

Innovative Countermeasures for Higher Vocational English Teaching Models in the Context of Artificial Intelligence

Xiaoying Liu*

Zhangzhou Health Vocational College, Zhangzhou 363000, Fujian, China

*Corresponding author: Xiaoying Liu, lxy198577@163.com

Copyright: © 2025 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

Abstract: Higher vocational colleges are crucial for cultivating high-quality technical and skilled talents in China. With the continuous advancement of the construction and reform of the modern vocational education system in the new era, the innovative development of English teaching models has become a major exploration issue. For higher vocational students, learning English well is of great significance and value. In this regard, higher vocational colleges can give full play to the enabling advantages of artificial intelligence to create personalized and interactive English learning classrooms for students, thus promoting their all-round development. Based on the current situation of higher vocational English teaching in the context of artificial intelligence, this article focuses on how to use artificial intelligence technology to innovate the English teaching model, aiming to improve students' language application ability.

Keywords: Artificial intelligence; Higher vocational English; Teaching innovation

Online publication: April 4, 2025

1. Introduction

In the context of artificial intelligence, it is essential to build a new development path for higher vocational English teaching relying on intelligent technology to deepen the construction and reform of the modern vocational education system. However, problems such as teaching content being divorced from vocational needs and the simplification of teaching resources have led to many development dilemmas in higher vocational English teaching. Therefore, exploring new ideas and methods for innovating higher vocational English teaching models using artificial intelligence technology can help construct an English teaching model that meets the goals of the modern vocational education system construction, fully demonstrating the application value of artificial intelligence in the education field and facilitating students' personalized learning.

2. Analysis of the current situation of higher vocational English teaching in the context of artificial intelligence

2.1. Disconnection between course content and vocational needs

Higher vocational English teaching should highlight the particularity of vocational education, that is, be oriented towards workplace applications and strengthen the connection between course content and vocational needs. However, the disconnection between course content and vocational needs has become an important issue restricting the innovative development of higher vocational English teaching. This reflects that higher vocational English has not established a corresponding teaching system according to the actual situation of market occupations^[1]. Under the long-term constraints of traditional educational ideas, higher vocational English teaching over-emphasizes the cultivation of students' basic language skills, such as listening, speaking, reading, and writing abilities. Although this teaching model can lay a solid foundation for students' learning, due to its lack of vocational characteristics, it is difficult to guide them to master specific vocational skills in professional fields, such as industry communication skills and business English negotiation. In addition, English teaching that mainly focuses on written and theoretical aspects makes it difficult for teachers to create vocational practice scenarios in the classroom, resulting in students being in an embarrassing situation of "being able to write but not speak" and unable to apply theoretical English knowledge to practical communication. The disconnection between English teaching content and vocational needs not only makes it difficult to improve the practicality of English education but also is not conducive to students' future career development, affecting the improvement of the quality of applied-talent cultivation^[2]. This problem weakens the vocational training function of higher vocational English teaching and increases the difficulty for students to acquire vocational skills and knowledge.

2.2. Relatively backward teaching methods

Since the advent of the artificial intelligence era, higher vocational English teachers should keep pace with the times to improve their digital literacy and digital teaching capabilities and actively use artificial intelligence technology to innovate and optimize teaching work ^[3]. However, due to the deep-rooted influence of traditional teaching ideas, the application of technical means in English teaching still remains at a superficial level, merely using them as auxiliary tools to present course content. Moreover, some teachers are accustomed to using the previous single-form teaching method, that is, the inculcation-based teaching method under the large-class teaching system. This single-form teaching method ignores the personalized and differential needs of students from different majors, easily causing them to develop negative emotions such as boredom and resistance in the course of learning, thus affecting the improvement of the overall teaching effect. In addition, the large-class teaching system increases the difficulty for English teachers to implement classroom teaching, making it difficult for them to organize and carry out targeted teaching activities according to the professional backgrounds of students ^[4].

2.3. Relatively traditional evaluation system

The evaluation of higher vocational English courses often relies on written examinations to assess and test students' mastery and application of basic knowledge. This evaluation model is one-sided and difficult to evaluate students' language expression abilities and cross-cultural communication abilities in language application scenarios. It can be seen that the existing English evaluation system in higher vocational colleges severs the relationship between education and teaching and students' career development, ignores the practicality of English education, and is not conducive to cultivating students' vocational skills^[5]. Specifically,

the single-form evaluation method mainly based on written examinations is difficult to accurately identify the differences among students' listening, speaking, reading, and writing abilities and cannot provide them with practical learning suggestions. The vocational education reform in the new era aims to cultivate master craftsmen and skilled artisans. However, the current English evaluation method in higher vocational colleges fails to stimulate students' initiative in exploring practical skills, resulting in students being more inclined to mechanical learning. In addition, some higher vocational English teachers neglect to use artificial intelligence technology to optimize the evaluation method and lack the initiative to use artificial intelligence technology for teaching innovation, which is not conducive to giving full play to the guiding function of evaluation and is also not conducive to improving students' comprehensive qualities ^[6].

