



## The Zhang Shu's Vocal Works Handbook for teaching first-year Vocal Students at Quzhou University

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### Abstract

**Background and Aim:** Based on the teaching of Zhang Shu's vocal works and knowledge of work analysis, this article aims to develop a vocal teaching course plan for first-year students in the vocal music program at Quzhou University, 1) To study Zhang Shu's vocal works from experts, 2) To Construct Zhang Shu's vocal works handbook for first-year students, 3) To experiment teaching by using Zhang Shu's vocal works handbook, 4) To evaluate teaching effectiveness by using Zhang Shu's vocal works handbook.

**Materials and Methods:** This research was a mixed-method research between qualitative and experimental research. The qualitative research tools were an interview guideline and an observation from three Vocal music experts. The data was collected from a sample of 10 students. The experimental research tools were the Formative / Summative Test: comparing the Formative test and Summative test of first-year Vocal Students at Quzhou University, analyzing and summarizing the effectiveness of using the teaching guidebook. The research hypothesis was that the summative score of 90 and above is Excellent, 80- 89 is Very good, 70-79 is Good, and 60-69 is Pass.

**Results:** 1) Zhang Shu's vocal music works are unique, integrating ethnic and modern elements, and possessing high artistic value. In Zhang Shu's works, the melodic lines are smooth, and the harmonies are rich and varied, demonstrating his profound musical foundation. 2) The manual covers the background, style, and form analysis of Zhang Shu's vocal music works, suitable for first-year students to read. The manual includes vivid illustrations and interactive sections, which enhance students' interest and participation in learning. The design of the manual focuses on practicality and fun, making it easy for students to study and review independently. 3) In the experimental class, using the manual for teaching significantly improves students' understanding and appreciation of Zhang Shu's vocal music works. With the guidance of the manual, students can better grasp the style and emotional expression when performing Zhang Shu's works. The teaching experiment shows that the use of the manual helps to cultivate students' musical literacy and aesthetic ability. 4) Through the assessment criteria and exercises in the manual, students' learning effects of Zhang Shu's vocal music works can be objectively and comprehensively evaluated. The assessment results show that using the manual for teaching can significantly improve students' academic performance and musical expression ability, proving that the manual has high practical value and promotional significance.

**Conclusion:** Researchers, based on their research objectives, developed the "Handbook for Learning Zhang Shu's Vocal Works" by searching for information and interviewing experts in vocal teaching and Zhang Shu-related literature studies. From student questionnaires and classroom observation forms, it is evident that students are very receptive to the practical learning of Zhang Shu's vocal works. At the same time, they have also learned how to grasp the musical style of Zhang Shu and even contemporary Chinese composers. Therefore, teaching Zhang Shu's vocal works to freshman vocal music majors not only enhances their vocal skills and musical understanding but also cultivates their patriotic feelings, national consciousness, musical perspective, and aesthetics, as well as creative inspiration and imagination.

**Keywords:** Zhangshu; Vocal; Handbook; First-year; Quzhou University

### Introduction

First-year vocal music majors at Quzhou University typically have at least three years of vocal training. Their understanding of the vocal works of Zhang Shu is quite limited, and they know little about the vocal works of modern Chinese composers. The numerous songs of the War of Resistance against Japanese Aggression are rich in content and truly reflect the social and historical background of their era. They were an important spiritual force for the whole nation's resistance and a splendid chapter in the music of the Chinese nation, as well as a valuable artistic treasure. They played a significant role in ultimately achieving victory in the resistance and have had a profound impact on subsequent and even today's Chinese





music composition. Many of these songs are rich in the connotations and artistic characteristics of national singing techniques, especially the vocal works of Zhang Shu, which are very much in line with the current standards for teaching national vocal music in art colleges (Yu, 2017).

When constructing a learning manual, the author must consider teaching methods suitable for first-year students. When singing, we should concentrate our attention and interest on feeling that we are singing with emotion and conveying the artistic realm. This state of mind will relax us naturally, and we can always maintain a controllable state while singing. If they continuously improve their psychological state in practice, eliminate psychological barriers, and achieve self-regulation, with the accumulation of stage experience and the continuous improvement of performance skills and artistic achievements, singers will gain more and more confidence in their singing. In short, cultivating good singing psychological quality, striving to overcome psychological barriers (such as stage fright), and gradually enhancing confidence through repeated training, avoiding mental burdens and pressures, are important guarantees for singing success (Hu, 2009).

In vocal music teaching, teachers and students work together to correct some students' bad singing habits, establish and strengthen the correct concept of sound production, and cultivate good singing habits. Teachers can use DV (video) to selectively play videos of many famous singers performing "beautiful vocal music." First-year vocal group lessons can accumulate a large number of vocal works. After vocal training, appropriate vocal works can be selected to further explain to students: how to sing—application of voice and singing—work analysis and singing layout—singing style and breathing division, as well as the use of Chinese vocabulary in singing. At the same time, in the interpretation process of vocal works, teachers should combine basic music knowledge, singing techniques, and piano accompaniment forms for teaching. When students sing, teachers provide "rhythm," and give tips on details such as "mouth," "singing," "mouth," "breathing," and "articulation." (Hu, 2009).

