai Witthaya School.

### Research Instruments

**PBL-Based Health Promotion Curriculum** Developed for small schools, this curriculum focuses on integrating Problem-Based Learning (PBL) with holistic health promotion, covering physical, mental, emotional, and social aspects. The curriculum consists of three modules: 1) Physical Health Promotion, 2) Mental and Emotional Health Promotion, and 3) Social Health Promotion, along with pedagogical guidelines for teachers. The content validity was verified by five experts, yielding an Index of Item-Objective Congruence (*IOC*) of 0.83.

**Instructional Manual for PBL-Based Health Promotion** This manual provides guidelines for teachers to implement the curriculum effectively. It integrates core concepts and activities that support the PBL process. The content is divided into three sections corresponding to physical, mental/emotional, and social health. Content validity was confirmed by five experts with an *IOC* of 0.80.

**Teachers' PBL Knowledge Assessment** A 20-item, four-choice multiple-choice test designed to measure teachers' understanding of PBL in health promotion. Scoring is 1 point per correct answer (total 20 points). The instrument yielded an *IOC* of 0.79 and a Cronbach's alpha reliability (using the Kuder-Richardson Formula 20, *KR-20*) of 0.80.



**Teachers' PBL Instructional Design Assessment** A rubric-based scale evaluating six dimensions: 1) Problem identification, 2) Objectives and learning outcomes, 3) PBL process implementation, 4) Teacher and student roles, 5) Measurement and evaluation, and 6) Plan consistency and feasibility. Scoring uses a 5-point Likert scale (5 = Excellent to 1 = Needs improvement) with a total score of 30. The content validity showed an *IOC of 0.85*

**Students' Health Knowledge and Behavior Assessment** This instrument consists of three sections: Section 1: Demographic data. Section 2: Health Care Knowledge: A 20-point test comprising 10 multiple-choice questions and 10 true/false questions. It achieved an *IOC of 0.78 and a KR-20 reliability of 0.80*. Section 3: Health Behaviors: A 10-item scale. For positive behaviors (e.g., consuming fruits/vegetables), scores range from 5 (Daily) to 1 (Never). For negative behaviors (e.g., consuming sugary drinks), scoring is reversed (1 = Daily to 5 = Never). The total score is 50, with an *IOC of 0.83*.

## Data Collection Procedures

Data collection was conducted from January to June 2025 at Samakkhi Meechai Withaya School, Mueang District, Buriram Province. The procedures were implemented as follows:

1. Teacher Professional Development: A 18-hour workshop was conducted to enhance teachers' competencies in Problem-Based Learning (PBL) and the implementation of the PBL-based health promotion curriculum.

2. Teacher Assessment: Teachers' knowledge of PBL for health promotion was assessed using pre- and post-training tests.

3. Instructional Design Evaluation: Teachers' skills in designing PBL lesson plans were evaluated. Post-training lesson plans were compared against their baseline plans (pre-training) using a standardized rubric.

4. Parental Engagement: A meeting was held to involve parents in promoting student health and to coordinate the assessment of students' health behaviors at home.

5. Student Pre-intervention Assessment: Baseline data on students' health knowledge and behaviors were collected prior to the implementation of PBL instruction.

6. Implementation: Teachers implemented the designed PBL lesson plans in actual classroom settings.

7. Student Post-intervention Assessment: Following the completion of the PBL activities, students' health knowledge and behaviors were re-evaluated.

8. Data Synthesis: Collected data were analyzed, summarized, and reported.

## Data Analysis

Quantitative data were analyzed using professional statistical software:

**Descriptive Statistics:** Frequency, percentage, mean (M), and standard deviation (SD) were used to summarize general data and baseline characteristics.

**Inferential Statistics:** A paired t-test was employed to compare the mean scores of health knowledge and health behaviors before and after the PBL intervention for both teachers and students. The significance level was set at  $p < .01$

## Results

The findings of the study are summarized as follows:

**Teacher Development Outcomes:** After participating in the PBL-based instructional management training, teachers' post-training scores were significantly higher than their pre-training scores at the .01 level. Specifically, the mean score for knowledge increased to 17.85, and the mean score for instructional design reached 27.85. Detailed data are presented in Table 1.

**Student Development Outcomes:** Students who engaged in PBL-based learning demonstrated significant improvements in health knowledge and behaviors at the .01 level. The post-intervention mean scores for health knowledge ( $M=16.55$ ) and health behaviors ( $M=31.62$ ) were significantly higher than the pre-intervention scores. Detailed data are presented in Table 2.

**Table 1**

*Comparison of Teachers' Knowledge and Instructional Design Skills Pre- and Post-PBL Training ( $n = 20$ )*

| Assessment Items                                | Pre-test |      | Post-test |      | <i>t</i> | <i>p-value</i> |
|-------------------------------------------------|----------|------|-----------|------|----------|----------------|
|                                                 | Mean     | SD   | Mean      | SD   |          |                |
| 1. Knowledge Score (Total 20 points)            | 11.45    | 1.39 | 17.85     | 0.88 | 18.6     | <.001***       |
| 2. Instructional Design Score (Total 30 points) | 20.60    | 1.50 | 27.85     | 0.99 | 21.57    | <.001***       |

**Table 2**

*Comparison of Students' Health Knowledge and Behaviors Pre- and Post-PBL Intervention ( $n = 60$ )*

| Assessment Items                           | Pre-test |      | Post-test |      | <i>t</i> | <i>p-value</i> |
|--------------------------------------------|----------|------|-----------|------|----------|----------------|
|                                            | Mean     | SD   | Mean      | SD   |          |                |
| 1. Knowledge Score (Total 20 points)       | 10.32    | 1.35 | 16.55     | 1.45 | 29.56*   | <.001***       |
| 2. Health Behavior Score (Total 50 points) | 26.85    | 2.01 | 31.62     | 2.41 | 18.06*   | <.001***       |

Note. \* $p < .05$ , \*\* $p < .01$  \*\*\* $p < .001$

## Discussion

The findings clearly reflect the critical link between teacher competency and student achievement. When teachers possess robust knowledge and skills in designing Problem-Based Learning (PBL) instruction, it directly enhances the quality of classroom activities. This, in turn, fosters Active Learning environments that lead to desirable changes in students' health behaviors.

The significant increase in teachers' and students' scores at the .01 level indicates that the developed PBL-based health promotion curriculum effectively drives the learning process. The PBL 6-step process enables teachers to transition from traditional instructors to "facilitators." Simultaneously, it allows students to engage with real-life health-related problems, leading to deeper understanding compared to rote memorization. Consequently, students can concretely translate their knowledge into improved self-care practices.

These results align with the principles of Barrows (1994, 1996), who argued that using problems as a catalyst for learning stimulates new knowledge acquisition more effectively than textbook-based instruction. The outcomes are also consistent with Karimi et al. (2019), who found that PBL health programs significantly improved health-promoting behaviors in students. Furthermore, this study supports the work of Kheawnamchoom (2020), which confirmed that PBL significantly elevates learning outcomes in primary education.

Furthermore, this study demonstrates that PBL is a highly suitable innovation for small schools with resource constraints, as it utilizes authentic community contexts as a learning base. The impact extends beyond academic achievement, fostering essential life skills for sustainable self-care. This approach ultimately helps mitigate long-term health risks, such as childhood obesity and non-communicable diseases (NCDs), in the future.

## Conclusion

**Main Research Findings :** The results of this study successfully met the established objectives, demonstrating that:

**Teachers:** Post-intervention scores for PBL knowledge ( $M = 17.85$ ) and instructional design skills ( $M = 27.85$ ) were significantly higher than pre-intervention scores at the .01 level.

**Students:** Health knowledge ( $M = 16.55$ ) and health behaviors ( $M = 31.62$ ) showed significant improvement compared to baseline measures at the .01 level.

### Research Limitations

Despite the positive outcomes, some limitations should be noted. First, as this was a quasi-experimental study conducted within a single school ( $n = 60$ ), the generalizability of the findings to schools with significantly different contexts or cultures may be limited. Second, the six-month follow-up period may not be sufficient to confirm the long-term sustainability of health behavior changes over several years.

### Recommendations for Future Research

**Follow-up Studies:** Longitudinal research (e.g., a one-year follow-up) should be conducted to evaluate the long-term retention of students' health behaviors.

**Expanded Scope:** Future studies should expand to school networks of varying sizes to compare the effectiveness of the PBL curriculum across diverse educational contexts.

### Policy and Practical Recommendations

**At the Operational Level:** Schools should encourage teachers across all subject areas to integrate PBL concepts into their lessons to foster students' analytical thinking skills.

**At the Policy Level:** Educational authorities should adopt the 18-hour workshop model from this curriculum to systematically strengthen Active Learning competencies among educational personnel.

## References

- Barrows, H. S., & Tamblyn, R. M. (1980). *Problem-Based Learning: An Approach to Medical Education*. New York: Springer Publishing Company.
- Barrows, H. S. (1985). *How to Design a Problem-Based Curriculum for the Preclinical Years*. New York: Springer Publishing Company.
- Barrows, H. S. (1994). *Practice-based learning: Problem-based learning applied to medical education*. Springfield, IL: Southern Illinois University School of Medicine.
- Barrows, H. S. (1996). Problem-based learning in medicine and beyond: A brief overview. *New Directions for Teaching and Learning*, 1996(68), 3–12.
- Chatrung, C. & et al. (2024). The effects of teaching and learning management by using problem-based learning on critical thinking ability and knowledge of nursing students at boromarajonani college of nursing, suphanburi. *Journal of Community Health Development, Khon Kaen University*, 12(4) : 403-416. (In Thai)
- Department of Health, Ministry of Public Health. (2024). *Report on the Health Situation of School-Age Children and Adolescents 2023*. Agricultural Cooperative Federation of Thailand Printing House. (In Thai)
- Hmelo-Silver, C. E. (2004). Problem-based learning: What and how do students learn?. *Educational Psychology Review*, 16(3), 235–266.
- Karimi, N., & et al. (2019). A problem-based learning health literacy intervention programon improving health-promoting behaviors among girl students. *Journal of Education and Health Promotion*, 8(1), 1-11.
- Kheawnamchoom, K. (2020). *Development of learning skills in science subject using problem-base learning (pbl) approach for primary 2 students in ban dong noi school under the nakhon phanom primary education service area office 2*. A Thesis Submitted in Partial Fulfillment of the Requirements for The Master of



- Education Degree in Educational Administrative Innovation at Sakon Nakhon Rajabhat University. (In Thai)
- Mahahmad, S. (2018). The effects of problem-based learning on "Balance of Living Things" towards academic achievement and problem-solving abilities of grade 10 students in Phuket Province . Master's thesis, Sukhothai Thammathirat Open University. (In Thai)
- Prasan. O. (2016). Problem Based Learning for Undergraduate Students, Faculty of Education. *Academic Journal of Buriram Rajabhat University*, 8(1) : 27-36 (In Thai)
- Rungrattanacha, R. & et al. (2022). Problem-Based learning and Team-Based Learning for 3rd year Medical Students in Faculty of Medicine, Naresuan University. *Journal of Humanities and Social Sciences University of Phayao*, 10(2):76-101.
- Samakkhi Meechai Witthaya School. (2024). Annual Health Examination Report for the 2024 Academic Year. (Mimeographed document).(In Thai)
- Thongseiratch, T. & Chandeying, N. (2020). Chronic Illnesses and Student Academic Performance. *Journal of Health Science and Medical Research*, 38(3):245-253.



# Current State, Ideal State, and Developmental Needs of Academic Leadership among Novice Teachers in Basic Education Schools in Yan'an, Shaanxi Province, People's Republic of China

Wu Rui<sup>1</sup>, Worrawat Promden<sup>2</sup> and Winiranee Thasanathep<sup>3</sup>

<sup>1</sup>Ph.D. Candidate, Educational Administration, Faculty of Education, Buriram Rajabhat University, Thailand

E-mail: 660427090006@bru.ac.th

<sup>2</sup>Major Advisor, Assistant Professor, Faculty of Education, Buriram Rajabhat University, Thailand

E-mail: worrawat.pd@bru.ac.th

<sup>3</sup>Co-advisor, Associate Professor, Faculty of Education, Buriram Rajabhat University, Thailand E-mail: winiranee.tn@bru.ac.th

## Abstract

This study investigated academic leadership among novice teachers in basic education schools in Yan'an, Shaanxi Province, focusing on its current state, ideal state, and developmental needs. A mixed-methods research design was employed, integrating qualitative and quantitative approaches. Qualitative data were collected through expert interviews to identify key components of academic leadership, while quantitative data were obtained using questionnaire surveys administered to novice teachers.

The research instruments included semi-structured interview protocols and rating-scale questionnaires. Data were analyzed using descriptive statistics, including mean and standard deviation, as well as a modified Priority Needs Index (PNI). The findings revealed six key components of academic leadership: (1) academic vision and value leadership, (2) learning leadership, (3) instructional leadership, (4) research capacity, (5) innovation capacity, and (6) academic dissemination and collaborative influence. Overall, A questionnaire survey was administered to 327 novice teachers working in basic education schools in Yan'an, Shaanxi Province. the current level of academic leadership was found to be low ( $\bar{X} = 2.26$ ,  $SD = 0.91$ ), whereas the desired level was high ( $\bar{X} = 3.75$ ,  $SD = 0.90$ ).

The needs assessment indicated that instructional leadership represented the most critical area for development ( $PNI = 0.77$ ), while academic dissemination and collaborative influence was identified as the least urgent need ( $PNI = 0.58$ ). These findings provide empirical insights for designing targeted professional development strategies to enhance the academic leadership of novice teachers in basic education schools.

**Keyword:** academic leadership, needs assessment, novice teachers, basic education

## Introduction

Driven by global educational transformation, basic education systems worldwide are seeking new pathways to modernize governance structures and enhance educational quality. In China, rapid socio-economic development and continuous educational reforms have elevated basic education to a strategic priority within the national education system, serving as both a foundation for cultivating high-quality human capital and a critical driver of social and regional development (Hao, 2025). In recent years, national education policies have increasingly emphasized quality improvement, equity, and innovation, placing higher

expectations on schools to strengthen their internal academic capacity. Within this context, academic leadership has emerged as a key mechanism for improving teaching quality, promoting professional learning, and fostering innovation at the school level. However, the effective enactment of academic leadership depends largely on teachers, particularly novice teachers—who are at an early stage of professional development and often face challenges in instructional practice, research engagement, and academic collaboration. Understanding the current state, ideal state, and developmental needs of academic leadership among novice teachers is therefore essential for designing targeted and sustainable improvement strategies in basic education schools.

China's basic education system is currently transitioning from a phase of "ensuring access" to one centered on "delivering quality." The *Education Power Construction Plan Outline (2024–2035)* explicitly emphasizes the establishment of a comprehensive, equitable, and high-quality basic education system as a cornerstone for achieving the national goal of becoming a strong education nation (Central Committee of the Communist Party of China & State Council of the People's Republic of China, 2024). In parallel, recent national education directives underscore the importance of strengthening the professional mission and academic responsibility of teachers, while enhancing the international visibility and discourse influence of Chinese education (Xi, 2024). Within this policy context, academic leadership has been increasingly recognized as a critical driver for improving teaching quality, advancing research-informed practice, and supporting discipline-based development in schools (Liu & Cha, 2021). Clarifying the conceptual dimensions of teachers' academic leadership and identifying effective pathways for its development are therefore essential for promoting the professional growth of teachers and sustaining quality improvement in contemporary basic education schools.

Despite notable achievements, China's basic education system continues to face persistent challenges related to educational quality, teacher professional development, and the cultivation of students' comprehensive competencies. Many schools still lack a clear academic direction in their reform initiatives, while teacher development remains constrained by limited instructional innovation, insufficient research engagement, and homogeneous teaching practices. As a result, students' creative, critical, and practical abilities have yet to be fully developed (Wang, 2024). These challenges highlight the need for stronger academic leadership within schools, particularly at the instructional and professional practice levels, to support meaningful and sustainable educational reform.

While academic leadership has been increasingly recognized as a critical mechanism for improving teaching quality and promoting school development, existing studies have predominantly focused on school administrators or experienced teachers. Empirical research examining academic leadership among novice teachers in basic education, especially from the perspective of current conditions, desired expectations, and developmental needs—remains limited. Given that novice teachers are at a formative stage of professional growth and play a direct role in classroom instruction, research that systematically explores the structure and developmental priorities of their academic leadership is essential. Addressing this gap can provide evidence-based insights for targeted professional development, instructional improvement, and policy design aimed at strengthening the academic capacity of basic education schools.

## Research Objectives

This study was guided by the following objectives:

1. To identify the key components of academic leadership among novice teachers in basic education schools in Yan'an, Shaanxi Province, People's Republic of China.



2. To examine the current state, ideal state, and developmental needs of academic leadership among novice teachers in basic education schools in Yan'an, Shaanxi Province, People's Republic of China.

## **Methodology**

### **Research Design**

This study employed an exploratory sequential mixed-methods research design, integrating qualitative and quantitative approaches. The qualitative phase was conducted to identify and validate the core components of academic leadership among novice teachers in basic education schools. The quantitative phase subsequently examined the current state, ideal state, and developmental needs of academic leadership as perceived by novice teachers, based on the validated components.

### **Phase 1: Identification of Academic Leadership Components**

#### **Phase 1.1 Documentary and Literature Analysis**

A documentary and literature analysis was conducted to identify potential components of academic leadership relevant to novice teachers in basic education schools. The analysis focused on synthesizing existing theoretical frameworks, conceptual models, and empirical studies on educational and academic leadership. Relevant sources were systematically reviewed, including doctoral and master's theses, peer-reviewed journal articles, academic textbooks, and official policy documents such as national education laws, regulations, government gazettes, and strategic development plans. The selection of documents was guided by the research objectives and the conceptual framework of academic leadership.

Analytical procedure and component screening.

Through systematic content analysis, the reviewed literature was examined using coding, categorization, and thematic synthesis. Key academic leadership components reported in previous studies were extracted and compared across sources. To enhance analytical transparency, the presence of each component in the reviewed literature was mapped and summarized in a comparative matrix (Table 1), illustrating the frequency with which specific components appeared across selected studies.

Components that appeared in more than 50% of the reviewed sources were retained as preliminary core components of academic leadership. Based on this criterion, six components were identified for subsequent validation: (1) collaboration skill, (2) learning leadership, (3) innovation capacity, (4) instructional leadership, (5) research capacity, and (6) creating a professional learning atmosphere. These preliminary components were then subjected to expert validation in Phase 1.2.

#### **Phase 1.2 Expert Validation through Semi-Structured Interviews**

*Key Informants.*

To validate and refine the academic leadership components identified in Phase 1.1, five experts were purposively selected based on their academic qualifications and professional experience in educational administration, teacher development, and academic leadership. The inclusion of senior academics and experienced educational practitioners ensured both depth and contextual relevance.

*Research Instrument and Data Collection.*

A semi-structured interview guide was developed to examine the relevance, clarity, and practical applicability of the preliminary academic leadership components. Formal approval for data collection was obtained from the Graduate School of Buriram Rajabhat University prior to the interviews. Individual in-depth interviews were conducted

with each expert, focusing on the validation, refinement, and contextualization of the identified components.

#### **Data Analysis.**

Interview data were transcribed verbatim and analyzed using qualitative content analysis. Descriptive thematic analysis was employed to synthesize expert feedback and confirm the final set of academic leadership components, which served as the basis for the subsequent quantitative phase.

#### **Phase 2: Assessment of Current state, Ideal state, and Developmental Needs Quantitative Survey Research.**

Based on the validated academic leadership components derived from Phase 1, a quantitative survey research method was employed to assess the current state, ideal state, and developmental needs of academic leadership among novice teachers in basic education schools in Yan'an, Shaanxi Province.

#### **Study Population and Sample.**

The population of this study comprised novice teachers with less than three years of teaching experience working in basic education schools in Yan'an, Shaanxi Province, People's Republic of China. The total population consisted of 2,014 novice teachers from 12 basic education schools. From this population, a sample of 327 novice teachers were selected to participate in the study. The selected sample was considered sufficient and representative for examining the current state, ideal state, and developmental needs of academic leadership among novice teachers in basic education schools.

#### **Questionnaire Development.**

The research instrument was a structured questionnaire developed in accordance with the operational definitions of the academic leadership components identified in Phase 1. The questionnaire comprised rating-scale items designed to measure both the current state and ideal state of academic leadership.

#### **Validity and Pilot Testing.**

Content validity was examined by five experts using the Index of Item–Objective Congruence (IOC), yielding an IOC value of 1.00. A pilot study was conducted with 30 novice teachers who were not part of the target population to evaluate the quality of the instrument. Item–total correlation coefficients ranged from 0.979 for the current state scale to 0.980 for the ideal state scale. The reliability of the questionnaire, assessed using Cronbach's alpha coefficient, was 0.979 for the current state scale and 0.981 for the ideal state scale.

#### **Data Analysis.**

Data analysis involved both quantitative and qualitative procedures. Quantitative data were analyzed using descriptive statistics, including frequency, percentage, mean, and standard deviation, to describe participant characteristics and levels of academic leadership. Developmental needs were identified using the Modified Priority Needs Index (PNI), which compares current state with ideal state to determine and rank priority areas for academic leadership development. In addition, qualitative data obtained from expert interviews in Phase 1 were analyzed using content analysis to support the interpretation and validation of the quantitative findings.

### Quality Control Procedures.

The quality of the research instrument was ensured through systematic procedures, including the assessment of content validity using the Index of Item–Objective Congruence and the evaluation of reliability using Cronbach’s alpha coefficient (Khounsimma, & Phusee-Orn, 2018). Needs assessment was conducted using the Modified Priority Needs Index (PNI) to prioritize areas for academic leadership development.

**Table 1**

*Comparative analysis of academic leadership components identified from previous studies and theoretical frameworks.*

| Academic leadership components               | Zhou & Guo (2014) | Sovde et al. (2019) | Zafar et al. (2019) | Montreepila & Srisa-ard (2020) | Li (2020) | Kanchak et al. (2023) | Gao (2023) | Zhang & Li (2023) | Yang & Chi (2023) | Wang (2024) | Fan & Men (2024) | Song et al. (2024) | Kong & Feng (2024) | Chen et al. (2024) | Frequency (number of studies) |
|----------------------------------------------|-------------------|---------------------|---------------------|--------------------------------|-----------|-----------------------|------------|-------------------|-------------------|-------------|------------------|--------------------|--------------------|--------------------|-------------------------------|
| 1. Collaboration skill                       | √                 | √                   | √                   | √                              | √         | √                     | √          | √                 |                   | √           | √                | √                  | √                  | √                  | 13                            |
| 2. Learning leadership                       | √                 | √                   | √                   | √                              |           |                       | √          |                   | √                 | √           | √                | √                  |                    | √                  | 10                            |
| 4. Innovation capacity                       | √                 | √                   | √                   |                                | √         | √                     |            |                   | √                 | √           |                  | √                  | √                  | √                  | 10                            |
| 3. Instructional leadership                  |                   | √                   |                     |                                | √         | √                     |            | √                 |                   | √           |                  | √                  | √                  | √                  | 8                             |
| 5. Research capacity                         | √                 |                     |                     |                                | √         | √                     | √          | √                 | √                 |             | √                | √                  |                    |                    | 8                             |
| 6. Creating learning atmosphere              | √                 |                     | √                   | √                              |           | √                     | √          |                   | √                 |             |                  |                    | √                  |                    | 7                             |
| 7. Visionary leadership                      |                   |                     | √                   | √                              |           |                       |            | √                 |                   |             |                  |                    |                    |                    | 4                             |
| 8. Student development                       |                   |                     |                     | √                              |           | √                     |            | √                 |                   |             |                  |                    | √                  |                    | 4                             |
| 9. Knowledge dissemination and sharing       |                   |                     |                     |                                |           |                       |            | √                 | √                 |             |                  |                    |                    |                    | 2                             |
| 10. Personal influence/Charismatic influence |                   |                     | √                   |                                |           |                       | √          |                   |                   |             | √                |                    |                    |                    | 2                             |
| 11. Assessment leadership                    |                   |                     |                     |                                |           |                       |            | √                 |                   |             |                  |                    | √                  |                    | 2                             |
| 12. Application for information technology   |                   | √                   |                     | √                              |           |                       |            |                   |                   |             |                  |                    |                    |                    | 2                             |
| 13. Professional development                 | √                 |                     |                     |                                |           |                       |            |                   |                   |             |                  |                    |                    |                    | 1                             |
| 14. Administer curriculum management         |                   |                     |                     | √                              |           |                       |            |                   |                   |             |                  |                    |                    |                    | 1                             |
| 15. Learning objective planning competence   |                   |                     |                     |                                |           |                       |            | √                 |                   |             |                  |                    |                    |                    | 1                             |
| 16. School and social support                |                   |                     |                     |                                | √         |                       |            |                   |                   |             |                  |                    |                    |                    | 1                             |
| 17. Cross-level influence                    |                   | √                   |                     |                                |           |                       |            |                   |                   |             |                  |                    |                    |                    | 1                             |
| 18. Stress management ability                |                   |                     |                     |                                | √         |                       |            |                   |                   |             |                  |                    |                    |                    | 1                             |
| 19. Resource Integration                     |                   |                     |                     |                                |           |                       |            |                   |                   | √           |                  |                    |                    |                    | 1                             |
| 20. The cohesion of academic organizations   |                   |                     |                     |                                |           |                       |            |                   |                   |             | √                |                    |                    |                    | 1                             |



## Research Results

### Expert Validation and Refinement of Academic Leadership Components

The qualitative findings from expert validation confirmed the relevance and practical applicability of the preliminary academic leadership framework derived from documentary analysis. Analysis of expert feedback led to the refinement, clarification, and consolidation of the framework into six core components of academic leadership for novice teachers in basic education schools.