3. Innovative countermeasures for higher vocational English teaching models in the context of artificial intelligence

3.1. Emphasize technology applications to promote personalized development

Artificial intelligence technology provides new technical means and resource support for the modernization reform of higher vocational English teaching and is a practical guarantee for teachers to implement personalized teaching. Higher vocational English teaching focuses on the explanation of language knowledge and the cultivation of skills in professional fields, and its teaching objectives should be consistent with the overall requirements of vocational colleges for the cultivation of technical and skilled talents. However, some teachers still have not broken free from the shackles of the traditional teaching model and continue to use the "preaching-style" teaching method, resulting in students being in a passive and submissive learning position for a long time, and their subjective initiative is difficult to fully exert. With the wide application of artificial intelligence technology in education and teaching, the traditional teaching model can no longer adapt to the development of the digital and intelligent education environment. Higher vocational English teachers urgently need to take advantage of the educational benefits of artificial intelligence technology to strengthen classroom innovation and enrich the application of technical means in English classrooms^[7].

For example, with the empowerment of artificial intelligence technology, adaptive teaching can be implemented. Specifically, higher vocational English teachers can upload students' test scores, learning habits, learning time, and other data to the artificial intelligence platform and use the algorithm function of the platform to comprehensively analyze students' language levels and learning progress. On this basis, personalized data analysis results can be generated to adjust the teaching content and difficulty. In this way, with the assistance of artificial intelligence, English teachers can provide students with personalized suggestions to help them maximize their personal value in learning. This is an effective way for higher vocational English teachers to implement the concept of teaching students in accordance with their aptitudes and achieve personalized teaching ^[8]. Another example is that the artificial intelligence platform can push personalized learning resources to students according to their different learning habits, characteristics, and professional backgrounds, and provide personalized learning plans and paths. The traditional higher vocational English teachers. In this regard, higher vocational English teachers can use the artificial intelligence system to recommend matching learning resources to students. In short, when applying technical means to implement personalized teaching, higher

vocational English teachers need to break free from the shackles of the traditional teaching framework, establish new digital and information-based teaching thinking, and then rely on artificial intelligence technology to construct a new teaching system based on students' learning situations, to provide students with a personalized English learning experience in education and teaching and fully stimulate their internal driving force for learning.

3.2. Create interactive situations to guide independent expression

The core goal of higher vocational English teaching is to cultivate high-quality applied technical and skilled talents oriented towards career development. However, higher vocational English teachers over-emphasize written expression and exam-oriented education in teaching and do not pay much attention to training students' oral expression and communicative application abilities in the classroom, resulting in the common phenomenon of "mute English" in the field of English education and making it difficult to provide practical English translation talents for various industries ^[9]. It can be seen that "mute English" has become a key factor restricting the career development of higher vocational students. Therefore, creating real-life interactive situations in higher vocational English teaching based on artificial intelligence technology and strengthening students' oral training can fundamentally solve the learning problem of "being able to write but not speak", further promote the development and improvement of their disciplinary core qualities, and lay a good foundation for their career development.

Creating interactive learning situations according to industry scenarios is a concrete manifestation of innovating higher vocational English teaching using artificial intelligence technology. It can create an immersive language learning environment for students and lead them to simulate language dialogues in future career scenarios. Specifically, higher vocational English teachers can use means such as virtual reality technology and augmented reality technology, starting from the professional backgrounds of students, to build communicative dialogue scenarios, such as business negotiations and customer service exchanges ^[10]. Bringing the real-life situations that students may encounter in their future career development into the classroom can not only train their oral expression abilities but also help them master professional English expressions and practice their negotiation skills. This significantly enhances the practicality of higher vocational English teaching and can effectively improve students' initiative and enthusiasm for participating in interactive learning. In addition, in situational communication, English teachers can also guide students to have one-on-one conversations with artificial intelligence-driven characters. Artificial intelligence can build different character scenarios based on industry information and provide students with diversified voice interaction opportunities. Human-machine interaction is of great help in enhancing students' desire to express themselves, allowing them to continuously improve their oral communication skills in real-life scenario simulations. Relying on artificial intelligence to create industry-simulation scenarios and promote the interactive learning of higher vocational students can effectively improve the innovation of English teaching, enabling them to practice their English communication skills in simulated career scenarios and environments, and thus improve their career competitiveness on this basis^[11].

3.3. Optimize the evaluation system to strengthen the educational effect

Optimizing the evaluation system of higher vocational English teaching can help students build self-confidence during the learning process and cultivate good language learning interests ^[12]. The traditional way of evaluating