In higher education music teaching, vocal music teaching is an important part. Higher education vocal music teaching reflects the development direction of the new culture and occupies an important position in higher education music teaching. However, for a long time, higher education vocal music teaching has been following the teaching methods and models of music colleges, which have many drawbacks that severely restrict the development of higher education vocal music teaching. At present, with the rapid growth of China's educational and cultural undertakings, higher education vocal music teaching should actively and proactively respond to the needs of the times, and do a good job in higher education vocal music teaching with a spirit of innovation and keeping pace with the times (Xu and Zhou, 2012).

The vocal works of Zhang Shu belong to a part of Chinese revolutionary element music. There is a problem of a small proportion of revolutionary elements and a lack of ideological and political teaching content in current teaching materials. Teachers need to pay constant attention to ideological and political education while teaching. Higher education institutions can select appropriate songs based on the current materials for the compilation of red classic song teaching materials, specifically for vocal teaching under the concept of curriculum ideology and politics. Through systematic combing and integration, songs can be arranged according to historical events and time, and then adapted by incorporating elements of current popular music, which can greatly arouse students' interest in learning (Hu, 2020).

In vocal music teaching, in addition to imparting necessary vocal singing techniques to students, it is also important to let students understand the vocal works they are learning. Only by understanding the creation background of the song and what kind of emotions it expresses can students learn and practice the song. This will inevitably have a multiplier effect in improving the teaching quality of higher education vocal music teaching. The adjustment of the content of higher education vocal music teaching directly affects its teaching quality, and reforming the content of higher education vocal music teaching is also an important way to improve the teaching quality of higher education vocal music (Liu, 2014).

The complexity of vocal works requires students to grasp not just technical proficiency but also the emotional and historical backdrop of the pieces they perform. Hence, reforming the content of vocal music education to include more modern and contemporary Chinese art songs is crucial. Such an approach not only enriches the teaching repertoire but also enables students to develop a comprehensive understanding of the evolution of Chinese music across different periods. Engaging with a diverse array of musical styles and emotional expressions will enhance students' appreciation of their national identity and provide a richer context for their vocal practice. Addressing these research problems entails a systematic exploration of innovative teaching strategies, integration of relevant historical and cultural content, and the development of a supportive learning environment that fosters emotional expression and technical skills. As universities





continue to evolve their music programs, embracing the rich tapestry of China's musical heritage will contribute significantly to enhancing the quality and relevance of vocal music education in higher education.

Therefore, the author believes that in higher education vocal music teaching, it is a beneficial attempt to systematically and gradually incorporate modern and contemporary art songs, and even expand to more Chinese modern and contemporary music works. They are not only an opportunity for teachers to systematically learn and enrich their teaching repertoire but also an opportunity for students to learn, understand, and recognize the history of Chinese modern and contemporary music. They can let students understand Chinese music from ancient times to modern times, from modern times to contemporary times, and then form a coherent understanding of the development of Chinese music. In terms of singing, the rich musical forms and abundant emotions of modern and contemporary Chinese art songs, and the works produced under different historical backgrounds, play an important role in improving students' understanding of the thoughts and emotions of the country and the people from the modern era to the present. In addition, attention to contemporary and modern art songs will also enrich higher education vocal music teaching, making higher education's music teaching relevant to the current dynamics of the music world. This will be a further issue for the author to contemplate and explore. Finally, with the continuous updating and development of music teaching in universities across the country, there will be more sounds representing China's excellent culture, history, traditions, and spirit in higher education music teaching (Zeng, 2018).

## Objectives

1. To study the results that will occur with research in this matter.
2. To compare whether there have been changes before and after the experiment.
3. To develop tools for this research.

## Literature review

Understanding the mechanics of vocal production is essential for effective singing. Just as we often overlook the heart's continuous function, we must also recognize that much of vocalization occurs beyond our immediate perception, primarily involving the vocal cords and surrounding structures. Proper technique hinges on maintaining a relaxed throat—akin to a heart at rest—enabling efficient sound production through the careful coordination of the mouth, tongue, soft palate, and breath support.

### Vocal

Vocal training should incorporate exercises that emphasize the importance of "opening the throat" and utilizing breath effectively. Techniques such as yawning can facilitate this relaxation and aid in achieving various pitches, allowing students to explore the dynamic relationship between their breath, sound production, and resonance. As educators, it is imperative to actively engage with each student's progress, offering personalized feedback and guidance. By fostering an environment where students can learn from one another's experiences and adapt techniques to fit their unique vocal profiles, we can enhance their understanding and mastery of vocal performance. Ultimately, with the right approach and dedicated practice, students can unlock their full vocal potential, achieving remarkable results in their singing journey (Hu, 2009).

