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# Research on the Application and Practice of Generative AI Tools in Higher Vocational English Teaching

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**Abstract: In the context of the advancement of the Education Informatization 2.0 Strategy and the deepening of higher vocational English teaching reform, generative AI technology provides a new approach to addressing practical dilemmas in higher vocational English teaching, such as "emphasizing theory over practice" and "insufficient personalized support". Based on the practical logic of integrating generative AI with higher vocational English teaching and combined with the actual situation of higher vocational English teaching, this paper constructs an "AI+Vocational English" integrated teaching model. It clarifies the teaching objectives oriented by core competencies in workplace English, builds a "general+professional" modular teaching content system, innovates AI-empowered hybrid teaching methods, and establishes a dual-track assessment system of "AI+teachers". Meanwhile, taking the teaching units of Nucleus Vocational College English 1 as examples, specific application strategies are proposed, and potential challenges and corresponding solutions in the application of generative AI are analyzed, providing practical references for the digital transformation of higher vocational English teaching.**

**Keywords: Higher Vocational English; Integrated Teaching Model; Workplace English; Teaching Strategies; Dual-track Assessment**

## 1. Introduction

With the in-depth penetration of artificial intelligence technology in the field of education, policies such as the Education Informatization 2.0 Action Plan and Opinions on Building a High-Quality and Balanced Basic Public Education Service System have clearly identified AI as a core force driving changes in teaching models, management models, and service models, requiring colleges and universities to deepen the integration and innovation of technology and teaching. As a core course for cultivating students' workplace communication skills, higher vocational English has long faced contradictions such as "the gap between students' weak foundation and workplace needs", "the disconnection between outdated teaching content and post capabilities", and "the mismatch between single teaching methods and students' learning interests"[1,2]. Generative AI tools (such as ChatGPT, iFlytek Spark, Grammarly, etc.), with functional advantages such as text generation, voice interaction, real-time feedback, and personalized adaptation, can simulate real-life language scenarios, optimize the supply of teaching resources, and improve assessment efficiency. They provide technical support for the transformation of higher vocational English from "knowledge imparting" to "competence cultivation"[3].

Against this background, this paper combines the practice of higher vocational English teaching, systematically analyzes the practical logic of the integration of generative AI and higher vocational English teaching, constructs an "AI+Vocational English" integrated teaching model, refines specific application strategies, and proposes solutions to the challenges in application. It aims to provide theoretical and practical references for improving higher vocational students' comprehensive application capabilities of workplace English and promoting the reform of higher vocational English teaching.

## 2. Practical Logic of the Integration of Generative AI and Higher Vocational English Teaching

### 2.1 Policy Drive: Education Informatization Promotes Teaching Reform

Education informatization is an important direction of national education reform. The

*Education Informatization 2.0 Action Plan* clearly proposes to "empower education with technology and promote the innovation of teaching models, management models, and service models". The Ministry of Education's "Action Plan for Artificial Intelligence to Boost the Construction of Teacher Teams" further requires higher education institutions to deeply integrate AI technology into curriculum teaching, particularly focusing on the core objective in vocational education: aligning the cultivation of practical skills with actual job requirements. In the field of higher vocational English teaching, policy documents clearly point out the need to break through the limitations of traditional teaching and solve problems such as "the disconnection between theory and practice" and "insufficient personalized teaching". As a cutting-edge achievement in natural language processing technology, generative AI is highly consistent with the requirements of education informatization policies for "precision teaching" and "efficient education" due to its technical characteristics, and has become an important driving force for promoting the reform of higher vocational English teaching[4].

### 2.2 Teaching Dilemmas: Existing Contradictions in Higher Vocational English Teaching

Current higher vocational English teaching faces three core contradictions, which restrict the improvement of teaching quality:

Contradiction between students' abilities and post requirements: Higher vocational students have a weak English foundation, insufficient vocabulary, incomplete grammar systems, and lack of language application capabilities in real workplace contexts, making it difficult for them to meet the requirements of positions such as cross-border e-commerce and international trade for skills in business negotiations and customer communication[5].

Contradiction between teaching content and industry development: Traditional textbooks focus on general English, with outdated content that is divorced from workplace reality and fails to cover industry-specific terminology and scenario-based communication skills, resulting in a significant mismatch with post capability requirements [2].

