
The Creation Of Vocal Performance Course Case Study Guangxi Arts University

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Abstract:

The main research scope of this paper is the vocal music teaching methods for Chinese art songs in vocal performance courses in Chinese universities. Based on the current content and requirements of vocal music teaching syllabuses in Chinese universities, the author has collected vocal music teaching methods and teaching content from home and abroad, conducted a comprehensive study, summarized them, and combined them with the author's own teaching methods and experience to create a systematic set of vocal music teaching methods and vocal music textbooks for Chinese art songs. At the same time, the author also used the VMUS platform to achieve audio visualization analysis in the experiment, thus transforming vocal music teaching from the traditional model to an all-round teaching model that combines "mouth, ear and eye". The research results show that the vocal music teaching methods and textbooks created by the author are effective, and that students' performance and basic skills have improved significantly.

Keywords: Vocal Music Education, Chinese Art Song, Guangxi Arts University, Audio Visualization Analysis

Introduction

Music education has played an important role in the Chinese education system since ancient times. In the early days, it was dominated by religious rituals and Confucianism. After the founding of the People's Republic of China, music education gradually became more diversified and modernized (Zhang, 2023). At the beginning of the 21st century, Chinese music education entered a stage of informatization and modernization, which promoted profound changes in the environment for cultivating music talents and gained international recognition (Wen, 2017).

However, Chinese music education, especially vocal music education, is still influenced by Western theories. Chinese ethnic vocal music has absorbed some Western experiences, but in recent years, it has gradually developed vocal music education theories and practices with local characteristics (Li, 2019). With the increasing demand for comprehensive talent training, vocal music education is facing new opportunities and challenges, such as: the outdated teaching methods affecting the teaching quality (Yi, 2023); the monotonous theoretical teaching methods hindering students from laying a solid theoretical foundation, thus limiting their understanding of the essence of the performance works (Zhao, 2018); and the impact of the deeply rooted singing styles inherited by teachers on the development of students' personal vocal styles (Chi, 2015).

The main research scope of this paper is the vocal music teaching methods for Chinese art songs in vocal performance courses in Chinese universities. According to the content and requirements of the current vocal music teaching syllabus in Chinese universities, vocal music teaching methods and teaching content at home and abroad, as well as theoretical research on Chinese art songs, have been collected. The author will integrate and summarize the above-mentioned content, and, combined with the author's own teaching methods and experience, compile a systematic set of Chinese art song teaching methods and vocal music teaching materials.

Literature Review

1.Chinese art song

Tang Li (2022) A brief introduction to the art of singing. It is argued that Chinese art songs are regarded as a product of the integration of Chinese and Western music cultures, combining Western vocal techniques with the uniqueness of Chinese language and culture. Yang Yunyu (2022) The historical heritage and evolution of Chinese art songs. The interpretation of Chinese art songs has led to the following conclusions: first, Chinese art songs are vocal works created by modern composers using poems and songs handed down from ancient history or original compositions as content, and using the form of Western art songs as a model; second, Chinese composers refer to the creative ideas and methods and techniques of Western art songs to create vocal works composed of Chinese lyrics. Zhang Weijia (2015) edited "Music Appreciation" believes that Chinese art songs inherit the lyrical qualities of traditional poetry and demonstrate rich emotional layers and technical expression through the high demands of bel canto singing.

2.Music education in China

According to Yu Danhong (2012) Yearbook of Music Education in China. Influenced by elements such as religion, tradition and modernity, music education in China is gradually developing into a comprehensive system that covers various music forms, professions and fields. From ancient rituals and Confucian education to modern diversified music education, the history of music education in China has seen rich and varied changes and development. In addition, there is also a wealth of research papers on contemporary music education, most of which focus on current problems and consider solutions. For example, Huang Kai (2022) Research on the Current Situation, Problems and Countermeasures of Musical Theatre Education in China—A Case Study of the Musical Theatre Department of the Beijing Dance Academy and Bai Xiaowei (2022) The Transformation of the Teaching Model of Music Education Majors in the Context of New Liberal Arts. These documents mainly analyze the gains and losses of the development of the teaching model of music education majors in China, analyze the needs and demands of professional education positions, clarify the advantages and disadvantages of the current education model, and clarify the direction and purpose of reform and development, with a view to gradually promoting the transformation of China's music education model.