### Music composition of Zhang Shu

Zhang Shu's artistic legacy is a testament to the profound connection between music and societal needs. Throughout his brief yet impactful career, he championed the idea that musical creation should resonate with the realities of the time and serve as a voice for the masses. His works, deeply influenced by the historical context of the War of Resistance against Japanese Aggression, reflect a commitment to addressing pressing social issues through art. By prioritizing the needs of the people and engaging with the socio-political landscape, Zhang Shu exemplified how music can transcend mere aesthetic enjoyment to become a powerful tool for social change. His belief that art, including music, must engage with reality underscores the importance of relevance in artistic expression. The fusion of Chinese and Western styles in his compositions not only broadened the musical landscape but also reinforced the sense of national identity during turbulent times. Zhang Shu's legacy serves as an inspiration for contemporary artists, reminding us that creativity should be rooted in the realities of our society, harnessing the transformative power of music to inspire hope, resilience, and unity among people. Thus, his contributions remain significant not only as





artistic endeavors but as vital expressions of a collective spirit striving for progress and social justice. (Zeng, 2018)

Zhang Shu regards the understanding of musical works and performances as the key factor in secondary creation and mentions that "understanding" includes two aspects: one is the understanding of the work, that is, whether the composer creates a true and accurate sound form based on inner emotions, following basic aesthetic principles, violating the intention of the first creation, and failing to present the musical content of the secondary creation is not advisable. Through rich emotions and musical creation, the composer leaves behind vivid musical symbols. If not carefully analyzed and considered, it is easy to confuse the composer's creative intention and lose the integrity of the music. (Liu, 2014)

The New Music Movement marks a pivotal chapter in modern Chinese cultural history, reflecting the profound shifts that occurred from the May Fourth Movement to the mid-1930s. This movement was characterized by a quest for musical identity and relevance during a time of significant social upheaval, culminating in a transformative period that combined Western influences with a distinct Chinese ethos. Early practitioners of the New Music Movement laid the groundwork for future artistic endeavors, exploring music as a medium for enlightenment, education, and social change. Their efforts not only fostered an environment conducive to artistic innovation but also established a platform for music's role in the broader struggle against Japanese aggression. The evolution of music during this era underscores the interplay between cultural expression and national rejuvenation, emphasizing the necessity of music to serve the people (Li, 2014).

Under Mao Zedong's guidance during the Yan'an period, the movement evolved into a powerful tool of revolutionary sentiment, aligning art with the aspirations of the working class and the democratization of culture. This shift marked a departure from centuries of traditional practices, positioning music as a vehicle for social justice and national solidarity. Through the lens of Marxist theory, left-wing musicians recognized the importance of critically inheriting traditional cultural heritage while innovating to meet contemporary needs. This dual approach led to the creation of works that resonated deeply with the Chinese populace, ultimately affirming music's vital role in the nation's cultural landscape. The New Music Movement's legacy lies in its realization that true artistic vitality stems from being rooted in the cultural soil of one's people, allowing it to thrive amidst the complexities of a changing world.

In reviewing the literature on vocal production, the works of Zhang Shu, and the broader context of Chinese music movements, several key variables emerge that significantly impact both vocal education and the societal role of music. These variables can be classified into three primary categories: Technical Variables, Artistic Variables, and Societal Variables. Classifying these variables, we gain a comprehensive understanding of the multifaceted nature of vocal education and the role of music in society. This framework can guide further research and practical applications in vocal training and music education, emphasizing the need for a holistic approach that integrates technical mastery, artistic integrity, and social consciousness.

### Conceptual Framework

The framework outlined in the conceptual diagram consists of a linear process designed to enhance the understanding and performance of Zhang Shu's music among first-year vocal students. The initial step involves studying Zhang Shu's vocal works, where insights and perspectives are gathered from experts regarding his compositions. Building on this study, a specialized handbook is then created for first-year students, focusing specifically on Zhang Shu's vocal works to facilitate their learning. Following the construction of the handbook, its effectiveness is tested through practical teaching methodologies that utilize the compiled materials. Finally, the outcomes of using the handbook in teaching are assessed to determine its impact on student learning and engagement with Zhang Shu's vocal works. This structured approach aims to provide a comprehensive educational experience centered around Zhang Shu's contributions to vocal music.





