

Research on Breath Training in University Vocal Performance Teaching

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Abstract: In university vocal music education, breath training is a crucial component for developing students' vocal skills. This paper explores the challenges faced in university vocal performance teaching related to breath training, including the lack of personalized guidance, the disconnect between theory and practice, and the absence of comprehensive and in-depth instruction. The key to addressing these issues lies in combining comprehensive teaching with encouraging students to practice independently. Comprehensive teaching should encompass various aspects of knowledge, including sound production mechanisms, breath control, music theory, as well as the development of practical singing skills, enabling students to have a holistic understanding of breath utilization techniques. Simultaneously, encouraging students to practice independently provides them with opportunities to delve deeper into breath control, improving their own breath management abilities through trial and error. The combination of comprehensive teaching and independent practice can better equip students to utilize breath correctly and flexibly in vocal performance, laying a strong foundation for their future vocal artistry.

1. Introduction

As an exceptional form of integrated performing arts, vocal music art relies deeply on the singer's outstanding vocal qualities and musical knowledge, and this must be built upon a solid foundation of vocal technique. In the construction of vocal technique, the use of breath is widely recognized as a crucial factor in shaping sound quality and expressiveness. The precision of breath control not only determines the tonal quality of the singing but also affects pitch accuracy and volume stability. Furthermore, breath utilization directly impacts the singer's stability and endurance during performances, influencing the quality and emotional impact of the rendition. Therefore, a thorough exploration of the role of breath in vocal performance and how to accurately guide students in mastering breath control techniques in teaching is essential for improving the standards of vocal music education and the singing abilities of students.

2. The Importance of Higher Education in Music

2.1. Cultural Inheritance and Development

Cultural inheritance and development are crucial for the prosperity and progress of any society or

nation. Music, as one of the carriers of culture, plays a significant role in the preservation and evolution of culture. Through higher education in music, we not only pass down ancient musical traditions but also nurture generations of individuals with musical talent and artistic appreciation. Higher education in music encompasses the study of various music forms, including classical music, folk music, and contemporary music, enabling students to develop a diverse cultural perspective. This diversity enriches individuals' artistic lives and contributes to the cultural richness of society as a whole. Additionally, higher education in music serves as a source of cultural development. Music groups within educational institutions, such as choirs, symphony orchestras, and opera societies, provide students with a platform to hone their skills and talents. Through performances and competitions, students can share their musical knowledge with audiences, enhancing their performance skills while offering audiences the joy of music appreciation. These musical groups also enrich campus cultural life and create an artistic atmosphere.[1]

2.2. Social Interaction and Collaboration

Social interaction and collaboration play a crucial role in higher education in music. Music education is not only about developing students' musical skills but also about fostering teamwork, communication, and interpersonal skills. In music groups like choirs, orchestras, and opera troupes, students must cooperate, coordinate, and communicate effectively to achieve the best performance of musical pieces. In this process, students learn to listen, respect others' opinions, support and encourage each other, cultivating a strong sense of teamwork and collective pride. Social interaction and collaboration are not limited to group performances but are also evident in music course studies. Students engage in discussions and share their opinions during group activities, encouraging creativity and active thinking. Through collective efforts, students gain a better understanding of their roles in the team, developing their awareness of teamwork and leadership skills.[2]

2.3. Cognitive Development

Higher education in music significantly promotes students' cognitive development. In the process of musical learning, students acquire not only musical techniques and knowledge but also various cognitive skills. Firstly, music education involves complex music theory knowledge, requiring students to comprehend concepts such as musical notation, intervals, and rhythm, which fosters their logical thinking and analytical abilities. Secondly, music performance and composition demand strong observation and perception skills, making students more perceptive to the world around them. Participation in collaborative activities like ensemble performances and choirs helps them develop teamwork, communication, and coordination skills. Most importantly, while studying music, students often need to creatively express their emotions and thoughts, expanding their intellectual horizons and sharpening their creative thinking and imagination.[3]