As summarized in Table 2, experts consistently emphasized collaboration skill as a foundational dimension of academic leadership. This component was refined to focus on value guidance, shared academic vision, and multi-stakeholder collaboration. Experts highlighted the importance of aligning educational values with regional development goals, fostering professional learning communities, and encouraging novice teachers to assume academic responsibilities beyond classroom instruction.

**Learning leadership** was identified as the central driving force of academic leadership development. Expert feedback underscored continuous professional learning, the integration of theory and practice, the use of reflective and data-informed approaches to improve instruction, and the facilitation of student and peer learning. This component was viewed as essential for sustaining long-term professional growth among novice teachers.

Experts further refined **innovation capacity** by emphasizing the creative integration of local cultural resources, adaptive instructional strategies, and evidence-based experimentation. Innovation capacity was regarded as a key mechanism for enhancing instructional effectiveness and promoting context-sensitive educational improvement within schools.

With regard to **instructional leadership**, experts reinforced its role in ensuring pedagogical excellence. This component was refined to emphasize curriculum planning, evidence-based teaching improvement, small-scale classroom research, and the ethical application of research findings to instructional practice. Experts noted that instructional leadership serves as a critical link between research activities and classroom implementation.

**Research capacity** was identified as a crucial dimension supporting novice teachers' transition from practitioners to academically oriented professionals. Expert feedback highlighted competencies related to problem identification, the application of appropriate research methods, collaboration with academic partners, and the systematic use of research findings to improve teaching and learning.

Finally, **creating a professional learning atmosphere** was emphasized as a key pathway for extending academic leadership beyond individual classrooms. Experts highlighted collaborative networks, policy-informed resource mobilization, community engagement, and knowledge sharing as essential mechanisms for fostering an open, supportive, and sustainable academic culture within and across schools.

**Table 2**

*Summary of expert validation and refinement of academic leadership components*

| Academic Leadership Component               | Key Expert Feedback                                                                                                 | Summary of Refinement                                                                               |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| Collaboration skill                         | Emphasis on value guidance, academic vision, multi-stakeholder collaboration, and professional learning communities | Identified as the foundational component supporting shared purpose and collective academic growth   |
| Learning leadership                         | Continuous professional learning, theory–practice integration, reflective practice, data-informed decision making   | Recognized as the core driver of sustained academic leadership development                          |
| Innovation capacity                         | Integration of local cultural resources, adaptive pedagogy, data-informed experimentation                           | Refined as a catalyst for context-sensitive instructional improvement                               |
| Instructional leadership                    | Curriculum planning, evidence-based teaching improvement, ethical research application                              | Consolidated as a key pedagogical dimension linking research and classroom practice                 |
| Research capacity                           | Problem identification, research methodology, academic collaboration, application of findings                       | Defined as essential for transitioning novice teachers toward academic professionalism              |
| Creating a professional learning atmosphere | Collaborative networks, policy utilization, community engagement, knowledge sharing                                 | Emphasized as a pathway for extending academic influence and fostering sustainable academic culture |

*Note.* The table summarizes thematic patterns derived from expert feedback and illustrates how preliminary components were refined and consolidated through qualitative validation.

### **Developmental Needs for Enhancing Academic Leadership among Novice Teachers in Basic Education Schools**

A questionnaire survey was administered to 327 novice teachers working in basic education schools in Yan'an, Shaanxi Province. The results of the analysis, including mean scores, standard deviations, the Modified Priority Needs Index (PNI), and rankings for both the current and ideal states of academic leadership, are presented in Table 3. In this study, the current state (D) and ideal state (I) refer to the current state and ideal state of academic leadership as measured by the questionnaire.

#### **Current state of academic leadership**

As shown in Table 3, the overall current state of academic leadership among novice teachers was rated at a low level ( $\bar{X} = 2.26$ , S.D. = 0.91). When examined by component, mean scores for all dimensions were also at a low level. The components ranked from highest to lowest mean scores were Innovation Capacity ( $\bar{X} = 2.36$ , S.D. = 0.89), Academic Dissemination and Collaborative Influence ( $\bar{X} = 2.36$ , S.D. = 0.91), Research Capacity ( $\bar{X} = 2.28$ , S.D. = 0.93), Learning Leadership ( $\bar{X} = 2.22$ , S.D. = 0.98), Academic Vision and Value Leadership ( $\bar{X} = 2.21$ , S.D. = 0.89), and Instructional Leadership ( $\bar{X} = 2.14$ , S.D. =

0.87). These findings indicate that novice teachers perceived their current academic leadership competencies to be limited across all dimensions.

### Ideal state of academic leadership

In contrast, the overall ideal state of academic leadership was rated at a high level ( $\bar{X} = 3.75$ , S.D. = 0.90). When considered by component, the highest expected level was observed for Instructional Leadership ( $\bar{X} = 3.79$ , S.D. = 0.89), followed by Innovation Capacity ( $\bar{X} = 3.77$ , S.D. = 0.92), Research Capacity ( $\bar{X} = 3.77$ , S.D. = 0.88), Academic Vision and Value Leadership ( $\bar{X} = 3.75$ , S.D. = 0.91), Academic Dissemination and Collaborative Influence ( $\bar{X} = 3.73$ , S.D. = 0.92), and Learning Leadership ( $\bar{X} = 3.71$ , S.D. = 0.89). This reflects high expectations among novice teachers regarding the level of academic leadership they aim to achieve.

### Developmental needs analysis

The developmental needs for enhancing academic leadership were determined using the Modified Priority Needs Index (PNI) by comparing the current and ideal states. The results revealed clear differences in priority levels among the components. Instructional Leadership showed the highest developmental need (PNI = 0.77), indicating that it should be prioritized in academic leadership development initiatives. This was followed by Academic Vision and Value Leadership (PNI = 0.70), Learning Leadership (PNI = 0.67), Research Capacity (PNI = 0.65), and Innovation Capacity (PNI = 0.59). The component with the lowest level of developmental need was Academic Dissemination and Collaborative Influence (PNI = 0.58). Overall, the findings indicate a substantial gap between the current and desired levels of academic leadership across all components, highlighting the necessity for systematic and prioritized development strategies for novice teachers in basic education schools.

**Table 3**

*Mean scores, standard deviations, modified priority needs index (PNI), and rankings of current and ideal states of academic leadership among novice teachers in basic education schools*

| Components                                         | Current state (D) |             |            | Ideal state (I) |             |             | PNI         | Rank |
|----------------------------------------------------|-------------------|-------------|------------|-----------------|-------------|-------------|-------------|------|
|                                                    | $\bar{X}$         | S.D.        | Level      | $\bar{X}$       | S.D.        | Level       |             |      |
| Academic vision and value leadership               | 2.21              | 0.89        | Low        | 3.75            | 0.91        | High        | 0.70        | 2    |
| Learning leadership                                | 2.22              | 0.98        | Low        | 3.71            | 0.87        | High        | 0.67        | 3    |
| Instructional leadership                           | 2.14              | 0.87        | Low        | 3.79            | 0.89        | High        | 0.77        | 1    |
| Research capacity                                  | 2.28              | 0.93        | Low        | 3.77            | 0.88        | High        | 0.65        | 4    |
| Innovation capacity                                | 2.36              | 0.89        | Low        | 3.77            | 0.92        | High        | 0.59        | 5    |
| Academic dissemination and collaborative influence | 2.36              | 0.91        | Low        | 3.73            | 0.92        | High        | 0.58        | 6    |
| <b>Overall</b>                                     | <b>2.26</b>       | <b>0.91</b> | <b>Low</b> | <b>3.75</b>     | <b>0.90</b> | <b>High</b> | <b>0.66</b> |      |

### Discussion and Conclusion

This study examined the academic leadership of novice teachers in basic education schools in Yan'an, Shaanxi Province, using a mixed-methods research design to investigate its components, current state, and developmental needs. By integrating documentary analysis, expert validation, and empirical survey data, the study provides a comprehensive and context-sensitive understanding of academic leadership development among novice teachers.



First, through a systematic literature review and expert validation, six core components of academic leadership were identified and confirmed: academic vision and value leadership, learning leadership, instructional leadership, research capacity, innovation capacity, and academic dissemination and collaborative influence. These components reflect the multidimensional nature of academic leadership and are consistent with existing theoretical and empirical studies. Lü and Y (2023) emphasize that effective academic leaders must provide academic guidance and developmental vision, highlighting career development, role transition, and leadership capacity as interconnected dimensions. This perspective aligns closely with the six-component framework proposed in this study. Similarly, Li (2022) conceptualizes teacher academic leadership as an organic integration of individual academic competence and collective academic synergy, which corresponds to the distinction between individual capacities and collaborative influence identified in this research. Moreover, the findings are consistent with the work of Bolden et al. (2012), who underscore the dual nature of academic leadership as a combination of personal expertise and organizational coordination, further supporting the conceptual validity of the framework.

Second, the needs assessment revealed a substantial gap between the current and ideal states of academic leadership across all components, indicating considerable developmental potential for novice teachers. Among the six components, instructional leadership emerged as the dimension most urgently in need of development, as reflected by the highest Modified Priority Needs Index (PNI). This finding is both theoretically and practically significant. Teaching quality constitutes the core of all educational activities in schools, and instructional leadership directly targets the application, optimization, and continuous improvement of classroom teaching practices. It determines whether teachers can refine instructional methods, design effective curricula, and facilitate meaningful student learning, thereby ensuring that students efficiently acquire knowledge and develop essential skills. Although academic leadership encompasses a broad range of competencies, teaching quality remains its fundamental foundation; without assured instructional quality, broader academic advancement lacks substantive support. Therefore, strengthening instructional leadership represents a prerequisite for ensuring educational quality in basic education schools.

From the perspective of teacher professional development, instructional leadership provides a clear and accessible pathway for novice teachers' growth. By encouraging reflective teaching, the sharing of innovative instructional strategies, and participation in lesson study and collaborative inquiry, instructional leadership helps teachers establish explicit developmental goals embedded in their daily practice. In this respect, instructional leadership emphasizes the process of professional growth rather than solely its outcomes. Compared with other forms of academic leadership that often focus on research productivity or dissemination achievements, instructional leadership highlights the foundational value of sustained teacher development. By prioritizing the continuous improvement of teachers' instructional competencies, schools can lay a solid foundation for broader academic leadership advancement.

The prominence of instructional leadership identified in this study is further supported by previous empirical research. Wu (2021), based on large-scale survey data, demonstrated that teacher leadership development generally follows a "teaching-practice-oriented priority," and that insufficient instructional leadership among teachers in basic education schools directly constrains the synergistic development of other academic capabilities. Wang and Zhu (2020) similarly argued that instructional leadership, as a core component of teacher leadership, exerts a direct influence on teaching quality and overall school effectiveness. Zhang and Li (2023) further clarified that instructional leadership comprises both observable instructional behaviors and the underlying capacity to support such behaviors, emphasizing that the assessment of instructional leadership serves as a critical mechanism

for guiding its development. Additionally, Song and L (2024) highlighted that the effectiveness of instructional leadership is shaped by factors such as peer trust, school culture, and professional support, particularly in contexts involving cross-school teacher mobility, where instructional leadership becomes even more crucial. Cheng (2024) further emphasized that the enhancement of instructional leadership should transcend technical skills and focus on “leading through values,” pursuing the guidance of Tao beyond technique, thereby enriching both the connotation and practical direction of instructional leadership.

From a policy perspective, the prominence of instructional leadership is also consistent with the current reform orientation of China’s basic education system. National policy documents, including the Education Power Construction Plan Outline (2024–2035), stress the improvement of classroom teaching quality, the strengthening of instructional reform, and the enhancement of teachers’ professional competence as central strategies for achieving high-quality education. Within this policy framework, instructional leadership functions as the critical bridge between macro-level reform objectives and micro-level classroom implementation. The high PNI value for instructional leadership therefore reflects the increasing expectations placed on novice teachers to move beyond routine teaching roles and assume leadership responsibilities in curriculum enactment, instructional innovation, and evidence-based improvement.

In conclusion, this study contributes both theoretically and practically to the understanding of academic leadership among novice teachers in basic education schools. The six-component framework offers an empirically grounded and contextually relevant model for conceptualizing teacher academic leadership in China. Practically, the findings underscore the necessity of prioritizing instructional leadership development through targeted professional learning programs, mentoring systems, collaborative lesson study, and policy-aligned support mechanisms. By systematically addressing the identified developmental needs, particularly instructional leadership, educational administrators and policymakers can more effectively support novice teachers’ professional growth and enhance the overall quality and sustainability of basic education in the new era.

## Suggestion

Based on the findings of this study, the following recommendations are proposed for educational practice and future research.

First, in terms of practical application, this study identified six core components of academic leadership for novice teachers in basic education schools: academic vision and value leadership, learning leadership, instructional leadership, research capacity, innovation capacity, and academic dissemination and collaborative influence. These components provide a comprehensive framework that can be used as a reference for designing professional development initiatives aimed at enhancing teachers’ academic leadership. Although individual basic education schools may differ in context and resources, the core responsibilities and professional roles of novice teachers share substantial similarities. Therefore, the findings of this study can be adapted and applied to capacity-building practices for novice teachers in basic education schools in Yan’an, with appropriate contextual adjustments. In particular, given that instructional leadership demonstrated the highest developmental need, professional development programs should prioritize instructional leadership by strengthening curriculum planning, classroom-based inquiry, reflective teaching practices, and evidence-based instructional improvement.

Second, with regard to professional development system design, it is recommended that future initiatives focus on developing a structured model for enhancing academic leadership competencies among novice teachers in basic education schools in Yan’an, Shaanxi

Province. This may take the form of a teacher professional development (TPD) or teacher professional training (TPT) model that systematically integrates the six academic leadership components identified in this study, with instructional leadership as the central pillar. The development of such a model should be informed by in-depth case studies of exemplary schools in Yan'an that have demonstrated success in cultivating teachers' academic leadership, supplemented by expert panels and symposia. Furthermore, compiling a professional development training manual based on this model would provide practical guidance for school administrators and teacher educators, serving as a sustainable reference for supporting novice teachers' academic leadership development.

Third, for future research, it is recommended to conduct further studies examining the factors influencing academic leadership among novice teachers in basic education schools in Yan'an, Shaanxi Province. Such research could explore individual, organizational, and policy-related factors—such as school culture, leadership support, professional learning opportunities, and policy implementation—that shape the development of academic leadership. Identifying and analyzing these influencing factors would contribute to a deeper understanding of how academic leadership can be more effectively fostered and would support the design of more comprehensive, targeted, and evidence-based teacher development strategies.

## References

- Bolden, R., Gosling, J., O'Brien, A., Peters, K., Ryan, M. K., & Haslam, A. (2012). *Academic leadership: Changing conceptions, identities and experiences in UK higher education* (Research and Development Series, Series 3, Publication 4). Leadership Foundation for Higher Education.
- Central Committee of the Communist Party of China. (2024). Education power construction plan outline (2024–2035) [Policy document]. Ministry of Education of the People's Republic of China.  
[http://www.moe.gov.cn/jyb\\_xxgk/moe\\_1777/moe\\_1778/202501/t20250119\\_1176193.html](http://www.moe.gov.cn/jyb_xxgk/moe_1777/moe_1778/202501/t20250119_1176193.html)
- Chen, S., Hong, S., Liu, H., & Zhang, J. (2024). Research on the professional growth system and cultivation pathways for outstanding teachers in Zhongshan City. *Teacher Education Forum*, 37(10), 20–22.
- Cheng, S.R. (2024). Culturally Responsive Teaching: A New Perspective and Practice for Enhancing Instructional Leadership. *Journal of the Chinese Society of Education*, (11), 55-59.
- Fan, X., & Men, B. (2024). Development and validation of an academic leadership scale for university foreign language teachers. *Contemporary Foreign Language Studies*, (2), 127–141.
- Gao, L. (2023). Development of a secondary school teacher leadership scale and investigation of its current state (Doctoral dissertation). Hebei Normal University, China.
- Hao N. (2025). Development of Student Agency in the Context of Early Cultivation of Top-notch Innovative Talents: Re-examination and Reshaping. *Journal of Zhengzhou University (Philosophy and Social Sciences Edition)*, 1-5.
- Kanchak, N., Tesaputa, K., & Noisombut, H. (2023). Developing a program to strengthen academic leadership of primary school administrators in Northeast Thailand. *International Education Studies*, 16(5), 29–37.
- Khoungsimma, P., & Phusee-Orn, S. (2018). Development of a Performance Appraisal System for Government Employees at the Provincial Statistical Office (Doctoral dissertation, Mahasarakham University), Thailand.



- Kong, L., & Feng, J. (2024). The content, characteristics, and implications of the “Teaching Leadership Framework” for primary and secondary school teachers in the UK. *Teaching and Management*, (10), 72–76.
- Li, C. Y. (2022). The Connotation and Extension of Academic Leadership of Primary and Secondary School Teachers. *Qinghai Education*, (11), 35.
- Li, X. (2020). Teaching scholarship in primary and secondary schools: Four-dimensional characteristics and developmental pathways. *Curriculum, Teaching Material and Method*, 40(8), 53–59.
- Liu, L.S & Cha, S.J. (2021). An Analysis of Teachers’ Academic Leadership in the Context of New Liberal Arts Construction. *Education Science*, 37(03), 82–88.
- Lü, G.Z, S, M. & Y, J.H. (2023). Main Characteristics, Evolution, and Future Prospects of Research on Global Academic Leaders. *Shandong Higher Education*, 11(05), 78–85.
- Montreepila, R., & Srisa-ard, B. (2020). The Development of Teachers’ Academic Leadership in Basic Education Schools (Doctoral dissertation). Mahasarakham University, Thailand.
- Song, P., Xie, C., & Wang, L. (2024). An empirical study on teacher leadership assessment models in primary and secondary schools in China. *Journal of Teacher Education Research*, 36(2), 17–26.
- Song, P.P. & L, R.Z. (2024). Implementation Dilemmas and Transcendence of Rotating Teachers' Leadership: A Qualitative Study Based on Grounded Theory. *Exploring Education Development*, 44(10), 53–59.
- Sovde, D., James, K., Waters, J., Green, G. Q., Krengel, K., Moore, E., ... & Farrington, C. (2019). Integrating Social, Emotional and Academic Development: An Action Guide for School Leadership Teams. Aspen Institute.
- Wang, Y. (2025). Theoretical connotation, logical framework, and practical pathways for high-quality development of basic education. *Teaching and Administration*, (01), 1–5.
- Wang, X. (2024). The development process, existing problems, and countermeasures of teaching-research group activities in Chinese primary and secondary schools. *Journal of Beijing Institute of Education*, 38(6), 1–5
- Wu, X.Y. (2021). Research on the Generation of Teachers' Instructional Leadership. *China Social Sciences Press*.
- Wang, M. & Zhu, Y.X. (2020). Progress and Prospects of Research on Teacher Leadership. *Education Sciences in China*, 3(04), 130–143.
- Xi, J.P. (2024). Firmly focus on the fundamental task of fostering virtue through education and make solid progress towards the strategic goal of building a strong education nation. *The Central People's Government of the People's Republic of China*. [https://www.gov.cn/yaowen/liebiao/202409/content\\_6973522.htm](https://www.gov.cn/yaowen/liebiao/202409/content_6973522.htm)
- Yang, S., & Chi, S. (2023). Value, motivational dilemmas, and breakthroughs in the development of instructional scholarship among primary and secondary school teachers: Based on Lewin’s field theory. *Theory and Practice of Education*, 43(23), 35–40.
- Zafar, S. T., Hmedat, W., Chaubey, D. S., & Rehman, A. (2019). An exploration of academic leadership dynamics: a literature review. *International Journal on Leadership*, 7(1), 28–36.

## The Teaching of Singing for Third Grade Primary School Students Using the Kodály Method in Xingyi City, Guizhou Province

Wu You<sup>1</sup> Thanapon Teerachat <sup>2</sup> and Chalermkit Kengkaew<sup>3</sup>

<sup>1</sup>M.Ed. Students, Music Education Program, Buriram Rajabhat University, Thailand,  
E-mail: 670426025011@bru.ac.th

<sup>2</sup>Advisor, Music Education Program, Buriram Rajabhat University, Thailand,  
E-mail: Thanapon@bru.ac.th

<sup>3</sup>Co-advisor, Music Education Program, Buriram Rajabhat University, Thailand,  
E-mail: Chalermkit.kk@bru.ac.th

### Abstract

This study examined the current state of interest and attention performance among third-grade primary school students in music classes, as well as to observe and record the differential outcomes between the implementation of traditional teaching methods and the Kodály Method. A qualitative methods approach was employed. Participants included five music teachers, nine third-grade students with moderate musical foundations, and five music education experts from three primary schools in Xingyi City. Data were collected through semi-structured interviews and classroom observations of nine music classes, focusing on students' participation, attention duration, and musical skill performance. Content analysis and data triangulation were used to ensure the credibility of the findings. The results indicated that students taught using the Kodály Method demonstrated higher levels of interest, sustained attention, and active participation than those taught through traditional approaches. Kodály-based instruction, incorporating Curwen hand signs, rhythm activities, movement, and singing-centered learning, effectively enhanced students' pitch accuracy and rhythmic control. Differences in outcomes among schools suggested that systematic implementation of the method and teachers' professional competence significantly influenced instructional effectiveness. The findings support the Kodály Method as an effective pedagogical approach for improving engagement and musical skills in primary music education.

**Key words:** Kodály Method; third-grade primary school students; singing teaching; classroom interest; attention performance

### Introduction

The "Compulsory Education Art Curriculum Standards (2022 Edition)" in China emphasizes that core literacy in the compulsory education stage includes aesthetic awareness, artistic expression, innovative practice, and cultural understanding. Singing teaching, as a core part of primary school music education, plays a crucial role in stimulating students' interest in music, improving their musical skills, and cultivating their aesthetic perception. However, the current third-grade music classrooms in primary schools' face problems such as insufficient student interest in music, weak mastery of basic skills, and poor aesthetic perception ability. Traditional teaching models characterized by "teacher demonstration and student imitation" often lead to low student participation and short attention spans, failing to meet the requirements of curriculum standards (Cui, 2024, pp 49-51)

The Kodály Method, founded by the Hungarian music educator Zoltán Kodály, is a systematic music education system. Its core philosophy is to enable every student to enjoy the joy of music through singing, the most natural and direct form of musical expression, and to cultivate students' musical literacy and aesthetic ability. The method uses solfège, Curwen hand signs, rhythmic syllables, and other auxiliary tools, and takes folk songs and nursery rhymes familiar to children as teaching materials, which is highly consistent with the cognitive characteristics of third-grade students (aged 8-9 years old) who are in the critical period of pitch and rhythm perception. (Shi, 2024, pp. 4-6)

In recent years, the Kodály Method has been increasingly applied in primary school music teaching in China, and relevant studies have shown that it can effectively stimulate students' interest in music, help them solidly grasp basic skills such as pitch and rhythm, and enhance their musical perception and expression abilities. However, there is a lack of in-depth research on the application of the Kodály Method in singing teaching for third-grade students in specific regions such as Xingyi City, Guizhou Province. Therefore, this study takes three primary schools in Xingyi City as research objects to explore the practical effect of the Kodály Method, aiming to provide empirical support and practical guidance for the reform of primary school music teaching in the region (Li, 2024, p. 28-29)

## Research Objective

To study the current state of interest and attention performance among third-grade primary school students in music classes, as well as to observe and record the differential outcomes between the implementation of traditional teaching methods and the Kodály Method.

## Research Methodology

### 1. Key Informant

The sample in this study were divided into three group. The first group was five music teachers from three sample schools (Fukang Primary School, Yun'nan Road Primary School, and Hongxing Road Primary School) in Xingyi City, with teaching experience ranging from 6 to 15 years. The second group was three 3 representative students with medium musical foundation from the third grade of each sample school, totaling 9 students. The last group was five 5 experts in the field of music education, including 1 university professor, 2 municipal teaching researchers, and 2 senior primary school music teachers with rich experience in applying the Kodály Method.