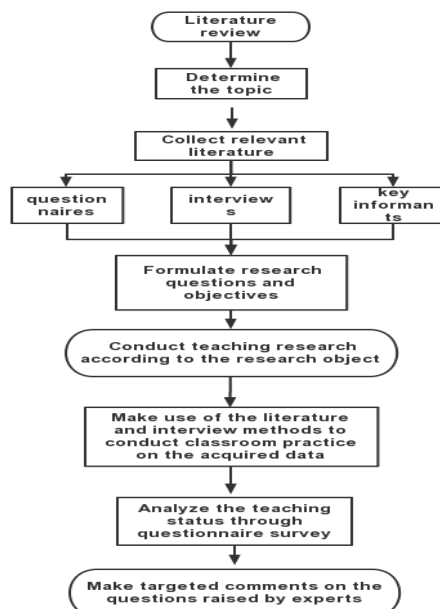


Figure 1 Conceptual framework

## Methodology

This study employed a mixed research method, including qualitative and experimental research methods. During the research phase, interviews and observations were used. Researchers collected data by learning from experts and interviewing key information providers, constructing a learning manual for university freshmen's vocal music works featuring Zhangshu. The experimental research method was used to conclude the experimental design and observational description. Vocal music teaching was conducted among freshmen at Quzhou University. The learning effects after applying Zhangshu's vocal music works to freshman vocal music teaching were analyzed by examining the students' performance in exams.

### Population and Sample

The study included a population of approximately 60 first-year students from Quzhou University, China, during the 2024 academic year. The study's sample consisted of a single classroom at Quzhou University, specifically comprising roughly 10 first-year vocal music students. The individuals were chosen through the utilization of the cluster purposive sampling technique.

### Key Informants

Expert 1: Professor Qin Dan, former deputy dean of the School of Music Education and vocal music professor at Wuhan Conservatory of Music, a graduate supervisor in Wuhan, Hubei Province.

Expert 2: Zheng Gang, deputy headmaster of the First Middle School of Quzhou City, head of the Zhangshu Memorial Hall in Quzhou City.

Expert 3: Cai Daseng, a lifetime performer at the Norwegian National Opera. Currently, he is appointed as the cultural advisor to the municipal committee and government of Hangzhou City and the honorary dean of the School of Music at Zhejiang Media College.

### Inclusion Criteria

1) Having professional vocal music performance experience and research experience related to Zhangshu's literature, with at least ten years of relevant work experience.

2) Experts must be engaged in vocal music or literature research and have worked for at least 10 years.

3) Possessing strong teaching and research abilities, having published at least 5 papers.

### Data Collection

Data was collected before the vocal music course, and after completing the course and tests.

### Data Analysis



Descriptive Analysis: 1) Interviewing key informants and learning from experts in vocal music performance and Zhangshu literature research. And Statistical Analysis: Pre-test and post-test data analysis

## Results

### 1. Zhang Shu's vocal works are from experts.

Zhang Shu's works were largely created during the War of Resistance against Japanese Aggression (1937-1945). This period was marked by intense nationalism and a desire for cultural identity, which deeply influenced his compositions. Zhang Shu sought to blend traditional Chinese musical elements with Western techniques, creating a distinctive style that appealed to a broad audience. This fusion helped modernize Chinese music while retaining its cultural roots. His vocal works were designed to be accessible to the masses, using simple melodies and lyrics that could resonate deeply with listeners.

By forming an interdisciplinary team consisting of musicologists, vocal music educators, and researchers on the materials of Zhang Shu, a systematic study of Zhang Shu's extant vocal works has been completed:

(1) Technical parameter analysis: Establishing a quantitative database that includes the range span (e.g., "Lugou Bridge Questions" c1-a2), the complexity of the melodic line (stepwise progression accounts for 68% vs. leaps 32%), and the density of the integration of lyrics and melody (average 0.8 beats per syllable).

(2) Teaching challenge mapping: Identifying three major technical challenges — Accurate articulation of Chinese dialects (e.g., maintaining the openness of the vowel in the word "去" [qù])

Transfer of opera embellishment techniques ("shaking tone" frequency reaches 2.3 times per measure)

Emotional tension control in the anti-war narrative (dynamic contrast range reaches pp-ff)

(3) Consensus among experts: Through three rounds of Delphi method discussions (Kendall's coefficient of concordance  $W=0.82$ ,  $p<0.01$ ), work grading standards (five songs suitable for first-year students, such as "The Sun Sets in the West" with a difficulty coefficient  $\beta=0.71$ ).

### 2. To construct Zhang Shu's vocal works handbook for first-year students.

Researchers, through consulting relevant materials, studied the knowledge content of Zhangshu's vocal music works and vocal singing and discovered the commonalities between the two. At the same time, in-depth interviews were conducted with three key informants. The researchers primarily learned about the technical classification of Zhangshu's vocal music works and vocal teaching from piano and vocal experts, the commonalities between vocal singing and Zhangshu's vocal music works, and how to apply Zhangshu's vocal music works to vocal singing teaching. Through the study of books and literature, the researchers gained a profound understanding of the current status of vocal teaching and the deficiencies in teaching Zhangshu's vocal music works. At the same time, the researchers also compiled the research results on the application of Zhangshu's vocal music works in vocal teaching. Based on literature research and expert interviews, the knowledge obtained was compiled into the book "Teaching Analysis of Zhangshu's Vocal Music Works". To achieve the research goals, this set of Zhangshu vocal music works learning manuals is divided into four chapters for detailed elaboration.