Contradiction between teaching models and learning needs: Teacher-centered lecture-style teaching dominates, leading to insufficient classroom interaction and low student learning interest; at the same time, formative assessment relies on manual correction by teachers, resulting in delayed feedback and low efficiency, which cannot achieve personalized guidance[6].

### 2.3 Technological Adaptation: Teaching Functional Advantages of Generative AI

The core functions of generative AI are highly compatible with the needs of higher vocational English teaching, which is reflected in three aspects:

Scenario-based language practice function: Tools such as ChatGPT and SparkDesk simulate real workplace scenarios such as business negotiations and job interviews, providing students with an immersive language output environment and making up for the shortcoming of "lack of practical scenarios" in traditional teaching[7].

Personalized resource supply function: Based on students' learning data (such as vocabulary size, grammar mastery, and learning progress), customized learning materials are dynamically generated, such as hierarchical vocabulary lists and targeted exercise questions, to meet the learning needs of students at different levels [8].

Efficient teaching assessment function: Tools such as Grammarly and Aimwriting can realize automatic essay correction, real-time pronunciation error correction, and visualized analysis of learning data, which greatly reduces the burden of teachers' mechanical work and improves the efficiency of teaching feedback[9].

## 3. Construction of the "AI+Vocational English" Integrated Teaching Model

### 3.1 Teaching Objectives: Focusing on Core Workplace English Competencies

The teaching objectives of higher vocational English are reconstructed based on the "post demand orientation", breaking the traditional positioning of "emphasizing examinations over application", and deeply integrating generative AI tools with the cultivation of core workplace English competencies. The specific objectives include:

Language application ability: Through AI-simulated scenario training, improve students' comprehensive listening, speaking, reading, and

writing abilities in scenarios such as job interviews, business communication, and cross-cultural communication.

Career adaptation ability: Combined with different majors (such as cross-border e-commerce, international trade, and hotel management), use AI to generate industry-specific language materials, and train students to master industry terminology and post communication skills.

Independent learning ability: Guide students to use AI tools for self-diagnosis, independent practice, and self-assessment, forming an independent learning cycle of "goal-practice-feedback-improvement" [3].

### 3.2 Teaching Content: Building a "General+Professional" Modular System

Relying on the resource generation capability of generative AI, the linear structure of traditional textbooks is broken, and a modular content system of "general English module+professional English module" is built:

General English module: Covers basic grammar, general vocabulary, daily communication, and other contents. AI tools are used to generate interesting learning materials (such as situational dialogue videos and interactive exercises) to consolidate students' language foundation.

Professional English module: According to different professional directions, AI generates an "industry scenario corpus". For example, for the cross-border e-commerce major, it generates "cross-border live streaming scripts" and "order communication emails"; for the international trade major, it generates "letter of credit clause interpretation" and "business negotiation scripts", so as to realize the accurate alignment between teaching content and post needs[4].

Dynamic module update: AI captures cutting-edge industry information in real time (such as changes in foreign trade policies and updates to cross-border e-commerce platform rules), and updates the content of professional modules regularly to ensure the timeliness of teaching content.

### 3.3 Teaching Methods: Innovating "AI-Empowered" Hybrid Teaching

By integrating the advantages of online and offline teaching, and leveraging generative AI, an all-process hybrid teaching model covering the "pre-class, in-class, and post-class" phases is constructed.

Pre-class preview: AI pushes personalized preview tasks (such as job English vocabulary micro-courses and interview scenario dialogue audios) according to students' learning situation, and diagnoses students' knowledge gaps through intelligent tests.

In-class teaching: Teachers conduct interactive teaching with the support of AI tools. For instance, they may use iFlytek Spark for "job interview role-playing" or employ Doubao to generate debate topics (such as "Will AI Replace Human Translators in Workplace English Communication?"), guiding students toward deep engagement.

Post-class consolidation: AI automatically generates targeted review materials (such as error analysis and extended reading), and provides students with 24-hour online Q&A through intelligent chat robots, extending the time and space of teaching[10].

