

Exploration of the Approaches of Artificial Intelligence-Assisted College English Teaching

Shi Liyan

Beijing Institute of Petrochemical Technology, Beijing, China

Received: 25 Jun 2025, Received in revised form: 21 Jul 2025, Accepted: 25 Jul 2025, Available online: 29 Jul 2025

Abstract

Responding to the rapid development of artificial intelligence, this paper mainly discusses the opportunities and challenges brought by artificial intelligence to college English teaching, as well as the approaches of artificial intelligence-assisted college English teaching, aiming to provide thinking for the further development of college English teaching in the artificial intelligence environment.

Keywords— *artificial intelligence, approaches, college English teaching*

I. BACKGROUND

The rapid development of artificial intelligence has put forward new requirements for the reform and further development of college English teaching. Different from traditional modern teaching methods, artificial intelligence needs to be deeply integrated with college English teaching both in depth and breadth. Professor Wen Qiufang from Beijing Foreign Studies University pointed out that theoretically, the impact of AI represented by ChatGPT on English teaching in China will exceed that of general courses.

II. OPPORTUNITIES FOR COLLEGE ENGLISH TEACHING IN THE CONTEXT OF ARTIFICIAL INTELLIGENCE

Thanks to the development of artificial intelligence, more and more intelligent learning platforms and tools become available to English learners, providing wide ranges of learning materials, giving them personal and

dynamic learning feedbacks, and cultivating their potentials in learning and thinking.

i. Realization of Personalized Teaching Mode

Artificial intelligence can promote learners' autonomous learning efficiently. Based on learner' profiles and learning data, artificial intelligence can track students' learning data in real-time (such as vocabulary mastery, weak points in grammar, listening comprehension speed, etc.) through learning analysis technology, and generate personalized learning plans based on the data, dynamically adjusting the difficulty and progress of learning content. For example, intelligent teaching platforms can push targeted exercises according to the types of students' mistakes in learning, helping them efficiently make up for their shortcomings and solving the "one-size-fits-all" problems in traditional "large-class teaching".

ii. Intelligent Expansion of Teaching Resources

Artificial intelligence is like a treasure house,

gathering massive learning resources in multiple forms such as text, audio, and video. Artificial intelligence technology has enriched the forms and acquisition methods of English teaching resources. On the one hand, virtual teaching assistants supported by technologies such as intelligent speech recognition and natural language processing, and large language models represented by ChatGPT, can simulate real dialogue scenarios, assist students in listening and speaking practice, answer grammar questions, and even generate customized learning materials. They can realize automatic correction of compositions and real-time evaluation of spoken language. At the same time, resource libraries based on big data can automatically screen high-quality materials (such as foreign articles and film clips suitable for students' levels), broadening students' channels of language input.

iii. Improvement of Teaching Efficiency and Interaction

Artificial intelligence platforms and tools is expected to simplify the teaching process. For example, automatic correction systems can quickly score objective questions, saving teachers' time; intelligent interactive courseware can stimulate students' sense of participation through gamified designs (such as word challenges and situational dialogue simulations), transforming the classroom from a "teacher-led" mode to a diversified mode of "teacher-student interaction and student-student interaction". Language learning scenarios combined with VR/AR technologies, such as virtual English laboratories, allow students to improve their application abilities in simulated cross-cultural communication environments.

III. CHALLENGES FACED BY COLLEGE ENGLISH TEACHING IN THE ARTIFICIAL INTELLIGENCE ENVIRONMENT

i. Adaptation Problem Between Technology

Application and Teaching Needs

Some intelligent teaching tools have a tendency of "valuing technology over teaching". For example, the accuracy of speech recognition is insufficient, and the analysis of learning data is divorced from teaching objectives, leading to a disconnection between technology and actual teaching needs, which instead increases the use burden of teachers and students.