3.Chinese art song teaching method

Qiao Xinjian, Feng Jianzhi, & He Jun. (2001). Introduction to vocal art. Starting with the basic human organ theory of the structure and development principles of the singing organs, it explains in detail the basic principles of scientific vocalization, especially conducting in-depth research on aspects such as the "closed" singing method and chest resonance. It then teaches the relationship between singing and language in terms of how to achieve a good relationship between "words and sound" and "words and emotion" during the singing process. In addition, the book also provides a wealth of practical teaching instructions on aspects such as "the study and training of Chinese folk vocal music" and "song processing, performance and singing tips".

Yang Ligang (2007). Vocal Music Pedagogy. An overview of the overall content of vocal music teaching is provided through the selection of vocal music teaching plans, syllabuses and teaching materials. In terms of teaching methods, the book divides vocal music classes into "vocal music lectures", "vocal music group classes", "vocal music individual classes" and "artistic practice and internship classes", and explains the teaching process of each class from different teaching and organizational forms. In addition, in the arrangement and evaluation system of vocal music teaching courses, the book also discusses in detail the overall process of vocal music teaching practice as well as the evaluation criteria, forms and purposes of vocal music teaching, fundamentally establishing an evaluation system for vocal music teaching.

Han Desen (2014). *Introduction to Vocal Music Pedagogy*. This book provides new insights into the scientific construction of the vocal music teaching system from a macro perspective, and explores in depth many micro issues in vocal music teaching practice. It provides a comprehensive and objective analysis of various vocal music issues using a combination of empirical and dialectical thinking, in order to explore the scientific principles and effective teaching methods of vocal music teaching. The vocal music concepts and teaching methods it explains are novel and unique, closely linked to teaching practice, concise and efficient, highly practical, and suitable as a vocal music textbook for regular higher education institutions.

Wang Houyi (2018). *Bel Canto teaching method in vocal music teaching in the new century*. A series of systematic teaching steps are proposed. First, by combing through the history of vocal music development in China and abroad, students can understand the historical roots and cultural background of bel canto singing, which will stimulate their interest in vocal music. Next, the necessity and importance of vocal music teaching is introduced, emphasizing the impact of scientific vocal music training on students' future development. Then, the basic principles of bel canto singing are analyzed in depth, including the mechanism of sound production, the use of the resonance cavity, and the shaping of tone color. In addition, the book is equipped with a wealth of examples and exercises to help students apply what they have learned in actual singing. In terms of teaching methods, the author advocates interactive teaching, which stimulates students' creativity and expression through active interaction between teachers and students. At the same time, modern technical methods such as audio recording and video analysis are used to help students provide timely feedback and adjust their singing skills. To sum up, this book not only provides a wealth of theoretical knowledge, but also promotes the spread and development of bel canto in the new era through a systematic teaching process.

Li Linlin (2021). *Vocal performance and expression of Chinese art songs*. Emphasizes that the performance of art songs is not just a display of technique, but also a deep integration of emotion and music. Through careful analysis of the work, students can understand the emotions and stories behind the music, and thus achieve a deeper level of expression in their singing. The teaching methods proposed in the book encourage students to create works of art, inspiring them to add their own personal understanding and artistic expression to the singing process, so that every performance becomes a unique artistic experience. In addition, the teaching process in this book is divided into six chapters, covering everything from historical evolution to technical training. By explaining singing techniques and skills, students can master the basics of vocal music and singing methods. In the part on emotional processing and stage performance, special emphasis is placed on the emotional transmission and expressiveness of music, guiding students on how to show the connotation and charm of the work on stage. In addition, the part on the performance and guidance of classic art songs helps students apply the skills they have learned in actual singing through specific analysis and demonstrations of the works.

