Journal of Contemporary Educational Research, 2025, Volume 9, Issue 7
http://ojs.bbwpublisher.com/index.php/JCER
ISSN Online: 2208-8474
ISSN Print: 2208-8466

Transformation of the Teaching Mode for Higher Vocational Public Music Courses in the Context of Artificial Intelligence

Libei He*

Zhejiang Zhoushan Tourism and Health College, Zhoushan 316100, Zhejiang, China

**Author to whom correspondence should be addressed.*

Abstract: In recent years, the rapid integration of artificial intelligence (AI) with various industries has led to an intelligent transformation in people's learning and working patterns. In the field of higher vocational public music course teaching, AI provides intelligent teaching tools and learning platforms, while offering students timely and scientific support and companionship, enabling them to complete learning tasks more efficiently. How to explore the transformation path of teaching modes for higher vocational public music courses in the AI context has become a key consideration for frontline teachers. Based on this, this paper first analyzes the significance of teaching higher vocational public music courses in the AI context, and then proposes feasible transformation paths for teaching modes in combination with course characteristics for reference.

Keywords: AI context; Higher vocational education; Public music courses; Teaching mode; Transformation

Online publication: July 31, 2025

1. Introduction

The current era has seen "transformation and upgrading" become a hot topic. Frontline teachers have made multiple beneficial attempts in transforming the teaching modes of higher vocational public music courses, proposing many novel and advanced teaching methods. In this process, artificial intelligence (AI) has provided multi-faceted technical support for teaching mode innovation, bringing various conveniences to teachers in their daily teaching work, and has become an important tool for teachers to improve teaching plans, enhance teaching efficiency and evaluation accuracy, and innovate teaching methods.

2. Significance of teaching higher vocational public music courses in the AI context

2.1. Improving teaching plans

In the AI context, the scope of integration between big data technology and higher vocational public music

course teaching is gradually expanding, playing an important auxiliary role in teaching modes. Relying on this, teachers can conduct more comprehensive and accurate learning situation analysis, understand students' musical foundations, learning gains, and interest preferences, and then improve teaching plans according to students' actual conditions. This plays a very important role in promoting the improvement of teaching standards and quality for higher vocational public music courses [1]. Higher vocational public music courses not only emphasize the imparting of musical knowledge but also require teachers to focus on cultivating students' musical performance abilities, so the teaching involves more practical content, making learning more difficult for students. To understand and solve students' learning difficulties, teachers can adopt a "big data + music" model to push learning resources tailored to students' individual needs in music learning, guiding them to learn independently [2].

2.2. Enhancing teaching efficiency and evaluation accuracy

The intelligent means provided by AI for higher vocational public music course teaching have become important tools for teachers to improve teaching efficiency and evaluation accuracy. Teachers innovating the teaching mode of public music courses and optimizing the implementation of teaching evaluation in the AI context to improve course teaching quality respond to the trend of higher vocational education reform [3]. For example, teachers can rely on AI to construct simulation environments, allowing students to understand the creative background and ideological connotations of musical works in virtual spaces and experience performance scenarios, which broadens students' horizons and enriches their musical practice experiences; through teaching robots, students can be guided to independently explore musical knowledge, promoting efficient learning; through the automatic recording and analysis functions of AI teaching systems, students' classroom participation, musical proficiency, and the application effect of teaching modes can be evaluated, improving the coverage and accuracy of teaching evaluations and providing a reliable basis for subsequent teaching activities [4].

2.3. Promoting innovation in teaching methods and means

The application of the "AI + music" model in higher vocational public music course teaching has created more possibilities for teaching innovation and development. Through AI technology, teachers can obtain a large amount of data generated at the student end, analyze students' music learning behaviors and foundations, accurately grasp their learning abilities and effects, and then optimize subsequent teaching strategies to help students break through learning bottlenecks, deeply understand knowledge, and flexibly master musical skills. For example, teachers can use AI technology to capture and analyze students' musical activity behaviors in class, understanding their participation, cooperation patterns, and communication frequency within the learning community; through big data, they can understand each student's learning needs and characteristics, implementing more novel and targeted teaching plans to meet these needs [5].

3. Transformation paths for teaching modes of higher vocational public music courses in the AI context

3.1. Pre-analysis for accurate diagnosis of learning problems

In teaching higher vocational public music courses, teachers should adopt personalized teaching methods that "suit the individual" based on comprehensive considerations of students' musical ability development levels and knowledge mastery, in accordance with teaching objectives and practical experience. This means that when

teaching higher vocational public music courses in the AI context, teachers need to prioritize teaching data analysis, accurately diagnose students' learning problems, and then more rationally design teaching objectives and implementation plans to better align with actual learning situations [6]. For example, when teaching the piece Story of Spring, teachers can use big data for learning situation diagnosis during the preview session, conducting overall analyses of students' learning in different modules such as work background analysis, connotation analysis, and singing skill practice. Specifically, teachers can use the scoring function of intelligent APPs to analyze students' preview results, understand their musical ability development, and construct classrooms individually based on the analysis results feedback from the APP. This requires teachers to release autonomous learning tasks through the APP platform before teaching the piece, guiding students to preview; students complete assignment requirements on the APP, such as reading relevant materials and recording singing audio. During the preview process, the platform will conduct intelligent learning situation analysis based on students' traces, score students, form corresponding analysis reports, and provide feedback to both students and teachers. Next, teachers can identify students' learning difficulties based on the received information and design personalized teaching [7].

