Research on Artificial Intelligence Enabled English Teaching in Higher Vocational Institutes

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Abstract: The booming development of artificial intelligence has brought transformative chances to English instruction inside China's higher vocational institutes. At present, English teaching at such schools still faces multiple practical troubles, mainly including learners' inadequate basic language foundation and outdated, rigid teaching modes adopted by instructors. Targeted improvements against these existing problems are essential to upgrade teaching quality and fit the practical demands of modern educational development. Relying on AI technologies, schools can set up personalized learning schemes and build immersive learning environments combining real classroom practice with virtual scenes, meanwhile perfect full-process teaching evaluation mechanisms. Customized learning support helps vocational learners break through long-standing English teaching bottlenecks. Standardized technical application rules and relevant ethical norms will jointly build a stable, sustainable educational ecosystem for English courses.

Keywords: Artificial Intelligence Enablement; Higher Vocational Education; English Instruction

1. Introduction

Fueled by fast-evolving artificial intelligence technologies, domestic education sectors are stepping into comprehensive digital upgrading. From personalized tutoring tools and generative intelligent applications to adaptive learning platforms and virtual teaching simulation equipment, AI is continuously renovating traditional teaching logic and learning forms. As an indispensable component of China's higher education layout, higher vocational education undertakes the core task of cultivating skilled practical talents with comprehensive literacy. As a compulsory general course offered in vocational colleges, English works as a crucial carrier to broaden students' international vision, polish their cross-cultural communication skills and consolidate their core competitiveness for future career growth.

2. Current Status of English Teaching in Higher Vocational Colleges

Most domestic higher vocational colleges struggle with students' unsatisfactory basic English levels; quite a number of freshmen fail to reach the passing line in college entrance English exams, alongside weak subjective willingness and learning interests toward language study. From teaching method perspectives, plenty of English classrooms still stick to teacher-centered cramming teaching. Uniform teaching plans ignore individual gaps among students and fail to carry out differentiated tutoring. In terms of course content design, conventional textbooks seldom connect closely with real vocational working scenes, making students hard to apply learned language knowledge into daily communication and leading to unsatisfactory teaching outcomes.

3. Value Connotation of Artificial Intelligence Empowering Higher Vocational English Teaching

3.1 Realize Individualized Tutoring and Precise Classroom Instruction

The core advantages of introducing AI into vocational English lie in getting rid of rigid unified teaching arrangements and supplying differentiated learning support for every student. After collecting and sorting out learners' daily learning preferences, interest orientation and original knowledge reserves, intelligent tools can formulate exclusive study plans and put the long-standing educational concept of teaching students according to individual features into real practice. During oral practice sessions, AI equipment keeps track of learners' pronunciation mistakes and intonation problems in real time; for composition training, relevant intelligent

systems record students' drafting ideas and repeated revision tracks to build personal learning archives, which clearly mark each student's merits and weak points in English learning.

3.2 Build Integrated Virtual-real Learning Space and Deepen Immersive Learning Experience

The biggest restriction of conventional vocational English teaching is the lack of authentic language application environments, which stops students from turning textbook knowledge into practical language capability. The emergence of AI simulation tools and virtual reality technology effectively fixes this defect by constructing diverse immersive practice settings. These digital systems can simulate various complicated daily and professional English conversation scenes; students can take part in repeated interactive drills under virtual conditions to gradually correct wrong pronunciation and awkward expression habits. During regular classroom lessons, teachers can make visualized course courseware with AI auxiliary resources. By matching chronological and spatial dimensions, teachers can intuitively present etiquette differences across global regions and sort out the evolution track of traditional Chinese rituals, reducing understanding difficulty for abstract cultural knowledge.

Such digital technologies gain wider application in occupation-focused English courses. Taking cabin service English as an example, teachers develop interactive educational games based on AIGC tools. Learners finish group-based real job tasks inside VR virtual environments, while the intelligent system feeds back personalized improvement suggestions after analyzing students' practical performance. Such hybrid teaching enables repeated skill training under low-risk virtual conditions, protecting students' learning confidence while improving their practical language using ability.