### 3.4 Teaching Assessment: Establishing an "AI+Teacher" Dual-Track Assessment System

Breaking through the traditional single assessment model, a dual-track system of "AI quantitative assessment+teacher qualitative assessment" is constructed, taking into account both assessment efficiency and fairness:

AI quantitative assessment: It is responsible for evaluating quantifiable indicators, such as grammar error rate and vocabulary richness in writing, as well as pronunciation accuracy and fluency in speaking. Assessment reports and scores are automatically generated through relevant tools.

Teacher qualitative assessment: Teachers focus on dimensions that are difficult for AI to quantify, such as the logic of language expression, the appropriateness of cross-cultural communication, and the adaptability in workplace scenarios. Comprehensive evaluation is conducted based on classroom performance and group tasks.

Dynamic feedback mechanism: Regularly integrate AI and teacher assessment data to generate students' learning growth files, providing a basis for the adjustment of teaching strategies and personalized guidance [6].

## 4. Specific Application Strategies of Generative AI in Higher Vocational English Teaching

Taking each unit of *Nucleus Vocational College English 1* as a case, specific applications are carried out in combination with generative AI tools.

### 4.1 Integrated Design of AI Tools and Textbook Content

4.1.1 AI-assisted teaching plans based on textbook unit themes

Based on the unit themes of *New Core Higher Vocational English 1*, various AI-assisted teaching plans can be designed by using domestic free AI tools to enrich teaching content and improve teaching effects. In the unit "Hi, I'm a freshman", the teaching objective is mainly to help students master basic greetings, self-introductions, and English expressions related to campus life. With the help of iFlytek Spark, teachers can ask it to generate more dialogue scenarios related to campus life, such as borrowing books in the library, ordering food in the cafeteria, and participating in club activities. These rich dialogue scenarios can provide students with a more real and comprehensive language learning environment, allowing students to practice English expressions in different situations and improve their oral English skills.

In the vocabulary learning section, Doubao can play an important role. For campus-related vocabulary appearing in this unit, such as "campus", "dormitory", and "cafeteria", Doubao can provide detailed word meaning explanations, abundant example sentences, synonyms, antonyms, and vocabulary memory skills. Taking "campus" as an example, Doubao can not only give its common meaning "campus" but also provide example sentences like "The campus is very beautiful with many trees and flowers." Through these example sentences, students can better understand the usage of vocabulary in actual contexts. Doubao can also provide synonyms such as "schoolyard" and antonyms such as "off-campus", helping students expand their vocabulary and deepen their understanding and memory of vocabulary.

For the unit "English opens a door to the world", in terms of reading teaching, teachers can use AI tools to generate extended reading materials related to the theme. For example, ask iFlytek Spark to generate articles about cultural differences in different countries. These articles contain rich details and vivid cases, which can attract students' attention and stimulate their interest in reading. After students finish reading the articles, teachers can use Doubao to design some reading comprehension questions. These questions not only cover the detailed content of the articles but also include the understanding of the main idea of the articles, the author's views, and the examination of students' critical thinking. For example, "What are the manifestations of a certain cultural difference mentioned by the author in real life? How do you think we should deal with these cultural differences?" Through such questions, students are guided to think in depth, improving their reading comprehension and critical thinking skills.

4.1.2 Expanding the depth and breadth of textbook knowledge with AI

Domestic free AI tools have rich resources and powerful information processing capabilities, which can provide strong support for the teaching of *Nucleus Vocational College English 1*, effectively expanding the depth and breadth of textbook knowledge and helping students better understand and master knowledge points.

In terms of cultural knowledge, taking the unit "English opens a door to the world" as an example, textbooks may only briefly introduce the cultural customs of some countries. However, with the help of iFlytek Spark, teachers can obtain more in-depth and comprehensive cultural knowledge. Regarding British culture, iFlytek Spark can introduce in detail aspects such as British history, traditional festivals, social etiquette, and food culture. When introducing British traditional festivals, it will not only mention the time and celebration methods of the festivals but also tell the historical origins and cultural significance behind the festivals. For example, Christmas is not only a religious festival but also a time for family reunions and exchanging gifts. People will decorate Christmas trees and sing Christmas carols. Through these detailed introductions, students can have a deeper understanding of British culture, broaden their cultural horizons, and enhance their awareness of cross-cultural communication.