Sell Karen (2017). *The disciplines of vocal pedagogy: Towards an holistic approach*. Routledge. Based on the disciplines related to vocal pedagogy and traces the vocal teaching methods from ancient times to the present day. Throughout the teaching process, the knowledge of disciplines such as acoustics, anatomy and physiology is used to analyze singing methods, which leads to discussions on performance and aesthetics. Detailed thinking about singing techniques is the core of this book, and an understanding of techniques and scientific awareness is the basis of vocal teaching practice.

Huang Yin & Yang Jian (2012). *A Feasibility Study on the Application of Computer-Visualized Acoustic Parameter Analysis Methods in Vocal Music Teaching*. Feasibility of teaching the bel canto song "Lullaby" (composed by Brahms) through visualization techniques. They visualize the acoustic parameters such as pitch, timbre, rhythm, and beat in the teaching of song singing, so that vocal music students, teachers, and researchers can intuitively "see" the detailed dynamic changes in the music itself in a visual way. This teaching model with objective and

accurate assistance can undoubtedly provide them with good subjective evaluation references and learning cognitive feedback.

Methodology

Selected 20 second-year students of professional vocal performance (especially bel canto) of different levels, including students with a solid foundation and those with a weak foundation, to ensure the accuracy of the experimental process. They will be subject to rigorous professional testing methods and serve as samples for data analysis. The research plan will provide students with a series of teaching courses in 10 lessons over an 8-week period.

In this experiment, the digital tool VMUS (Visual Music System) is used to visually represent the various elements of music. This platform can convert audio data into dynamic visual effects in real time, helping users understand the structure and emotion of music from a visual perspective. It is commonly used in music education, performance, and sound analysis scenarios.

The exam is mainly divided into a pre-test and a post-test.

The pre-test is used to assess students' starting level and to find out what they already know about a particular topic or skill before teaching begins. This part usually includes questions, exercises or tests related to the course or topic. For example, in a vocal music course, the pre-test may include questions on music theory knowledge, scale recognition, basic music terminology, etc. By analyzing students' pre-test results, it can be determined in which areas they need more support and guidance, which helps to develop an individualized teaching plan. The post-test is used to assess students' learning outcomes and improvements in knowledge, skills and abilities at the end of the course. It can measure the impact of the course on students and the effectiveness of teaching. The post-test is administered at the end of the course and is designed to assess students' mastery of the content learned. It can take a similar test format as the pre-test. This helps teachers evaluate the effectiveness of the course and provides guidance for future course improvements.

In order to study in greater depth the methods and experiences of teaching Chinese art songs, the author conducted online video interviews with famous Chinese art song singers Xie Cheng, Chen Xue, and Chen Yixun.

Table 1 Interview questionnaire

1. What is Chinese art song?
2. What are the differences between Chinese art song and Western art song?
3. What are the characteristics of Chinese art song?
4. Why is Chinese art song worth studying?
5. How can Chinese art song be effectively taught to university students? Which songs are suitable for teaching at the university level?
6. What specific considerations should be emphasized in the teaching of Chinese art song?

7. What techniques and skills are needed to sing Chinese art song?

Results

Research results on the vocal pedagogy of Chinese art songs:

The origins of Chinese art songs can be traced back to the beginning of the 20th century, when composers combined folk tunes with poetry to form art songs with national characteristics. These songs emphasize the beauty of national melodies, while also requiring the singer to master unique vocal techniques. The following is a summary of the research results on their pedagogy:

1. Teaching theory

The vocal teaching theory for Chinese art songs should be based on the combination of vocal techniques and traditional music culture. The core includes three pillars: breath, voice, and mouth shape:

- Breath is the foundation of singing. It needs to be controlled through the coordination of the ribs, abdomen, and other parts to maintain smooth breathing.
- Sound production is a combination of vocal cord vibration and respiratory airflow, which resonates in the chest, head and mouth cavities.
- The mouth cavity plays an important role in sound production, and accurate pronunciation and tone are essential for singing Chinese art songs.

2. Teaching content

Vocal music teaching content needs to be designed according to the characteristics of students, including training objectives and course arrangements. The choice of teaching materials should be closely related to the teaching objectives, and teachers and students are encouraged to jointly create vocal music teaching materials.