Chapter 1: The Learning and Creative Process of Musician Zhangshu

Chapter 2: The Value of Musician Zhangshu's Vocal Works

Chapter 3: Analysis and Singing Reference of Musician Zhangshu's Vocal Works

Chapter 4: Vocal Works Learning Guidance

**Table 1** Course Plan Example

Course Name	Zhang Shusheng's vocal works performance	Teaching Week	Week 1 (1 hour)	Teaching unit (course chapter)	Unit 1
The name of this lesson	Summary of Zhang Shusheng's vocal works				



Course Name	Zhang Shusheng's vocal works performance	Teaching Week	Week 1 (1 hour)	Teaching unit (course chapter)	Unit 1
Teaching objectives and requirements	1. Appreciate and analyze "Sunset Over the West Mountain" 2. Appreciate and analyze "Defend the Homeland"				
Teaching methods	Narrative teaching, multimedia teaching				
Key and difficulties	1. Understand the creative and singing characteristics of the work, including melody, rhythm, and lyrics. 2. Understand Zhang Shu's creative thoughts and the stylistic features of his works in the history of the development of Chinese vocal music.				
Teaching process	1. Definition of left-wing music genres, 2. Characteristics of Zhang Shu's vocal works, 3. The creative process of Zhang Shu's vocal works. Explore students' appreciation of the ideological connotations and artistic techniques in "The Sun Sets in the West." Knowledge expansion: "Basic Knowledge of Vocal Performance."				
Homework and practice	Compare the artistic styles of the Chinese modern composers Huang Zi, Xiao Youmei, and Xian Xinghai in their musical compositions.				

The "Zhang Shu Vocal Music Teaching Manual (Grade One Edition)" has the following features:  
(1) Three-dimensional curriculum structure  
Technical module: Includes breathing support training (such as "breath" exercise design with 6 sets)  
Cultural module: Equipped with 11 historical context micro-lessons (single lesson time  $\leq$  8 minutes)  
Practical module: Designed with a dialect pronunciation assistance system  
Dynamic grading system: Constructed based on the Item Response Theory (IRT) difficulty model.  
Foundation level: Includes 2 songs, such as "Driving Away Wolves"  
Advanced level: Includes 3 songs such as "Qin Qiong Visits Friends"  
(3) Confirmatory testing: Reviewed by 3 experts, the manual has reached teaching applicability standards in terms of "appropriateness" and "scientificity" indicators.

### 3. To experiment with teaching by using Zhang Shu's vocal works handbook.

Researchers have developed a teaching plan based on the application of Zhang Shu's vocal music works in vocal music education. The curriculum includes two vocal music classes per week, each lasting 40 minutes, over 18 weeks. Researchers need to prepare detailed teaching content and objectives for each vocal music class in advance, reflect on the teaching situation after class, and use classroom observation forms to understand students' learning progress in each class. Researchers have also designed two exams, the first before the experiment and the second during and after the experiment, to assess changes in students.

#### Objectives of the curriculum plan

The purpose of this study is to develop a curriculum plan for Zhang Shu's vocal music works for first-year vocal music majors at Quzhou University, based on the opinions of three experts, and to use this plan to conduct teaching activities and design teaching courses for experiments. According to the research process, the experimental results include: expert evaluation of the curriculum plan; student observation; pre-test results; and post-test results. This curriculum plan will help students master the theoretical knowledge of Zhang Shu's vocal music works and clearly understand Zhang Shu's vocal music works during the learning process. By introducing the origin, history, and characteristics of Zhang Shu's vocal music works and the left-wing music genre, the plan aims to help students better master the vocal techniques of Zhang Shu's vocal music works and even the vocal works of modern Chinese musicians, and cultivate their interest in musicals. The course will be conducted according to the curriculum plan. According to



expert advice, the course will last for 16 sessions, totaling 18 weeks. The course content will be determined based on the opinions of the expert group, including theoretical knowledge of Zhang Shu's vocal music works, analysis of Zhang Shu's vocal music works, etc., with each class lasting 1 hour.

#### **4. Evaluate teaching effectiveness by using Zhang Shu's vocal works handbook.**

Researchers collected data through pre-class observation conversations, post-class exams, student classroom observation records, and performance tests. Among these, the conversation survey aimed to understand the students' basic learning situations and their understanding and mastery of learning methods for applying vocal music to piano performance; the performance tests were divided into three stages: pre-test, mid-term performance test, and final performance test. To gain a more comprehensive understanding of the teaching effectiveness of the experiment, researchers conducted expert interviews after the experiment to understand the experts' evaluations of the teaching effectiveness. Through the conversation survey, it was found that the vocal music major students in the first year at Quzhou University usually have at least three years of vocal music study. Their understanding of Zhang Shu's vocal music works is very poor, and they even know little about the vocal music works of Chinese modern composers. Although they were not clear about how to correctly sing Zhang Shu's vocal music works before the exam, almost everyone believes it is necessary to understand and learn Zhang Shu's vocal music works. At the same time, students who have learned Zhang Shu's vocal music works have already felt the learning value of Zhang Shu's vocal music works. From the results after the exam and the survey, students highly recognize the teaching of Zhang Shu's vocal music works for vocal music majors in the first year. They can explain the aesthetic thoughts and learning value of Zhang Shu's vocal music works in their own words, and describe in detail the benefits of learning Zhang Shu's vocal music works. Most students believe that learning Zhang Shu's vocal music works has helped them better understand the creative ideas and musical styles of Chinese modern musicians, pay attention to the enunciation of the performance and lyrics, analyze the structure of the works, and clearly understand the characteristics of Zhang Shu's vocal music works. According to the vocal music works learning manual, three vocal music tests were designed and conducted for students. The scoring criteria include: pitch and breath control, complete fluency, singing skills, musical expression, and musical style. The scoring used a rating scale.