In terms of grammar explanation, taking the simple future tense appearing in the unit "Career Planning" as an example, AI tools can provide more example sentences and exercises. iFlytek Spark can generate sentences using the simple future tense in various scenarios, such as

"I will attend a job interview tomorrow." and "She will start her new job next week." Through these abundant example sentences, students can more intuitively feel the usage of the simple future tense in actual contexts. Teachers can also use Doubao to design targeted grammar exercises, such as fill-in-the-blanks, multiple choices, and sentence-making, helping students consolidate the learned grammar knowledge and improve their grammar application capabilities.

### 4.2 AI-Supported Personalized Learning Paths

4.2.1 Students' English proficiency assessment and learning plan formulation

Using domestic free AI tools to conduct a comprehensive and accurate assessment of students' English proficiency is the key to formulating personalized learning plans. Taking Doubao and iFlytek Spark as examples, they can assess students' English proficiency in a variety of ways. By designing a set of test questions covering multiple dimensions such as vocabulary, grammar, listening, speaking, reading, and writing, students' English abilities are comprehensively examined. In the vocabulary test, not only students' memory of words is examined but also the usage and collocation of words; the grammar test covers various grammar knowledge points such as tenses, voices, and clauses; the listening test provides listening materials with different speeds and accents to examine students' listening comprehension abilities; the speaking test evaluates students' pronunciation, fluency, and expression abilities through speech recognition technology; the reading test selects articles of different difficulties and themes to examine students' reading comprehension abilities; the writing test requires students to write according to given topics or situations to evaluate students' writing abilities and logical thinking abilities.

After the test is completed, AI tools will conduct a detailed analysis of students' test results. Doubao can accurately identify students' strengths and weaknesses in each dimension and generate a comprehensive assessment report. If students have difficulties in synonym discrimination in the vocabulary section, the report will clearly point out this problem and provide relevant improvement suggestions, such as recommending some learning materials or exercise questions for synonym discrimination. Based on the assessment results, AI tools will tailor personalized learning plans for each student. For students with insufficient vocabulary, the learning plan may arrange for them to learn a certain number of new words every day and consolidate the learned words through vocabulary exercises and vocabulary games; for students with weak listening skills, it will recommend listening materials suitable for their level, such as English broadcasts and English movie clips, and formulate corresponding listening practice plans, such as 30 minutes of listening training every day, including listening comprehension, dictation, and follow-up exercises.

Moreover, the learning plan is not static. AI tools will continuously adjust it according to students' learning progress and feedback. If students master a certain knowledge point well during the learning process, the learning plan will appropriately accelerate the progress; if students encounter difficulties in a certain part, the learning plan will increase relevant learning content and exercises, providing students with more learning support to ensure that students can learn according to the path most suitable for themselves and improve learning efficiency and effects.

4.2.2 Intelligent tutoring and feedback in the learning process

In the process of students' English learning, domestic free AI tools can provide all-round intelligent tutoring and real-time feedback, helping students solve problems encountered in learning in a timely manner, adjust learning strategies, and improve learning effects.

Taking Doubao as an example, it has a powerful Q&A function. During the process of learning *New Core Higher Vocational English 1*, students can ask Doubao questions at any time whether they have doubts about vocabulary, grammar, and text content in textbooks, or encounter problems when completing homework and conducting extracurricular reading. When students do not understand the usage of the phrase "major in" in the unit "Hi, I'm a freshman" and ask Doubao, Doubao will explain its usage in detail and provide multiple example sentences, such as "She majors in English." and "He majors in computer science." Through these example sentences, students can clearly understand the correct usage of the

phrase in sentences.

In terms of writing, both Doubao and iFlytek Spark can play an important role. After students complete their compositions, they can input the compositions into Doubao, which can conduct a comprehensive correction of the compositions. Doubao will check grammar errors in the compositions, such as subject-verb disagreement, tense errors, and part-of-speech misuse, and give detailed modification suggestions; it will also evaluate vocabulary usage, point out inappropriate vocabulary usage, and recommend more accurate and rich vocabulary to improve the expression level of the article; in terms of article structure and logic, Doubao will analyze whether the paragraph structure of the article is clear and the argumentation is reasonable, put forward improvement suggestions, and help students make the article more organized and logically coherent. For a composition about "My Campus Life", Doubao may point out that a certain paragraph is too long and suggest splitting it into two paragraphs to make the article structure clearer; for some simple vocabulary used repeatedly, Doubao will recommend some synonyms or near-synonyms for replacement to enhance the language richness of the article.