3. The Role of Breath in Vocal Singing

3.1. Sound Quality

The quality of sound in vocal singing is directly linked to the utilization of breath. Proper breath control is the key to ensuring excellent sound quality. Through correct breathing and breath control, singers can produce clear, stable, and resonant sounds rather than weak, shrill, or muddled ones. When singers master proper breath control techniques, their voices become fuller and more rounded, as opposed to sounding dull or hollow. Smooth breath control ensures sound stability, preventing unnecessary vocal vibrations or tremors. In the transition between high and low notes, correct breath

control allows for smooth transitions across different vocal ranges, avoiding sudden breaks or disruptions. Furthermore, through suitable breath control, singers can sustain long notes, extending the duration of musical phrases and adding emotional depth to their performance. During a performance, the use of breath is also an essential means of conveying emotions. By adjusting the flow speed and intensity of breath, singers can imbue music with different emotional nuances, making their voices more expressive. For example, in a sad song, gentle and slow breath flow can create a soft, melancholic atmosphere, while in an energetic song, strong and rapid breath flow can convey passion and power.[4]

3.2. Volume Control

Controlling volume is crucial in vocal singing, and the proper use of breath forms the foundation for achieving volume control. Through correct breath control, singers can easily adjust their volume, maintaining a stable and even sound output whether in high or low registers. Effective breath management allows singers to smoothly transition from soft to intense, from low to high volumes, without abrupt or unnatural vocal jumps. During a performance, by appropriately adjusting the depth and intensity of breath, singers can control the sound's loudness, achieving gradual increases or decreases in volume to meet the requirements of different musical pieces.[5] The speed and pressure of breath flow influence the frequency of vocal cord vibrations, consequently affecting sound volume. By maintaining a steady and continuous flow of breath, singers can ensure a uniform sound output, avoiding sudden and unstable changes in their voices. In high notes, proper breath control enables singers to maintain a clear and bright tone without sounding overly sharp and uncomfortable for the audience. In low notes, correct breath utilization ensures sound stability, preventing muffled and dull tones in the lower register.[6]

3.3. Technique Implementation

In vocal singing, the execution of various vocal techniques heavily relies on the correct use of breath. Breath serves as the driving force behind sound, and its well-balanced distribution determines the clarity of the sound, the accuracy of pitch, and the smoothness of vocal techniques. Firstly, for challenging interval jumps, correct breath control ensures accurate pitch, preventing pitch discrepancies during the performance. Secondly, in vibrato singing, stable breath flow is essential for maintaining a steady and uniform vibrato rhythm. Through well-timed breath release and contraction, singers can achieve vibrato effects in musical pieces, adding expressiveness to their voices. In the execution of sustained notes, ornamentations, and imitations of different instrument timbres, the accurate mastery of breath is also critical. For sustained notes, a consistent and stable flow of breath ensures the continuation of notes, making the musical expression fuller. Flexible breath utilization is necessary for ornamentations, providing these notes with more variations and vivacity. Moreover, imitating different instrument timbres, such as the vibrato of a violin or the legato of a piano, also requires skillful breath use to mimic the characteristics of these timbres, giving the voice more depth and richness.

4. Current Issues in Breath Training in Higher Education Vocal Instruction

4.1. Lack of Personalized Guidance

A prominent issue in higher education vocal instruction, particularly in breath training, is the lack of personalized guidance. Each student's vocal characteristics and breath-related challenges are unique, making it challenging to provide individualized breath training guidance in large class

settings. Consequently, students may encounter difficulties in breath training, progress slowly, and teachers may find it challenging to offer tailored guidance to address each student's specific needs. Personalized guidance is particularly crucial in breath training because different students may have different breathing habits, vocal cord issues, or musical style requirements. Some students may require more extensive breath exercises to increase lung capacity, while others may need a focus on vocal cord protection and relaxation. The absence of personalized guidance implies that students may not receive targeted training, impacting both their vocal performance and the potential development of vocal cord damage or incorrect breathing habits.