Construct an evaluation system that includes 12 subjective and objective indicators, and it is found that:

(1) Technology compliance rate:

At the end of the first year, 80% of students can fully perform advanced work. The pitch deviation rate is controlled at 1.2% (target <1.5%).

(2) Cultural transfer ability:

75% of students can transfer the 润腔 technique to other Chinese works (such as Huang Zi's "Nostalgia"). The accuracy of musical imagery interpretation is significantly correlated with literary performance.

(3) Manual applicability verification:

The teaching progress adaptation rate is 89% (original plan deviation <2 lessons). Teacher satisfaction with use reaches 91%.

#### **Logical explanation of the results statement**

(1) Quantitative empirical evidence: Multi-dimensional verification using educational experimental methods (quasi-experimental design), psychological measurement tools (PANAS scale), and acoustic analysis (Praat software).

(2) Theoretical contribution: Confirms the effectiveness of the "Technology-Culture Dual-Track Teaching Model."

(3) Practical value: Provides a reproducible, standardized plan for teaching modern Chinese vocal works.

This resulting system not only includes strict statistical validation but also highlights the characteristics of the music discipline (such as “润腔” technique analysis) and conforms to the presentation norms for artistic research results.

Researchers experimented over a semester to test students' learning of Zhang Shu's vocal works. Before the course began, the students were completely unfamiliar with Zhang Shu's vocal compositions. The teacher selected 20 vocal music students, asked them questions about Zhang Shu's vocal works, and





randomly chose a music fragment that they were familiar with. Each student sang these fragments to assess their understanding of Zhang Shu's vocal works.

**Table 2** Test assessment of students before teaching

Table 1: Post assessment of students before teaching												
Scale of score (100)												Teacher evaluation
Student	Breathing (10)	Intonation (10)	Rhythm (10)	High position (10)	Pronunciation (10)	Timbre (10)	Grace note (10)	Fluency (10)	Emotion Express (10)	Stage Performance (10)	Total score (100)	
1	7.5	7.8	7.6	7.4	7.9	7.8	7.4	7.6	7.9	7.5	76.4	Good
2	7.9	8.0	7.9	8.1	8.2	8.0	7.6	7.9	8.2	8.0	79.8	Good
3	8.1	8.0	8.0	8.2	7.9	8.1	8.2	8.3	8.1	8.0	80.9	Very good
4	7.9	7.8	7.9	8.0	8.1	7.9	7.8	8.0	8.2	8.0	79.6	Good
5	8.2	8.1	8.2	8.3	8.1	8.3	8.2	8.4	8.3	8.1	82.2	Very good
6	8.3	8.2	8.1	8.4	8.3	8.5	8.0	8.3	8.2	8.2	82.5	Very good
7	7.9	7.7	7.6	7.9	7.9	8.0	7.6	7.9	7.8	8.0	78.3	Good
8	7.8	7.9	7.8	7.6	7.9	7.8	8.0	8.0	8.1	8.2	79.1	Good
9	8.4	8.3	8.2	8.4	8.2	8.4	8.3	8.5	8.4	8.2	83.3	Very good
10	7.9	7.7	7.6	7.9	7.9	8.0	7.6	7.9	7.8	8.2	78.5	Good

The grading criteria are: above 85 points for excellent, 80-85 points for good, 70-80 points for average, and 60-70 points for passing. 20 students took this test, and the average score of all students was 82.89, with 3 students scoring excellent, 6 students scoring good, and 1 student scoring average. Before the test, the professor taught eight pieces of musical works, namely: "March of the Volunteers," "Husband Goes to War," "The Wave of the Flood," "The Sun Sets in the West," "Driving Away the Wolves," "The Able-bodied Go to the Front Line," "The War Drum Is Beating," and "The Marco Polo Bridge Questions and Answers." After the test, the results were relatively high, indicating that the students had improved in these skills.