ii. Transformation of Teachers' Roles and Improvement of Ability Requirements

The popularization of artificial intelligence has put forward new requirements for teachers: teachers need to transform themselves from single knowledge imparters into knowledge imparters, teaching designers, learning supervisors, and transmitters of emotional values. Teachers must not only master the operation of intelligent tools but also have the ability to analyze data and design personalized teaching plans. However, some teachers have a low acceptance of new technologies, and some have much trouble learning some specialized skills about artificial intelligence, and others can not get enough professional training, then thus there are some difficulties in the transformation process, which is actually a big challenge.

iii. Test of Students' Autonomous Learning Ability and Independent Thinking Ability

Artificial intelligence not only provides a large number of resources for student' autonomous learning but also provides personalized learning platforms and means, which is actually a good choice for students. However, the biggest challenge for students is that they will over-rely on the answers provided by intelligent tools, and gradually they will lack the ability of independent thinking and the ability to distinguish the accuracy of answers. Especially for subjective part of language learning, such as translation and writing, the answers given by different platforms are too rigid or even wrong. Faced with massive information, students are reluctant to carefully analyze sentence structures or

relevant contexts, resulting in inaccurate language input or lack of independent thinking ability in the long run.

IV. INNOVATIVE APPROACHES OF COLLEGE ENGLISH TEACHING IN THE ARTIFICIAL INTELLIGENCE ENVIRONMENT

The assistance of artificial intelligence in college English teaching needs to be combined from several dimensions, which is a big task, not only involving setting teaching goals, adjusting teaching concepts, enriching curriculum systems, selecting suitable tools, and improving teachers' AI capabilities but also balancing technology and humanity.

i. Constructing a Curriculum System Integrating "Technology + Teaching"

Make full use of artificial intelligence to design a hybrid teaching mode of "online intelligent preview + offline interactive deepening": the former means online learning of basic knowledge through intelligent platforms, and the latter means offline classrooms learning which focuses on discussions, practices, and emotional exchanges, so as to achieve a balance between technology and humanity. This is such an overall learning pattern, interacting artificial intelligence and learning deeply and thoroughly.

ii. Strengthening the Integration of the Whole Process of Listening, Speaking, Reading, Writing, and Translation with Technology

Combine English teaching objectives with artificial intelligence by selecting suitable artificial intelligence tools and avoiding blindly introducing technologies. For example:

Listening training: Use artificial intelligence tools to provide personalized listening materials and feedbacks for students with different listening levels, help them analyze personal problems in vocabulary, grammar, etc. in listening, and provide corresponding training to improve their listenings. At the same time,

intelligent tools can provide intensive and extensive listening materials, including those of different themes such as news, long dialogues, short passages, and lectures, and provide diagnostic analysis to strengthen their weak points.

Oral practice: Intelligent platforms can provide students with personalized oral materials and real-time intelligent feedback systems, which can help them to analyze students' oral problems and provide specific solutions and personalized improvement exercises. With the help of advanced natural language processing and virtual reality technologies, artificial intelligence can construct highly realistic dialogue scenarios, enabling students to improve their spoken language in simulated English communication environments.

Reading training: Provide reading materials suitable for students' levels through intelligent platforms, which has rich materials, and students can develop good reading habits through self-management, and their reading levels can be improved step by step. At the same time, intelligent tools can provide personalized guidance by analyzing students' problems in reading to improve their reading ability.

Writing and translation practice: Intelligent systems have a large number of model essays, such as narration, description, argumentation, etc, which can provide students with writing and translation examples of different themes for learning and accumulation. At the same time, intelligent correction can quickly and accurately analyze students' problems in writing and translation, and provide intelligent guidance according to different themes to improve writing and translation levels.

iii. Improving Teachers' Skills and Abilities

The integration of artificial intelligence and college English teaching is inseparable from the improvement of teachers' skills and technical abilities. Colleges and universities need to regularly carry out special trainings at different levels, such as training on artificial

intelligence itself to help teachers understand the cutting-edge developments and requirements, training on intelligent teaching operations including the operation of basic intelligent tools, data collection and data analysis, and training on teaching reform, trying to solve problems or make further development in the process of integration. Regularly organize teachers to carry out relevant intelligent teaching discussions or seminars to solve problems encountered in actual teaching operations, and at the same time organize teachers to carry out teaching reforms to explore the integration of artificial intelligence and college English teaching.

