Research on the Application of the PAD Class Model in Higher Vocational Public English Teaching from the Perspective of New Media

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Abstract: With the rapid development of information technology and the wide application of new media, the education field is undergoing profound changes. Higher vocational public English teaching, as an important part of cultivating technical and skilled talents, urgently needs to explore teaching models that meet the requirements of the new era. The PAD (Presentation-Assimilation-Discussion) class model, as an innovative teaching model, combines the advantages of traditional lectures and modern discussions, and shows unique teaching potential, especially from the perspective of new media. This paper aims to explore the application of the PAD class model in higher vocational public English teaching from the perspective of new media, analyze its advantages, challenges, and implementation strategies, to provide theoretical support and practical reference for the reform of higher vocational English teaching.

Keywords: New media; Higher vocational public English; PAD class model; Teaching model; Application research

1. Introduction

The purpose of higher vocational public English teaching is to cultivate students' English application ability and lay a solid foundation for their career development. However, traditional teaching models often ignore the dominant position of students, resulting in low learning interest and participation. For example, in the traditional "teacher lectures and students listen" model, students passively receive knowledge, lacking opportunities for active thinking and language practice, and makes it difficult to improve their English application ability. The emergence of the PAD class model provides new ideas for higher vocational public English teaching. Especially in the context of new media, its application is more extensive, and the teaching effect is more remarkable. This paper explores the application of the PAD class model in higher vocational public English teaching from the perspective of new media, and analyzes its advantages, challenges, and implementation strategies, hoping to provide a reference for the reform of higher vocational English teaching[1].

2. Overview of the PAD class model in higher vocational public English teaching from the perspective of new media

2.1. Concept and characteristics of the PAD class model

The PAD class model is a new teaching model proposed by Zhang Xuexin from Fudan University. Its core is to divide classroom time into three stages: "Presentation-Assimilation-Discussion" [2]. This model emphasizes students' active participation and autonomous learning, which helps to stimulate students' learning interest and improve learning effects. For example, in the presentation stage, teachers explain the core knowledge points to help students build a knowledge framework. In the assimilation stage, students consolidate knowledge through after-class autonomous learning [3]. In the discussion stage, students discuss in groups, share learning experiences, and solve difficult problems. This model not only improves classroom efficiency but also cultivates students' autonomous learning ability and teamwork ability.

2.2. Application of new media in the PAD class model

New media provides rich resources and tools for the PAD class model in higher vocational public English teaching [4]. For example, teachers can release course materials and assign homework through online learning platforms such as Chaoxing Xuexitong and Zhihuishu. Students can use these platforms for autonomous learning, online discussion, and assignment submission. In addition, new media tools such as social media (WeChat, QQ) and mobile applications (English Fluency Speaking, Baicizhan) also facilitate instant communication and interaction between teachers and students, greatly enhancing the flexibility and interactivity of the classroom. For example, in English oral teaching, teachers can send oral practice tasks through WeChat groups. Students record and upload their voices, and teachers can give instant comments, forming an efficient interactive learning loop [5].

3. Integration of the basic PAD class model and new media

3.1. Structural optimization of the teaching model

(1) Presentation stage: Teachers use new media resources such as short videos and online courses to transmit knowledge [6]. Students can preview before class to improve classroom efficiency. For example, when teaching the topic of "Business English Negotiation", teachers can record a 10-minute micro-lecture video in advance to introduce the basic process and common expressions of negotiations. Students watch the video and complete relevant exercises before class. In class, teachers only need to explain the difficult and key points, saving time for interactive discussions.

(2) Assimilation stage: Students complete knowledge consolidation with the help of mobile learning platforms such as English learning APPs and online question banks. The platforms provide personalized exercises according to students' performance, enhancing pertinence. For example, after students complete vocabulary exercises on "Baicizhan", the system will push relevant review content based on their error rates to help them fill in the gaps [7].