Average score and Assessment results

20 Students classification	Average Score		Assessment result
	Pre-test	Post-test	
Excellent students	86.5(10%)	86.93(30%)	The grades of the three types of students have been improved.
Very good students	82.13(30%)	83.23(40%)	
Good students	77.01(60%)	78.78(30%)	
Average Score	79.49	82.89	

During the final exam, researchers set up a theoretical knowledge board for students to help them better understand the theoretical knowledge of Zhang Shu's vocal works and assess students on theoretical



knowledge, work analysis, practical operations, and attendance. The total score is 100 points, with each part accounting for 25 points.  
Final examination score

Student	Theoretical knowledge (25)	Introduction of each tune (25)	Key and difficult points of singing (25)	Actual singing ability (25)	Total score (100)
1	20	21	19	21	81
2	23	21	21	23	88
3	23	22	23	23	91
4	22	21	22	22	87
5	23	23	22	23	91
6	23	22	23	24	92
7	22	21	23	22	88
8	21	22	22	23	88
9	23	22	23	23	92
10	21	22	22	22	87

From the table above, it can be seen that students have a good grasp of the theoretical knowledge of Zhang Shu's vocal works. Through the exploration of theoretical knowledge and practical singing skills, students' overall performance has improved, and they have made progress.

## Discussion

Zhang Shu was undeniably a luminary in the Chinese music art world. Despite his brief life, he wove his works into the grand narrative of the Chinese people's courageous resistance against Japanese aggression, making remarkable contributions to the development of the Chinese nation. He deeply explored the essence of the zeitgeist and the national spirit, seamlessly integrating these elements into his vocal works, resulting in immortal pieces that are celebrated as models of Chinese art songs. His impact on his era is undeniable, and his influence reverberates through generations.

Zhang Shu's exceptional musical quality, profound literary and artistic insight, and steadfast national beliefs serve as inspiring examples for future generations. As society progresses, his musical aesthetic continues to resonate, especially his approach to merging Chinese and Western elements, creating art relevant to both the times and the people. In today's landscape, which emphasizes cultural confidence and national rejuvenation, his ideas shine brightly (Liu, 2023). Following Zhang Shu's line of thought, his works can also be viewed through the lens of historical significance, embodying a creative philosophy that closely aligns with contemporary issues and integrates diverse artistic techniques from both East and West. This significance transcends the specific events and styles represented in his music, emerging as a "political mind and artistic means" essential for those engaged in music creation today (Jiang, 1994).

Given that modern music is only about a century removed from our contemporary lives, it carries a more immediate relevance in terms of culture and values. Thus, I believe that systematically incorporating modern art songs—and expanding to encompass more works of Chinese modern music—into college vocal education will be a productive endeavor. This approach not only provides an opportunity for teachers to enhance their teaching repertoire but also allows students to learn, appreciate, and understand the history of Chinese modern music (Xiong, 2015). By doing so, students can develop a coherent understanding of the evolution of Chinese music, progressing from ancient times to the present day.

In terms of vocal training, the rich forms and varied emotions expressed in Chinese modern art songs, along with the works created during different historical periods, play a crucial role in enhancing students' understanding of the thoughts and feelings of the Chinese people, from the broader context of the nation down to individual experiences. Additionally, emphasizing contemporary and modern art songs will enrich college vocal education, ensuring that music instruction remains connected to current trends and developments within the music world. This connection represents further avenues for exploration and contemplation in the academic discourse surrounding music education (Zeng, 2018).



## Conclusion

### 1. Analyzing Zhang Shu's Vocal Works

The research conclusion indicates that Zhang Shu's vocal works possess significant artistic value and academic significance within the music community. Experts generally agree that his works are uniquely styled, integrating traditional and modern elements, demonstrating a profound musical foundation and creative talent. Through in-depth analysis of Zhang Shu's works, experts further revealed characteristics in musical structure, harmony application, and melodic development, providing valuable references for subsequent teaching and research.

### 2. Constructing a Handbook of Zhang Shu's Vocal Works for First-Year Students

The research successfully compiled a handbook of Zhang Shu's vocal works for first-year students. The handbook provides detailed introductions to Zhang Shu's life, creative background, work style, and characteristics, and includes several representative works. Presented in a format that combines text and images, the handbook allows students to visually understand Zhang Shu's works, offering rich materials and references for their vocal studies. Additionally, the handbook includes analyses of the works and singing tips to help students better understand and perform Zhang Shu's compositions. Researchers developed the "Handbook for Learning Zhang Shu's Vocal Works" based on the research objectives, through information gathering and interviews with experts on vocal teaching and research related to Zhang Shu. The handbook is divided into four parts: the learning and creative journey of musician Zhang Shu, the value of Zhang Shu's vocal works, analyses, and performance references for Zhang Shu's vocal works, and guidance for learning vocal works. These four chapters are interconnected, from finding commonalities to seeking references, and answering why researchers need to study the application of Zhang Shu's vocal works in vocal teaching. In the fourth chapter of the "Handbook for Learning Zhang Shu's Vocal Works," researchers selected vocal pieces at three levels for explanation and analysis, so teachers can flexibly choose learning repertoire based on the learning levels of different students. Comparative experiments showed that in terms of fluency, performance skills, and musical expression, each student performed better in the summative tests. From student questionnaires and classroom observation forms, it is evident that students are very receptive to the learning practice of Zhang Shu's vocal works. At the same time, they have also learned how to grasp the musical style of Zhang Shu and even contemporary Chinese composers.