3. Organization

Vocal music teaching can be organized in individual, small group, or large group classes. Individual classes emphasize personalized teaching, while small group and large group classes focus on interactive group learning and the mastery of theoretical knowledge. All types of classes should complement each other to achieve comprehensive teaching results.

Interview results

The author interviewed three famous Chinese art song singers: Xie Cheng, Chen Xue and Chen Yixuan. Their opinions provide an important reference for the teaching and research of Chinese art songs:

- Definition of Chinese art songs: The three experts all believe that Chinese art songs are a product of the combination of Western art songs and Chinese cultural elements.
- Differences between Western and Chinese art songs: Different languages, lyric styles and cultural connotations make Western and Chinese art songs unique.
- Teaching methods: The three experts emphasised that direct teaching methods and heuristic teaching methods are important for teaching Chinese art songs.
- Singing techniques: The experts believe that when singing Chinese art songs, the dialect, pronunciation of the Chinese language and the tunes of traditional music are elements that require special attention.

Through this interview, the research further clarified the focus of teaching Chinese art songs, which is to combine vocal music teaching with Western vocalisation methods while emphasising cultural background and language pronunciation.

Achievements of the vocal music course development for Chinese art songs

The Chinese Art Song Vocal Music Textbook is a book written for the teaching of Chinese art songs. It is suitable for use in Chinese art song courses in universities, for both teachers teaching the course and students learning to use it. The core teaching content of the textbook includes the ‘three essentials’: breath, voice and mouth shape, which form the theoretical basis for the teaching of Chinese art song vocal music.

The textbook consists of eight chapters, which cover the methods of teaching and assessing Chinese art songs and specific teaching content. Each chapter includes in-class exercises and after-class exercises to help students consolidate what they have learned. The following table provides an overview of the course information in the textbook:

Table 2 Course content

Chapter	Content	Class exercise	Homework	Used in
1	Singing posture	Practise correct singing posture in the mirror	Practise correct singing posture	Lesson 1
2	Structure of the singing organs and vocal production principles	Find the parts of the anatomy diagram in the mirror	Be familiar with the various organs of vocal production	Lesson 2
3	Breathing for singing	Correct breathing methods; staccato, legato, staccato-legato, and glottal	Staccato, legato, staccato-legato, and glottal	Lesson 3
4	The singing voice and training methods	The vowel scales of a, e, i, o, and u	The vowel scales of a, e, i, o, and u	Lesson 4
5	Diaphragmatic resonance and head resonance	Hummed vowels and ascending and descending scales	Hummed vowels and ascending and descending scales	Lesson 5-6
6	Basic knowledge of Chinese phonetics and training methods for articulation and pronunciation	Practice of open mouth, alveolar, close mouth and guttural sounds, and the song “Selling Cloth”	Practice of open mouth, alveolar, close mouth and guttural sounds, and the song “Selling Cloth”	Lesson 7-8

The textbook is designed to gradually guide students in mastering singing posture, vocal production principles, resonance techniques, and Chinese pronunciation, helping students systematically learn and improve their singing level of Chinese art songs.

A teaching plan is a key tool for improving teaching efficiency, ensuring teaching quality and promoting teaching innovation. In the vocal music teaching of Chinese art songs, formulating a reasonable teaching plan can effectively organise the teaching content and enable teachers to flexibly adjust the teaching progress according to the characteristics of students. Through the

teaching plan, teachers can help students establish learning goals and methods, thereby strengthening student management and promoting the development of learning habits. The table below shows the teaching plan formulated based on the Chinese Art Song Textbook, which integrates the content of the textbook into the curriculum and covers the key aspects of vocal music teaching of Chinese art songs.