(3) Discussion stage: Group discussions are carried out with the help of online collaboration tools such as Tencent Docs and DingTalk groups. Discussion results are recorded in the form of screen recordings and mind maps. Even virtual reality (VR) technology can be used to simulate English communication scenarios, enhancing the authenticity of language practice [8]. For example, in the teaching of the "Tourism English" topic, students can use VR devices to simulate airport check-in, hotel check-in and other scenarios for role-playing dialogues, improving their language application ability.

3.2. Innovative advantages enabled by technology

(1) Precision teaching: By analyzing big data to track students' learning trajectories and identify weak links, it provides a basis for teachers to adjust teaching content. For example, by using the data analysis function of the online learning platform, we found that students had a high error rate in the "English tenses" section. Teachers adjusted the teaching focus accordingly, designed special exercises, and significantly improved students' learning effects [9].

(2) Enhanced interactivity: New media breaks through the limitations of time and space. Students can ask questions in the barrage and comment areas after class, and teachers can give instant feedback in the form of short videos or voice messages, forming a "classroom-after-class" closed-loop interaction [10]. For example, in the learning of the "English writing" module, students submit their compositions through the online platform. Teachers use the voice comment function to comment one by one. Students modify and resubmit according to the feedback, forming a positive interaction.

(3) Diversified evaluation: Combining online peer evaluation, AI automatic scoring (such as writing correction systems) and traditional teacher evaluation, a multi-dimensional evaluation system is constructed to enhance the objectivity of process assessment. For example, in the "English speech" topic, after students upload their speech videos to the platform, other students can rate them from aspects such as content, language, and expression [11]. The AI system gives evaluations from dimensions such as pronunciation and grammar, and finally, teachers comprehensively assess the scores.

4. Practical paths for the integration of new media and the PAD class model

4.1. Design of blended PAD classes

(1) Before class: Release preview tasks (such as micro-lecture videos and interactive Q&A) through new media to stimulate students' interest and build a preliminary understanding. For example, in the topic of "Cross-cultural Communication," teachers push a short video about the differences between Chinese and Western cultures through the WeChat official account. Students watch the video and complete an online test. In class, teachers only need to explain the common problems in the test [12].

(2) During class: After teachers explain the key and difficult points, use grouping tools (such as random grouping software) to organize online or offline discussions. Combine the screen-sharing function to display students' results and promote instant communication. For example, when teaching the topic of "English Debate", teachers use the "DingTalk" platform to randomly group students [13]. Students debate on the topic of "Whether online education should be promoted." Teachers display the mind maps of each group through screen-sharing and give real-time comments.

(3) After class: Extend to new media platforms (such as WeChat official accounts and learning communities) to carry out topic debates and cross-class collaborative projects to consolidate knowledge and expand application scenarios. For example, in the teaching of the "English News Writing" module, students post their class assignments on the learning community, and students from other classes can comment, forming cross-class interaction.

4.2. Personalized learning support

In view of the large differences in the English foundation of higher vocational students, new media can provide hierarchical learning resources. For example, use adaptive learning platforms to push differential exercises (such

as basic grammar questions and advanced writing tasks) to meet the needs of students at different levels. At the same time, AI voice assistants (such as English oral practice robots) can assist students in independent listening and speaking practice, relieving the pressure on teachers for one-on-one guidance. For example, in classroom learning, we introduced the "English Fluency Speaking" APP[14]. Students can choose oral practice of different difficulty levels according to their levels, and the system scores in real-time and gives improvement suggestions.

4.3. Digital transformation of teaching evaluation

(1) Collection of process data: Record students' speaking frequencies in the discussion area, online test scores, etc., to form a dynamic learning file. For example, our school once used the Zhihuishu platform to record students' classroom participation, assignment completion and other data as an important basis for the final comprehensive assessment.

(2) Introduction of social evaluation: Encourage students to post their classroom achievements (such as English short videos, blog articles) on public platforms (such as Bilibili and Zhihu) to receive feedback from external readers and enhance learning motivation. For example, in the "English Short Video Production" course, after students' videos were posted on Bilibili, they received a large number of likes and comments from netizens, greatly stimulating students' learning enthusiasm.