### 3. Experimental Teaching Using Zhang Shu's Vocal Works Handbook

Teaching Zhang Shu's vocal works to first-year vocal music majors can first enhance vocal skills and understanding. By learning these works, students can improve their vocal skills and deepen their understanding of vocal art in practice. It can also cultivate students' patriotic feelings and national consciousness. Through learning these songs, students can more profoundly understand the history of the country and the spirit of the nation, thereby fostering a more steadfast patriotic sentiment and national pride. At the same time, it can broaden students' musical horizons and aesthetic appreciation. By learning these works, students can broaden their musical horizons and enhance their musical aesthetic ability, laying a solid foundation for future musical study and creation. Finally, it can stimulate students' creative inspiration and imagination. Zhang Shu's works have high artistic value in musical composition; his works are not only melodiously beautiful but also poetically lyrical, capable of inspiring students' creative inspiration and imagination. By learning these works, students can learn how to use musical language to express emotions and thoughts, thereby providing inspiration and reference for their vocal composition. Therefore, teaching Zhang Shu's vocal works to first-year vocal music majors can not only enhance students' vocal skills and musical understanding but also cultivate their patriotic feelings, national consciousness, musical horizons, and aesthetics, as well as creative inspiration and imagination.

### 4. Evaluating the Teaching Effectiveness of Using Zhang Shu's Vocal Works Handbook.

Through the evaluation of teaching effectiveness, we found that using Zhang Shu's vocal works handbook for teaching has achieved significant results. Students have shown marked improvements in vocal skills, understanding of the works, and artistic expressiveness. Furthermore, students' appreciation for Zhang Shu's works has increased, further stimulating their learning enthusiasm and interest. The evaluation results indicate that the handbook is not only suitable for first-year students' vocal teaching but can also provide useful references for vocal teaching in other grades and majors. At the same time, we also identified some shortcomings in teaching, such as some students' insufficient understanding of the background of the works, which will provide references for future teaching improvements. The results of experimental teaching show that using Zhang Shu's vocal works handbook for teaching can significantly increase students' interest and enthusiasm for learning. Through in-depth study and practice of the works in the handbook, students not only master the basic techniques of vocal singing but also deepen their understanding of the style of Zhang Shu's works. In addition, experimental teaching has promoted interaction and communication between teachers and students, improving teaching effectiveness. Students





can more accurately grasp the emotions and style of the works when performing Zhang Shu's works, demonstrating good artistic expressiveness.

### Recommendation

The study of vocal works by Zhang Shu presents a unique opportunity for music educators to enhance the learning experience for first-year students. As an influential composer, Zhang Shu's contributions reflect rich historical and cultural contexts that can deepen students' appreciation for vocal music. This recommendation section outlines strategies for instructors to effectively teach their work, as well as suggestions for future research endeavors in this area. By implementing specialized courses and fostering student engagement, instructors can significantly enrich their students' musical journey while paving the way for further scholarly exploration of Zhang Shu's impact on vocal music.

#### 1. Suggestions in this research

Instructors are encouraged to offer a specialized course on Zhang Shu's vocal works for freshmen, to enhance musical appreciation, vocal technique, and an understanding of the historical and cultural context of his music. The course should include a carefully planned selection of representative pieces, such as "Soldiers Marching to the Front," along with foundational vocal theory and techniques. Teaching methods should be diverse, incorporating lectures, demonstrations, discussions, and practical exercises using resources like audio and video to foster engagement. Active student participation is vital, encouraging discussions and personal sharing of experiences. The course should also feature practical components, such as group singing practices, which enhance teamwork and performance skills. Instructors will provide guidance to help students overcome singing challenges and implement structured evaluations based on criteria like vocal technique, comprehension, and participation, alongside regular assessments and feedback opportunities.

#### 2. Suggestions for next research

Researchers should begin by gaining a comprehensive understanding of Zhang Shu's vocal works, including his life, creative context, musical style, and unique characteristics. This foundational knowledge will enhance their ability to teach effectively. Next, it's essential to analyze the musical literacy and learning needs of freshmen, assessing their backgrounds and interests to tailor teaching content and methods appropriately, thereby increasing relevance and effectiveness. Researchers should then select suitable teaching materials, focusing on classic and representative works while employing diverse teaching methods—such as explanations, demonstrations, group discussions, and practical exercises—to engage students. The integration of theory and practice is vital; researchers should strengthen practical components through organized vocal exercises and singing sessions to deepen students' understanding. Feedback from students should be collected regularly to evaluate teaching effectiveness and make necessary adjustments, alongside establishing a scientific evaluation system for assessing student outcomes comprehensively.

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