3.2. Real-time evaluation for innovative teaching forms

In higher vocational public music course teaching, singing teaching is an extremely important component, but many students find repeated singing practice tedious and reject it. In response to this, teachers can introduce the "AI + music" model in singing teaching, relying on intelligent APP software with demonstration and leading singing functions to support students, providing full-process "companionship" for their singing practice; using the built-in voice evaluation function of intelligent APP software to score students' singing, allowing them to see their progress and deficiencies at any time, thereby stimulating practice interest and maintaining initiative to actively cooperate with teachers in completing singing practice. For example, when guiding students to learn the song Casablanca, teachers should optimize the singing practice process through the "AI + music" model, achieving innovation in singing teaching modes based on the demonstration, leading singing, and evaluation functions of intelligent APP software [8]. Intelligent APPs provide real-time evaluation and flexible scoring for each link of students' singing practice, offering "whole-process" companionship, guiding them to correct pronunciation and properly use breath, making singing practice more interesting [9].

3.3. Constructing VR virtual scenes to enhance musical perception

The cognitive characteristics of higher vocational students determine that intuitive experience and experiential learning are more likely to trigger their thinking and associations about musical works. Therefore, when applying AI to higher vocational public music course teaching, teachers should attach importance to the application of VR, using the virtual space it provides to expand students' musical practice scope, enrich practice forms, and bring them more intuitive feelings and rich learning experiences [10]. VR technology constructs virtual 3D scenes based on musical works and their creative backgrounds, allowing students to explore and think in highly restored scenes, helping them form in-depth understandings of musical works [11]. Taking the piece Voyage as an example, teachers can use VR technology for innovative teaching design, constructing scenes where musicians create music, allowing students to experience the creative process and understand the inspiration sources of musicians in a virtual space, thus promoting resonance between students and musicians. This intelligent teaching mode changes how students understand musical works, strengthens their appreciation experience of Voyage, and brings great help to students' exploration of musical knowledge and mastery of

appreciation skills. Teachers should transform traditional music appreciation teaching modes into "AI + music" modes, allowing students to observe, experience, analyze, and immerse themselves in learning within the 3D space virtualized by VR technology. Immersive music enables students' music appreciation activities to break through time and space limitations, perceiving and understanding musical works from multiple dimensions to form unique interpretations [12].

3.4. Simulating musical performance scenes to improve comprehensive literacy

As AI gradually integrates into students' lives and learning, the teaching modes of higher vocational public music courses usher in an opportunity for brand-new upgrading and transformation. Teachers can use AI to simulate musical performance scenes, allowing students to "experience" performances in different scenarios, which can strengthen their understanding of performance knowledge and music theory, and improve comprehensive literacy. For example, when teaching Tears of Heaven, teachers can simulate concert scenes using VR technology, enabling students to perceive the processes of makeup, singing, accompaniment, and dancing, guiding them to explore musical knowledge from the perspective of musical performance for more ideal teaching effects. First, teachers should simulate concert scenes in the VR teaching system, including dressing rooms, stages, audience seats, etc., bringing students immersive and rich sensory experiences. Students "enter" the concert through head-mounted devices, choosing different roles such as makeup artists, singers, accompanists, dancers, and audience members, experiencing the entire process of performing Tears of Heaven and accumulating perceptual experiences about musical performance, which plays an important role in promoting subsequent teaching activities. Next, teachers should have students for learning summaries, discuss the relationships between various elements in musical performances, and raise guiding questions at appropriate times to trigger students' thinking and discussions about musical performances. Simulating concert scenes and setting up summary and discussion links facilitate students' in-depth understanding of the application of musical performance knowledge [13].