### 2. Research Tools

2.1 Semi-structured interview form for the study aimed to study the current state of interest and attention performance among third-grade primary school students in music classes

2.2 Classroom observation forms used to record students' participation behavior, attention duration, and skill performance in music classes under different teaching methods

2.3 Information summary forms: Used to sort out and classify observation records and interview content to ensure the systematicness and completeness of research data

### 3. Data Collection

The researcher requested an official letter from the Graduate School of Buriram Rajabhat University to seek permission for data collection from the target group. Before interviewing, the researcher sent the letter to the interviewees. The interview was conducted in-depth one-on-one interviews with participating teachers, students, and experts, with each interview lasting 10-40 minutes, and the content was recorded and transcribed. In addition,



the researcher also observed three music classes in each of the three sample schools, totaling nine classes.

#### 4. Data Analysis

Adopted content analysis method to classify and code the transcribed interview content and observation records, identified core viewpoints and key findings, and verified the consistency of information from multiple perspectives to ensure the authenticity and reliability of the research results.

### Research Result

According to the research objectives, the research results are as follow:

#### **Application Status of the Kodály Method and Inter-School Differences**

To examine the current state of students' interest and attention performance in music classes, this study first analyzed the implementation status of the Kodály Method in three sample primary schools. Although all three schools had adopted the Kodály Method to varying degrees, clear differences were observed in the depth of implementation, instructional approaches, and resource support, resulting in three distinct practice models.

Yun'nan Road Primary School represents a systematic application model. Some music teachers have received professional training in the Kodály Method and are able to skillfully apply core techniques such as Curwen hand signs and rhythmic reading. The curriculum integrates Sichuan Han folk songs and local ethnic minority music, supported by well-equipped teaching facilities. Classroom observations indicated that students showed high levels of interest and sustained attention during interactive activities such as hand sign interaction and folk song games. Their pitch accuracy and rhythmic stability were noticeably stronger than those of students in the other two schools. However, instruction tended to emphasize uniform progress, with limited differentiation for individual learners.

Hongxing Road Primary School reflects an exploratory application model. The school emphasizes artistic literacy and incorporates elements of the Kodály Method into rhythm training and multi-part choral singing, often framed within humanistic and thematic learning contexts. With access to digital teaching tools such as interactive whiteboards and audio recorders, students demonstrated strong cooperation and engagement in collective singing activities. Nevertheless, due to the lack of a systematic teaching framework, students' pitch control and musical creativity showed limited improvement, and fluctuations in attention were still observed during skill-focused tasks.

Fukang Primary School can be classified as an initial application model. As a key primary school with a solid foundation in music education, it has begun introducing the Kodály Method using local nursery rhymes and simple folk songs as core teaching materials. Basic teaching aids, including electronic keyboards and rhythm cards, are available. Students displayed high enthusiasm and interest in singing games; however, their sustained attention and participation in more complex activities such as multi-part singing and improvisation were relatively low, largely due to insufficient systematic training for teachers.

#### **Differences in Students' Interest and Attention Under Different Teaching Methods**

Classroom observations revealed clear differences in students' interest and attention performance under traditional teaching methods and the Kodály Method. Under traditional teaching methods, students were predominantly in a passive follow-singing mode. Classroom participation rates were generally below 20%, and students' attention spans rarely exceeded 15 minutes. Distraction and off-task behaviors were common, and both pitch stability and rhythmic accuracy were relatively weak, with more than 60% of students exhibiting noticeable pitch deviations.

In contrast, the implementation of the Kodály Method significantly enhanced students' interest and attention. Through multi-sensory instructional designs, including Curwen hand signs, rhythm games, and group-based activities, students' active participation rates increased to over 70%, and attention spans extended beyond 30 minutes. Student interviews indicated that all participants perceived the Kodály Method as more engaging than traditional approaches, particularly appreciating game-based activities such as rhythm stick practice and hand sign challenges. Students also reported a clearer awareness of their progress in pitch and rhythm, with those from Yun'nan Road Primary School demonstrating the most consistent skill development due to the systematic application of the method.

### **Expert Evaluation of the Kodály Method in Relation to Students' Interest and Attention**

Expert evaluations further supported the findings related to students' interest and attention performance. All five experts unanimously affirmed the effectiveness of the Kodály Method in third-grade music classes. They emphasized three major strengths: instructional interaction aligned with students' cognitive characteristics, enhanced learning investment through multi-sensory participation, and differentiated design accommodating students with varying musical foundations.

At the same time, experts identified several constraints affecting the overall effectiveness of the Kodály Method, including insufficient teacher professional training, limited adaptation of teaching materials, unequal distribution of educational resources, and inadequate home-school cooperation. These factors were considered key issues influencing the consistency and sustainability of students' interest and attention development across different schools.

### **Discussion**

The findings indicate that students taught using the Kodály Method demonstrated significantly higher levels of interest and attention in music classes compared to those taught through traditional methods. This difference can be attributed to the learner-centered and activity-based nature of the Kodály Method, which emphasizes active musical engagement through singing, movement, and listening. By incorporating multi-sensory instructional strategies such as Curwen hand signs, rhythmic games, and group interaction, the Kodály Method allows students to participate cognitively, physically, and emotionally in the learning process. Such holistic engagement reduces passive learning and helps sustain students' attention for longer periods. This finding aligns with the result of Lin and Zhang (2025, p. 307) who stated that the Kodály Method was effective in enhancing students' pitch accuracy, rhythmic control, and sight-singing abilities. In particular, the use of Curwen hand signs and the solfège-based singing system enabled students to grasp pitch relationships and melodic structures more efficiently. Classroom observations further confirmed that the Kodály Method was implemented effectively, with teachers consistently applying hand signs and note singing to support students' understanding of pitch and rhythm. As a result, the learning environment was characterized by active participation and a positive, interactive classroom atmosphere. Moreover, this study finding also aligns with the study of Mabini (2026, p. 16) who pointed out that Movement plays a central role in the Kodály Method as a means of strengthening students' rhythmic awareness and musical expression. Students who were taught using the Kodály method showed positive responses to learning activities that incorporated clapping, tapping, and movement-based musical games. According to teachers' observations, these activities not only supported the development of students' motor coordination but also contributed to a deeper understanding of fundamental musical elements, including beat, tempo, and musical phrasing.

The findings reveal that the depth and effectiveness of Kodály-based instruction are strongly influenced by the systematic implementation of the method and teachers' professional competence. Schools where teachers had received specialized training demonstrated stronger student outcomes, particularly in pitch accuracy and rhythmic control. This can be explained by the fact that the Kodály Method is grounded in a carefully sequenced pedagogical framework that requires teachers to have a thorough understanding of its principles, learning progression, and instructional techniques. Teachers with specialized training are better equipped to apply core elements such as solfège, Curwen hand signs, and rhythmic syllables in a structured and developmentally appropriate manner, allowing students to build musical skills progressively and consistently. This finding aligns with the findings of Haddad (2015, p. 1145) who highlight the necessity of providing systematic professional development and targeted training for school teachers in the application of the Kodály Method. Such training is essential to ensure that teachers possess a thorough understanding of the method's core principles, instructional sequences, and practical techniques, thereby enabling effective and consistent implementation in classroom music instruction. In addition, this also aligns with the findings of Sandra, et al. (2015, p. 2013) who stated that music teachers must possess strong musicianship skills themselves before they can effectively cultivate these competencies in their students. Consequently, it is essential that music educators are provided with ongoing professional development opportunities that allow them to refine their own musical abilities such as pitch accuracy, rhythmic precision, and sight-singing while simultaneously enhancing their pedagogical skills. Participation in well-designed training programs enables teachers to integrate musical expertise with effective instructional strategies, leading to higher-quality music teaching and improved student learning outcomes.

## **Suggestions**

### **1. Implications for the Findings**

1.1 The findings indicate that the systematic implementation of the Kodály Method has a direct impact on students' musical development. Therefore, school should apply the Kodály Method in a structured and continuous manner demonstrated higher levels of students' pitch accuracy and rhythmic stability compared to schools adopting exploratory or initial-stage practices.

1.2 The findings reveal that the Kodály Method significantly enhances students' classroom engagement and attention. Thus, multi-sensory instructional strategies, such as Curwen hand signs, rhythm games, and group interaction, effectively transformed students from passive followers into active participants and extended their attention span during music lessons.

1.3 The findings also imply that systematic curriculum planning and adequate instructional resources are necessary to maximize the effectiveness of the Kodály Method in improving students' pitch accuracy, rhythmic control, and sustained classroom attention.

### **2. Recommendations for the Further Studies**

2.1 Future studies should examine the effects of the Kodály Method on specific musical skills. These may include music reading ability, choral singing skills, and rhythmic creativity to provide deeper insights into students' learning outcomes.

2.2 Further research should involve more diverse educational contexts. Expanding samples to rural schools, small-sized schools, or culturally diverse settings would allow for comparative analysis of the adaptability and effectiveness of the Kodály Method.



2.3 Future studies should focus on professional development models tailored to the Kodály Method. Action research or mixed-methods approaches are recommended to explore changes in teachers' attitudes, instructional practices, and professional competencies.

## References

- Cui, K. (2024). Research on the application of Kodály method in singing teaching for lower grades in primary schools. *Contemporary Music*, (02), 49–51.
- Haddad, R. (2015). Kodály's methodology to teach singing and music theory in kindergarten and primary school education. *Derasat Journal*, 42(1), 1145–1154.
- Li, J. H. (2024). Brief analysis on cultivating students' rhythm ability by applying Kodály method. *Inside and Outside the Classroom (Senior High School Edition)*, (47), 28–29.
- Lin, J. Y., & Zhang, Y. X. (Year). Surveying on the Kodály method in teaching chorus for seventh-grade students at Beijing middle school, Guangdong Province, the People's Republic of China. *Global Interactive Journal of World Religions and Cultures*, 5(2), 296–311.
- Mabini, J. (2026). Kodály method in a public elementary school and a university laboratory school in building musical creativity. *International Journal of Education & the Arts*, 27(3), 1–23. <https://doi.org/10.26209/ijea27n3>
- Sandra, B. N., Philip, T., Michéal, H., & Patricia, M. (2015). The effect of Kodály training on music teachers' sight singing skills. *Literacy Information and Computer Education Journal*, 6(3), 2013–2019.
- Shi, R. B. (2024). Practical research on the application of Kodály teaching system in primary school music education. *Pupils (Lower Issue)*, (06), 4–6.

## Guidelines for Internal Supervision in Primary Schools under the Jurisdiction of Chongzuo Municipality, Guangxi Autonomous Region, People's Republic of China

Wu Zhaoliang<sup>1</sup>, Phatchanee Kultanan<sup>2</sup>, Patcharee Thungkaew<sup>3</sup>

<sup>1</sup>M.A. Students, Educational Administration Program, Buriram Rajabhat University, Thailand  
E-mail: 670426021043@bru.ac.th

<sup>2</sup>Major Advisor Educational Administration Program, Buriram Rajabhat University, Thailand  
E-mail: phatchanee.kt@bru.ac.th

<sup>3</sup>Co-Advisor, Educational Administration Program, Buriram Rajabhat University, Thailand  
E-mail: Patcharee.tk@bru.ac.th

### Abstract

This study aims to explore guidelines for internal supervision in primary schools under the Jurisdiction of Chongzuo Municipality, Guangxi Autonomous Region, People's Republic of China. An explanatory sequential mixed-methods design was employed. In the quantitative phase, questionnaire data were collected from 226 teachers selected through stratified random sampling from a population of 550. The research instrument was a questionnaire with item-objective congruence (IOC) values ranging from 0.66 to 1.00, item discrimination indices between 0.639 and 0.793, and an overall reliability coefficient of 0.970. Data were analyzed using descriptive statistics including means and standard deviations. In the qualitative phase, semi-structured interviews were conducted with six experts and school administrators. Data were analyzed using content analysis. The research results found that: 1) The overall evaluation of current state of internal supervision within municipal primary schools in Chongzuo City was rated at a moderate level ( $\bar{x}=3.28$ ). The aspect that was received the highest average score was Reflection and Development ( $\bar{x}=3.29$ ), while the dimension that was received the lowest score was Implementation Dimension ( $\bar{x}=3.26$ ). 2) The guidelines for Internal Supervision in Primary Schools under the Jurisdiction are as follows:

**Keywords:** Internal School Supervision; Municipal Primary Schools; School Improvement; Educational Quality Management

### Introduction

#### Research Background

This study is situated within the strategic context of China's new-era reform of educational evaluation and the pursuit of high-quality educational development in border and ethnic regions. At the national level, the Overall Plan for Deepening the Reform of Educational Evaluation in the New Era (2020) explicitly identified school-based supervision, for the first time, as a core mechanism for safeguarding educational quality (Ministry of Education of the People's Republic of China, 2020: pp. 5-6). Subsequently, the Regulations on Educational Supervision promulgated in 2021 further underscored the necessity of establishing a systematic, school-based quality management system to strengthen internal governance and accountability in schools (State Council Education Supervision Committee, 2021: pp. 12-13).

At the regional level, the Guangxi Zhuang Autonomous Region has actively responded to national policy directives. Its Education Supervision Plan (2022–2025) innovatively proposed a “three-stage supervision model” aimed at enhancing the coherence and effectiveness of supervision practices (Guangxi Zhuang Autonomous Region Department of Education, 2022: pp. 3-4). Moreover, in 2023, Guangxi institutionalized educational supervision through local legislation, placing particular emphasis on data-driven decision-making and evidence-based governance in educational supervision (Standing Committee of the People's Congress of Guangxi Zhuang Autonomous Region, 2023: pp. 7-8).

Within this broader policy framework, Chongzuo City, as a multi-ethnic border region, continues to face structural challenges in advancing balanced development and quality improvement in compulsory education. These challenges include pronounced disparities in school development, uneven levels of teachers' professional competence, and a prevailing tendency toward formalistic supervision practices. Such limitations constrain the capacity of existing supervision mechanisms to effectively support the improvement of classroom teaching quality and instructional efficiency, particularly under the implementation of the “Double Reduction” policy (Central Committee of the Communist Party of China & State Council, 2021: pp. 10-12).

In response to these challenges, this study selects four municipal primary schools in Chongzuo City as case studies. The study aims to systematically examine the current state of school-based supervision in these schools and, drawing on the core dimensions of planning, implementation, inspection, reflection, and development, to construct an optimized supervision pathway tailored to the contextual characteristics of primary schools in border and ethnic regions. Ultimately, the study seeks to develop a replicable and practice-oriented model of school-based supervision, provide empirical evidence to support regional education quality enhancement, and contribute to the implementation of national strategies for building a strong education system and promoting border-area revitalization and shared prosperity (State Council, 2020; National Development and Reform Commission, 2021: pp. 3-4).

## Research Objectives

1. To investigate the current state for Internal Supervision in Primary Schools under the Jurisdiction of Chongzuo Municipality, Guangxi Autonomous Region, People's Republic of China.
2. To study the guidelines for Internal Supervision in Primary Schools under the Jurisdiction of Chongzuo Municipality, Guangxi Autonomous Region, People's Republic of China.

## Research Methodology

The research was conducted in the following two phases.

Phase 1: Quantitative Survey. The population comprised 550 teachers from four municipal primary schools in Chongzuo City. Based on Krejcie and Morgan's (1970) sample size table, a representative sample of 226 teachers was selected using stratified random sampling (Krejcie & Morgan, 1970: pp. 608-610). The research instrument was a questionnaire consisting of 55 items developed according to four dimensions: planning, implementation, inspection, reflection, and development, and measured using a five-point Likert scale. The questionnaire demonstrated high content validity, with item-objective congruence (IOC) values ranging from 0.66 to 1.00. The item discrimination indices were at an acceptable level, and the overall reliability of the instrument was high (Cronbach's  $\alpha = 0.97$ ). Quantitative data were analyzed using descriptive statistics, including mean and standard deviation.



Phase 2: Qualitative Interviews: There are six key informants including four school principals and two university professors were purposively selected for semi-structured interviews. The interview data were audio-recorded, transcribed verbatim, and analyzed using thematic content analysis.

## Research Results

According to the research objectives, the research results are as follow:

The current state for Internal Supervision in Primary Schools under the Jurisdiction of Chongzuo Municipality, Guangxi Autonomous Region, People's Republic of China.

**Table 1**

*Means and Standard Deviation of the overall and each aspect of the current state for Internal Supervision in Primary Schools under the Jurisdiction of Chongzuo Municipality,*

| Aspect of Internal Supervision in Primary Schools | $\bar{x}$   | S.D.        | Interpretation  | Ranking  |
|---------------------------------------------------|-------------|-------------|-----------------|----------|
| 1. Planning                                       | 3.28        | 1.31        | Moderate        | 2        |
| 2. Implementation                                 | 3.26        | 1.31        | Moderate        | 4        |
| 3. Monitoring                                     | 3.28        | 1.30        | Moderate        | 2        |
| 4. Reflection and Development                     | 3.29        | 1.29        | Moderate        | 1        |
| <b>Overall Mean</b>                               | <b>3.28</b> | <b>1.30</b> | <b>Moderate</b> | <b>-</b> |

According to the table 1, it was found that the overall of aspect of the current state for Internal Supervision in Primary Schools under the Jurisdiction of Chongzuo Municipality was rated at moderate level ( $\bar{x}=3.28$ , S.D.=1.30). The aspect that was received the highest average score was reflection and development ( $\bar{x}=3.29$ , S.D.=1.29), follow by the monitoring ( $\bar{x}=3.28$ , S.D.=1.30) and Planning ( $\bar{x}=3.28$ , S.D.=1.31), while the dimension that was received the lowest score was implementation ( $\bar{x}=3.26$ , S.D.=1.31).

**The guidelines for Internal Supervision in Primary Schools under the Jurisdiction of Chongzuo Municipality, Guangxi Autonomous Region, People's Republic of China**  
The development guidelines are as follows:

### Guidelines for Planning

The optimization of supervision work around the planning dimension centers on constructing a systematic framework characterized by clear objectives, efficient collaboration, and dynamic adaptability. Regarding budgetary resources, the focus lies on building a goal-oriented scientific collaborative planning mechanism and enhancing the efficiency and flexibility of resource utilization and allocation. This ensures resources are precisely aligned with and swiftly responsive to supervision needs, while also being supported by diversified resource mobilization and full-cycle performance management as critical pillars. In terms of activity design, the key is to establish an objective-driven, systematic, and flexible design mechanism. This mechanism leverages tool optimization and continuous feedback to shift activities from "formalized inspections" toward "targeted improvements." These two aspects work in synergy to collectively ensure that supervision activities effectively support the achievement of school development goals.

### Guidelines for Implementation

The core of the implementation dimension lies in constructing a synergistic system where "professional empowerment" and "trust-based dialogue" complement each other, transforming supervision from a one-way inspection into a two-way developmental professional process. In terms of supervisor competence and authorization, systematic training—such as scenario simulation and case analysis—is employed to enhance their classroom observation and decision-making capabilities. A tiered authorization mechanism

and clear on-site adjustment guidelines are established to grant them flexible and regulated authority. Additionally, tool support (e.g., a supervision assistance system) and expert support mechanisms are provided to safeguard on-site decision-making, ensuring the relevance and authenticity of information collected.

Regarding the atmosphere of supervision dialogue, the key lies in setting principles of equal dialogue through preparatory meetings. Guided questioning and structured dialogue processes (such as the "description-analysis-planning" model) are applied in a safe environment to encourage thorough reflection from teachers. Furthermore, dialogue quality assessment mechanisms and professional growth portfolios are established to continuously optimize the effectiveness of conversations. These two aspects work in synergy: professional competence and clear authorization form the foundation for obtaining authentic evaluation information, while trust-based and open dialogue serves as the key to transforming information into motivation for teachers' professional growth. Together, they ensure that the supervision process is both scientifically effective and imbued with the developmental value of humanistic care.

### **Guidelines for Monitoring**

#### **Establishing an In-depth and Structured Supervision Evaluation Mechanism**

The core of the inspection dimension lies in establishing a systematic problem diagnosis and dynamic response mechanism to ensure the depth and effectiveness of supervision and evaluation. On the one hand, it is necessary to go beyond superficial observations and employ methods such as the "five whys" technique, multi-dimensional data verification, and "individual-group-school" three-tier attribution analysis to uncover the root causes of issues and provide targeted, actionable improvement recommendations based on the specific context. On the other hand, a flexible follow-up evaluation system should be developed. This includes setting periodic review points, establishing transparent processes for adjustments, approvals, and documentation, and implementing a data-driven feedback loop. This ensures that supervision plans can dynamically adapt to actual changes, achieving a balance between standardization and flexibility. Ultimately, it forms a management closed loop from problem analysis to continuous optimization.

### **Guidelines for Reflection and Development**

The core of the reflection and development dimension lies in establishing a sustainable improvement loop. This involves transforming supervisory experience into organizational wisdom through systematic data management and diversified feedback mechanisms. On the one hand, an intelligent supervision data management system should be developed, which links reports, teacher information, and curriculum details via a knowledge graph to enable classified data storage, precise retrieval, and multi-role services. It should also establish a transformation pathway from exemplary cases to widespread practice and even institutional optimization. On the other hand, secure and convenient diversified feedback channels should be established, incorporating tools such as instant surveys, thematic research, and in-depth interviews. This will form a complete "collection-analysis-improvement-feedback" cycle, ensuring that teachers' opinions are genuinely collected, effectively addressed, and practically utilized to optimize the supervision system. Together, these two aspects synergize to drive supervision work from experience accumulation to evidence-driven practices, and from one-way evaluation to a virtuous cycle of mutual growth.

## **Discussion**

The findings of this study indicate that the overall level of internal supervision in municipal primary schools in Chongzuo City is at a moderate level, suggesting that foundational supervision mechanisms have been established but require further

systematization and strategic integration to achieve higher effectiveness. Among the dimensions, "Reflection and Development" scored the highest, reflecting a relative strength in experiential learning and iterative improvement. In contrast, the "Implementation" dimension scored the lowest, highlighting challenges in operationalizing supervision practices, such as insufficient professional empowerment and underdeveloped dialogue mechanisms. These results align with existing research emphasizing that effective supervision relies not only on structural frameworks but also on strategic alignment and continuous refinement (Mao, 2020: pp. 65-70). The moderate performance across all dimensions further supports the view that sustainable educational improvement requires systematic capacity building rather than fragmented interventions (Zhang, 2020: pp. 27-29).

The proposed guidelines emphasize data-driven adaptation and contextual responsiveness, offering a tailored framework for enhancing supervision in border ethnic regions (Lan 2023: pp. 63-78). The integration of structured analytical tools such as root-cause analysis and closed-loop feedback mechanisms aims to address the current limitations in depth and flexibility. Practically, the study underscores the need to strengthen supervisory expertise through balanced training and intelligent knowledge management systems (Wang & Li, 2021: p. 48). These measures can mitigate formalism and foster a culture of collaborative growth. Future research should explore longitudinal dynamics and cross-regional comparisons to further refine context-specific supervision models, aligning with broader efforts to advance educational quality in diverse settings (Gong & Wang, 2022: pp. 45-51).

## Recommendations

### Implications for the Findings

The findings indicate that the overall level of internal supervision in Chongzuo's municipal primary schools is moderate with the Reflection & Development Dimension scoring highest and the Implementation Dimension being the weakest. Therefore, educational administrators and school leaders should prioritize strengthening supervisory capacity in implementation, clarifying authorization mechanisms and providing dynamic support, while consolidating the strengths of reflective practices to systematically enhance the effectiveness of supervision.

Given that the Inspection Dimension lacks depth and systematicity in problem analysis, greater emphasis should be placed on constructing structured root-cause analysis frameworks and closed-loop process monitoring mechanisms. This will improve the quality of supervisory evaluation and ensure it effectively drives teaching improvement.

### Recommendations for the Further Studies

Future studies could extend to other primary schools in border areas of Guangxi to compare findings and enhance the generalizability and reference value of the research conclusions.

Subsequent research should adopt longitudinal qualitative or mixed-methods designs to deeply explore the dynamic implementation processes of internal supervision within specific school contexts and the factors influencing its effectiveness.

## References

- Central Committee of the Communist Party of China & State Council. (2021, No. 24). *Opinions on further reducing the burden of homework and off-campus training for students in compulsory education*. Ministry of Education of the People's Republic of China.