Table 3 Chinese Art Songs vocal course teaching plan

Lesson	Content	Classroom	Format	Exercise
1	Singing posture	Vocal Classroom	Main course	Exercises 1-2
2	Structure of the Singing Organ and Principles of Vocalization	Vocal Classroom	Main course	Exercise 1
3	Singing breath	Vocal Classroom	Group lesson	Exercise 1
4	Singing throat and training methods	Vocal Classroom	Group lesson	Exercise 1
5	Chest resonance, head cavity resonance.	Vocal Classroom	Group lesson	Exercise 1
6	Chest resonance, head cavity resonance.	Vocal Classroom	Group lesson	Exercise 1
7	Basic knowledge of Chinese phonetics	Vocal Classroom	Group lesson	Exercise 1
8	Basic knowledge of Chinese phonetics	Vocal Classroom	Individual lesson	Exercises 1-2
9	Commonly Used Vocal Practice Songs	Vocal Classroom	Individual lesson	Song Homesick
10	Learning the song "Listen to the Rain	Vocal Classroom	Individual lesson	Song Listen to the Rain

The course lasts for 8 weeks with 10 lessons. Tests are arranged before and after the class to assess students' learning outcomes. The following are the assessment criteria for the tests:

Table 4 Assessment criteria

Evaluation Topic	Very Good	Good	Normal	Bad	Very Bad
	5	4	3	2	1
Melody	Pitch all correct	Out of tune up to 3 notes	Out of tune up to 5 notes	Out of tune up to 8 notes	Out of tune more than 8 notes
Breathing	Very even breathing	Uneven breathing within 2 counts	Uneven breathing within 3 counts	Uneven breathing within 4 counts	Uneven breathing more than 4 counts

Cont.

Rhythm	Perfect rhythm	Incorrect rhythm within 3 counts	Incorrect rhythm within 4 counts	Incorrect rhythm within 5 counts	Incorrect rhythm more than 5 counts
Articulation	All words pronounced correctly	Inarticulation within 3 times	Inarticulation within 4 times	Inarticulation within 5 times	Inarticulation more than 5 times
Stage presence	Very good presence	Slightly nervous	Voice slightly shaky	Voice noticeably shaky	Voice seriously shaky

In the pre-test and post-test evaluations, this study used the aural music piece “Listen to the Rain” to test and evaluate students in five areas: melody, breathing, rhythm, diction, and stage performance control.

Table 5 Student pre-test scores

Evaluation Topic	Student's overall score	Average score for each item
Melody	71	3.55
Breathing	63	3.15
Rhythm	60	3
Articulation	75	3.75
Stage presence	69	3.45
Overall average	3.38	
Percentage scale	67.6	

Table 6 Student post-test score

Evaluation Topic	Student's overall score	Average score for each item
Melody	81	3.55
Breathing	81	3.15
Rhythm	80	3
Articulation	82	3.75
Stage presence	74	3.45
Overall average	3.98	
Percentage scale	79.6	

The average score of the students improved from 3.38 to 3.98, which indicates that the students have made significant progress in breathing control and rhythm, and have mastered more basic skills. After training in this course, the pitch deviation of some students in melodic singing has also improved, which indicates that their sense of pitch has been strengthened. Overall, this experimental vocal music course has not only improved the students' practical performance level, but also enhanced their confidence in learning vocal music.

VMUS application

In some items of objective testing, this paper analyses the objective parameters of the students' singing with the help of the digital analysis platform VMUS, and the specified test piece

is Listening to the Rain. Before the analysis, the version of Listening to the Rain by singer Fan Jingma is used here as an example as a reference for visualising the objective data, and the following are the results of the pre- and post-tests of one of the students:

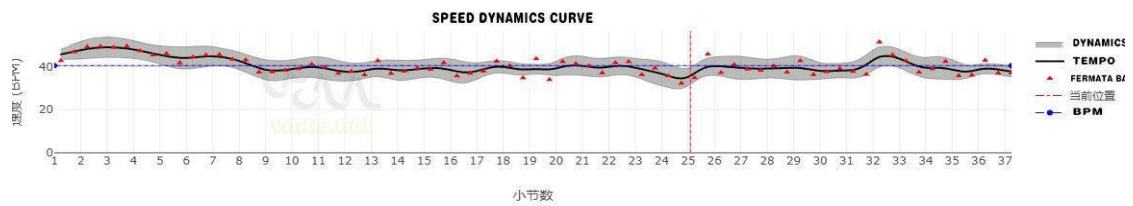


Figure 1 Pre-test VMUS analysis

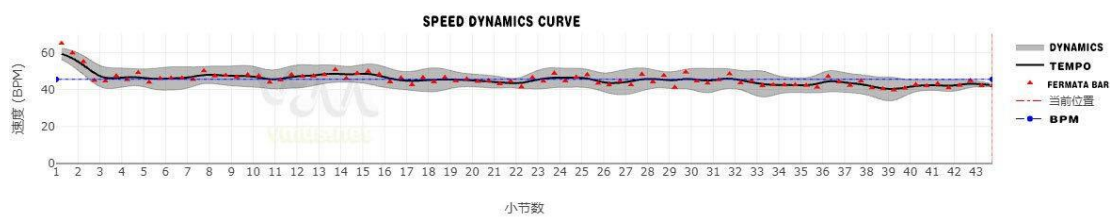


Figure 2 Post-test VMUS analysis

A comparison of the velocity-strength figure shows that the curve of the post-test is significantly smoother than the pre-test, which can prove that the experimental course is effective.

Conclusion

In this paper, when studying the teaching methods of Chinese art songs, research was conducted on domestic and foreign books on vocal pedagogy, art songs, and vocal pedagogy of Chinese art songs. At present, the teaching of Chinese art songs is based on the teaching of vocal pedagogy. This is because Chinese art songs were created by Chinese composers after the introduction of Western art songs into China, based on the characteristics of art songs. Therefore, the author believes that the teaching of Chinese art songs should be consistent with the basic methods of vocal music teaching, and should be taught from three aspects: the theory, content and organisation of Chinese art song vocal music teaching.

Although the genre of Chinese art songs comes from Western art songs, Chinese art songs have their own unique characteristics. This article learns from three experts on famous Chinese art songs about the teaching methods of Chinese art songs, and conducts an online video interview. These three experts are all famous vocal music professors at Chinese art colleges, and they have all achieved significant teaching results. The three experts all agree that the unique charm of Chinese art songs lies in the profound cultural heritage behind them and the particularity of the Chinese language. They emphasise that the content of the lyrics of Chinese art songs is mainly based on the literary genres of poetry and lyrics in Chinese, and some also quote local ‘dialects’ and tunes. Therefore, in the teaching of Chinese art songs, knowledge of the basic phonetics of Chinese, as well as the pronunciation and diction of words, is an important learning content. The author believes that the unique charm of Chinese art songs lies in their Chinese cultural heritage and pronunciation. For this reason, the Chinese art song vocal textbook was created. In the design of the teaching content of this book, the training methods of the basic knowledge of Chinese phonetics and the articulation and pronunciation of Chinese characters are taught as important course content.

Judging from the overall scores of the pre- and post-tests, the vocal music textbooks are effective for most people. This is because

1. The vocal music textbook is designed with exercises that are suitable for most student levels. Some students may be very comfortable with the content in the teaching textbook, and the exercise methods and techniques provided by the textbook can effectively meet their learning needs, help them overcome difficulties, and improve their vocal music skills.

2. The positive learning attitude and motivation of some students when using the vocal music textbook is also the key to improving their grades. They are willing to spend time and effort practicing and mastering new skills. This positive learning attitude and motivation helps them make better use of the textbook and achieve good learning results.

However, the results of a small number of students have declined. The reasons are as follows:

1. The content of the vocal music textbook includes 'lyrical posture', 'principles of organ sound production', 'singing breathing', 'throat training methods', 'diction training', etc., which for most students contains a certain singing system that is applicable to most students. However, due to the different circumstances of a small number of students, the textbook lacks certain personalised guidance, lacks consideration for individual differences among students, and fails to provide personalised guidance and feedback.

2. The methods described in vocal music textbooks, such as 'vocal production principles', 'throat training methods' and 'diction training', are somewhat complicated, and some of the theories are boring. Therefore, the design of the practice methods may not be scientific enough to effectively improve students' vocal music skills. Sometimes, some exercises may be too complicated or not specific enough for students to understand and practice correctly.