higher vocational English courses is relatively single. Teachers often evaluate students based on their test scores, without conducting formative evaluations combined with their learning processes and dynamics. As a result, the "score-oriented" ideology has long dominated the field of course evaluation, ignoring students' subjective initiative and making it difficult to fully stimulate their English learning interests ^[13]. Moreover, the subject of this evaluation method is also relatively single. Students usually only receive scores from teachers, which affects their self-reflection and self-improvement. The core goal of higher vocational English teaching is to promote the all-round development of students and implement the fundamental task of "cultivating morality and nurturing people." Therefore, using artificial intelligence technology to construct a dynamic and continuous English teaching evaluation system can effectively address the shortcomings of the traditional evaluation model and integrate the advantages of formative evaluation and summative evaluation^[14]. Specifically, higher vocational colleges can develop an automatic artificial intelligence-based teaching evaluation system. Using its intelligent algorithms and data models, it can objectively and quantitatively evaluate students' English learning and generate personalized learning-situation diagnosis reports covering learning attitudes, learning achievements, learning methods, etc. This is not only helpful for improving the evaluation efficiency of English courses but also can reduce the interference of human factors and give students objective, fair, and accurate evaluations. At the same time, the automatic evaluation system can process a large amount of data in a short time, which greatly saves the time cost of English teachers. It should be noted that the automatic evaluation system developed relying on artificial intelligence technology is essentially an auxiliary tool and cannot replace the initiative of teachers in course evaluation. Therefore, higher vocational English teachers should be vigilant against the influence of the "technology-supremacy" trend of thought to ensure the harmonious co-existence of technology application and educational development, and thus continuously strengthen the educational effect of English teaching on this basis^[15].

4. Conclusion

Innovating the higher vocational English teaching model using artificial intelligence technology is an important part of building a modern vocational education system. Therefore, higher vocational colleges should deeply explore the application potential of artificial intelligence technology in the education field, combine its advantages and characteristics, and construct an English teaching model that meets the standards of teaching reform. Through measures such as implementing personalized teaching, creating interactive situations, and optimizing the evaluation system, the organic combination of theory and practice can be promoted, and students' disciplinary core qualities can be further developed.

Funding

This article is one of the research results of the 2024 Fujian Provincial Education Science Planning Regular Project "Exploration of the Cultivation Model for College Students' English Multiliteracy in Medical Colleges from the Perspective of New-Quality Productivity" (Project No. FJJKGZ24-068).

Disclosure statement

The author declares no conflict of interest.

References

- Zhang XY, 2023, Research on the Application of Big Data and Artificial Intelligence Technology in Higher Vocational English Teaching. Overseas English, 2023(5): 238–240.
- [2] Jiang XL, Zhou XY, 2023, Research on the Reform and Practice of Higher Vocational Public English Teaching in the Context of Artificial Intelligence. Journal of Hubei Open Vocational College, 36(2): 186–188.
- [3] Huang YH, 2022, Research on the Application of AI-Enabled Smart Teaching in Higher Vocational English Teaching. Overseas English, 2022(21): 199–200 + 203.
- [4] Zhang CY, 2022, The Application of Artificial Intelligence in Higher Vocational English Teaching in the Information-based Environment. Journal of Chinese Multimedia & Network Teaching (Mid-issue), 2022(6): 14– 17.
- [5] Cui Y, Zhou DF, 2022, Discussion on the Opportunities, Challenges, and Strategies for the Professional Development of Higher Vocational English Teachers in the Artificial Intelligence Era. Office Automation, 27(4): 37–39 + 52.
- [6] Feng Q, 2021, Reflections on the Teaching Design of Flipped Classrooms Based on Students' Learning Ability in the Artificial Intelligence Era-Taking Higher Vocational English Teaching as an Example. Modern Vocational Education, 2021(49): 126–127.
- [7] Zhang YP, 2021, Research on the Blended Teaching of Higher Vocational English Based on the Concept of Smart Teaching and Artificial Intelligence Technology: Taking Inner Mongolia Electronic Information Vocational Technical College as an Example. English Square, 2021(10): 112–115.
- [8] Yin M, 2021, Discussion on Higher Vocational English Teaching in the Context of Artificial Intelligence. Overseas English, 2021(1): 117–118.
- [9] Tang J, 2020, Research on the Significance and Path of Embedding Artificial Intelligence in Higher Vocational English Classroom Teaching. University, 2020(50): 141–142.
- [10] Yu S, 2020, Research on the Construction of Smart Classrooms for Higher Vocational Spoken English Courses Based on Big Data and Artificial Intelligence. Journal of Yuzhang Normal University, 35(5): 113–116.
- [11] Li JY, 2020, Research on the Listening and Speaking Teaching of Higher Vocational English Based on the Immersion Theory Enabled by Artificial Intelligence Technology. Journal of Kaifeng Vocational College of Culture and Arts, 40(7): 108–111.
- [12] Yu SY, 2020, Reflections and Explorations on the Application of Artificial Intelligence in Higher Vocational English Teaching from the Perspective of "Internet +". China-Arab States Science and Technology Forum (Chinese-English-Arabic), 2020(5): 188–189.
- [13] Deng H, 2020, Research on the Application of the Combined Technology of "Big Data" and "Artificial Intelligence" in Higher Vocational English Classrooms. Science and Technology Innovation Herald, 17(4): 184 + 186.
- [14] Liang YY, 2020, Research on the Application of Artificial Intelligence Technology in Higher Vocational English Teaching. Digital Technology and Application, 38(1): 41–42.
- [15] Tang XY, 2019, Reflections and Explorations on the Application of Artificial Intelligence in Higher Vocational English Teaching from the Perspective of "Internet +". Modern Vocational Education, 2019(36): 32–33.

Publisher's note

Bio-Byword Scientific Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.