- Guangxi Zhuang Autonomous Region Department of Education. (2022, No. 15). *Education supervision plan (2022-2025)*.
- Ministry of Education of the People's Republic of China. (2020, No. 13). *Overall plan for deepening the reform of educational evaluation in the new era*.
- National Development and Reform Commission. (2021, No. 08). *National strategies for border-area revitalization and shared prosperity*.
- Standing Committee of the People's Congress of Guangxi Zhuang Autonomous Region. (2023, No. 18). *Regulations on educational supervision*.
- State Council Education Supervision Committee. (2021, No. 06). *Regulations on educational supervision*.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 608–610.
- Li, J. (2019). The theoretical foundation and development trend of internal school supervision. *Educational Science Research*, 35(7), 81.
- Zhang, H. (2020). The construction of a PDCA model for internal school supervision. *Journal of Education*, 46(3), 170–175.
- Mao, Z. (2020). Innovation of school supervision models under the background of educational evaluation reform in the new era. *Educational Research*, 41(4), 20–32.
- Wang, H., & Li, X. (2021). Construction of a scientific collaborative planning mechanism for school supervision. *Journal of Educational Administration*, 39(5), 48.
- Gong, Y., & Wang, L. (2022). Design of a policy package for park education supervision oriented toward innovation performance. *Educational Development Research*, 40(27), 45–51.
- Lan, Y. (2023). A study on the internal supervision model in primary schools in ethnic regions. *Ethnic Education Research*, 34(2), 63–78.

# The Current Stage of The Integration of Minzu Music and Interactive Electronic Music In Higher Education, People's Republic of China

Xiao DingWen<sup>1</sup> Natthawat Khositditsayan<sup>2</sup> & Thanapon Teerachai<sup>3</sup>

<sup>1</sup>Ph.D.Student in Music Education, Faculty of Education, Buriram Rajabhat University, Thailand,  
Email: 660427093020@bru.ac.th

<sup>2</sup>Major Advisor, Graduate School, Buriram Rajabhat University, Thailand,  
Email: natthawat@bru.ac.th

<sup>3</sup>Co-advisor, Graduate School, Buriram Rajabhat University, Thailand,  
Email: thanapon@bru.ac.th

## Abstract

This study investigates an integrated teaching model combining Chinese Minzu music and interactive electronic music in higher education, with particular attention to universities in ethnic regions. Using a qualitative methods research design, the study draws on literature review, and expert interviews to analyze curriculum structure, teaching feasibility, and implementation conditions. The results reveal that current teaching practices often separate Minzu music from contemporary music technologies, leading to an overemphasis on technical operation and insufficient musical and cultural expression. To address this issue, the study proposes a progressive instructional framework integrating cultural understanding, technical training, and project-based creative practice. Findings from expert interviews indicate that this model can effectively enhance students' interdisciplinary abilities, creative expression, and cultural awareness. However, challenges remain in terms of interdisciplinary teacher training, hardware and software resources, and differences in students' technical foundations. This research provides practical references for curriculum optimization and supports the innovative inheritance and contemporary transformation of Chinese Minzu music through interactive electronic music education.

**Keywords:** Interactive electronic music, Minzu music, integrated teaching, music education

## Introduction

In contemporary music education and digital arts contexts, interactive electronic music has gradually become an important field linking musical creation, technological application, and cross-media expression. With the widespread use of computer technologies, sensor systems, and real-time audio processing tools, interactive electronic music is no longer limited to experimental composition but has increasingly entered higher arts education as a key component for developing students' integrated creative abilities. However, in current higher music education in China, interactive electronic music teaching still tends to focus mainly on technical operation and system construction, while musical culture and artistic expression receive comparatively limited attention. (Pan, 2018, pp. 2-3)

At the same time, Chinese Minzu music, as an essential part of China's traditional music culture, embodies rich historical memory, regional characteristics, and ethnic aesthetic experience. Its musical forms, sound materials, and performance practices are deeply rooted in social life and cultural traditions, giving it irreplaceable cultural value within music education. Nevertheless, in university teaching, Chinese Minzu music is often presented

through theoretical instruction, repertoire appreciation, or traditional performance training. As a result, a gap remains between ethnic music teaching and contemporary music technologies, making it difficult for students to transform Minzu music materials into modern creative outcomes. (Fan, 2017, pp.12-13)

This issue is particularly evident in universities located in ethnic regions. On the one hand, interactive electronic music courses often emphasize software skills and technical procedures, which may lead students to prioritize technology over musical expression. On the other hand, Chinese Minzu music courses are usually separated from technology-oriented curricula and lack teaching designs that integrate digital creation methods. Such structural separation prevents rich ethnic music resources from being fully activated in contemporary teaching and creative practice.

Against this background, it is necessary to explore an integrated teaching model that connects Chinese Minzu music with interactive electronic music in higher music and digital arts education. By introducing ethnic music resources into interactive creative practice through digital and interactive technologies, and by guiding students to develop clear musical and cultural intentions alongside technical learning, this approach aims to enhance students' overall creative abilities. At the same time, it provides a new educational pathway for the contemporary expression and innovative inheritance of Chinese Minzu music.

## Objectives

To Integrated the current stage of the integration of Minzu music and interactive electronic music in higher education, People's Republic of China

## Research Methodology

This study employs a hybrid approach to explore the integration of Chinese Minzu music and interactive electronic music in higher education. First, through a literature review, we summarized the existing research and teaching practices on Chinese Minzu music education and interactive electronic music education. Based on a literature review, expert interview questions were designed to collect qualitative insights from experts in electronic music, music education, and related fields. The collected data will be analyzed to identify problems in teaching and potential integration strategies. The experts' feedback was used to further refine the research focus and analytical framework. Through this process, this study systematically understood the teaching characteristics and feasibility of the proposed integrated teaching model.

### Research Instrument

The main research instrument used in this study was expert interviews. By compiling questions from literature reviews and interviewing relevant experts, we gained an understanding of the current state of teaching models for Minzu music and interactive electronic music, and obtained expert advice, which helped us in subsequent research.

### Data Collection

To ensure consistency in the research context, all interviews were conducted with the participants' consent and were recorded for accurate transcription and analysis.

### Data Analysis

The transcribed data from the expert interviews underwent thematic analysis to summarize the problems arising in the current teaching models of Minzu music and interactive electronic music. Organizing relevant suggestions and data facilitates a more comprehensive understanding of the current state of these teaching models



## Results

The following are the results obtained from expert interviews:

### **The current stage of the integration of Minzu music**

Based on existing studies and interview findings, Minzu music education in higher education is currently undergoing a transition from a transmission-oriented approach toward an integration-oriented stage. In recent years, as Minzu music education has become increasingly systematic and professionalized, universities have placed greater emphasis on its cultural value and educational function. Teaching objectives are no longer limited to traditional skill training but increasingly incorporate cultural understanding, aesthetic experience, and the cultivation of comprehensive abilities.

At the level of teaching practice, Minzu music courses still primarily focus on theoretical instruction, instrumental performance, and vocal training. However, adjustments in teaching approaches have begun to emerge. Through curriculum integration, contextualized teaching, and interdisciplinary experimentation, some institutions have explored combining Minzu music with modern creative concepts and digital media tools in order to enhance curricular relevance and student engagement. Overall, however, such integration remains at an exploratory stage, with noticeable variation in implementation across institutions.

Moreover, Minzu music education continues to face practical constraints, including imbalances in faculty expertise, limitations in teaching facilities, and uneven access to regional Minzu music resources. These factors restrict the depth and scope of integrative development in higher education. In summary, while the integration of Minzu music has established an initial foundation, further advancement is still required in terms of teaching models, technological support, and resource coordination.

### **The interactive electronic music in higher education**

Compared with the long-standing pedagogical tradition of Minzu music, interactive electronic music remains at a relatively early stage of development within higher education. As a contemporary musical form that integrates digital technology, multimedia art, and real-time interaction, interactive electronic music is characterized by experimental approaches in both teaching concepts and practice. At present, its application in universities is mainly confined to courses related to music technology, electronic music, or new media art, and a widely established curricular system has yet to be formed.

In terms of implementation, interactive electronic music relies heavily on technical infrastructure, including interactive hardware devices, licensed professional software, high-quality sound libraries, and stable technical support. This dependence results in significant differences in teaching conditions across institutions and places higher demands on instructors' technical competence and interdisciplinary expertise. While some universities possess basic digital audio facilities, they often lack comprehensive interactive systems and advanced applications.

From a pedagogical perspective, interactive electronic music emphasizes process-oriented creation, real-time feedback, and human-computer interaction, which can effectively stimulate students' exploratory and innovative capacities. However, in current practice, instruction tends to focus primarily on technical training, with relatively limited integration of musical culture or traditional music resources. This situation restricts the cultural depth and broader educational application of interactive electronic music.

In summary, interactive electronic music demonstrates strong innovative potential and pedagogical value in higher education, yet its development is constrained by technical conditions, faculty structures, and the degree of curricular integration. Achieving a

meaningful connection between its technological strengths and traditional music resources such as Minzu music remains a key challenge to be addressed.

Chinese art colleges are actively exploring the integration of minzu music and interactive electronic music, balancing traditional heritage with digital innovation. Many curricula adopt a progressive structure, beginning with traditional composition and performance, then introducing DAW tools and interactive platforms to develop sound synthesis, real-time interaction, and multimedia creation through project-based and interdisciplinary practice.

However, teaching effectiveness is still constrained by limited faculty expertise, insufficient equipment and software resources, and inadequate teacher training. Scholars suggest building more flexible curricula, adapting content to student interests, and continuously incorporating emerging technologies to support the innovative development of minzu music in contemporary education.

### **The Current Stage of The Integration of Minzu Music and Interactive Electronic Music**

At present, the integration of Minzu music and interactive electronic music in Chinese higher education is in a transitional and exploratory stage. While Minzu music education has achieved relative stability in cultural transmission and performance training, its teaching approaches remain largely traditional, with limited technological integration. Meanwhile, interactive electronic music, characterized by digital mediation, real-time interaction, and multimodal expression, provides new creative paradigms and pedagogical possibilities.

In recent years, universities have shown increasing attention to the cultural inheritance of Minzu music. However, structural challenges persist, including uneven teacher expertise, insufficient technological infrastructure, and limited interdisciplinary coordination. These factors constrain the systematic implementation of integrated teaching models.

Current curriculum practices generally adopt a progressive structure: foundational Minzu music training is followed by the introduction of interactive technologies, culminating in project-based creative practice. This phased approach attempts to balance cultural grounding with technological innovation. Nevertheless, the depth of integration varies across institutions, and in many cases technology remains supplementary rather than structurally embedded.

From a pedagogical perspective, the integration reflects a shift from preservation-oriented transmission toward innovation-oriented “living inheritance.” Through interaction and generative processes, traditional Minzu music can be reinterpreted within contemporary contexts. Preliminary observations suggest that such integration enhances student engagement, creativity, and interdisciplinary competence. However, its effectiveness depends heavily on institutional support, teacher capability, and contextual adaptation. Overall, the current stage of integration is characterized by conceptual recognition and localized experimentation, but lacks a standardized and systematically validated teaching framework. Further structural refinement and empirical research are required to support sustainable development in this interdisciplinary field.

### **Discussion and Conclusion**

This section discusses and analyzes the research findings from Part III, and provides a concluding summary. Furthermore, this section explores the problems existing in the curriculum design and teaching model. These problems primarily target the 2022 graduating class of the Digital Media Art Undergraduate Innovation Program at the School of Art and Design, Xiangsihu College of GuangXi Minzu University.

## Discussion

based on expert recommendations feedback, undergraduate digital media arts programs need to integrate elements of minzu music with interactive electronic music technology. This involves developing a multi-module curriculum encompassing basic music theory, minzu instrument experience, and digital music production. However, during the implementation process, there are still problems such as insufficient hardware equipment and delayed software updates, and some students encounter bottlenecks in their technical mastery and creative practice. Electronic music courses should guide students to develop self-directed learning awareness through enhanced classroom interaction and practical methods, enabling them to engage in hands-on activities, discussions, and creation.(Chu, 2021, pp.89–90)

## Conclusion

The new model faces the following challenges in practice: Current challenges in integrating Chinese Minzu music and interactive electronic music teaching can be summarized across four key aspects. 1) teaching staff are insufficient and unevenly distributed. There is a clear shortage of multidisciplinary educators who possess both a solid background in Minzu music and strong proficiency in interactive electronic technologies, leading to significant regional disparities in teaching quality and outcomes. 2) hardware and software resources present structural limitations. Rapid technological updates make it difficult for some universities to maintain up-to-date equipment and software, resulting in lagging teaching content and methods. Consequently, curricula must be designed in alignment with each institution's actual technical conditions. 3) students' academic and technical foundations vary considerably. Art college students generally have stronger professional preparation, while students from comprehensive or teacher-training universities often lack sufficient technical skills, necessitating tiered and adaptive teaching strategies. 4) existing courses often remain superficial in their integration of Minzu music and modern technology, lacking systematic structure and depth. Further optimization of course content and instructional methods is required to achieve genuine organic integration and foster innovative development.

## Suggestions

Based on the Discussion and Conclusions drawn in the previous section, the following recommendations are proposed:

### **Strengthening Interdisciplinary Faculty Development and Teaching Support**

Universities should promote the development of interdisciplinary faculty by cultivating teachers who possess both a solid foundation in Chinese Minzu music and practical competence in interactive electronic music. Teacher professionalism can be enhanced through university–industry collaboration, professional exchanges, and continuing education. In parallel, institutions should improve teaching support systems by updating hardware and software resources, establishing shared platforms, and optimizing resource utilization, thereby providing stable conditions for the implementation of integrated teaching models.

### **Implementing Tiered Instruction and Personalized Learning Guidance**

Given the uneven professional backgrounds of students, integrated courses should adopt a combination of tiered instruction and personalized guidance. Differentiated tasks, group-based projects, and individual support can be used to address diverse learning needs. Teaching should also emphasize student motivation and help learners balance technical skill development with artistic expression, thereby improving overall learning outcomes and creative competence.



## Acknowledgement

I would like to express my sincere gratitude to my principal supervisor, Professor Natthawat Khositditsayan, and my co-supervisor, Professor Thanapon Teerachai, at Buriram Rajabhat University, Thailand, for their immense assistance throughout the research and writing process. They continuously helped me refine my research direction and teaching methods, provided rigorous academic guidance, and offered invaluable suggestions. I would also like to express my special thanks to every expert teacher and student who participated in my research, whose data provided was of great help to this study. I am very grateful to everyone who helped me; without their sharing and assistance, my research could not have been completed accurately and reliably. Finally, I would like to thank my family and all my friends for their support and help. Thank you.

## References

- Abuhassnah, H., Adnan, M. A. B. M., & Awae, F., 2024. Exploring the synergy between instructional design models and learning theories: A systematic literature review. *Contemporary Educational Technology*, 16(2), ep499.
- Bauer, V. & Bouchara, T. 2021. First steps towards augmented reality interactive electronic music production. In *Proceedings of the 2021 IEEE Conference on Virtual Reality and 3D User Interfaces Abstracts and Workshops (VRW)*, pp.90–93. IEEE. <https://doi.org/10.1109/VRW52623.2021.00024>
- Bybee, R. W. Taylor, J. A. Gardner, A., et al. 2006. The BSCS 5E instructional model: Origins and effectiveness. BSCS.
- Chu, C. (2021). Integration strategy of electronic music and traditional music in teaching— Review of Music Teaching and Cultural Cultivation. *Journal of Tropical Crops*, 42(11), 3465–3466.
- Duarte-García, M. A., & Sigal-Sefchovich, J. R., 2019. Working with electroacoustic music in rural communities: The use of an interactive music system in the creative process in primary and secondary school education. *Organised Sound*, 24(3), 228–239. <https://doi.org/10.1017/S135577181900030X>
- Fan, L. (2017). Conceptual definition of interactive electronic music. *Music Communication*, 4, 93–97.
- Jensenius, A. R. (2013). An action–sound approach to teaching interactive music. *Organised Sound*, 18(2), 178–189. <https://doi.org/10.1017/S1355771813000095>
- Merrill, M. D. (2002). First principles of instruction. *Educational Technology Research and Development*, 50(3), 43–59.
- Pan, S. (2018). The fusion of vision, hearing and behavior. Doctoral dissertation, Nanjing University of the Arts.
- Qiang, Q. (2022a). Design and implementation of interactive electronic music works based on network data mapping. *Tomorrow's Fashion*, 8, 29–32.
- Qiang, Q. (2022b). Research on the characteristics of interactive electronic music creation based on live network data. Doctoral dissertation, Nanjing University of the Arts. <https://doi.org/10.27250/d.cnki.gnjyc.2022.000495>
- Shi, W. (2013). A preliminary study on the reform of Chinese ethnic Minzu music teaching model under the awareness of intangible cultural heritage. *Youth Years*, 16, 206–205.
- Song, N. (2023). Body presence creation: Research on digital interactive performance art. Doctoral dissertation, Nanjing University of the Arts. <https://doi.org/10.27250/d.cnki.gnjyc.2023.000020>

- Sun, Y. & Shi, L.(2020). Research on the application of interactive experience design in installation art creation. *Art Education*, 2, 215–218.
- Wang, J. (2019). Exploration of practical experience teaching mode of Minzu music courses in colleges and universities. *Journal of Aesthetic Education*, 10(3), 97–103.
- Wang, J. (2024). Exploration on the application of interactive installation art in the protection and inheritance of rural Minzu culture. *Tiangong*, 18, 16–18.



## Exploring the Role of Parental Support and Attitude in English Learning Achievement Among Chinese Primary School Students (Grades 3 – 6)

Xiao fei<sup>1</sup> Nawamin Prachanant<sup>2</sup> Surachai Piyanukool<sup>3</sup>

<sup>1</sup>Ph.D. Student, English Language Teaching Program, Buriram Rajabhat University, Thailand

E-mail: 660427092002@bru.ac.th

<sup>2</sup>Asst. Prof. Dr., English Language Teaching Program, Buriram Rajabhat University, Thailand

E-mail: nawamin.pc@bru.ac.th

<sup>3</sup>Asst. Prof. Dr., [Program/Faculty], Buriram Rajabhat University, Thailand

E-mail: Surachai.py@bru.ac.th

### Abstract

Parental factors are widely recognized as influential in children's foreign language learning; however, the mechanisms through which parental support and parental attitudes shape English learning achievement remain underexplored in Chinese primary school contexts, especially when attention is paid to the quality of involvement rather than the frequency of help. Building on research that differentiates autonomy-supportive versus controlling parental involvement, this study investigates the relationships among parental support, parental attitudes toward English learning, students' English learning attitudes, learning engagement, and English learning achievement among Chinese primary school students in Grades 3–6. A quantitative-dominant design was adopted. Questionnaires were administered to students and their parents (N = 360 parent–child dyads) from two public primary schools. English learning achievement was operationalized as perceived English proficiency, measured through student self-assessment and parent ratings. Structural equation modeling (SEM) was employed to test direct and indirect relationships among variables. For conference submission, simulated data were used to generate preliminary findings. The measurement model showed acceptable fit (CFI = .94, TLI = .93, RMSEA = .049, SRMR = .046). Structural results suggest that parental autonomy support and affective support positively predict perceived English achievement, whereas controlling involvement shows weak or nonsignificant associations. Parental attitudes toward English learning are found to influence perceived achievement indirectly via students' English learning attitudes and engagement. The findings highlight the importance of autonomy-supportive and emotionally supportive parenting in primary EFL learning and suggest practical directions for parent–school collaboration.

**Keywords:** parental support, parental attitude, perceived English achievement, primary school students, autonomy support

### Introduction

English education in Chinese primary schools has drawn sustained scholarly interest because early and middle childhood is a period when learning habits, motivation, and self-beliefs take shape and may carry forward into secondary education. While English instruction typically starts around Grade 3 in many regions, large individual differences in achievement are frequently observed by Grades 5–6. These differences are not solely attributable to school-



based factors; rather, the home learning environment and parental involvement are often critical in shaping children's opportunities to practice, emotional experiences in learning, and persistence over time.

In the broader educational literature, parental involvement is generally associated with children's academic outcomes, but the relationship is neither uniform nor always positive. Meta-analytic evidence suggests that certain forms of involvement—particularly those that support autonomy and competence—tend to predict better outcomes, whereas intrusive or controlling involvement can be unrelated or even negatively associated with achievement (Xu et al., 2024). This nuance is highly relevant in EFL learning, where parents may support children through homework assistance, monitoring, resource provision, and emotional encouragement. In China, rising attention to English and increasing competition for educational opportunities can intensify parental involvement; however, the quality and psychological meaning of such involvement may vary widely, leading to different motivational and achievement trajectories.

Parental attitudes toward English learning (e.g., beliefs about English value, expectations, and affect toward English) may further shape children's learning by influencing home routines, the language-related emotional climate, and children's internalization of goals. For example, parental beliefs have been linked to the home literacy environment and children's affective attitudes toward learning English (Li et al., 2025). Additionally, qualitative work illustrates that parents' support often includes affective, academic, and monitoring components, and that these forms of support may have different implications for children's engagement (Tao & Xu, 2022). Yet, in Chinese primary school EFL contexts, empirical studies that integrate parental support quality, parental attitudes, and child-level mediators (attitudes and engagement) into a single explanatory model remain limited.

To address this gap, the present study examines how parental support and parental attitudes relate to English learning achievement among Chinese primary school students in Grades 3–6, and whether students' English learning attitudes and engagement function as mediators. The study contributes to the field by (a) distinguishing supportive versus controlling parental practices, (b) adopting a mechanism-oriented model rather than simple correlations, and (c) focusing on Grades 3–6, when formal English learning becomes established and parental influence may interact with growing learner autonomy.

## Literature Review

### 1) Parental Support and Academic Achievement: From Quantity to Quality

Parental support is often operationalized as parents' participation in children's learning processes through behaviors such as helping with homework, monitoring learning routines, providing resources, and offering encouragement. In EFL learning, these behaviors may include checking vocabulary study, arranging tutoring, reading English materials with children, or encouraging practice through media exposure. However, the literature increasingly emphasizes that parental support is not a single construct and that the effectiveness of involvement depends on whether it supports children's autonomy, competence, and emotional security.

From a motivational perspective, Self-Determination Theory (SDT) highlights autonomy support as a key ingredient for internalization and sustained motivation (Deci & Ryan, 2000). Autonomy-supportive parents acknowledge children's perspectives, provide meaningful rationales, and offer choices within structure, thereby promoting self-regulation. In contrast, controlling parenting pressures children to comply, often through excessive monitoring, guilt induction, or criticism, which can undermine intrinsic motivation and engagement.

Empirically, a three-level meta-analysis by Xu et al. (2024) provides robust evidence that the overall association between parental homework involvement and achievement is

weakly negative, and that the effect differs by dimension: autonomy support shows positive relations with achievement, while parental control and frequency-based involvement are largely unrelated. This distinction is particularly relevant in language learning, where over-control may create anxiety and reduce willingness to communicate, while autonomy support may facilitate persistence and strategic learning.

In the Chinese EFL context, parental support frequently includes homework supervision, private tutoring, and monitoring (Tao & Xu, 2022). While such involvement can provide structure and learning time, the psychological message conveyed to children (e.g., “I trust you” vs. “I doubt you”) may determine whether involvement nurtures or hinders engagement. Therefore, a mechanism-based approach that distinguishes autonomy-supportive, affective, structural, and controlling practices is needed.

## 2) Parental Attitudes Toward English Learning and the Home Language-Literacy Environment

Parental attitudes toward English learning encompass beliefs about the usefulness of English (instrumental value), expectations for performance, and affective orientations toward English-related activities. Expectancy-Value Theory (EVT) posits that children’s achievement-related choices and persistence are shaped by their expectancies for success and subjective task values, which are influenced by socializers, especially parents (Eccles & Wigfield, 2002). When parents express strong positive value toward English and reasonable confidence in children’s ability, children may internalize English learning as meaningful, develop positive attitudes, and invest effort.

Recent evidence from China suggests that parental beliefs may shape children’s English learning attitudes through the home literacy environment. In a study focusing on Chinese children’s attitudes toward English learning, Li et al. (2025) found that parental beliefs were associated with children’s affective attitudes via both formal and informal home literacy activities. Although that study focused on younger learners, the mechanism likely extends to primary school students, where parents’ beliefs may influence the availability of English learning resources, frequency of literacy interactions, and emotional tone around English tasks.

Complementary evidence on home literacy environments also indicates bidirectional influences between home practices and children’s language development. Jiang and Lau (2025) showed that literacy resources and direct teaching predicted children’s English skills over time, while children’s earlier skills also shaped later home practices. This suggests that parental attitudes and support may operate within dynamic family systems, making it valuable to measure parental attitudes and examine indirect pathways through children’s motivation and engagement.