Systematic, theoretical and repetitive exercises may affect students' emotional state and personal preferences, and if students lack interest or motivation, it may affect learning outcomes.

In short, judging from the results of the vocal music textbook, students can achieve significant improvement from the vocal music exercise book. Of course, for the small number of students whose improvement is small or whose grades have even dropped, the author will discuss the problem with the students and teachers in the future to find out the reasons that affect the learning effect, try to adjust the learning methods and strategies, find a vocal music teaching method that suits the students, and revise the content of the vocal music textbook. Better provide personalised guidance, practice opportunities and feedback, as well as more scientific and effective practice methods.

The following recommendations are made in response to the problems identified in the vocal coaching programme described above:

1. Introduce regular individual tutoring to provide students with tailor-made lesson plans that are adapted to the specific needs and characteristics of each student.

2. simplify complex theories and exercises in textbooks and focus on core content to ensure that students can understand and apply them.

3. Encourage students to share their learning experiences and insights, promote interaction and mutual support among peers, and increase motivation for learning.

4. Provide a variety of different types of exercises and encourage students to try out different styles and techniques to help them find the most suitable learning method for themselves.

5. For students with special needs, supplementary materials or programmes can be developed to meet their individual requirements.

6. A regular assessment mechanism is established to track students' learning progress in a timely manner and to continuously adjust and optimise the content of teaching materials and exercises based on feedback information.

References

1. Zhang, L. Y. (2023). Ancient “Li-Yue” music education thought from the perspective of music philology. *Comparative Research on Cultural Innovation*, 7(15), 174-177.
2. Wen, X. (2017). Research on the development of School Music Education in China in the 20th Century. *Chinese Literature and Art*.
3. Li, Z. J. (2019). Exploration of Chinese ethnic opera performance art since the reform and opening up. *Contemporary Music* (6), 2.
4. Yi, W. (2023). A study of the problems and solutions in the teaching of bel canto in college vocal music. *Drama Home* (21), 187-189.
5. Zhao, Y. (2018). Discussion on the problems and reform measures of music theory teaching in colleges and universities. *Northern Music*, 38(15), 2.
6. Chi, H. D. (2015). Exploring the construction of a teaching model for singing in various styles in colleges and universities. *Contemporary educational practice and teaching research: Electronic Edition* (11X), 2.
7. Yu, D. H. (2012). *China Music Education Yearbook*. Shanghai Conservatory of Music Press.
8. Huang, K. (2022). Research on the current situation, problems and countermeasures of China's musical theater education: A case study of the musical theater department of Beijing Dance Academy. *Journal of Beijing Dance Academy* (6), 119-125.
9. Bai, X. W. (2022). Transformation of the teaching mode of music education under the background of new liberal arts. *Symphony: Journal of Xi'an Conservatory of Music*, 41(3), 95-99.
10. Tang, L. (2022). *A Concise Introduction to the Art of Singing*. Yunnan University Press.
11. Yang, Y. Y. (2022). *The Historical Inheritance and Evolution of Chinese Art Songs*. Jilin People's Publishing House.
12. Zhang, W. J. (2015). *Music Appreciation*. Fudan University Press.
13. Qiao, X. J., Feng, J. Z., & He, J. (2001). *Introduction to Vocal Art*. Southwest Normal University Press.
14. Yang, L. G. (2007). *Vocal Music Teaching Method*. Shanghai Music Press.
15. Han, D. S. (2014). *Introduction to vocal pedagogy*. Higher Education Press.
16. Li, L. L. (2021). *Singing treatment and performance of Chinese art songs*. Jilin Publishing Group
17. Sell, K. (2017). The disciplines of vocal pedagogy: Towards an holistic approach. *British Journal of Music Education*.
18. Huang, Y., & Yang, J. (2012). Feasibility study of computer visualized acoustic parameter analysis method applied to vocal music teaching. *Huang Zhong: Journal of Wuhan Conservatory of Music*, (1), 120-125.