The Application of Artificial Intelligence
in the Integrated English Course Teaching Mode

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Abstract

This article aims to explore the teaching mode of the integrated English course based on artificial intelligence. First, the article introduces the application of artificial intelligence in the field of education and explains why artificial intelligence can bring innovation to English language teaching. Then, the article explores the advantages of AI-based integrated English curriculum teaching mode. Finally, it shows how AI can be used to improve students' listening, speaking, reading, writing, and translating skills and promote students' participation and personalized learning. This article is intended to provide a valuable reference for English education advocates and educational technology practitioners.

Keywords: Integrated English Course, Artificial Intelligence, Teaching Mode

Introduction

With the rapid development of artificial intelligence technology, it is gradually penetrating into various fields, including the field of education. The use of artificial intelligence in university English teaching is increasing and benefits students and teachers. Artificial intelligence technology can provide students with personalized learning experiences, help teachers with teaching assessment and feedback, and provide a variety of language learning resources. The application of artificial intelligence in English teaching has achieved some remarkable results, bringing new hopes and challenges to English education. The integrated English course teaching mode based on artificial intelligence is an innovative teaching method that uses artificial intelligence technology to improve students' learning effect and meet the individual needs of different students.

The connotation of artificial intelligence

Artificial Intelligence, abbreviated as AI. It is a new technical science that studies and develops theories, methods, techniques and applied systems for simulating, extending, and expanding human intelligence. Artificial intelligence is an important driving force for a new scientific and technological revolution and industrial transformation.

Artificial intelligence is an essential part of the discipline of intelligence, which attempts to understand the nature of intelligence and produce a new intelligent machine that can respond similarly to human intelligence, including robotics, language recognition, image recognition, natural language processing, and expert systems. Since the birth of artificial intelligence, theory and technology have become increasingly mature, and the application field has expanded. It can be imagined that the scientific and technological products brought by artificial intelligence in the future will be the "container" of human intelligence. Artificial intelligence can simulate the information process of human consciousness and thinking. Artificial intelligence is not human intelligence; it can think like a human and may also surpass human intelligence.

Artificial intelligence is an extremely challenging science, and the person who does this work must have computer knowledge, psychology, and philosophy. Artificial intelligence is a comprehensive science comprising different fields, such as machine learning, computer vision, and so on. Overall, a major goal of AI research is to enable machines to perform complex tasks that would normally require human intelligence. But different times and different people understand this "complex work" differently.

Advantages of the integrated English curriculum teaching mode based on AI

AI can use adaptive learning systems to adjust teaching content and difficulty according to students' learning habits and progress, providing personalized learning paths. In this way, students can learn according to their needs and interests, improving learning effect and motivation. According to students' learning situations and needs, artificial intelligence can provide personalized learning content and support to meet students' different learning needs. AI can evaluate students' learning performance in real-time and give timely feedback and suggestions to help students improve quickly. AI can stimulate students' interest, enthusiasm, and learning motivation through gamification, challenge, and reward mechanisms. AI can also provide flexible learning resources and plans according to students' learning progress and schedule so

that students can learn independently and better choose and arrange learning content flexibly.

AI can help students improve their speaking and writing skills through speech recognition and natural language processing technology to provide students with real-time speech correction and grammar suggestions. AI voice assistants can point out students' pronunciation and grammatical errors through real-time assessment of students' speaking and writing and give corresponding suggestions and corrections.

AI can intelligently push learning content according to students' learning progress and interest, provide personalized learning suggestions and challenges, and stimulate students' interest and motivation to learn.

Based on students' learning situations and interests, the intelligent education platform can recommend English articles, videos, and practice questions suitable for students to feel more fun and fulfilled in learning.