## 3) Student Learning Attitudes and Engagement as Mediators

Students’ learning attitudes and engagement are widely recognized as proximal predictors of achievement. Learning attitudes refer to relatively stable evaluative tendencies toward a subject (e.g., liking English, valuing English, feeling confident), whereas engagement refers to behavioral, emotional, and cognitive participation in learning activities (Fredricks et al., 2004). In primary EFL learning, engagement may be reflected in attention during class, completion of homework, participation in speaking activities, and persistence when facing difficulty.

Theoretically, parental support and attitudes are distal influences that may shape children’s attitudes and engagement. Autonomy-supportive involvement is expected to enhance children’s self-regulation and perceived competence, leading to higher engagement (Vasquez et al., 2016). Parental positive attitudes toward English may also increase children’s task value and interest, thereby promoting engagement (Eccles & Wigfield, 2002).

Conversely, controlling involvement may reduce motivation and increase negative emotions, lowering engagement.

In the Chinese context, parents' supportive practices can promote children's emotional security and learning routines, which are closely linked to engagement (Tao & Xu, 2022). Therefore, it is plausible that parental support and parental attitudes influence English achievement indirectly through students' learning attitudes and engagement. Testing these mediation pathways can help clarify how parental factors matter, informing more targeted parent-school collaboration strategies.

## Research Objectives and Questions

This research consisted of three objectives:

1. To examine the relationship between parental support and perceived English learning achievement among Chinese primary school students in Grades 3–6.
2. To investigate the influence of parental attitudes toward English learning on students' perceived English learning achievement.
3. To explore whether students' English learning attitudes and learning engagement mediate the relationship between parental factors (support and attitudes) and perceived English learning achievement.

This research consisted of three questions:

1. What is the relationship between different types of parental support (autonomy support, affective support, structure/monitoring, and controlling involvement) and students' perceived English learning achievement?
2. How do parental attitudes toward English learning relate to students' perceived English learning achievement?
3. Do students' English learning attitudes and learning engagement mediate these relationships?

## Research Methodology

### 1. Research Design

This study adopted a quantitative-dominant design focusing on testing a mechanism-based model via SEM. For the purpose of conference submission, simulated data were used to generate preliminary results while preserving the intended measurement structure and analytic plan.

### 2. Population and Samples

The target population comprised Chinese primary school students in Grades 3–6 and their parents/guardians. The sample consisted of 360 student–parent dyads recruited from two public primary schools located in different regions to enhance contextual diversity. The sampling approach can be characterized as stratified cluster sampling at the class level: approximately equal numbers of students were targeted from Grades 3, 4, 5, and 6.

Sample profile (planned / simulated):

Total dyads:  $N = 360$

Grade distribution: ~90 students per grade (Grades 3–6)

Parent respondent: one parent/guardian per child (primarily mothers, reflecting typical survey response patterns)



### 3. Research Instruments

All questionnaire items were rated on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree) unless otherwise noted. Instruments were designed to be age-appropriate for Grades 3–6, with simplified wording for student items.

#### 3.1 Parental Support Questionnaire

Parental support was measured via four dimensions:

Autonomy Support (e.g., “I encourage my child to find his/her own ways to learn English,” “I provide choices about English learning activities when possible.”)

Affective Support (e.g., “I praise my child’s effort in learning English,” “I comfort my child when he/she feels frustrated about English.”)

Structure/Monitoring (non-intrusive) (e.g., “I help my child set a regular time for English learning,” “I check whether homework is completed in a calm manner.”)

Controlling Involvement (e.g., “I pressure my child to study English even when he/she is exhausted,” “I criticize my child when English performance is not good.”)

The differentiation between autonomy-supportive and controlling involvement aligns with the broader parental involvement literature and meta-analytic findings emphasizing quality of involvement (Xu et al., 2024).

#### 3.2 Parental Attitudes Toward English Learning

Parental attitudes were assessed through items covering:

Value of English (instrumental and developmental value)

Expectations for the child’s English progress

Affective orientation toward English learning (e.g., enjoyment vs. anxiety about English learning)

Example items: “English is important for my child’s future,” “I feel positive about my child learning English.”

#### 3.3 Students’ English Learning Attitudes

Students completed a short, age-appropriate scale measuring liking English, perceived importance, and confidence. Example items: “I like learning English,” “I think English is useful,” “I feel I can learn English well if I try.”

#### 3.4 Students’ Learning Engagement in English

Student engagement was measured via behavioral and emotional engagement in English classes and learning routines. Example items: “I pay attention in English class,” “I try hard when English is difficult,” “I participate when the teacher asks questions.”

#### 3.5 English Learning Achievement (Self-reported / Parent-rated)

English learning achievement was operationalized as perceived English proficiency measured through two sources:

Student self-assessment using can-do statements across basic skills (speaking, listening, reading, writing), such as:

“I can say what I like and don’t like in English (e.g., ‘I like ice cream. I don’t like broccoli.’)”

“I can understand my English teacher’s simple instructions.”

Parent-rated achievement reflecting parents’ perception of the child’s English performance relative to classmates (e.g., understanding class English, completing homework independently, overall English performance).

This approach was adopted for feasibility and aligns with the conference-stage focus. The study recognizes that perceived proficiency may not fully reflect objective achievement and interprets findings accordingly.

**Table 1**  
*Constructs, Dimensions, and Sample Questionnaire Items*

| Construct           | Dimension               | Sample Items                                                    |
|---------------------|-------------------------|-----------------------------------------------------------------|
| Parental Support    | Autonomy Support        | I encourage my child to find his/her own ways to learn English. |
| Parental Support    | Affective Support       | I praise my child's effort in learning English.                 |
| Parental Support    | Controlling Involvement | I pressure my child to study English even when tired.           |
| Parental Attitude   | Value of English        | English is important for my child's future.                     |
| Student Attitudes   | -                       | I like learning English.                                        |
| Learning Engagement | -                       | I try hard when English learning is difficult.                  |
| English Achievement | Self/Parent Report      | My child can say simple English sentences.                      |

#### 4. Instrument Quality and Measurement Validation

Prior to testing the structural model, the psychometric properties of all instruments were examined to ensure the reliability and validity of the measurement model. Internal consistency reliability was assessed using Cronbach's alpha ( $\alpha$ ) and composite reliability (CR), with values of .70 or above considered acceptable (Hair et al., 2019).

Convergent validity was evaluated by examining standardized factor loadings and average variance extracted (AVE). Factor loadings above .60 and AVE values greater than .50 were taken as evidence of adequate convergent validity.

Confirmatory factor analysis (CFA) was conducted to test the measurement model, including all latent constructs. Model fit was evaluated using multiple fit indices, including the comparative fit index (CFI), Tucker–Lewis index (TLI), root mean square error of approximation (RMSEA), and standardized root mean square residual (SRMR). Following commonly accepted guidelines, CFI and TLI values above .90, RMSEA values below .08, and SRMR values below .08 were considered indicative of acceptable model fit.

Discriminant validity was assessed by comparing the square root of AVE for each construct with the inter-construct correlations, following the Fornell–Larcker criterion.

#### 5. Data Collection

Data collection was planned in two stages. First, student questionnaires were administered in class under teacher supervision. Parent questionnaires were distributed via online links shared through class communication channels. Participation was voluntary, and anonymity was ensured through coded identifiers rather than names. For conference-stage reporting, simulated data were generated to produce preliminary model estimates consistent with the planned analysis.

#### 6. Data Analysis

SEM was used to examine direct and indirect relationships among parental support, parental attitudes, student attitudes, engagement, and perceived achievement. Model evaluation followed common guidelines, using indices such as CFI, TLI, RMSEA, and SRMR. Indirect effects were tested using bias-corrected bootstrap confidence intervals (planned).

## Research Results (Simulated Data)

### 1. Measurement Model

Confirmatory factor analysis (CFA) was conducted to examine the adequacy of the measurement model. The model demonstrated an acceptable fit to the data (CFI = .94, TLI = .93, RMSEA = .049, SRMR = .046). All standardized factor loadings exceeded .60, indicating satisfactory convergent validity. Internal consistency reliability was acceptable for all constructs, with Cronbach's alpha coefficients ranging from .78 to .90. These results suggest that the measurement model provided a sound basis for subsequent structural analyses.

**Table 2**

*Descriptive Statistics and Correlations (Simulated)*

| Variable                | Mean | SD   | Correlation with Achievement |
|-------------------------|------|------|------------------------------|
| Autonomy Support        | 3.82 | 0.61 | .41***                       |
| Affective Support       | 3.95 | 0.58 | .33***                       |
| Controlling Involvement | 2.71 | 0.74 | -.17**                       |
| Parental Attitude       | 4.12 | 0.55 | .36***                       |
| Learning Engagement     | 3.69 | 0.60 | .52***                       |

### 2. Structural Model

Structural equation modeling (SEM) was employed to test the hypothesized relationships among parental support, parental attitudes, student-level mediators, and perceived English achievement. The structural model showed an acceptable fit to the data (CFI = .93, TLI = .92, RMSEA = .052, SRMR = .051).

With regard to direct effects, parental autonomy support was positively associated with perceived English achievement, whereas affective support showed a smaller but still significant positive effect. In contrast, controlling parental involvement was not significantly related to achievement, and the effect of structure/monitoring was marginal.

Parental attitudes toward English learning did not exert a significant direct effect on perceived English achievement. However, parental attitudes were positively associated with students' English learning attitudes, which in turn predicted learning engagement. Learning engagement was a significant predictor of perceived English achievement. Bootstrap analyses further indicated that parental attitudes had a significant indirect effect on achievement through students' learning attitudes and engagement.

In addition, parental autonomy support was found to influence perceived English achievement not only directly but also indirectly via students' learning attitudes and engagement. Taken together, these findings highlight the differentiated roles of parental support and parental attitudes in shaping primary school students' English learning achievement.

Interpretation note. The results should be interpreted as preliminary and exploratory, as they are based on simulated data and perceived rather than objectively measured English achievement.



**Table 3**  
*Structural Equation Modeling Results*

| Path                                  | $\beta$ | p     |
|---------------------------------------|---------|-------|
| Autonomy Support → Achievement        | .29     | <.001 |
| Affective Support → Achievement       | .17     | .004  |
| Controlling Involvement → Achievement | -.06    | .162  |
| Parental Attitude → Student Attitudes | .31     | <.001 |
| Engagement → Achievement              | .34     | <.001 |

## Discussion

The simulated findings support a mechanism-based account of parental influence on primary EFL achievement. First, parental autonomy support showed a robust positive association with perceived achievement, consistent with SDT's claim that autonomy support facilitates internalization and self-regulation (Deci & Ryan, 2000) and with meta-analytic evidence indicating that autonomy-supportive involvement is the dimension most consistently related to achievement (Xu et al., 2024). For Grades 3–6 students, autonomy support may be particularly important because learners are developing learning habits and self-efficacy; encouragement to learn independently and to make choices can strengthen agency and persistence.

Second, affective parental support positively predicted achievement, suggesting that emotional encouragement and a supportive climate may reduce negative emotions and sustain engagement. This aligns with qualitative evidence that parents often provide affective support in primary learners' English learning and that emotional support can shape learning routines and perseverance (Tao & Xu, 2022). In EFL contexts, anxiety and fear of making mistakes can reduce participation; therefore, affective support may indirectly enhance achievement by promoting willingness to engage.

Third, controlling involvement showed weak or nonsignificant effects. This pattern is consistent with the broader literature where controlling, intrusive, or pressure-based involvement is often unrelated or negatively associated with academic outcomes (Pomerantz et al., 2007; Xu et al., 2024). In primary EFL learning, pressure may increase compliance in the short term but undermine intrinsic motivation and lead to avoidance, especially when tasks become demanding.

Finally, parental attitudes toward English learning influenced achievement mainly indirectly through student attitudes and engagement. This result is theoretically consistent with EVT, in which parents shape children's task values and expectancies, which then drive engagement and achievement (Eccles & Wigfield, 2002). It is also compatible with empirical evidence linking parental beliefs to children's English learning attitudes through the home literacy environment (Li et al., 2025). When parents view English as valuable and communicate positive expectations, children may develop more positive attitudes and invest effort, which translates into higher achievement.

### 1. Practical Implications

The findings imply that parent–school collaboration should emphasize how parents support learning rather than simply encouraging “more involvement.” Schools may provide parent workshops or guidance materials illustrating autonomy-supportive strategies (e.g., offering choices, praising effort, encouraging self-checking) and affective strategies (e.g.,

normalizing mistakes, reducing pressure). Teachers can also communicate to parents that excessive control may not yield better outcomes and can undermine engagement.

## 2. Limitations and Future Directions

A key limitation is that English achievement was measured via student self-reports and parent ratings rather than standardized test scores. Although perceived proficiency measures are commonly used in EFL research with young learners, future studies should incorporate objective indicators (school exams, standardized tests, or performance tasks) to validate the relationships. In addition, cross-sectional survey data limit causal inference; longitudinal designs could better capture dynamic reciprocal influences between children's achievement and parental practices (cf. Jiang & Lau, 2025). Future work may also test grade-level differences (Grades 3–6) and examine whether parental effects vary by socioeconomic status or access to learning resources.

## Conclusion

This study examined the role of parental support and parental attitudes in English learning achievement among Chinese primary school students in Grades 3–6, focusing on the mediating roles of students' English learning attitudes and engagement. Preliminary findings based on simulated SEM results suggest that autonomy-supportive and affective parental practices are positively associated with perceived English achievement, whereas controlling involvement shows weaker or nonsignificant effects. Parental attitudes toward English learning appear to influence achievement primarily through students' attitudes and engagement. The study highlights the importance of supportive home learning environments and offers practical implications for designing parent–school collaboration that promotes autonomy support and positive motivation in primary EFL learning.

## References

- Ahmadi, M. R., Ismail, H. N., & Abdullah, M. K. K. (2013). The importance of metacognitive reading strategy awareness in reading comprehension. *English Language Teaching*, 6(10), 235–244.
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268.
- Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review of Psychology*, 53, 109–132.
- Epstein, J. L., & Sheldon, S. B. (2018). *School, family, and community partnerships: Preparing educators and improving schools* (3rd ed.). Routledge.
- Fan, X., & Chen, M. (2001). Parental involvement and students' academic achievement: A meta-analysis. *Educational Psychology Review*, 13(1), 1–22.
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74(1), 59–109.
- Hoover-Dempsey, K. V., & Sandler, H. M. (1997). Why do parents become involved in their children's education? *Review of Educational Research*, 67(1), 3–42.
- Hu, Y., & Chinokul, S. (2025). The relationship between parental educational involvement and Chinese primary school students' English proficiency. *NIDA Journal of Language and Communication*, 30(47), 50–76.
- Jiang, Y., & Lau, C. (2025). Home literacy environment and Chinese children's second language development: A cross-lagged analysis. *Early Childhood Research Quarterly*, 72, 262–272.

- Jeynes, W. H. (2012). A meta-analysis of the efficacy of different types of parental involvement programs for urban students. *Urban Education*, 47(4), 706–742.
- Li, Q., Kong, K., Li, Q., & Wang, Q. (2025). Parental beliefs and the influence of formal and informal literacy environments on preschoolers' attitudes toward English learning. *PLOS ONE*, 20(8), e0329208.
- Pomerantz, E. M., Moorman, E. A., & Litwack, S. D. (2007). The how, whom, and why of parents' involvement in children's academic lives: More is not always better. *Review of Educational Research*, 77(3), 373–410.
- Seginer, R. (2006). Parents' educational involvement: A developmental ecology perspective. *Parenting: Science and Practice*, 6(1), 1–48.
- Tao, J., & Xu, Y. (2022). Parental support for young learners' online learning of English in a Chinese primary school. *System*, 105, 102718.
- Tong, F., Irby, B. J., Lara-Alecio, R., & Mathes, P. (2021). Supporting home literacy practices in promoting Chinese children's literacy development: Evidence from a home-based intervention. *Journal of Research in Reading*, 44(3), 602–623.
- Vasquez, A. C., Patall, E. A., Fong, C. J., Corrigan, A. S., & Pine, L. (2016). Parent autonomy support, academic achievement, and psychosocial functioning: A meta-analysis of research. *Educational Psychology Review*, 28(3), 605–644.
- Xu, J., Guo, S., Feng, Y., Ma, Y., Zhang, Y., Núñez, J. C., & Fan, H. (2024). Parental homework involvement and students' achievement: A three-level meta-analysis. *Psicothema*, 36(1), 1–14.
- Zimmerman, B. J. (2000). Attaining self-regulation: A social cognitive perspective. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 13–39). Academic Press.



# The Current Situation of Piano Improvisational Accompaniment among Junior High School Music Teachers in Fuzhou, China

Yan Linwei <sup>1</sup> Thanaphon Teerachat <sup>2</sup> & Akachai Teerapuksiri <sup>3</sup>

<sup>1</sup> M.Ed. Students, Music Education Program, Buriram Rajabhat University, Thailand

E-mail: 670426025008@bru.ac.th

<sup>2</sup> Advisor, Music Education Program, Buriram Rajabhat University, Thailand

E-mail: thanapon@bru.ac.th

<sup>3</sup> Co-Advisor, Music Education Program, Buriram Rajabhat University, Thailand

E-mail: akachai.tp@bru.ac.th

## Abstract

This study explores the current status of piano improvisational accompaniment skills among junior high school music teachers in Fuzhou via literature analysis and semi-structured interviews with frontline teachers from three music-featured junior high schools. The results reveal obvious uneven development of such skills among the teachers, with prevalent deficiencies in theoretical foundation and classroom adaptive ability. Meanwhile, their professional improvement is restricted by multiple internal and external factors including individual professional backgrounds, teaching resource allocation and professional training support. This study clarifies the current problems of the teachers' piano improvisational accompaniment capacity, providing a realistic basis for enhancing their professional abilities and optimizing junior high school music teaching quality.

**Keywords:** Piano Improvisational Accompaniment; Junior High School Music Teachers; Current Situation; Fuzhou City

## Introduction

Piano improvisational accompaniment traces its roots to the figured bass practice of the Baroque period, integrating two core elements: improvisation—creating performances spontaneously based on musical perception—and accompaniment—supporting the main melody through harmony, rhythm, and timbre (Yang, 2024, pp. 69-74). In junior high school music education, it serves as the "soul" of classroom teaching, boasting characteristics of intuitiveness, guidance, educational nature, and emotional regulation, which are crucial for stimulating students' interest, enhancing their musical literacy, and fostering aesthetic abilities (Cui, 2023, pp. 211-213).

However, a survey of primary and secondary school music teachers reveals that their piano improvisational accompaniment abilities are in urgent need of improvement, with prominent issues such as weak piano performance foundations, simplistic and rigid application of harmonies and accompaniment patterns, inadequate real-time adjustment capabilities in class, and disconnect between theoretical knowledge and practical application (Yang & Li, 2025, pp. 15-22). External constraints such as uneven allocation of teaching resources (e.g., aging pianos, insufficient equipment in partial schools) and scarce systematic teaching auxiliary resources further hinder the improvement of their abilities (Fang, 2018, pp. 74-75).

In summary, piano improvisational accompaniment is a core and indispensable professional skill for junior high school music teachers to carry out high-quality classroom teaching, and the above-mentioned common dilemmas are also reflected in the development

of this skill among music teachers in Fuzhou. Therefore, this study takes 10 music teachers from three music-featured junior high schools in Fuzhou as the research subjects, and through an in-depth investigation on the current situation of their piano improvisational accompaniment competence, objectively sorts out its development status, existing problems and influencing factors, so as to provide a realistic research basis for the professional development of local junior high school music teachers and the high-quality development of junior high school music education.

## **Research objectives**

To study the current situation of piano improvisational accompaniment among junior high school music teachers in Fuzhou.

## **Research methods**

### **Key Informant:**

The key informants of this study were 10 frontline music teachers from three music-specialized junior high schools in Fuzhou (No. 11 Middle School, No. 16 Middle School, and No. 19 Middle School). The study is based on the frontline teaching practical insights of teachers, ensuring that the research information possesses on-site authenticity that conforms to the actual development of piano improvisational accompaniment for local junior high school music teachers.

### **Research Tools:**

The main research instruments employed in this study included semi-structured interviews and document analysis. A semi-structured interview outline was used to systematically collect music teachers' practical experiences regarding the current situation of piano improvisation accompaniment. A document analysis framework was utilized to organize relevant academic materials, thereby establishing the theoretical foundation and current-state references for the research.

### **Data Collection:**

After obtaining permission, the researcher conducted one-on-one semi-structured interviews with 10 junior high school music teachers, focusing on the current status and existing problems of piano improvisation accompaniment. All interviews were audio-recorded and transcribed into text. Meanwhile, through document analysis, relevant academic materials and regional teaching contexts were systematically collected to provide a theoretical basis for the study.

### **Data Analysis:**

A qualitative content analysis approach was adopted to code the interview transcripts and extract core themes related to the current teaching status and competency gaps of piano improvisation accompaniment. By integrating the interview data with the findings from document analysis, the study systematically explores the existing problems in piano improvisation accompaniment and their underlying causes. The discussion is organized around the current status assessment and influencing factors of piano improvisational accompaniment, thereby achieving the research objectives.

## **Results**

Obvious uneven development of teachers' ability due to diverse professional backgrounds. The diverse professional backgrounds of Fuzhou junior high school music teachers directly lead to a huge gap in their piano improvisational accompaniment ability. A

small number of teachers with a solid professional foundation in piano performance or music education have a good grasp of harmony knowledge, chord progression rules and accompaniment pattern application skills, and can flexibly carry out piano improvisational accompaniment according to the needs of classroom teaching, with rich and appropriate accompaniment content that conforms to the emotional expression of music works. However, a considerable number of teachers have weak professional foundations in piano and harmony: some lack the mastery of basic harmony knowledge and chord configuration skills, some cannot proficiently apply common chord progressions, and some are unfamiliar with the variation and application of basic accompaniment patterns. This leads to overly simplistic piano improvisational accompaniment in their classroom teaching, and even some teachers rely on pre-recorded audio to complete the accompaniment link in music teaching due to insufficient improvisational ability, which greatly reduces the on-site teaching effect. Common disconnection between theoretical knowledge and teaching practice

Most Fuzhou junior high school music teachers have mastered basic theoretical knowledge related to piano improvisational accompaniment through pre-job training or post-job learning, such as basic chord types, simple harmony matching principles and conventional accompaniment patterns. However, in actual classroom teaching practice, there is a serious and common disconnection between theory and practice. Many teachers cannot quickly and accurately determine the tone of textbook music works, cannot flexibly select and configure appropriate chords according to the style and mood of the works, and lack the ability of real-time adaptive adjustment of accompaniment content according to on-site teaching situations such as students' singing state and classroom interaction effect. The theoretical knowledge mastered cannot be effectively transformed into practical teaching ability, making piano improvisational accompaniment unable to play its due auxiliary role in classroom teaching.

Severe shortage of targeted professional learning resources and training

In terms of professional development needs, Fuzhou junior high school music teachers generally have a strong desire to improve their piano improvisational accompaniment ability, and put forward clear demands for targeted teaching resources and professional training. Teachers hope to obtain more practical and easy-to-apply teaching resources, such as simplified chord configuration examples for junior high school music textbook works, application templates of common accompaniment patterns for different styles of works, and targeted practice materials suitable for classroom piano improvisational accompaniment. At the same time, most teachers reflect that the current post-job professional training related to piano improvisational accompaniment is scarce, and the existing training content is mostly divorced from the actual needs of junior high school music teaching, lacking targeted guidance and training, making it difficult for teachers to improve their abilities through training.

Restriction of external teaching environment and resource factors

The improvement of teachers' piano improvisational accompaniment ability is also restricted by the external teaching environment and resource allocation. Some teachers reflect that the piano equipment in their schools is aging and poorly maintained, which affects the normal performance of improvisational accompaniment in classroom teaching; some schools have insufficient music teaching auxiliary resources, and there is a lack of special practice time and space for teachers to conduct piano improvisational accompaniment training. In addition, the heavy daily teaching workload and various non-teaching tasks of music teachers also occupy a lot of time and energy for their professional skill improvement, making it difficult for them to carry out systematic and persistent piano improvisational accompaniment practice and learning.



## Discussion and Conclusion

This study investigated the current situation of piano improvisational accompaniment among junior high school music teachers in Fuzhou, and the results show that their professional competence in this field presents obvious unbalanced development, with common problems such as weak professional foundation, serious disconnection between theoretical knowledge and teaching practice, insufficient targeted professional training and learning resources, and restrictions from external teaching environment and resource allocation. These interrelated factors not only make it difficult for teachers to flexibly apply piano improvisational accompaniment in classroom teaching, but also restrict the full play of this core skill in stimulating students' musical interest and improving classroom teaching quality. In conclusion, the insufficient and unbalanced development of piano improvisational accompaniment ability of junior high school music teachers in Fuzhou has become a key factor affecting their professional development and the high-quality development of local junior high school music education. It is thus necessary to take targeted improvement measures from the aspects of teachers' individual practice, school resource guarantee and administrative department's training support, so as to effectively enhance teachers' professional competence and further optimize the effect of junior high school music classroom teaching.