In oral English learning, AI tools such as Liulishuo (Fluent English) help students improve their oral English level through intelligent scoring and real-time feedback. When students conduct oral practice, Liulishuo will real-time evaluate students' performance in terms of pronunciation, intonation, speech rate, and fluency, and give corresponding scores and detailed feedback suggestions. If students have problems in pronunciation, Liulishuo will point out specific pronunciation errors, such as inaccurate pronunciation of a certain phoneme, and provide correct pronunciation demonstrations and practice methods; for the problem of too fast or too slow speech rate, Liulishuo will give reasonable speech rate suggestions and help students adjust the speech rate through some oral practice to make the expression more natural and fluent. Through such intelligent tutoring and real-time feedback, students can timely understand their learning situation, make targeted improvements, and continuously improve their English learning abilities.

### 4.3 AI-Aided Classroom Interaction and Innovative Ability Cultivation

4.3.1 Design of scenario simulation and role-playing activities

Using domestic free AI tools to generate scenario simulation and role-playing scenarios can bring new vitality to higher vocational English classrooms, effectively stimulate students' learning interest and participation, and improve students' language application abilities and practical communication skills.

In the unit "Career Planning", teachers can use Doubao to generate scenario simulations of workplace interviews. Doubao can provide common questions in interviews, such as "Can you tell me a little about yourself?", "Why do you want to work for our company?", and "What are your greatest strengths and weaknesses?". Students are divided into groups for role-playing, with one group of students acting as interviewers and the other group acting as job seekers. During the interview, students need to use appropriate English expressions to communicate according to their roles. Interviewers need to ask questions and evaluate the answers of job seekers; job seekers need to prepare self-introductions and answers to various questions to show their professional abilities and job-hunting advantages. Through such scenario simulation and role-playing activities, students can understand the process and requirements of workplace interviews in advance, improve their application abilities of workplace English, and enhance their self-confidence.

4.3.2 Guidance on critical thinking and innovative thinking

Through open-ended questions and discussion topics provided by domestic free AI tools, students can be guided to cultivate critical thinking and innovative thinking, and improve their comprehensive quality and thinking abilities.

Taking Doubao as an example, when learning the unit "Technology Changes Life", teachers can use Doubao to put forward some open-ended questions, such as "Do you think artificial intelligence will replace human jobs in the future? Why or why not?" There is no fixed answer to this question. Students need to think and analyze from different angles based on their own knowledge and life experience. Some students may think that artificial intelligence will replace some repetitive and regular jobs because artificial intelligence has advantages

such as high efficiency, accuracy, and tirelessness; while other students may think that human creativity, emotional understanding, and interpersonal communication abilities cannot be replaced by artificial intelligence, so human jobs will not be completely replaced. During the discussion, students need to use English to express their views and provide reasonable arguments for support, which can not only improve students' English expression abilities but also exercise their critical thinking abilities, enabling students to learn to view problems from different angles and analyze the pros and cons of problems.

In the unit "English opens a door to the world", teachers can use iFlytek Spark to generate some discussion topics about cultural differences, such as "What are the advantages and disadvantages of cultural globalization?". When discussing this topic, students need to think in depth about the impact of cultural globalization on different countries and regions, including economic, social, and cultural aspects. In terms of economy, cultural globalization may promote the growth of international trade and investment; in terms of society, it may promote the exchange and integration between different cultures, but it may also lead to the loss of local culture; in terms of culture, it may enrich people's cultural life, but it may also bring cultural conflicts. Through such discussions, students can broaden their thinking horizons, cultivate innovative thinking abilities, learn to analyze and solve problems from complex phenomena, and improve their awareness and abilities of cross-cultural communication. Teachers can also guide students to conduct critical thinking on the content generated by AI, such as checking its accuracy, logic, and objectivity, to further cultivate students' critical thinking abilities.