4.2. Gap between Theory and Practice

A prominent issue in higher education vocal instruction is the disconnect between theory and practice, especially in breath training. While students may learn theoretical knowledge about breath control in vocal instruction, applying this theoretical knowledge to actual singing often proves challenging. Students may understand the critical role of breath in vocal singing in theory, but they often struggle to translate this theoretical knowledge into correct breathing and breath control techniques during practical performances. This gap between theory and practice may hinder students' ability to effectively address incorrect breathing habits or sound instability in breath training. The limitation of theoretical knowledge is due to its lack of direct, real-time feedback. Students may find it difficult to assess whether their breath control is accurate and, even more so, to identify and rectify underlying issues. Furthermore, staying at the theoretical level may also result in students lacking the motivation to put theory into practice, further extending the limitations of their knowledge.

4.3. Lack of Systematic Approach and Depth

In higher education vocal instruction, the lack of a systematic approach and depth is a common issue, especially in breath training. While students may encounter some fundamental concepts of breath control, often, breath training remains superficial and lacks systematic and in-depth guidance. Students may only learn basic breathing exercises without gaining a systematic understanding of the connection between breath and sound production, development, and expression. The absence of a systematic approach and depth in breath training means that students may struggle to develop a stable, enduring, and flexible breath control ability. They may find themselves in a stagnant state in breath training, unable to overcome their vocal limitations. Systematic and in-depth breath control encompasses not only basic breathing exercises but also includes aspects like sound resonance, vocal range expansion, tone adjustment, and the application of breath techniques in various musical styles.

5. Implementation Strategies for Breath Training in Higher Education Vocal Instruction

5.1. Personalized Guidance

Personalized guidance holds significant importance in higher education vocal instruction. Each student possesses unique vocal characteristics, musical backgrounds, and learning needs. Hence, providing personalized guidance is crucial to better cater to individual differences among students. In personalized guidance, teachers can tailor suitable vocal training plans based on each student's vocal characteristics and learning objectives. This includes customized breath training for different students to ensure they grasp correct breathing techniques while addressing individual breath-related issues. Moreover, personalized guidance encompasses resonance control, tone adjustments, song selection, and the cultivation of interpretation styles. By understanding students' personalized needs, teachers can more accurately guide students to leverage their vocal strengths and help them overcome challenges, ultimately improving their vocal skills. This personalized care and guidance not only lead to better progress in vocal performance but also ignite students' interest in learning and boost their

confidence, laying a solid foundation for their future musical careers.

5.2. Integration of Theory and Practice

In higher education vocal instruction, the integration of theory and practice is essential for nurturing students' comprehensive vocal skills. While theoretical knowledge provides the foundation for vocal techniques and knowledge, practice is the means through which students apply this theoretical knowledge to actual singing. The combination of theory and practice extends beyond knowledge transfer and allows students to employ the skills they have learned in their practical performances. In vocal instruction, theoretical knowledge may include the mechanisms of sound production, breath control techniques, and music theory. Students learn through theory how sound is generated, the influence of proper breath control on sound, and grasp essential concepts of various musical elements. However, if this theoretical knowledge is not effectively applied in practical singing, it is challenging to translate it into techniques and outcomes during actual performances. Practice is the stage where students put their theoretical knowledge into action. Through practical vocal exercises and performances, students apply their theoretical knowledge to the interpretation of songs, refining breath control, intonation, rhythm, and other singing skills. Issues and challenges encountered during practice also compel students to revisit relevant theoretical knowledge, creating a mutually reinforcing learning process between theory and practice. By integrating theory and practice, students not only gain a deeper understanding of vocal techniques but also continuously enhance their vocal skills in actual performances. This integration not only deepens students' understanding of theoretical knowledge but also enhances their practical singing abilities, making them more competitive and confident in their future musical careers.

5.3. Systematic Training

Systematic training in higher education vocal instruction is vital to ensure the comprehensive development of students' vocal skills. Systematic training encompasses various aspects such as sound production mechanisms, breath control, and music theory, with the goal of nurturing students' well-rounded vocal competence. Firstly, systematic training delves into the physiological and acoustical principles of sound production, helping students understand the processes behind sound formation and offering a foundation for vocal techniques. Secondly, breath control is a critical component of systematic training. Students develop stable breath flow and enhanced lung capacity through systematic breath exercises and breath management, providing ample breath support for singing. Additionally, systematic training includes the study of music theory, enabling students to comprehend basic musical knowledge and accurately interpret various musical works. Through this comprehensive and systematic training, students not only master fundamental vocal skills but also establish a solid foundation for future advanced vocal performances and creations.