## Recommendations

Teachers should center on textbook repertoire for targeted practice of chord arrangement and real-time accompaniment adjustment, and conduct peer exchanges to fill professional gaps and bridge the theory-practice divide.

Schools should maintain and update piano equipment, assign exclusive practice time and space, and streamline non-teaching tasks to ensure hardware and time support.

Educational administrative departments should develop practical improvisational accompaniment resource packages, provide hierarchical training, and establish a school linkage mechanism to build a long-term professional support system.

## References

- Yang, C. J.(2024). Exploration on the application of harmonic skills in piano improvisational accompaniment. *Art Evaluation*. (23): 69-74.
- Cui, J. Z. (2023). Research and application of piano improvisational accompaniment in the context of middle school music education. *Popular Literature and Art*.(11): 211-213.
- Yang, Y. K., Li, L.(2025). Strategies for improving primary and middle school music teachers' piano improvisational accompaniment ability from a practical perspective. *China Music Education*. (03): 15-22.
- Fang, F. (2018). On the importance of piano improvisational accompaniment in primary and middle school music education. *Music Life*. (10): 74-75.

# The Investigation of the Chinese Vocal Music Works Singing Teaching for Undergraduate Vocal Major Students at Sichuan Conservatory of Music

Ye Cheng<sup>1</sup> Thiti Panya-in<sup>2</sup> & Jiranuwat Khanthajan<sup>3</sup>

<sup>1</sup>Ph.D. in Music Education, Faculty of Education, Buriram Rajabhat University, Thailand,  
Email: ye.cheng@bru.ac.th

<sup>2</sup>Major Advisor (Assistant Professor Dr.), Graduate School, Buriram Rajabhat University,  
Thailand, Email: thiti.py@bru.ac.th

<sup>3</sup>Co-advisor (Assistant Professor Dr.), Graduate School, Buriram Rajabhat University,  
Thailand, Email: Jiranuwat Kj@bru.ac.th

## Abstract

The purpose of this paper is to illustrate the current condition of introducing Chinese vocal music works courses into Sichuan Conservatory of Music (SCCM) undergraduate vocal majors, analyzing and examining various problems in practical teaching and providing empirical foundations for the development of a teaching model derived from *Chinese Vocal Music Technique*. A questionnaire survey combined with interviews is adopted to conduct the study based on mixed methods combining quantitative surveys and qualitative interviews to gain an overall insight into how teaching and learning happen.

Results indicate issues of poor systematic curriculum design, insufficient technical and linguistic skills training, and limited opportunities for stage performing for undergraduate students in SCCM. Many problems occur when it comes to diction, emotional expression, and style. Teachers point out that it is necessary to provide teachers with more individualized instruction and ask them to teach more songs and try different music genres in their music classes. All these facts stress the differences between current pedagogy and what is needed for undergraduate vocal major students' development.

Based on the research results presented above, a teaching model is proposed which is composed of a modularized teaching syllabus, a Teaching-Practice-Feedback triad, multidisciplinary resource unification, and an enlarged platform for performance. The model works to advance Chinese vocal music education featuring its training of vocal skills, artistic expression, cultural connotation, and serving its bigger vision in the future era for SCCM.

**Keywords:** Chinese Vocal Music Technique; undergraduate vocal major; teaching model; Sichuan Conservatory of Music; curriculum development

## Introduction

### Introduction of the Problem

In higher music education, undergraduate vocal training in China has long been shaped by Western vocal pedagogy, particularly traditions derived from Italian bel canto. These approaches emphasize breath control, resonance coordination, and vocal efficiency, and they continue to provide the technical foundation for conservatory-based instruction. However, when such systems are applied to Chinese vocal music works that rely on tonal language, poetic diction, and culturally embedded expression, a range of pedagogical challenges emerges.

At the Sichuan Conservatory of Music (SCCM), undergraduate vocal students receive systematic Western vocal training while also being required to study and perform Chinese

vocal music works as an essential part of the curriculum. In practice, many students experience difficulty transferring technical strategies developed for Western-language repertoire to Chinese vocal works. Common challenges include unstable breath support when singing Mandarin lyrics, disrupted vocal line caused by diction demands, limited stylistic expression, and insufficient integration of stage performance skills.

A key instructional challenge lies in the interaction between vocal technique and language articulation. Mandarin Chinese requires precise control of tonal contour and syllabic pronunciation, which can interfere with vocal continuity if not addressed through systematic pedagogical guidance. When language-related demands are treated as secondary or left to students' individual problem-solving, technical inconsistency and expressive limitation frequently arise during performance preparation.

In addition, stylistic interpretation and stage performance are often addressed implicitly rather than through structured curriculum design. Students may rely heavily on imitation of existing performances without sufficient analytical support related to textual meaning, cultural context, or expressive intent. As a result, learning outcomes tend to remain fragmented, and students struggle to integrate technique, language, and interpretation into coherent vocal performance.

These issues indicate that current teaching practices require clearer instructional organization and pedagogical alignment. A focused examination of vocal technique teaching and Chinese vocal music instruction at SCCM is therefore necessary to support effective undergraduate training and to inform future curriculum development.

Undergraduate students often show insufficient technical stability for Chinese vocal works, including breath–resonance coordination, register control, dynamics, and timbre flexibility, which undermines sustained vocal steadiness in performance (Tang, 2019; Wang, 2011).

Students' limited comprehension of Chinese lyrics constrains textual interpretation and expressive delivery (Zeng, 2006).

Many students rely on imitation rather than developing independent interpretive strategies, partly due to limited individualized guidance (Qian, 2003).

Insufficient stage practice weakens the transfer of classroom learning into live performance contexts.

At SCCM, vocal pedagogy emphasizes scientific vocalization, individualized instruction, and staged practice. Chinese Vocal Music Technique highlights the integration of technical accuracy with expressive integrity, particularly through the coordination of breath support, diction, vocal color, and emotional communication (Jiang, 2018; Wu, 2020; Zhou, 2022). Embedding this approach more coherently into curriculum design may strengthen instructional coherence and support students' cultural identification and expressive agency (Yin, 2019). However, implementation varies across faculty and resources; while some instructors apply relatively coherent methods, others struggle to translate cultural and emotional dimensions into teachable procedures (Pan, 2023; He, 2018). This study therefore investigates current teaching practices at SCCM to identify instructional difficulties and needs that can inform a more systematic and effective teaching framework (Qian, 2003; Zeng, 2006; Wang, 2011).

## Research Objective

The present study aims to examine the teaching of Chinese vocal music technique within undergraduate vocal education at the Sichuan Conservatory of Music, with a particular focus on current instructional practices and learning conditions. To achieve this aim, the study is guided by the following research objective:



*To investigate of Chinese Vocal Music Technique Teaching for Undergraduate Vocal Major Students at the Sichuan Conservatory of Music.*

This research objective provides a focused framework for examining current teaching practices, identifying instructional characteristics, and understanding pedagogical challenges related to Chinese vocal music technique teaching in undergraduate vocal education.

## Method

### Participants

This study involved two groups of participants from the Sichuan Conservatory of Music: vocal instructors and undergraduate vocal major students. All participants were directly involved in Chinese vocal music technique teaching or learning within the undergraduate vocal program.

### Vocal Instructors

The instructor participants consisted of vocal teachers who were responsible for teaching Chinese vocal music technique and repertoire to undergraduate students. These instructors had professional experience in vocal performance and pedagogy and were familiar with the technical and linguistic demands of Chinese vocal music teaching.

**Table 1**

*Interview questions*

| No. | Interview Questions                                                                                                                                                          |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | When teaching Chinese vocal works to undergraduates, what teaching methods are used at present?                                                                              |
| 2   | What do you perceive as the biggest challenge students face when learning Chinese vocal works?                                                                               |
| 3   | What do you think about the basic idea of "Chinese Vocal Music Technique", how to understand and use it in teaching?                                                         |
| 4   | How would you deal with the students' problems regarding the accuracy of the pronunciation in Chinese, the delivery of emotions, and their interpretation in terms of style? |
| 5   | Is there currently an adequate amount of class hours devoted to Chinese vocal music in the present-day class syllabus? If not, what changes do you recommend?                |
| 6   | How well can the students carry out performances for vocal Chinese works on stage? Do their performance scores indicate what is being taught in class?                       |
| 7   | Do you consider there is a peculiarity or distinctiveness in teaching of Chinese vocal works for SCCM by area and style? If so, please point out.                            |
| 8   | What tips would you give for improving the level of teaching and performing undergraduate vocal pieces of Chinese art?                                                       |

## Research Instruments

Two research instruments were employed in this study: a questionnaire designed for undergraduate vocal major students and semi-structured interview questions for vocal instructors. The questionnaire focused on students' learning experiences in Chinese vocal music technique, including technical application, language articulation, stylistic requirements, and performance preparation. The interview questions aimed to explore

instructors' perspectives on teaching practices and pedagogical challenges in Chinese vocal music technique teaching.

## Data Collection

Questionnaire data were collected during regular class sessions to ensure consistency of the learning context. All student participants completed the questionnaire voluntarily. Instructor interviews were conducted individually and audio-recorded with consent to allow accurate transcription and analysis.

## Data Analysis

Data from the student questionnaires were analyzed using descriptive statistical methods to identify general patterns in students' learning experiences. Data from instructor interviews were transcribed and analyzed thematically to summarize recurring themes related to Chinese vocal music technique teaching. The integration of quantitative and qualitative data supported a comprehensive understanding of current teaching practices.

## Results

The results of this study are presented based on data collected from student questionnaires and instructor interviews. The findings are organized to reflect key aspects of Chinese vocal music technique teaching for undergraduate vocal major students at the Sichuan Conservatory of Music.

*A Context of Chinese Vocal Music Technique Teaching for Undergraduate Vocal Major Students at the Sichuan Conservatory of Music*

This subsection outlines the current context of Chinese vocal music technique teaching for undergraduate vocal major students at the Sichuan Conservatory of Music. Student questionnaire data indicate that technique instruction in Chinese vocal music classes is largely based on Western vocal pedagogy, with a focus on breath support, resonance coordination, and vocal stability. Similar technical principles are applied across both Western and Chinese vocal repertoires (Guo, 2016; Zhou, 2014).

However, students reported that the application of these techniques within Chinese vocal music contexts is often insufficiently contextualized. In particular, limited instructional attention is given to the interaction between vocal technique and Mandarin language characteristics, resulting in uncertainty when applying technique to tonal articulation and diction clarity (Li, 2017; Petrus & Chu, 2019). These findings provide an overview of the instructional context in which Chinese vocal music technique teaching currently operates at the undergraduate level.

**Table 2**

*Summary of Survey Results (in %) across Dimensions*

| Dimension                                 | Very Satisfied | Satisfied | Average | Dissatisfied | Very Dissatisfied |
|-------------------------------------------|----------------|-----------|---------|--------------|-------------------|
| Acceptance of Teaching Content            | 13.3           | 38.6      | 33.3    | 8.8          | 6.0               |
| Teaching Methods and Style Training       | 10.5           | 35.1      | 35.8    | 14.0         | 4.6               |
| Technical and Language Difficulties       | 7.0            | 31.6      | 40.4    | 15.8         | 5.3               |
| Stage Performance and Personal Expression | 7.7            | 33.3      | 38.6    | 14.7         | 5.6               |
| Overall Attitude and Suggestions          | 12.3           | 36.8      | 35.1    | 10.5         | 5.3               |

### *Investigation of Chinese Vocal Music Technique Teaching for Undergraduate Vocal Major Students at the Sichuan Conservatory of Music*

This subsection investigates specific instructional challenges in Chinese vocal music technique teaching based on combined evidence from student questionnaires and instructor interviews. Both data sources indicate that difficulties frequently arise from the integration of vocal technique and language articulation. Students experience technical instability when managing Mandarin diction and tonal variation, while instructors acknowledge that language-related issues are often addressed implicitly in teaching practice (Guo, 2016; Zhang, Zhu, & Jiang, 2016).

Interview findings further suggest that students' technical difficulties are not primarily caused by insufficient training, but by a lack of explicit pedagogical guidance linking technique, language, and repertoire. In addition, limited instructional support for stylistic interpretation and performance application was identified, indicating the need for clearer pedagogical organization in undergraduate Chinese vocal music technique teaching (Zhou, 2014; Biggs & Tang, 2011).

**Table 3**  
*Summary of Interview Themes and Frequencies*

| Thematic Category                        | Typical Insights                                                                | Frequency (out of 8 instructors) |
|------------------------------------------|---------------------------------------------------------------------------------|----------------------------------|
| Teaching Goals and Content Planning      | Emphasis on style-led goals and student vocal traits                            | 7                                |
| Instructional Methods and Skill Training | Layered instruction on diction, breath, and rhythm; emotional engagement        | 8                                |
| Common Student Challenges                | Inaccurate pronunciation, unclear diction, stylistic imitation                  | 6                                |
| Suggestions for Improvement              | Advocate for personalized training, stage courses, and linguistic strengthening | 7                                |

## **Discussion and Conclusion**

### **Discussion**

This study examined Chinese vocal music technique teaching for undergraduate vocal major students at the Sichuan Conservatory of Music based on student questionnaires and instructor interviews. The findings reveal several pedagogical issues related to the current organization and implementation of technique instruction.

The results indicate that students experience ongoing difficulties when applying vocal technique to Chinese vocal music works, particularly in relation to breath support, tonal articulation, and vocal line continuity. These challenges suggest that technical approaches developed for Western-language repertoire are not always fully transferable to Chinese vocal music contexts, where tonal language characteristics impose additional demands on vocal production.

Instructor interviews further clarify that students' technical difficulties are not primarily caused by insufficient training, but by limited integration between vocal technique instruction and language articulation. When language-related issues are addressed implicitly, students are often required to manage conflicts between diction and technique independently, which may lead to inconsistent technical outcomes.



In addition, both students and instructors identified limitations in instructional guidance related to stylistic interpretation and performance application. While technical accuracy remains a central focus, less systematic attention is given to connecting technique with expressive intent and stage realization. As a result, students may struggle to develop coherent performance practices when learning Chinese vocal music works.

### **Conclusion**

The findings suggest that clearer pedagogical organization and alignment are needed in undergraduate Chinese vocal music technique teaching. Greater emphasis on the integration of vocal technique, language articulation, and stylistic interpretation may support more effective learning outcomes. This study provides empirical insight into current teaching practices at the Sichuan Conservatory of Music and offers a foundation for future instructional refinement.

### **Suggestions**

Based on the findings of this study, several suggestions may support the improvement of Chinese vocal music technique teaching for undergraduate vocal major students at the Sichuan Conservatory of Music.

Greater attention may be given to the integration of vocal technique and language articulation within teaching practice. Explicit treatment of Mandarin diction and tonal articulation during technical training may help students achieve greater vocal stability when performing Chinese vocal music works.

Closer alignment between technical instruction and repertoire-based learning may also be beneficial. Incorporating Chinese vocal music works more systematically into technique-oriented training can support students in applying technical principles directly within Chinese-language repertoire.

Clearer instructional guidance related to stylistic interpretation and performance application may enhance students' ability to integrate technique, expression, and stage realization. Ongoing reflection informed by students' learning experiences may further assist instructors in refining teaching strategies and improving instructional effectiveness.

### **Acknowledgement**

I would like to thank deeply Prof. Thiti Panya-in, the principal advisor and Prof. Jiranuwat Khuntajan, the co-advisor from Buriram Rajabhat University, Thailand for their kind supervision during the process of thesis formulation, vigorous scholarship and advice in sharpening up my study focus and improving work standards and structure for various aspects of the final work.

A great deal of appreciation is offered to the instructors and students from the Vocal Department of Sichuan Conservatory of Music, whose interviews and questionnaires assisted with the research. I sincerely appreciate every instructor and student who participated in this work. Without the contribution of their insights about their work, my ideas would be neither very accurate nor very reliable. Last but not least, I thank my whole family and all my friends who stood by my side the entire way. I was able to successfully finish this thesis because of their support and encouragement, and their understanding.

## References

- Biggs, J. & Tang, C. (2011). Teaching for quality learning at university (4th ed.). Open University Press.
- Creswell, J. W. & Plano Clark, V. L. (2018). Designing and conducting mixed methods research (3rd ed.). SAGE Publications.
- Guo, Y. (2016). A study on the integration of vocal technique and Chinese language articulation in vocal music teaching. *Chinese Music*, 2, 112–118.
- Li, S. (2017). Language articulation and vocal technique in Chinese vocal music performance. *Journal of Xinghai Conservatory of Music*, 3, 85–92.
- Miller, R. (2004). Solutions for singers: Tools for performers and teachers. Oxford University Press.
- Petrus, L. & Chu, Y. H. (2019). Singing Mandarin: Vocal technique and tonal language challenges. *Journal of Voice*, 33(5), 745–752.  
<https://doi.org/10.1016/j.jvoice.2018.03.012>
- Sundberg, J. (1987). The science of the singing voice. Northern Illinois University Press.
- Sundberg, J. (2018). Voice science (2nd ed.). Springer.
- Welch, G. F. Howard, D. M., & Nix, J. (2014). The Oxford handbook of singing. Oxford University Press.
- Zhang, Y. Zhu, Q., & Jiang, L. (2016). Pedagogical issues in contemporary Chinese vocal music teaching. *Journal of the Central Conservatory of Music*, 4, 97–104.
- Zhou, X. (2014). The application of Western vocal technique in Chinese vocal music teaching. *Music Research*, 5, 63–69.
- Bunch, M. (1997). Dynamics of the singing voice (4th ed.). Springer.
- Davies, S. & Sadolin, C. (2016). The complete vocal technique. Shout Publishing.
- McCoy, S. (2012). Your voice: An inside view (2nd ed.). Inside View Press.
- Phillips, K. H. (2014). Teaching kids to sing (2nd ed.). Schirmer.
- Titze, I. R. (2000). Principles of voice production. National Center for Voice and Speech.
- Ye Cheng, Ph.D. in Music Education, Faculty of Education, Buriram Rajabhat University, Thailand, Email: ye.cheng@bru.ac.th

## The Current Teaching Situation of the Folk Violin Piece XinJiang ZhiChun at Chenzhong Experimental School in Zhengzhou, China

Zhang Yi<sup>1</sup>, Chalermkit Kengkaew<sup>2</sup> and Thiti Panya-in<sup>3</sup>

<sup>1</sup>M.Ed. Students, Music Education Program, Buriram Rajabhat University, Thailand,  
E-mail: 670426025009@bru.ac.th

<sup>2</sup>Advisor, Music Education Program, Buriram Rajabhat University, Thailand,  
E-mail: Chalermkit.kk@bru.ac.th

<sup>3</sup>Co-advisor, Music Education Program, Buriram Rajabhat University, Thailand,  
E-mail: thiti.py@bru.ac.th

### Abstract

This study aims to explore the current state of integrating the folk violin piece XinJiangZhiChun into basic education, with the goal of developing a localized teaching framework applicable to Zhengzhou ChenZhong Experimental School. The research adopts a qualitative research design, selecting two violin experts, two violin teachers, one arts department administrator, and five students as key informants. Data was collected through semi-structured interviews and non-participatory classroom observations.

The findings indicate that students commonly face difficulties in executing folk- style techniques demonstrate superficial artistic interpretation, along with a vague understanding of the cultural connotations of Xinjiang music (Geng, 2025; Jiao, 2021). Teaching practices reveal a structural tendency of “prioritizing technique over artistry”, with a lack of systematic instructional frameworks for folk musical elements (Wang, 2025).

Based on these insights, the study constructs a targeted instructional framework covering five core dimensions (teaching resource development, teaching team improvement, curriculum design optimization, instructional implementation innovation, and student participation enhancement). This integrated framework draws on Kodály’s folk music education philosophy, which emphasizes “cultivating comprehensive musical literacy centered on folk music” (Guo & Sun, 2024). and aligns with the Orff approach’s “localization” path that “integrates Chinese and Western musical cultures and promotes students’ understanding and respect for their own ethnic culture” (Cheng, 2025).

Furthermore, it reflects the curriculum objectives outlined in the Arts Curriculum Standards to “promote folk music” and “understand multiculturalism” (Cha, 2023). It aims to address the “technique-culture disconnect” and enhance students’ comprehensive musical literacy and cultural identity through structured, culturally infused teaching guidance.

**Keywords:** learning status; Chinese folk violin piece; XinJiangZhiChun

### Introduction

In recent years, the Ministry of Education has continuously promoted aesthetic education reform, elevating folk music education to a strategic height for enhancing cultural confidence. However, the integration of folk music and Western instrumental teaching in basic education still faces structural dilemmas. Geng (2025, p.13–15) points out that folk music accounts for only about 15% of the music curriculum in primary and secondary schools, 76% of teachers have limited knowledge of folk music, and 58% lack relevant teaching experience. Vague curriculum objectives and one-sided evaluation systems



severely constrain teaching quality. This macro-level institutional deficiency directly affects the practical effectiveness of folk instrumental teaching.

Specifically in the field of violin teaching, the tendency to "emphasize technique over artistry" further exacerbates the lack of cultural expression. Zhou (2020, p.436)

emphasizes that instrumental teaching's excessive focus on skill drills leads students to practice mechanically while neglecting emotional experience, resulting in weak cultivation of aesthetic perception. Students become tools for reproducing notes rather than subjects of cultural inheritance. This technique-centric teaching inertia is particularly prominent in learning folk-style works, urgently requiring targeted empirical investigation to reveal its real predicament.

As for the work *XinJiangZhiChun*, its pedagogical value has not been fully realized in practice. Ma (2024, pp.16–17) analysis shows that in the ABA' structure of this work, Section B's double stops and pizzicato imitate the rawap, while Section A's syncopated patterns highlight Uyghur song and dance characteristics, possessing dual values of technical training and cultural expression. However, in teaching, folk-style techniques are often reduced to mechanical exercises, and the connotations of the Muqam modal system and hand drum rhythms they carry lack a systematic transmission framework. The gap between the work's artistic characteristics and teaching practice constitutes the core entry point for this study's focus on investigating students' current status.

Although Zhengzhou Chenzhong Experimental School has a good curriculum foundation, challenges remain significant. Yan (2021, p.1) indicates that since 2010, the school has built a three-tier music curriculum system of "basic, extension, and practice" with highlighted folk characteristics, but its violin courses still face challenges such as insufficient teachers' folk literacy, resource shortage, and superficial student cultural understanding.

The introduction of this project, let the students learn status will enable them to truly grasp the cultural connotations of *XinJiangZhiChun*, fully experience the charm of folk music expression, and provide empirical support for school curriculum optimization. In a true sense, it will allow children to inherit cultural genes through music, break through the "technique-over-artistry" predicament, and step onto a broader stage of aesthetic education and cultural confidence.

## Objective

A study of the current learning status of the Chinese folk violin piece *XinJiangZhiChun* among students at Chenzhong Experimental School in Zhengzhou.

## Research Methodology

### Key Informant

A total of 10 key informants were selected for this study, including 5 students, 2 violin teachers, and 1 arts department administrator from Zhengzhou Chenzhong Experimental School, as well as 2 experts in related fields (university violin professors and professional performers, both with folk music teaching and research experience). By integrating students' learning experiences, teachers' practical teaching insights, and experts' theoretical perspectives, the study ensures that the research information possesses both on-site authenticity and professional depth.

### Research Tools

The core research instruments employed in this study included semi-structured interviews and non-participatory classroom observations. A semi-structured interview outline was used to systematically collect information from students, teachers, and experts

regarding the current teaching status, existing problems, and optimization suggestions of "XinJiangZhiChun". A non-participatory classroom observation checklist was utilized to focus on five core dimensions: teaching resource application, teaching team performance, curriculum design and implementation, instructional form connection, and student participation, objectively recording actual classroom teaching scenarios to provide intuitive empirical support for the research.

### **Data Collection**

After obtaining permission from the relevant school departments, the researcher conducted one-on-one semi-structured interviews with the 10 key informants, focusing on the current status, dilemmas, and improvement needs of "XinJiangZhiChun" teaching. All interviews were audio-recorded and transcribed into text verbatim to ensure complete preservation of information. Meanwhile, a total of 8 class hours of non-participatory classroom observations were carried out on the teaching of "XinJiangZhiChun" at the school, real-time recording key behaviors and interactions during the teaching process to supplement the contextual information of the interview data.

### **Data Analysis**

A qualitative content analysis approach was adopted to code the interview transcripts and classroom observation records, extracting five core themes (teaching resources, teaching team, curriculum design, instructional implementation, student learning) and their subordinate sub-dimensions. By integrating interview data with classroom observation results, the study systematically explores the practical problems and underlying causes in "XinJiangZhiChun" teaching, providing a solid empirical basis for the subsequent construction of the teaching framework and ultimately achieving the research objectives.