iv. Cultivating Students' Autonomous Learning and Independent Thinking

In the artificial intelligence environment, analyze students' learning characteristics, match relevant intelligent learning platforms and tools, encourage students to independently use learning platforms, formulate personalized learning plans, implement dynamic learning state management and feedbacks on the platform, continuously improve their own learning, and enhance autonomous learning ability. Regularly organize students to discuss, especially the answers given by different platforms, which can make them think actively. In the process of analysis and discussion, guide students to think independently and learn to identify and judge the correctness of answers. Form a closed-loop management, encourage students to carry out learning according to personalized plans, and teachers need to check and feedback at different times, do a good job in learning reflection and subsequent learning adjustment, and avoid completely letting go and over-reliance on technology.

V. KEY COMPETENCES OF COLLEGE ENGLISH TEACHERS IN THE ARTIFICIAL INTELLIGENCE ERA

Integrating artificial intelligence with English

teaching does not mean that it will replace teachers but reconstruct their roles. With the help of artificial intelligence, teachers can change their roles, vigorously promote flipped classrooms, and let students become the main body of classroom learning, actively and independently learn based on projects. Teachers are required to have composite abilities of "technology integration + teaching innovation + humanistic guidance".

Technical application ability is needed. Teachers are expected to master the operation logic of mainstream intelligent teaching tools, be able to use data analysis to interpret learning reports, and accurately identify students' learning difficulties instead of being "kidnapped" by technical tools.

Teaching design ability is required. Teachers should be able to design in-depth teaching activities based on artificial intelligence resources, such as using virtual assistants to create debate scenarios and guide students to improve critical thinking in interactions, instead of relying solely on content automatically generated by the system.

Cross-cultural guidance ability is included. Artificial intelligence can solve problems related to language forms, but the transmission of cultural connotations needs to be led by teachers. Therefore, teachers are expected to cultivate students' cross-cultural communication literacy by analyzing cases of cultural differences not covered by intelligent systems.

Learning support ability is also necessary. Teachers should transform their roles from "knowledge imparters" to "learning facilitators", and provide emotional support and strategic guidance for personalized problems (such as insufficient learning motivation) exposed in artificial intelligence feedback.

VI. CONCLUSION

Artificial intelligence brings opportunities for

personalized and efficient development of college English teaching, but its value must be realized based on the principle of “technology empowering rather than replacing”. Promoting the in-depth integration of the two needs to take teaching objectives as the core, balance the application of technology and humanistic care. Teachers need to actively adapt to technological changes, improve their composite abilities, and deeply integrate artificial intelligence resources with teaching objectives, ultimately realizing the transformation from “standardized teaching” to “personalized education” and cultivating high-quality talents with both language ability and cross-cultural competitiveness.

REFERENCES

- [1] Wen Qiufang. English Education in the Era of Artificial Intelligence: An Analysis of the Four-Element New Curriculum Model [J]. Foreign Languages in China, 2024, 21(3): 1, 11-18.
- [2] Du Qiongying. Strategies for Integrating Artificial Intelligence and College English Teaching [J]. Journal of Liaoning Open University, 2025(2): 97-100.
- [3] Zhang Ge. Research on Innovation of College English Teaching from the Perspective of Artificial Intelligence [J]. English Square, 2024(8): 103-106.
- [4] Lu Huiyan. Feasibility Study on Integrating Artificial Intelligence and College English Teaching [J]. Modern English, 2025(3): 1-3.
- [5] Yu Bei. Application Strategies of Artificial Intelligence in College English Teaching [J]. Journal of Guilin University of Aerospace Technology, 2022(2): 262-267.