## 5. Challenges and Countermeasures in the Application of Generative AI

### 5.1 Technical and Educational Issues in the Application of AI Tools

5.1.1 Technical stability and applicability issues

Domestic free AI tools have prominent problems of technical stability and applicability in the application of higher vocational English teaching. Some AI tools may experience slow response due to server overload during use, affecting the fluency of classroom teaching. In the classroom interaction session, when students use AI tools to conduct scenario simulation dialogues, if the response time of AI tools is too long, it will interrupt students' thinking and dialogue rhythm, making it impossible to carry out teaching activities smoothly. Unstable network connections can also cause AI tools to fail to work normally. For example, in some teaching areas with weak network signals, students may not be able to obtain feedback from AI tools in a timely manner, affecting learning effects.

Moreover, different AI tools have differences in functions and characteristics, and not all tools can be fully adapted to the actual needs of higher vocational English teaching. The content generated by some AI tools may be too academic or divorced from real - life scenarios, which is not compatible with the English level and learning objectives of higher vocational students. When generating English writing materials, the generated content may contain a large number of complex vocabulary and sentence patterns, which exceed the understanding range of higher vocational students, making it difficult for students to learn from and use them. The accuracy of speech recognition of some AI tools in oral training needs to be improved. For students with non-standard pronunciation or accents, their speech content may not be accurately recognized, leading to inaccurate feedback and failing to effectively help students improve their oral English level.

5.1.2 Potential impact on students' independent learning abilities

Excessive reliance on AI tools may lead to a decline in students' independent learning abilities, which is an important issue that needs to be paid attention to when AI tools are applied to higher vocational English teaching. When students encounter problems in the learning process, if they rely too much on the answers and solutions provided by AI tools, they will gradually lose the ability of independent thinking and exploration. In English writing, when students encounter vocabulary or grammar problems, they directly ask AI tools instead of actively consulting dictionaries or grammar books for learning. In the long run, students will develop a dependence on AI tools, and their learning initiative and ability to solve problems independently will gradually weaken.

The convenience of AI tools may make students

lack the exercise of in-depth thinking and critical thinking. The information provided by AI tools is often direct and ready-made, and students can obtain it without in-depth analysis and thinking. In reading comprehension exercises, students quickly get the translation and answers of the article through AI tools, but do not think in depth about the content, structure, and the author's views of the article, which is not conducive to cultivating students' reading comprehension abilities and critical thinking abilities. Moreover, if students rely on AI tools for learning for a long time, they may ignore the cultivation of their own learning methods and strategies, fail to master effective learning skills, and affect their future learning and development.

5.1.3 Challenges to the fairness and accuracy of teaching assessment

In terms of teaching assessment, the application of AI tools also brings challenges to fairness and accuracy. There are differences in students' familiarity and application ability of AI tools, which may lead to unfair assessment results. Some students can skillfully use AI tools to assist learning and may obtain better results in assessment, while other students are at a disadvantage in assessment because they are not familiar with AI tools or lack the conditions to use them. In writing assessment, students who are proficient in using AI writing assistance tools may write compositions with more correct grammar and more fluent expression, thus obtaining higher scores, while other students may get lower scores because they do not use or are not good at using these tools, which cannot truly reflect students' actual writing abilities.

AI tools may also have accuracy problems in the assessment process. Although AI tools can quickly score students' homework and tests, they can often only analyze from superficial levels such as grammar and vocabulary, and it is difficult to comprehensively assess students' language application abilities and thinking abilities. In composition scoring, AI tools may ignore important factors such as the innovation, logic, and ideological depth of the article, and only focus on the accuracy of grammar errors and vocabulary usage, resulting in scoring results that cannot accurately reflect students' writing levels. In oral English assessment, AI tools also have certain limitations in assessing whether students' language expression conforms to the context and whether they have communication abilities, and may not be able to give comprehensive and accurate evaluations.

**5.2 Countermeasures and Suggestions**

5.2.1 Technical support and tool optimization

To solve the problems of technical stability and applicability of AI tools in higher vocational English teaching, it is necessary to strengthen technical support and tool optimization. Schools and educational institutions should establish close cooperative relationships with AI tool developers, timely feedback the problems encountered in the application of tools in teaching, and promote developers to optimize and upgrade the tools to improve their stability and response speed. Schools can be equipped with professional technical personnel responsible for the daily maintenance and technical support of AI tools to ensure that the tools can operate normally during the teaching process. When technical failures occur, technical personnel can timely carry out troubleshooting and repair to reduce the impact on teaching.