3.3 Optimize Teaching Assessment and Construct Full-cycle Student Learning Profiles

Traditional English assessment mostly depends on final closed-book exams, which cannot reflect students' learning process, capability growth and actual learning effects comprehensively and dynamically. With AI auxiliary support, teaching evaluation shifts its focus from final results to whole learning progress. Intelligent teaching platforms continuously collect multi-dimensional data including classroom performance, homework completion status and group cooperation efficiency, forming complete learning records for subsequent teaching analysis.

4. Practical Innovative Strategies for AI-enabled English Teaching in Vocational Colleges

4.1 Construct Two-Pronged Teaching Mode: Online Intelligent Drilling plus Offline Scene Practice

To lift overall English teaching quality under AI application background, schools need to promote deep integration between online digital training and offline classroom practice. On the online side, specialized intelligent learning platforms provide targeted language training resources for all vocational students. Cloud assessment systems track learners' daily learning and periodic exam data so as to boost their comprehensive language literacy. Relying on intelligent English learning agents, schools build a closed-loop learning chain covering knowledge absorption and capability output, including five practice modules: vocabulary memorization, reading comprehension, oral expression, text recitation and article writing. Students can self-check learning outcomes anytime online, with learning paths updated dynamically according to real learning data.

On the offline side, AI-equipped smart classrooms help teachers implement refined class management. Intelligent equipment automatically counts student attendance, monitors in-class concentration span and records classroom answering conditions, providing reliable data basis for teachers to flexibly adjust follow-up teaching plans. This dual-mode framework reserves warm human-to-human interaction featured in traditional lessons while making full use of digital technology advantages, realizing organic combination between educational essence and intelligent auxiliary tools.

4.2 Carry Out Targeted Teaching Reform under the Guidance of ADDIE Theoretical Framework

To realize effective integration between AI technology and vocational English courses,

colleges can follow the five-step ADDIE model to push forward systematic teaching reform, namely Analysis, Design, Development, Implementation and Evaluation.

At the analysis stage, teaching teams summarize existing teaching obstacles, such as mismatched curriculum setup failing to match individualized learning needs and future vocational requirements. The design stage explores feasible solutions to embed digital technology into curriculum framework, classroom activities and evaluation rules. In the development stage, colleges develop intelligent teaching resource banks and professional English corpus. When moving to implementation, teachers roll out tiered teaching, situational courses and project-oriented study with AI assistance. At the final evaluation phase, multi-angle teaching effect inspection and curriculum optimization are completed relying on data collected from intelligent learning terminals. The application of this model ensures orderly reform progress and avoids disorderly random stacking of various digital instruments[1].

4.3 Develop New Teaching Forms Based on In-depth Combination of AI and English Discipline

Deep integration between artificial intelligence and English teaching drives diversified innovative teaching modes for quality improvement.

First, create a cyclic teaching framework consisting of content generation, interactive practice and post-class reflection for cross-cultural courses. Aiming at students' common weakness in expressing traditional Chinese culture in English, teachers use AI resources to collect diversified cross-cultural learning materials. Students complete interactive language exercises with intelligent tools and carry out targeted reflection under teachers' guidance.

Second, build an integrated three-part intelligent teaching system targeting prominent problems existing in business English courses, such as low efficiency of professional terminology memorization, insufficient in-class oral practice and disconnection between textbook knowledge and real business scenarios. This closed-loop system combines AI auxiliary resources, gamified training and scene-oriented output, effectively upgrading students' practical business English application skills[2].

5. Conclusion

In the current vocational education era, introducing artificial intelligence into English teaching has become an inevitable developmental trend, which helps boost the overall teaching standard of domestic higher vocational institutes. From technical and theoretical perspectives, education practitioners can explore systematic reform ideas to realize human-machine coordinated smart English teaching. Such reforms equip vocational graduates with solid English application ability as well as cross-cultural learning competence, continuously supplying high-quality practical talents for all sectors of domestic society.

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