3.5. Improving teaching evaluation methods to understand students' musical learning foundations

The various intelligent algorithms and models provided by AI can assist teachers in intelligently evaluating the entire process of students' learning of higher vocational public music courses, helping teachers gain a deeper understanding of students' musical learning foundations, interests, and needs. How teachers can reconstruct teaching modes based on actual learning situations, provide students with the necessary support for learning musical knowledge and cultivating applied music skills, and promote the comprehensive development of their musical literacy is a key issue to be solved in current higher vocational education reform. The transformation of teaching modes for higher vocational public music courses in the AI context should attach importance to the intelligent and diversified development of teaching evaluation methods, enhancing the novelty and scientificity of evaluation methods to provide a reliable basis for the design and implementation of subsequent teaching activities. Taking the teaching of the song Tears of Heaven as an example, teachers can use intelligent evaluation tools provided by the VR teaching system to evaluate students' performance in the "concert," understanding their mastery of musical performance knowledge and level of understanding of the piece, and then optimize subsequent teaching activities based on evaluation results as teaching improvement suggestions. First, teachers analyze students' performance in the "concert" through the AI large model in the VR teaching system. For example, if a student chooses the role of piano accompanist, the AI large model can analyze their musical

foundation, performance ability, and understanding of the song from the perspective of piano accompaniment. Second, teachers should appropriately "let go," leaving more autonomous learning space for students, prompting them to independently explore skills in accompaniment, singing, and makeup based on their chosen roles and analysis results feedback by the teaching system, cultivating their musical performance abilities [14]. Finally, teachers need to group students according to their role choices and design musical performance tasks, enabling them to further master melodies, accompaniment requirements, and singing characteristics in musical performances, completing knowledge sublimation and ability improvement. This novel model, combining online teaching with AI teaching and integrating teaching evaluation with teaching implementation, can provide students with more professional and targeted teaching services [15].

4. Conclusion

In summary, the integration of AI with higher vocational public music course teaching has changed students' learning methods, driving them toward intelligent development, which has become an inevitable choice for the reform of higher vocational public music course teaching. Teachers should fully recognize the significance of teaching higher vocational public music courses in the AI context for improving teaching plans, enhancing teaching efficiency and evaluation accuracy, and innovating teaching methods and means, and strengthen the application of AI technology through various measures such as pre-teaching analysis, real-time evaluation, and constructing VR virtual scenes.

Disclosure statement

The author declares no conflict of interest.

References

[1] Tang S, 2024, Research on Talent Training Objectives for Higher Vocational Music Education Majors Based on Core Literacy under the New Curriculum Standards. Drama Home, (36): 178–180.

[2] Liu H, 2024, Balancing Technique and Performance in Piano Education: Teaching Strategies and Practices—Taking Higher Vocational Colleges as an Example. Drama Home, (36): 190–192.

[3] Yan J, 2024, Innovative Thinking on Integrating Jinzhong Folk Songs into Music Teaching in Local Higher Vocational Colleges. Voice of the Yellow River, (24): 50–52 + 56.

[4] Wang X, 2024, Analysis of Implementing Project-Based Practical Teaching for New Media Copywriting in Higher Vocational Music Communication Majors in the New Era. Guangdong Vocational Education and Research, (12): 49–53.

[5] Lin M, 2024, "Audio Classroom, Invisible Ideological and Political Education"—Research on the Reform and Innovation of Ideological and Political Teaching in Music Performance Majors of Higher Vocational Colleges. Popular Literature and Art, (24): 181–183.

[6] Chen X, 2024, Research on "Intangible Cultural Heritage" Culture Teaching in Higher Vocational Preschool Education Majors Based on Orff Music Education. China Journal of Multimedia and Network Teaching (Late Edition), (12): 134–136.

[7] Xu H, Ma J, 2024, Innovative Teaching Exploration on Integrating Modern Information Technology into Higher Vocational Music Courses. Journal of Liaoning Normal College (Social Sciences Edition), (06): 65–67.

[8] Tao T, 2024, Research on the Integration Strategy of Ideological and Political Elements in Music Art Teaching—Taking Hubei Communications Technical College as an Example. Popular Literature and Art, (23): 129–131.

[9] Xiao H, 2024, Functional Exploration and Teaching Practice of Red Music Aesthetic Education—Focusing on Emotional Education and Value Cultivation. Journal of Guangxi College of Education, 39(06): 54–60.

[10] Xu Y, 2024, Path Analysis of Infiltrating Chinese Traditional Culture into Higher Vocational Music Teaching. Drama Home, (33): 187–189.

[11] Yu L, 2024, Integration and Innovation of Chinese Traditional Music in Higher Vocational Vocal Music Teaching. Journal of Jiamusi Vocational College, 40(11): 85–87.

[12] Bie J, 2024, Exploration on the "7+1" Ideological and Political Teaching Mode for Music Performance Majors in Higher Vocational Colleges. Music Education and Creation, (11): 14–19.

[13] Wang K, 2023, Research on Paths to Improve the Effectiveness of Public Music Course Teaching in Higher Vocational Colleges. Drama Home, (17): 79–81.

[14] Yang T, 2022, Exploration on the Teaching Reform of Public Music Courses in Higher Vocational Colleges from the Perspective of "Cultivating Morality and Fostering People." Art Evaluation, (19): 157–160.

[15] Yang B, Zhao J, 2022, Research on Problems and Countermeasures of Carrying Out Moral Education in Public Music Course Teaching in Higher Vocational Colleges. Times Report (Benliu), (03): 128–130.