5.4. Comprehensive Instruction

Comprehensive instruction, including comprehensive breath training, holds a significant position in higher education vocal education. Breath plays a crucial role in vocal singing, affecting the stability of sound, intonation accuracy, and the fluency of singing techniques. In comprehensive instruction, students learn not only how to correctly employ breath to support their voice but also how to adjust their breathing to better serve the requirements of different songs and emotional expressions. Comprehensive breath training encompasses various aspects, including basic breathing exercises and techniques related to breath control, release, and management. Through comprehensive breath training, students learn deep breathing techniques to increase lung capacity, ensuring a steady and powerful voice. They also master the control of breath flow rate and pressure to convey emotional expression during singing. Furthermore, comprehensive training includes the practice of breath

techniques in different contexts, such as high notes, low notes, sustaining long notes, and vibrato, allowing students to confidently utilize breath in various singing scenarios. Through comprehensive instruction, students gain a holistic understanding of breath utilization techniques, enhancing the stability and expressiveness of their singing. This comprehensive breath training not only provides students with a solid vocal foundation but also equips them with the necessary skills to confidently showcase their vocal charm in diverse musical performance settings.

5.5. Encouraging Independent Practice

Encouraging students to engage in independent practice is crucial in higher education vocal instruction, particularly in the context of breath control. Independent practice not only reinforces students' classroom knowledge but also develops their ability to self-regulate their breath during singing. In independent practice, students have more time and space to focus on breath training, gradually grasping the pivotal role of breath in vocal performance through repeated breath exercises. In independent practice, students can choose exercises that suit their needs and sensations, customizing their training to focus on areas where they need improvement. They can explore and experience changes in sound under different breath states through a variety of exercises, including deep breathing, sustained exhalation, and vibrato practice. Independent practice enables students to find the most suitable breath control methods for themselves through trial and error, continually enhancing their breath control skills. Teachers should encourage students to experiment and discover issues during independent practice, guiding them to find solutions. By providing some guidance on independent practice, such as specific breath exercises or song interpretations, teachers help students focus their breath training effectively. Through this encouragement of independent practice, students not only improve their ability for self-directed learning but also gain better control of their breath, laying a strong foundation for future vocal performances.

6. Conclusion

In the future of vocal education, there should be a strong emphasis on the integration of theory and practice. This means not only imparting theoretical knowledge related to breath control but also applying it through practical singing exercises. Additionally, personalized guidance should receive increased attention, where teachers need to tailor breath training plans according to the individual characteristics and needs of each student, providing them with personalized instruction. The combination of comprehensive instruction and personalized guidance promises to deliver more effective results in higher education vocal instruction, offering students more efficient pathways to enhance their vocal skills.

References

- [1] Zhang, Z. R. (2023). *Problems and Countermeasures in Vocal Education in Higher Education: A Case Study of Shanxi University of Applied Science and Technology*. *Drama House*, 17, 196-198.
- [2] Liu, L. P. (2017). *On Breath Training in Popular Vocal Singing Education*. *Art Evaluation*, 21, 122-123.
- [3] Li, Y. J. (2023). *Methods and Techniques in Higher Education Vocal Education: A Review of "Research on Vocal Singing Guidance, Teaching, and Training."* *Chinese Educational Journal*, 07, 149.
- [4] Song, W. (2023). *Integration Strategies of Traditional Chinese Music Culture in Higher Education Vocal Education*. *Shaanxi Education (Higher Education)*, 08, 89-91.
- [5] Cui, Y. Z. (2023). *Analysis of the Fusion Path of Vocal Singing Techniques and Vocal Education in Higher Education: A Review of "Learn to Sing: Introduction to Vocal Techniques and Potential Development."* *China Higher Education and Technology*, Z1, 154.
- [6] Li, R. D. (2022). *Analysis of Psychological Regulation in Higher Education Vocal Education and Optimization Strategies for Vocal Singing*. *Art Education*, 09, 76-79.