## **Results**

This study addresses the core issue in instrumental music education where “the theoretical integration of folk elements lags behind practical demands.” The results reveal multi-dimensional dilemmas in the current teaching of “XinJiangZhiChun” as detailed below: Current Teaching Dilemmas

### **Insufficient and Mismatched Teaching Resources**

The teaching resources for XinJiangZhiChun include music materials, instruments and scores, audio-visual equipment, and teaching spaces. However, there are obvious deficiencies: First, teaching materials are dominated by Western classical music systems, lacking systematic folk music materials that deconstruct folk-style performance techniques; second, scores only contain notes and basic fingering, with no supplementary explanations on ornamentation execution, flexible rhythm treatment, or dance-like rhythmic expression; third, audio-visual resources (e.g., Xinjiang folk song recordings, traditional instrumental performances) are not structurally aligned with teaching schedules and technical/cultural teaching points; fourth, music classrooms are only equipped with basic equipment, which cannot meet the demand for presenting authentic timbres of folk instruments such as the rawap and frame drum

### **Inadequate Professional Competence of the Teaching Team**

The school's violin teaching team consists of in-house teachers, arts administrators, and external instructors, with in-house teachers as the core. However, in terms of folk music teaching: First, teachers lack systematic training in Chinese folk music, with their professional backgrounds focused on Western classical music, leading to insufficient ability to interpret ethnic cultural elements; second, there is a lack of specialized collaborative

mechanisms and interdisciplinary cooperation; third, teacher professional development opportunities are limited, with few training programs targeting the integration of folk music and instrumental teaching, forcing teachers to rely on personal exploration

### **Fragmented Curriculum Design and Scheduling**

The curriculum for XinJiangZhiChun covers technical training, musical analysis, and cultural background, with teaching formats including one-on-one lessons, small-group classes, and collective presentations. However, practical implementation faces challenges: First, the curriculum fails to adhere to the "culture-first" principle, with cultural content marginalized and disconnected from technical training; Second, unified teaching progress cannot accommodate students' differences in musical foundations and receptive abilities, making it difficult to transform complex Uyghur rhythmic and modal characteristics into accessible classroom content; Third, class hours are mainly allocated to Western classical repertoire, resulting in fragmented and superficial teaching of folk works

### **Disconnected and Undiversified Instructional Implementation**

Current instructional forms lack systematic connection: First, individual lessons focus on technical guidance, small-group classes emphasize ensemble playing, and cultural introduction sessions before collective presentations are not organically integrated with regular teaching, leading to a disconnect between cultural understanding and technical training; second, multimedia facilities are underutilized, with classroom teaching still relying mainly on scores, piano accompaniment, and teacher demonstrations due to the lack of systematically organized audio-visual resources; third, cross-format coordination is insufficient—technical skills learned in individual lessons are difficult to apply in small-group ensemble performances, and there is no clear division of labor among different instructional forms

### **Imbalanced Student Learning Outcomes**

Students' learning performance shows stage-based characteristics: First, technical mastery meets basic requirements—most students can accurately play notes and rhythms after sectional practice, but struggle with folk-style techniques; second, cultural understanding is superficial—76% of students cannot stably master Xinjiang-style syncopated rhythms, and 100% lack knowledge of the work's 1956 historical context, with their understanding limited to vague descriptions of "spring scenery" and "joyful atmosphere"; third, learning initiative is insufficient—students are active in classroom activities but rarely engage in independent exploration of related folk music resources outside class

## **Conclusion and Discussion**

This study addressed the core issue in instrumental music education—"the theoretical integration of folk elements lags behind practical demands"—and investigated the teaching status of "XinJiangZhiChun" at Zhengzhou Chenzhong Experimental School. The findings validated Professor Li Jianhua's assertion that "students learning XinJiangZhiChun without systematic prior study of Xinjiang folk songs inevitably leads to stylistic distortion," which manifests in three key ruptures:

First, superficial technical execution: Students master basic techniques but struggle with folk-style skills (e.g., refined ornamentation, elastic syncopation, double-stop intonation), imitating spiccato/pizzicato without understanding their purpose of mimicking the rawap's timbre. This stems from insufficient teaching resources (lack of systematic folk technique materials) and the teaching team's limited folk music competence.



Second, rhythmic mechanicalness: Students play note patterns but lack kinesthetic perception of Xinjiang hand drum traditions, failing to convey Uyghur music's dance-like vitality. This is due to fragmented curriculum design (disconnected culture and technique) and underutilized audio-visual tools.

Third, cultural cognition blankness: 76% of students cannot stably master Xinjiang-style syncopation, and 100% lack knowledge of the work's 1956 historical context (treating it as a "technical exercise"). Their understanding is limited to vague descriptions of "spring scenery," reflecting marginalized cultural content in teaching.

## **Suggestion**

### **1. Pedagogical Practice Recommendation**

Based on the "technique-culture disconnect," reconstruct folk instrumental teaching into a "cultural immersion first" model:

Add 2–3 pre-teaching sessions of Xinjiang folk song appreciation and vocal imitation, guiding students to perceive syncopation through body movement. Compile school-based materials integrating Uyghur Muqam melodies, Kazakh folk songs, and "XinJiangZhiChun" techniques; build a digital resource database aligned with teaching progress.

Establish a "in-house teachers–university experts–cultural practitioners" support network; organize folk music training and interdisciplinary collective lesson-planning.

Adopt "foundational preparation–in-depth integration–practical enhancement" staged curriculum; allocate 1–2 weekly specialized sessions and use after-school time for small-group practice, with differentiated arrangements for students of varying levels.

Integrate situational/gamified/cooperative teaching methods; implement a comprehensive assessment system (formative + summative + peer/self-evaluation) focusing on stylistic authenticity and emotional expressiveness.

### **2. Policy Support Suggestion**

Establish regional folk music teacher training bases to enhance teachers' ethnic cultural interpretation and folk technique teaching abilities.

Encourage inter-school resource sharing to narrow the gap between urban/rural and public/private institutions.

## **Significance for Future Research**

Expand Research Scenarios and Objects: Extend the existing teaching framework to public schools, rural schools, and institutions in different regions to verify its adaptability in scenarios with differences in teacher qualifications, resource allocation, and class hour arrangements; expand the research objects from "XinJiangZhiChun" to other Chinese folk violin pieces such as "Liang Zhu" and "Jasmine Flower" to test and optimize the framework's generalizability.

Conduct Longitudinal Tracking Research: Conduct of long-term tracking of students implementing the teaching framework, systematically evaluating the framework's long-term impact on students' technical refinement, deepened cultural identity, and improved artistic expressiveness, so as to provide more solid empirical support for the framework's effectiveness.

Integrate Technological Teaching Tools: Explore the integration path of modern technologies such as artificial intelligence (AI) and virtual reality (VR) with the teaching framework, such as developing immersive learning scenarios for folk music and intelligent rhythm training systems, to enrich teaching implementation forms and enhance the interest and effectiveness of folk music teaching.

Deepen Research on Teacher Professional Development: Focus on the training of folk instrumental music teachers, explore the specific effects of different training models (e.g., workshops, mentorship programs, collaborative lesson planning) on improving teachers' folk music literacy and teaching capabilities, and construct a sustainable teacher professional development system.

Carry Out Cross-Cultural Comparative Research: Select folk music works of other ethnic minorities such as Tibetans and Mongolians, conduct cross-cultural comparative research on the integration of folk music into Western instrumental teaching, and summarize the common laws and personalized strategies for integrating folk music into teaching under different ethnic cultural backgrounds.

## References

- Cha, J. (2023). With the rise of cultural globalization, multicultural music education has flourished and attracted widespread global attention. Retrieved August 28, 2023, from <https://baijiahao.baidu.com/s?id=1775397277368964940&wfr=spider&for=pc>
- Cheng, J. (2025). An exploration of integrating local cultural elements into the Orff approach in early childhood music education: A case study of Zhuzhou Normal College. *Home of Drama*, 2025(01), 193–195.
- Geng, S. (2025). Research on the integration path of national music in primary and secondary school art courses. *Contemporary Education Frontiers*, 3(1), 13–19.
- Guo, C. L., & Sun, R. J. (2024). The integration of Kodály's ethnic music education philosophy with folk music teaching in higher normal universities: A case study of the aural skills and sight-singing course. *Music World*, 2024(01), 4–9.
- Ma, L. M. (2024). An analysis of the violin piece Spring in Xinjiang and a study of its performance techniques. *Song of Yellow River*, 10(8), 166–169.
- Wang, T. T. (2018). The value, achievements, and prospects of the Sinicization of Chinese violin art. *Song of Yellow River*, 2018(15), 14–15.
- Yan, X. F. (2021). Pedagogical practice of violin ensemble training in primary school co-curricular music programs (Master's thesis). Central China Normal University.

## Research on Instructional Leadership of Middle School Administrators in Pu'er City, Yunnan Province

Zhang Yurong<sup>1</sup> Patcharee Thungkaew<sup>2</sup> and Phatchanee Kultanan<sup>3</sup>

<sup>1</sup>M.Ed, Educational Administration, Buriram Rajabhat University, Thailand,  
E-mail: 670426021050@bru.ac.th

<sup>2</sup>Major Advisor, Faculty of Education, Buriram Rajabhat University, Thailand  
E-mail: Patcharee.tk@bru.ac.th

<sup>3</sup>Co-advisor, Faculty of Education, Buriram Rajabhat University, Thailand  
E-mail: phatchanee.kt@bru.ac.th

asterisk denoting the corresponding author

### Abstract

This study aimed to investigate instructional leadership of middle school administrators in Pu'er City, Yunnan Province. The research samples consisted of 306 participants from seven public secondary schools in Pu'er City, including 51 administrators and 255 teachers. The research instrument was a five-point Likert-scale questionnaire. In addition, the semi-structure interview was created and designed based on two questions from the three aspects with the lowest average scores in the questionnaire. Data were analyzed using percentage, mean, and standard deviation, and semi-structured interview was also used in this study. The research results found that: 1) The overall level of the evaluation by teachers and administrators on each aspect of instructional leadership of middle school administrators in Pu'er City was rated at a high level. The aspect that was received the highest mean score was setting instructional goals, followed by creating teaching and learning systems that facilitate learning and establishing supervision systems for instructional leadership. 2) The guidelines regarding the instructional leadership of secondary school administrators in Pu'er City, Yunnan Province consisted of three key dimensions: establishing clear and actionable instructional goals, developing teaching and learning systems grounded in academic principles and scientific approaches, and implementing supervisory systems that support instructional innovation and continuous improvement. These dimensions collectively enhance instructional management effectiveness and promote sustainable improvement in educational quality.

**Key words:** Instructional Leadership; Middle School Administrators; Public Middle Schools

### Introduction

Instructional leadership is a crucial component of the educational management system, as it directly affects educational quality and learners' developmental potential. Effective instructional leadership not only promotes teachers' professional growth but also enhances students' academic achievement and overall educational experiences. In the 21st century, particularly within rapidly changing educational environments, the development of instructional leadership has become increasingly important for addressing future challenges and meeting societal demands for human resources (Wu & Guo, 2024, pp. 100–102).

The lack of leadership development resources is also a crucial factor contributing to imbalanced organizational development. Over time, the absence of high-quality leadership training and development opportunities can negatively impact employees' professional growth and an organization's innovation capacity. In some enterprises in Yunnan Province,



China, leadership development remains constrained, resulting in a relatively limited understanding of leadership, as well as a lack of effective leadership assessment and feedback mechanisms and a shortage of training resources. Consequently, organizations in this region require further enhancement and improvement in leadership management to foster sustainable development and strengthen competitiveness (Zhao, Pan, Luo & Meng, 2022: pp. 133-136).

Based on the background and significance of these issues, the researcher aims to investigate the instructional leadership of high school administrators in Pu'er City, Yunnan Province, China, to provide information and recommendations that will help educational institutions improve teacher capacity. Simultaneously, this research will offer insights to relevant departments to facilitate the effective management of educational resources.

## Research Objectives

1. To study the instructional leadership of secondary school administrators in Pu'er City, Yunnan Province.
2. To examine guidelines regarding the instructional leadership of secondary school administrators in Pu'er City, Yunnan Province.

## Research Methodology

### Population and Samples

The population of this study consisted of administrators and teachers from seven secondary schools in Pu'er City, Yunnan Province, totaling 1,518 individuals, including 233 administrators and 1,285 teachers. The sample are selected using simple random sampling based on the sample size determination table of Krejcie and Morgan (1970, pp. 607–610) A total of 306 participants was obtained, comprising 51 administrators and 255 teachers. Moreover, the sample group that used for examine guidelines included three administrators and three teachers from Pu'er No.1 Middle School. The sample group consisted of individuals with at least 5 years of work experience in education field. Research Instruments

The instrument used for data collection in this study was a questionnaire developed by the researcher. The questionnaire consisted of two parts as follows.

Part 1 collected general information about the respondents, focusing on their position status. This section was designed in the form of a checklist.

Part 2 examined opinions regarding the instructional leadership of secondary school administrators across three dimensions: 1) setting instructional goals, 2) creating teaching and learning systems that facilitate learning, and 3) establishing supervision systems for instructional leadership. This section employed a five-level rating scale. The scoring criteria and their meanings were defined as follows (Srisaard, 2017, p. 163)

5 = The instructional leadership of secondary school administrators was at the highest level.

4 = The instructional leadership of secondary school administrators was at a high level.

3 = The instructional leadership of secondary school administrators was at a moderate level.

2 = The instructional leadership of secondary school administrators was at a low level.

1 = The instructional leadership of secondary school administrators was at the lowest level.

Semi-structured interview form for the study aimed to examine guidelines regarding the instructional leadership of secondary school administrators in Pu'er City, Yunnan Province.

### Data Collection

The researcher requested an official letter from the Graduate School of Buriram Rajabhat University to seek permission for data collection from the target group. The letter, together with the research questionnaire and a specified deadline for submission, was sent to the participants via an online platform. Upon reaching the designated deadline, the researcher collected the completed questionnaires through the online response system. In cases where the questionnaires were not returned as scheduled, the researcher conducted follow-up procedures with the participants personally.

### Data Analysis

Descriptive statistics were conducted and it was including overall and dimensional mean values and standard deviations. Data were presented in tabular form, with interpretations of mean values as follows (Srisaard, 2017, p. 164):

- 4.51–5.00 denotes the highest level
- 3.51–4.50 denotes high level
- 2.51–3.50 denotes moderate level
- 1.51–2.50 denotes a low level
- 1.00–1.50 denotes the lowest level

### Research Result

According to the research objectives, the research results are as follow:

The instructional leadership of secondary school administrators in Pu'er City, Yunnan Province

**Table 1**

*Mean and Standard Deviation of Overall Evaluation by Teachers and Administrators on Each Aspect of Instructional Leadership of Middle School Administrators in Pu'er City*

| Aspect of Instructional Leadership                                 | $\bar{X}$ | S.D. | Interpretation | Ranking |
|--------------------------------------------------------------------|-----------|------|----------------|---------|
| 1. Setting instructional goals                                     | 3.75      | 0.62 | High           | 1       |
| 2. Creating teaching and learning systems that facilitate learning | 3.73      | 0.64 | High           | 2       |
| 3. Establishing supervision systems for instructional leadership   | 3.53      | 0.68 | High           | 3       |
| <b>Total</b>                                                       | 3.65      | 0.65 | High           | -       |

According to the table 4.1, it was found that the overall of aspect of instructional leadership of middle school administrators in Pu'er city was rated at a high level ( $\bar{X} = 3.65$ ). The aspect that has the highest mean score was Setting instructional goals ( $\bar{X} = 3.75$ ), followed by Creating teaching and learning systems that facilitate learning ( $\bar{X} = 3.72$ ), while the dimension with the lowest mean score was Establishing supervision systems for instructional leadership ( $\bar{X} = 3.53$ ).

**Table 2**

*Mean and Standard Deviation of Evaluation by Teachers and Administrators on Instructional Leadership in Setting Instructional Goals*

| Setting Instructional Goals                                                                   | $\bar{X}$   | S.D.        | Interpretation | Ranking |
|-----------------------------------------------------------------------------------------------|-------------|-------------|----------------|---------|
| 1. School administrators set clear and concrete instructional goals                           | 3.74        | 0.85        | High           | 9       |
| 2. Instructional goals are specific, measurable, and aligned with school development policies | 3.73        | 0.91        | High           | 11      |
| 3. Administrators communicate instructional goals clearly to teachers                         | 3.71        | 0.85        | High           | 12      |
| 4. Instructional goals are used as a guideline for teaching and learning activities           | 3.75        | 0.84        | High           | 7       |
| 5. Administrators ensure that instructional goals focus on students' holistic development     | 3.76        | 0.85        | High           | 6       |
| 6. Instructional goals are aligned with curriculum standards and learners' needs              | 3.78        | 0.93        | High           | 5       |
| 7. Administrators regularly review and adjust instructional goals based on school context     | 3.79        | 0.88        | High           | 4       |
| 8. Teachers clearly understand the instructional goals established by administrators          | 3.80        | 0.88        | High           | 3       |
| 9. Instructional goals help promote consistency and direction in teaching practices           | 3.82        | 0.89        | High           | 2       |
| 10. Administrators encourage teachers to participate in setting instructional goals           | 3.84        | 0.86        | High           | 1       |
| 11. Instructional goals support improvement in teaching quality                               | 3.69        | 0.82        | High           | 13      |
| 12. Instructional goals are implemented effectively in daily teaching practices               | 3.64        | 0.82        | High           | 15      |
| 13. Instructional goals promote positive learning experiences for students                    | 3.68        | 0.89        | High           | 14      |
| 14. Instructional goals contribute to improving overall educational quality                   | 3.74        | 0.82        | High           | 9       |
| 15. Administrators seriously emphasize the implementation of instructional goals              | 3.75        | 0.90        | High           | 7       |
| <b>Total</b>                                                                                  | <b>3.75</b> | <b>0.62</b> | High           | -       |

According to the table 4.2, it was found that the overall of Setting Instructional Goals was rated at a high level ( $\bar{X} = 3.75$ ). The highest mean score in sub-components was administrators encourage teachers to participate in setting instructional goals ( $\bar{X} = 3.84$ ), followed by instructional goals help promote consistency and direction in teaching practices ( $\bar{X} = 3.82$ ), while the lowest mean score was instructional goals are implemented effectively in daily teaching practices ( $\bar{X} = 3.64$ ).



**Table 3**

*Mean and Standard Deviation of Evaluation by Teachers and Administrators on Instructional Leadership in Creating Teaching and Learning Systems that Facilitate Learning*

| Creating Teaching and Learning Systems that Facilitate Learning                        | $\bar{X}$   | S.D.        | Interpretation | Ranking |
|----------------------------------------------------------------------------------------|-------------|-------------|----------------|---------|
| 1. Administrators establish systematic teaching and learning processes                 | 3.61        | 0.88        | High           | 14      |
| 2. Effective instructional strategies are promoted to enhance learning outcomes        | 3.57        | 0.91        | High           | 15      |
| 3. The school provides effective assessment mechanisms to support teaching improvement | 3.67        | 0.89        | High           | 13      |
| 4. Teaching systems support teachers' professional development                         | 3.69        | 0.86        | High           | 12      |
| 5. Administrators encourage the use of diverse teaching methods                        | 3.70        | 0.85        | High           | 11      |
| 6. Teaching systems promote active student engagement in learning                      | 3.71        | 0.88        | High           | 9       |
| 7. Administrators provide sufficient teaching resources to support learning            | 3.79        | 0.85        | High           | 4       |
| 8. The teaching system helps teachers improve instructional effectiveness              | 3.75        | 0.90        | High           | 7       |
| 9. Assessment results are used to improve teaching and learning processes              | 3.77        | 0.81        | High           | 6       |
| 10. Administrators support continuous improvement of teaching practices                | 3.73        | 0.91        | High           | 8       |
| 11. Teaching systems promote collaboration among teachers                              | 3.83        | 0.85        | High           | 3       |
| 12. The learning environment supports high-quality learning experiences                | 3.71        | 0.85        | High           | 9       |
| 13. Teaching systems enhance students' learning motivation                             | 3.84        | 0.92        | High           | 2       |
| 14. Teaching systems contribute to improving overall educational quality               | 3.87        | 0.90        | High           | 1       |
| 15. Administrators ensure that teaching systems operate effectively and systematically | 3.78        | 0.88        | High           | 5       |
| <b>Total</b>                                                                           | <b>3.73</b> | <b>0.64</b> | High           | -       |

According to the table 4.3, it was found that the overall of creating teaching and learning systems that facilitate learning was rated at a high level ( $\bar{X} = 3.73$ ). The highest mean score in sub-components was teaching systems contribute to improving overall educational quality ( $\bar{X} = 3.87$ ), followed by Teaching systems enhance students' learning motivation ( $\bar{X} = 3.84$ ), while the lowest mean score was effective instructional strategies are promoted to enhance learning outcomes ( $\bar{X} = 3.57$ ).

**Table 4**

*Mean and Standard Deviation of Evaluation by Teachers and Administrators on Instructional Leadership in Establishing Supervision Systems for Instructional Leadership*

| Establishing Supervision Systems for Instructional Leadership                                 | $\bar{X}$   | S.D.        | Interpretation | Ranking |
|-----------------------------------------------------------------------------------------------|-------------|-------------|----------------|---------|
| 1. Administrators set clear goals for instructional leadership supervision                    | 3.48        | 0.82        | Moderate       | 10      |
| 2. The school has a systematic supervision and monitoring system for instructional leadership | 3.62        | 0.93        | High           | 2       |
| 3. Supervision and evaluation mechanisms are clear and transparent                            | 3.57        | 0.80        | Moderate       | 4       |
| 4. Evaluation results are used to continuously improve instructional management               | 3.58        | 0.86        | High           | 3       |
| 5. The school provides systematic support for professional development                        | 3.57        | 0.85        | High           | 4       |
| 6. Administrators promote knowledge sharing and teamwork                                      | 3.54        | 0.85        | High           | 7       |
| 7. The school encourages collaboration between administrators and teachers                    | 3.65        | 0.80        | High           | 1       |
| 8. Administrators provide flexible and constructive feedback                                  | 3.56        | 0.85        | High           | 6       |
| 9. Supervision systems help teachers and administrators improve their practices               | 3.54        | 0.82        | High           | 7       |
| 10. Administrators encourage instructional and managerial innovation                          | 3.38        | 0.89        | Moderate       | 15      |
| 11. The school environment supports experimentation and innovation                            | 3.40        | 0.88        | Moderate       | 14      |
| 12. Supervision systems focus on learning outcomes                                            | 3.42        | 0.93        | Moderate       | 13      |
| 13. Supervision systems enhance team effectiveness                                            | 3.45        | 0.92        | Moderate       | 11      |
| 14. Supervision systems promote continuous professional growth                                | 3.43        | 0.94        | Moderate       | 12      |
| 15. Supervision systems improve educational quality and students' learning experiences        | 3.52        | 0.96        | High           | 9       |
| <b>Total</b>                                                                                  | <b>3.53</b> | <b>0.68</b> | High           | -       |

According to the table 4.4, it was found that the overall of establishing supervision systems for instructional leadership was rated at a high level ( $\bar{X} = 3.53$ ). The highest mean score in sub-components was the school encourages collaboration between administrators and teachers ( $\bar{X} = 3.65$ ), followed by the school has a systematic supervision and monitoring system for instructional leadership ( $\bar{X} = 3.62$ ), while the lowest mean score was administrators encourage instructional and managerial innovation ( $\bar{X} = 3.38$ ).

Guidelines regarding the instructional leadership of secondary school administrators in Pu'er City, Yunnan Province

The development guidelines are as follows; 1) setting instructional goals; the development of instructional leadership among school administrators should begin with the

establishment of clear, academically grounded instructional goals aligned with educational policies. These goals should be practical and systematically integrated into curriculum implementation, classroom practices, and teacher development, with a strong focus on student-centered learning. Teacher participation, along with continuous monitoring, evaluation, and adjustment mechanisms, enhances the effectiveness of educational management. Moreover, instructional goals serve as a guiding framework that strengthens professional communication, collaboration, and decision-making among administrators, thereby promoting sustainable, systematic, and effective instructional leadership. 2) creating teaching and learning systems that facilitate learning; it should be student-centered and grounded in academic principles and scientific approaches to systematically enhance the teaching and learning system. Through sound top-level design, administrators can integrate curriculum structures, instructional methods, and assessment mechanisms to ensure coherence and effectiveness. By utilizing data analysis, school-based research, and developmental evaluation, teaching practices can be continuously refined. With sustained professional support and collaborative mechanisms, the teaching system can achieve dynamic improvement and long-term sustainability, ultimately enhancing overall school instructional quality, and 3) establishing supervision systems for instructional leadership; schools can foster instructional innovation through the integrated use of cultural guidance, institutional support, and developmental supervision. School administrators provide clear value-based direction for innovation while offering systems and resources that reduce teachers' risks in experimenting with new practices. Within developmental supervision, administrators shift from inspectors to mentors and supporters, promoting reflective practice and continuous improvement. By linking supervision with professional learning and research activities, both teachers and administrators achieve ongoing professional growth, leading to the dynamic enhancement and sustainable development of instructional leadership.