5. The role of new media technology in improving teaching efficiency

(1) Diversification of resources and blended learning: New media platforms (such as MOOCs, micro-lectures, and learning APPs) provide rich English learning resources, supporting students' pre-class preview and after-class consolidation, optimizing time allocation, and improving classroom efficiency.

(2) Situational simulation and construction of real-language environment: Through videos, audio, virtual reality (VR) and other means, immersive language environments are created for students, making up for the limitations of traditional classrooms. For example, in the teaching of the "Hotel English" topic, students use VR devices to simulate front-desk reception, room service and other scenarios for role-playing dialogues, improving their language application ability.

(3) Data-driven and personalized learning path design: With the help of big data and AI technology, analyze students' learning progress and ability levels, and recommend personalized learning resources to help students breakthrough in their "zone of proximal development". For example, our school used the data analysis function of the "Zhihuishu" platform to recommend reading materials and listening exercises suitable for students' levels, significantly improving learning effects.

(4) Diversified evaluation methods: Combine process-based evaluation and summative evaluation. Record students' assignment completion, discussion participation and other data through online platforms to construct a comprehensive evaluation system. For example, in the teaching of the "English Writing" module, teachers record students' writing processes through the online platform, and combine peer evaluation and AI scoring to form multi-dimensional evaluation results.

(5) Transformation of teachers' roles: From "lecturers" to "guides," teachers need to master new media technology, design online-offline integrated teaching activities, and stimulate students' critical thinking. For example, in the teaching of the "English Reading" module, teachers release reading tasks through the online platform, organize students to discuss in groups in class, and guide students to write book reports after class, forming an integrated teaching model of "pre-class, in-class, after-class."

6. Current challenges in practice and coping strategies

6.1. Main problems

(1) Insufficient information technology capabilities of teachers: Some teachers have limited mastery of new media technology, which affects teaching effectiveness.

(3) Unbalanced resource construction: Some colleges and universities have insufficient investment in hardware facilities (such as smart classrooms and VR devices), limiting the depth of technology application.

(4) Weak autonomous learning awareness of students: Students who are used to traditional spoon-feeding teaching need to gradually adapt to the autonomous exploration model.

(5) Increased teaching management difficulty: In the new media environment, students' learning behaviors are more dispersed, making it difficult for teachers to monitor comprehensively.

(6) Information overload and resource screening problems: The massive amount of information may make it difficult for students to screen valuable learning resources.

6.2. Optimization strategies

(1) Strengthen teacher training: Carry out systematic information-based teaching training to cultivate teachers' skills at different levels.

(2) School-enterprise cooperation in resource construction: Introduce enterprise technical forces to develop virtual simulation teaching software and promote the integration of industry and education.

(3) Construct a blended evaluation system: Combine online learning data and offline classroom performance to comprehensively evaluate students' abilities.

(4) Reasonable guidance and rule-making: Teachers should formulate clear learning rules to guide students to make rational use of new media resources[15].

(5) Improve students' information literacy: Cultivate students' abilities to screen, evaluate, and use information resources.

7. Future development trends

(1) Deepening of digital transformation: Vocational education will accelerate its development towards "ubiquitous lifelong learning", and the PAD class model can be extended to the field of vocational training.

(2) In-depth application of artificial intelligence: AI teaching assistants can assist teachers in grading assignments, analyzing learning data, and even simulating real-life conversation scenarios to provide students with instant feedback.

(3) Immersive teaching experience: With the help of virtual reality (VR) and augmented reality (AR) technology, create immersive learning environments to enhance the authenticity and fun of language learning[16].

(4) Alignment with international standards: By building international learning platforms (such as transnational online collaborative projects), promote the alignment of higher vocational English teaching with international vocational standards.

8. Conclusion

The research on the PAD class model in higher vocational public English teaching from the perspective of new media needs to take into account both technology-enabled teaching and the essence of education. Through resource integration, teacher training, and evaluation innovation, the transformation from "knowledge transfer" to "ability cultivation" can be achieved. In the future, with the deepening of digital transformation, this model is expected to become a benchmark paradigm for the reform of higher vocational English teaching, contributing to the cultivation of high-quality skilled talents.

Disclosure statement

The author declares no conflict of interest.

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