In terms of tool selection and application, teachers should carefully select suitable AI tools according to teaching objectives and students' needs, and screen and adjust the content generated by the tools. When selecting oral training tools, factors such as the accuracy of speech recognition of the tools, the richness and practicality of training content should be comprehensively considered to ensure that the tools can effectively help students improve their oral English level. For teaching resources generated by AI tools, teachers should conduct secondary processing in combination with teaching practice to make them more in line with students' English level and learning objectives. When using AI to generate writing materials, teachers can appropriately simplify and adapt the materials to make them easier for students to understand and use.

5.2.2 Teacher training and role transformation

Teachers play a crucial role in higher vocational English teaching in the AI era. Strengthening teacher training and promoting teacher role transformation are the keys to ensuring the effective application of AI tools. Schools should regularly organize teachers to participate in AI technology training to improve teachers' familiarity and application ability of AI tools. The training content can include the function introduction, usage methods, and integration

strategies with teaching content of AI tools. Through training, teachers can skillfully use AI tools for teaching design, teaching implementation, and teaching assessment, giving full play to the advantages of AI tools.

Teachers should actively transform their roles, from traditional knowledge imparters to learning guides. In the teaching process, teachers should guide students to use AI tools correctly, and cultivate students' independent learning abilities and critical thinking abilities. In writing teaching, teachers can let students use AI tools to create first drafts, but require students to analyze and think about the content generated by AI, put forward their own views and modification suggestions, and then carry out secondary creation. In this way, the auxiliary role of AI tools is brought into play, and students' independent thinking abilities are exercised. Teachers should also pay attention to the learning process of students, give guidance and feedback in a timely manner, help students solve problems encountered in the process of using AI tools, guide students to treat AI tools correctly, and avoid excessive dependence.

5.2.3 Establishing a diversified assessment system

To solve the problems of fairness and accuracy brought by AI tools in teaching assessment, a diversified assessment system should be established, comprehensively considering students' learning process and achievements. In terms of assessment subjects, in addition to teacher evaluation, student self-evaluation and peer evaluation should also be introduced. Student self - evaluation can enable students to reflect on and summarize their learning process and achievements, improving students' self-awareness abilities; student peer evaluation can promote communication and learning between students, cultivating students' cooperation abilities and critical thinking abilities. In writing assessment, in addition to teacher scoring, students can also conduct self-evaluation and mutual evaluation, analyzing and evaluating compositions from different angles to make the assessment results more comprehensive and objective.

In terms of assessment methods, a combination of multiple assessment methods should be adopted. In addition to traditional examination and homework assessment, classroom performance assessment, project assessment, and oral presentation assessment should be added. Classroom performance assessment can observe students' participation, speech, and cooperation abilities with classmates in class; project assessment can examine students' comprehensive abilities in the process of completing a specific project, such as data collection, problem analysis, and problem-solving abilities; oral presentation assessment can evaluate students' oral expression abilities, language organization abilities, and adaptability. Through the comprehensive application of multiple assessment methods, students' English learning abilities and levels can be evaluated more comprehensively and accurately, reducing the unfairness and inaccuracy caused by a single assessment method.

## 6. Conclusion

Based on the triple logic of policy, teaching, and technology, this study constructs an "AI+Vocational English" integrated teaching model, clarifies teaching objectives oriented to core workplace competencies, a "general+professional" modular content, an AI-empowered hybrid teaching method, and an "AI+Teacher" dual-track assessment system. Specific application strategies are proposed in combination with the content of the textbook *Nucleus Vocational College English 1*. The research shows that generative AI can effectively solve problems in higher vocational English teaching such as insufficient personalization, outdated resources, and low efficiency. However, its application still needs to address challenges such as weakened learning autonomy, assessment fairness, and ethical security.

In the future, higher vocational English teaching should further deepen the concept of "human-machine collaboration". By optimizing the teaching model, improving the standard system, and enhancing teachers' quality, the technical advantages of generative AI can be fully exerted to achieve the goal of "promoting teaching with technology and cultivating abilities through teaching", providing strong support for cultivating high-quality technical and skilled talents who meet workplace needs. At the same time, this study still has shortcomings such as a short practice cycle and a limited sample range. In the future, the scale of teaching practice can be expanded, the innovation of teaching models under the background of AI technology iteration can be

explored, and the further deepening and promotion of research results can be promoted.

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