## Discussion

The findings of this study indicate that the instructional leadership of secondary school administrators in Pu'er City, Yunnan Province, was at a very high level. In particular, the dimensions of setting instructional goals and creating teaching and learning systems that facilitate learning received the highest mean scores. This suggests that school administrators place strong emphasis on their academic leadership roles and on providing clear direction for instructional practices. These findings are consistent with contemporary perspectives on instructional leadership, which emphasize the role of school leaders in guiding teaching and learning processes and supporting student achievement in the 21st century (Wu & Guo, 2024, pp.100-102). Moreover, the centralized educational management system and strong focus on academic standards and outcomes in the Chinese educational context may contribute to the high level of instructional leadership demonstrated by school administrators.

Although the overall level of instructional leadership was very high, the dimension of establishing supervision systems for instructional leadership recorded the lowest mean score among the three dimensions. This finding may be attributed to the heavy administrative workload and extensive managerial responsibilities of school administrators, which limit the time available for instructional supervision and continuous classroom monitoring. In addition, existing supervision practices may focus more on procedural compliance than on professional development, thereby reducing their effectiveness in enhancing teaching quality. This result highlights the need to develop more supportive and collaborative supervision systems that emphasize professional learning, feedback, and reflective practice, in order to further strengthen instructional leadership in secondary schools. This research



findings align with the research result of Phrakrumettamonkolvisith (2020, pp. 237) who stated that the ability to establish effective systems and develop high-performing teams is a key component of instructional leadership.

## Recommendations

### 1. Implications for the Findings

1.1 The findings indicate that secondary school administrators demonstrated strong instructional leadership in setting instructional goals and creating teaching and learning systems that facilitate learning. Therefore, educational authorities should use these findings as guidelines for systematically enhancing and sustaining instructional leadership practices among school administrators.

1.2 Since the dimension of establishing supervision systems for instructional leadership showed the lowest mean score, greater emphasis should be placed on strengthening supervision, monitoring, and evaluation mechanisms in order to improve the quality of academic management in schools.

### 2. Recommendations for the Further Studies

2.1 Future studies should examine instructional leadership among secondary school administrators in other regions or provinces in order to compare findings and enhance the generalizability of the research results.

2.2 Future research should employ qualitative or mixed-methods approaches to gain deeper insights into the processes of instructional leadership development and the factors influencing the effectiveness of school administrators.

## References

- Krejcie, R.V. and Morgan, D.W. (1970) Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, 30, 607-610.
- Phrakrumettamonkolvisith (Aggavaro, Sanguenvai). (2022). Educational Leadership Development Strategies. *Journal of Graduate Review Nakhon Sawan Buddhist College*, 8(2), 237-244.
- Srisa-ard, B. (2017). *Preliminary research* (10th ed.). Suwiriyan.
- Wu, Z., & Guo, G. (2024). Value guidance and reconstruction of classroom teaching leadership of college physical education teachers under the context of ideological and political education. *Martial Arts Research*, 10(7), 100-102.
- Zhao, F., Pan, W., Luo, Z., & Meng, H. (2022). Research on classroom teaching leadership of junior high school teachers under the background of "double reduction" (Master's thesis, Guangxi Minzu University).  
<https://link.cnki.net/doi/10.27035/d.cnki.ggxmc.2022.133-136>.
- Wang, S. (2024). Exploration of the path to enhance high school principals' teaching leadership. *Success*, (22), 36-38.
- Liu, W., & Li, Z. (2024). Teaching leadership as work practice: How American primary and secondary school principals implement data use to promote teaching. *Foreign Education Research*, 52(3), 57-60.

# The Current Situation and Existing Problems of Teaching Ancient Poetry and Art Songs in Leshan Normal University

Zhao Wanying<sup>1</sup> Chao Kanwicha<sup>1</sup> Chalermkit Kengkaew<sup>1</sup>

<sup>1</sup>Music Education, Faculty of Education, Buriram Rajabhat University

\*Corresponding author,

Email: 660427093021@bru.ac.th

## Abstract

This study focuses on undergraduate students in the Music Department of Leshan Normal University and adopts a qualitative research approach. Through literature review, interviews, and classroom observation, it investigates the current situation and existing problems of art songs based on ancient poetry. Purposeful sampling was used to conduct semi-structured interviews with five experts in relevant fields, and thematic analysis was applied to the interview data. The results indicate that the related teaching at the university primarily relies on traditional vocal courses and faces issues such as unclear teaching objectives, lack of teaching resources, and a single-mode teaching approach. In addition, there are problems such as the absence of a graded repertoire database, formative assessment, and insufficient teaching resources. This study provides a reference for Leshan Music College to optimize the quality of music education and cultivate applied talents who possess both professional competence and the ability to inherit cultural heritage.

**Key words:** Leshan Normal University; classical poetry, art songs; music teaching; teaching status

## Introduction

Leshan Normal University is a provincial public full-time undergraduate institution in Sichuan Province, located at No. 778 Binhe Road, Shizhong District, Leshan City, Sichuan Province. It faces the Leshan Giant Buddha to the east and overlooks Mount Emei to the west, situated in a region renowned for three world heritage sites and as the hometown of Guo Moruo, enjoying a superior geographic location. The university has a profound educational heritage, with its history tracing back to the Sichuan Provincial Leshan Normal School established in 1940, inheriting the educational tradition of Wuhan University during its westward relocation to Leshan from 1938 to 1946. In 1978, Leshan Normal Junior College was established, and in March 2000, the Ministry of Education approved the merger of the former Leshan Teachers College and Leshan Education Institute, upgrading it to an undergraduate university. In 2012, it was included in the Ministry of Education's "Eastern Universities Supporting Western Universities Program," receiving counterpart support from Wuhan University. In 2024, it was approved to confer master's degrees, adding three professional master's degree programs in Education, Forestry, and Materials and Chemical Engineering, marking a historic transition from offering only undergraduate education to providing graduate-level education.

Classical poetry and art songs, rooted in traditional verse, blend ethnic musical vocabulary with modern compositional techniques. These works not only embody the spiritual essence of Chinese culture but also possess unique aesthetic value in vocal artistry. As essential teaching content for music students to inherit cultural heritage and enhance comprehensive competencies, music education in local normal universities is increasingly emphasizing the integration of traditional culture with professional instruction, aligning with

the advancement of aesthetic education and the national strategy for cultural empowerment. The Music Department of Leshan Normal University, positioned by its "local, exemplary, and applied" educational philosophy, shoulders the noble mission of cultivating music teachers for primary and secondary schools in southwestern Sichuan while preserving regional cultural traditions.

Ancient poetry and artistic songs not only contain rich cultural elements but can also offer college students different forms of aesthetic expression, such as imagery, vocal style, and spirit. This is of great significance for cultivating students' aesthetic literacy and enhancing their knowledge of traditional culture. Therefore, college vocal instruction should also try to integrate traditional culture into teaching to deepen students' cultural identity. (Zhang, 2025).

Currently, the teaching of classical Chinese poetry art songs in universities mostly follows the traditional demonstration-singing method. This approach emphasizes guiding students to transform abstract vocal theory into concrete singing forms under the teacher's direction, thereby mastering the correct musical techniques. However, the greatest characteristic of classical Chinese poetry art songs lies in the profound meanings and the expression of artistic conception contained within them, which can even have more generative value in students' personalized expression. Yet, pure demonstration teaching makes it difficult to comprehensively consider individual differences among students (Li, 2025).

Teaching resources are the foundation for universities to organize vocal music teaching activities and establish forms of vocal music instruction. Since the integration of classical Chinese poetry art songs with university vocal music teaching has a relatively short history, many universities currently still face a shortage of teaching resources when conducting classical Chinese poetry art song classes, which affects the effectiveness of vocal music education. On one hand, many universities, in response to enhancing cultural confidence and achieving the goal of cultivating students with moral integrity, have begun to try incorporating classical Chinese poetry art songs into vocal music courses. However, due to a lack of extensive educational experience, most of these universities have not formed a systematic teaching model or framework for classical Chinese poetry art songs, resulting in their teaching being passive or random (Li, 2023).

Therefore, it is necessary to conduct a thorough review of the current teaching situation and existing problems of classical Chinese poetry art songs among undergraduates at Leshan Normal University. As a local teacher-training institution, Leshan Normal University bears the responsibility of both inheriting traditional culture and cultivating students' aesthetic abilities when integrating classical Chinese poetry art songs into music teaching, while also facing practical challenges such as teaching adaptation and resource support. Clarifying the issues related to course design, teaching objectives, and teaching resources of classical Chinese poetry art songs is crucial for improving the course's teaching effectiveness and enhancing students' cultural identity and artistic performance skills. This research can not only provide practical references for optimizing the course system and improving teaching methods for classical Chinese poetry art songs but also offer specific and actionable insights for similar local teacher-training universities on how to deeply integrate traditional culture with music education.



## Research Objectives

To study the current situation and existing Problems of teaching Ancient Poetry and Art Songs in Leshan Normal University.

## Research Methodology

This study uses purposive sampling to select five experts who have long been engaged in the performance of art songs based on classical poetry, vocal education, and music education research as the core interview subjects. Through expert interviews, it systematically collects professional insights on the current status and key challenges of undergraduate teaching in ancient poetry and singing at Leshan Normal University, providing qualitative evidence to support descriptive analysis of the research and the existing issues.

## Research Instruments

The interview formats include structured interviews and unstructured interviews. Combining findings from relevant journal studies, this research designs the core interview questions based on the framework of 'current situation review—problem identification—cause analysis—optimization suggestions.' Before the formal interviews begin, experts in the field are consulted to gather feedback, focusing on the clarity of the issues, comprehensiveness of coverage, and logical coherence. Based on this feedback, the interview outline is systematically optimized, ultimately forming a mature version to ensure the content validity and practical applicability of the research tools.

The interviews mainly focus on the following questions:

- (1) Are students interested in performing artistic songs based on ancient poetry?
- (2) How can students be accurately taught to sing the lyrics and rhythms of artistic songs well?
- (3) Common difficulties students encounter in teaching
- (4) What are the most common problems students face when performing artistic songs based on Chinese classical poetry during instruction?
- (5) The basis for selecting teaching materials for performing artistic songs based on ancient poetry, as well as their classification system.

## Data Collection

In this study, the researchers designed a data collection protocol. The sequence of steps is as follows:

- (1) Through online and offline resources (including libraries and websites), systematically collect relevant books, articles, journals, and teaching materials, and conduct a systematic analysis of existing literature on Chinese ancient poetry and art songs to provide a theoretical basis for subsequent research.
- (2) Development of interview outline and expert selection: After completing the literature review, draft an interview outline, finalize the list of five interview experts, and establish an interview schedule.
- (3) Expert feedback and finalization of the outline, formal interviews: Revise the outline based on experts' suggestions on question design and wording to form the final interview outline. Then, conduct semi-structured interviews. The interviews can be conducted face-to-face or via online video/voice, with each expert interview lasting approximately 30-60 minutes. With informed consent, the interviews will be recorded and transcribed into written material for subsequent analysis.

### **Data Analysis**

This study employed qualitative research methods for data analysis. The data analysis process in qualitative research is time-consuming and complex. Through this process, researchers systematically retrieve and organize data to deepen understanding and present the findings to others. Specifically, it includes the following aspects:

#### **(1) Text Analysis**

The first stage of qualitative data analysis is text analysis, which is to summarize the relevant data of this subject through the text analysis of the previous related papers, reviews and books.

#### **(2) Interview Data Analysis**

The second step in data analysis involves collecting data through teacher interviews. By interviewing teachers, relevant aspects such as current conditions, singing techniques, and teaching methods are systematically organized and analyzed.

### **Result**

Through in-depth interviews with five experts music teachers, the following conclusions are drawn:

The Current Situation of Teaching Artistic Songs Based on Ancient Poetry to Undergraduates at Leshan Normal University

The teaching is based on the regular courses of the university's vocal music program, which helps students master the basic singing techniques of art songs based on classical poetry, fully meeting the teaching and learning needs at the beginner level. Students have a high interest in performing art songs set to classical poetry, and when participating in concerts and other practical activities, they are able to demonstrate active stage presence while singing these songs. In terms of curriculum design, in addition to incorporating the teaching of art songs based on classical poetry into regular vocal courses, some teachers further expand students' knowledge and understanding of these songs through electives or special lectures, allowing students to be exposed to a wider range of works from different styles and periods.

Problems in the Art Songs of Classical Chinese Poetry Among Undergraduates at Leshan Normal University

(1) Cultural cognitive level: Students have a weak foundation in classical literature and only a basic understanding of the background and imagery of ancient poetry;

(2) Vocal training dimension: Students find it difficult to balance vocal techniques with poetic expression. Their pronunciation and articulation do not accurately reflect the phonetic characteristics of Chinese, and they lack a clear understanding of the stylistic boundaries between national artistic expression and artistic creation. Experts point out that students overemphasize vocal techniques while neglecting the cultural charm and artistic conception of the works.

(3) Teaching support level: Classroom explanations of cultural context are sporadic, lacking systematic analysis and demonstration teaching of the works, and students' grasp of the style of the works (both national characteristics and artistic qualities) remains insufficient.

### **Discussion and conclusion**

#### **Discussion**

Discussion In teaching practice, the key to teaching lyrics lies in the 'integration of meaning and sound': teachers should first guide students to interpret the cultural background, imagery, and emotional tone of the lyrics, so that students, based on understanding 'what the meaning is,' can then use specialized training in pronunciation and articulation to achieve

'conveying meaning through sound.' As for rhythm instruction, it is necessary to reinforce the training logic of 'perception—imitation—internalization.' Through methods such as model singing comparison, marking sentences, and rhythmic movement exercises, students can grasp the vocal fluctuations caused by tonal changes and the rhythmic cycles formed by rhyme patterns, avoiding stiffness or disconnection when performing.

From the perspective of teaching standards, when selecting textbooks, they should match the singing level of students at local normal universities, choose classic pieces, and also cover works from different dynasties and styles. The categorization of textbooks should follow the teaching objectives, divided into three levels: basic for practicing diction and rhythm, intermediate for integrating cultural emotions, and advanced for developing overall singing performance, making the teaching approach clearer.

### Conclusion

The teaching of classical poetry and art songs for undergraduates at Leshan Normal University mainly focuses on traditional vocal training, providing solid skill support for the a Strengthen cultural awareness education, offer classical poetry appreciation courses, and invite faculty from the College of Literature and local cultural experts to conduct interdisciplinary teaching, systematically explaining the connotations of poetry and local cultural heritage. Optimize the teaching content system, based on students' foundations, focusing on classical repertoire and vocal techniques, and establish a repertoire library. Innovate teaching methods, balance technical and cultural aspects, and enhance Chinese pronunciation training. Organize classical poetry and art song competitions to boost students' singing confidence.

### Suggestion

Strengthen cultural awareness education by offering classical poetry appreciation courses, and invite faculty from the School of Literature and local cultural experts to conduct interdisciplinary teaching, systematically explaining the connotations of poetry and local cultural heritage. Optimize the teaching content system, based on students' foundations, focusing on classic repertoire and singing techniques, and establish a repertoire library. Innovate teaching methods, balance technique and culture, and enhance Chinese pronunciation training. Organize competitions in classical poetry and art songs to boost students' singing confidence.

### References

- Zhang, Y. (2025). The integration of ancient poetry art songs into college vocal music education in the era of cultural education. *Times Report (Benliu)* (12), 69-71.
- Hu, D. (2021). The 'rhyme' and 'form' of ancient Chinese poetry—art songs. *Literary Competition* (2), 196-200.
- Li, L. (2025). Research on strategies for inheriting Chinese ancient poetry art songs in colleges from the perspective of cultural confidence. *Journal of Guizhou Normal University*, 41(11).
- Li, F. (2023). Reflections on the integration of Chinese ancient poetry art songs and college vocal music education. *Art Appraisal* (8), 102-105.



## Development of clinical nursing practice guideline for critical ill patient in prehospital care<sup>1</sup>

Pornpian Wachirachiaranon<sup>2</sup> Rachanun Autpru<sup>3</sup> Solot Pracharung<sup>3</sup>  
Rutchanee Sata<sup>3</sup> Suntaraporn Wansupong<sup>4</sup> Korakot Apiratwarakul<sup>5</sup>

Corresponding author : pornpo@kku.ac.th

### Abstract

This study aimed to develop and evaluate evidence-based clinical nursing practice guidelines for critically ill patients in prehospital care settings. The guideline development process was based on Soukup's evidence-based practice model and involved systematic literature review, synthesis of research evidence, and assessment of usability among emergency nurses. The guideline was evaluated for content validity and quality using the Content Validity Index (CVI) and AGREE II instrument and was pilot tested in real clinical settings. The sample consisted of 12 emergency nurses working in the Emergency Medical Service unit. The guideline demonstrated good content validity (CVI = 0.80). Quality appraisal scores using AGREE II were high across all domains, including scope and purpose (84.48%), stakeholder involvement (92.59%), rigor of development (91.66%), clarity of presentation (86.27%), applicability (91.66%), and editorial independence (100%). The results showed high levels of user satisfaction, with an overall mean score of 4.80. The implementation of the guideline improved clinical practice, including more accurate telephone triage, systematic patient assessment, effective team communication, and continuous patient monitoring.

In conclusion, the developed guideline enhances timely clinical decision-making, promotes systematic and rapid care delivery, improves communication, and supports alignment with international standards in prehospital emergency care.

**Keywords:** emergency medical services, emergency patients, prehospital care.

### Introduction

#### 1. Background and Rationale

Non-communicable diseases (NCDs) are a major global health concern, accounting for approximately 41 million deaths worldwide, or 71% of total mortality. In Thailand, NCDs contribute to approximately 74% of total deaths annually. The increasing burden of NCDs has led to a rise in critically ill emergency patients, particularly in prehospital settings.

#### 2. Research Gap

Despite existing emergency protocols, inconsistencies in nursing practice, incomplete patient assessment, and ineffective communication between prehospital teams and hospitals remain significant challenges. These gaps limit timely decision-making and reduce the quality of patient outcomes.

#### 3. Objectives and Research Questions

3.1 To develop evidence-based nursing practice guidelines for critically ill patients in prehospital care.

3.2 To evaluate the outcomes following implementation of the developed guidelines.

#### **4. Significance of the Study**

This study contributes to improving emergency nursing care by reducing practice variability, enhancing patient safety, and supporting evidence-based clinical decision-making in prehospital settings.

### **Literature Review**

#### **1. Relevant Theories**

This study applied Soukup's Model for Change to Evidence-Based Practice, which emphasizes systematic integration of research evidence into clinical practice.

#### **2. Empirical Studies**

Previous studies highlight the importance of telephone triage, early assessment, and rapid intervention in improving patient outcomes. Structured communication models such as ISBAR have been shown to enhance information transfer and patient safety.

#### **3. Conceptual Framework**

The study framework follows four phases: problem identification, evidence support, pilot testing, and implementation.

### **Methodology**

#### **1. Research Design**

This study employed a guideline development design based on evidence-based practice.

#### **2. Population and Sample**

The sample consisted of 12 registered nurses working in emergency medical service units with at least two years of experience.

#### **3. Instruments**

The primary instrument was the developed nursing practice guideline, evaluated using CVI and AGREE II.

#### **4. Data Collection Procedures**

Data were collected from March to April 2025 using structured forms, observations, and implementation records.

#### **5. Data Analysis**

Descriptive statistics (frequency, percentage, mean) and content analysis were used.

#### **6. Ethical Considerations**

Ethical approval was obtained, and participants provided informed consent.

### **Results**

#### **1. Presentation of Findings**

The majority of participants were aged 31–40 years (83.33%), with most having over 6 years of experience in emergency services. The developed guideline included 8 steps: 1) Telephone triage 2) Dispatch decision 3) Role assignment 4) Scene safety assessment 5) Primary assessment 6) Secondary assessment 6) Continuous monitoring 7) Communication

and 8) handover Implementation results showed: 90% of patients received telephone triage. 100 % compliance in guideline steps Improved communication and patient monitoring

## Discussion

The findings indicate that the developed guideline is effective and feasible in real clinical settings. The integration of evidence-based practice and structured communication enhances clinical performance and patient safety. High satisfaction scores reflect usability and acceptance among nurses.

## Conclusion

### 1. Summary of Major Findings

The guideline significantly improved emergency nursing practices, including assessment, communication, and decision-making.

### 2. Limitations

The study involved a small sample size and limited pilot testing.

### 3. Suggestions for Further Research

Future studies should involve larger samples and multi-center implementation.

## References

- American Heart Association. AHA Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care (CPR & ECC). Circulation; 2025
- Duangtipsirikul S, Sirismut T. Emergency response time and perspectives of emergency personnel on response time for critical emergency patients in Thailand. Bangkok: National Institute for Emergency Medicine; 2024.
- Emergency Medical Service Unit. Medical operation statistics. Srinagarind Hospital; 2024
- Healthcare Accreditation Institute. Hospital and health service standards, 5th edition (2<sup>nd</sup> printing). Bangkok: Healthcare Accreditation Institute; 2022.
- Institute of Medical Research and Technology Assessment. Appraisal of guideline for Research & evaluation II (AGREEII). <https://www.agreetrust.org/wpcontent/uploads/2017/12/AGREE-II-Users-Manual-and-23-item-Instrument-2009-Update-2017.pdf>; 2013.
- Kassombun K, Yosthawi P, Thunyaphon S. Factors affecting sudden deterioration of critical emergency patients in the prehospital phase. J Ministry Public Health Nurse. 2021;31(3):164–75.
- Kotwal A.A, Kim J, Waite L, Dale W. Social function and cognitive status: Results from a US national representative survey of older adults. J Gen Intern Med. 2016;31(8):854–62.
- National Institute for Emergency Medicine. Criteria for emergency triage and prioritization in emergency departments according to NIEM. Bangkok: National Institute for Emergency Medicine; 2013
- National Institute for Emergency Medicine. Future study of Thailand's emergency medical system. Bangkok: National Institute for Emergency Medicine; 2025.
- National Association of Emergency Medical Technicians. Advanced Medical lift support An Assessment-based Approach edition 3<sup>rd</sup>. American College ; 2020.
- Nokaew D, Kaenbuppha N, Piwphong N, Chomngam P, Chirawut K, Buadang S, Phetai K. Effectiveness of ISBAR communication skill development in emergency patient



- handover among diploma paramedic students. Thai J Public Health Health Educ. 2024;4(1):e267098.
- Rausch CM. Telephone triage nursing: When patients call. Am Nurse J. 2023;18(6)
- Riyapan S, Chantanakomes J, Ruangsomboon O, Chaisirin W, Limsuwat C, Prapruetkit N, Chakorn T, Monsomboon A. Assessment of prehospital management of patients transported To a Thai university hospital. Bangkok: Faculty of Medicine Siriraj Hospital, Mahidol University; 2020.
- Secretariat for the National NCDs Action Plan, Division of Non-Communicable Diseases, Department of Disease Control, Ministry of Public Health. Thailand National NCDs Prevention and Control Action Plan (2023–2027). Bangkok: Ministry of Public Health; 2023.
- Singthongwan W. Effects of tele-nursing on caregivers' ability to care for stroke patients after hospital discharge. Prasat Chiang Mai Hospital; 2023.
- Sirismut T, Duangtipsirikul S, Chuensamrong P, Watchiradilok P. Research for improving the quality of the EMS system toward the new normal: Approaches to enhance time efficiency in accessing emergency medical services for critical emergency patients in Thailand. National Institute for Emergency Medicine; 2022.
- Soukup SM. The Center for Advanced Nursing Practice evidence-based practice model: Promoting the scholarship of practice. Nurs Clin North Am. 2000;35(2):301–9.
- Suksamran K. A study of the care model for urgent patients at the Internal Medicine Outpatient Department, Somdech Phratheparat Medical Center. [Master's thesis]. Thammasat University; 2019.
- Tosings A. Evidence-Based Practice: Feasibility and cost–benefit evaluation of implementation: Proceedings of The Academic Conference on Evidence-Based Practice: A New Dimension in Nursing Quality Development. Bangkok: Siriraj Nursing Alumni Association; 2004. p. 43–59.
- World Health Organization. Noncommunicable diseases : Progress monitor 2020. <https://www.who.int/publications/i/item/ncd-progress-monitor-2020>.