The application of artificial intelligence in integrated English course teaching mode

There are four teaching periods for integrated English courses a week. Whether the teaching form or the teaching content cannot meet the needs of college students with different levels, this can lead to a decrease in students' motivation to learn English, and students with poor grades will become tired of school. It also discourages teachers from teaching. However, with the development of artificial intelligence technology, teachers can view students' after-school learning tracks and each student's learning data through the textbook assistance APP platform to specify the learning plan that meets each student's requirements and the corresponding tests to effectively improve students' comprehensive skills. The AI-based integrated English curriculum teaching mode has excellent potential to provide students with personalized learning support and enhance learning outcomes. Through the combination of artificial intelligence technology, students can obtain more learning opportunities and resources and continuously improve their listening, speaking, reading, and writing abilities.

The optimization of teaching reform is constantly being promoted and implemented, and for colleges and universities, some new teaching modes, such as flipped classrooms, have been introduced and applied so that students' ownership in learning has become increasingly prominent. This naturally puts forward higher requirements for teachers, who should encourage students to improve their independent inquiry and excavation efforts. The hybrid teaching method and artificial intelligence are highly integrated, and the human-computer interaction mode is used to create a more flexible teaching atmosphere, which can fully stimulate the interest and enthusiasm of its students.

1. Artificial intelligence can be used as a language learning aid. AI can provide multilingual learning aids to help students improve their listening skills. For example, AI speech recognition technology can be used for listening practice. Students can listen to English recordings and materials in various accents and speech rates through the online listening practice app and record answers with words. AI will automatically match and evaluate students' listening levels in real-time through speech recognition and dialogue technology, and push corresponding listening practice materials according to students' needs. AI can also recommend appropriate readings based on students' learning goals and provide instant vocabulary and grammar explanations.

2. AI can provide speech recognition and pronunciation correction, which is very important and useful for students to improve their speaking ability. It can help students improve their pronunciation and oral expression skills by providing real-time speaking assessment and advice through speech recognition and natural language processing technology to provide accurate pronunciation guidance and correction. For example, students can use a voice conversation app to practice spoken dialogue with artificial intelligence, and the system will evaluate and recommend based on the students' pronunciation, fluency, and grammatical accuracy. Furthermore, students can practice speaking with AI, which evaluates their pronunciation in real time and gives feedback and suggestions. This helps students correct pronunciation errors and improve fluency and accuracy in spoken language. For example, AI can be a virtual teacher and learning partner. AI can simulate the role of a virtual teacher or learning partner to engage in dialogue practice and interaction with students. Students can improve their oral expression skills by conversing with AI and getting real-time error correction and feedback. In addition, AI can also provide cross-cultural communication and real-world simulation exercises to help students better adapt to the actual English environment. In this way, students' interest can be aroused, and students' speaking efficiency and level can be improved.

3. Reading is a cultural exchange behavior, spiritual dialogue between readers and authors, and the mental process of realizing perception, understanding, reference, and judgment. The two popular reading software, PDF and CAJ, can browse many files. Wisdom reading is a sublimation of conventional reading, focusing on gaining experience from information carriers, mastering reading skills, prompting readers to deeply understand themselves, and achieving the purpose of tempering thinking, understanding the world, and improving themselves. The library's smart reading service uses intelligent means

to let readers enjoy the fun brought by reading, extract valuable knowledge from massive literature, and have the ability to correctly analyze and solve problems. In the era of artificial intelligence, various intelligent technologies such as machine learning and semantic web have emerged one after another, providing support for libraries to carry out smart reading services, facilitating the improvement of the intelligence level of information systems, formulating diversified reading promotion programs, and giving play to their role in guidance, support, and encouragement in reading, so that readers can obtain profound changes through reading. AI can help students automate summarizing and summarizing English texts. Students can use AI tools to extract critical information, judge main ideas, and summarize essay structure, thus developing their reading comprehension and writing skills. AI can also provide students with personalized reading materials and comprehension exercises through semantic comprehension and machine learning algorithms. Students can choose articles of corresponding difficulty to read through the intelligent education platform according to their English level and interests and test their comprehension ability through systematic questions and analysis.

4. AI can provide automatic marking and feedback in writing. The intelligent marking system of composition on the marking network has been recognized and praised by teachers and students since its launch. And more and more schools are in use. After students upload their essays, they can get the review results the first time, give their opinions on correction, list synonyms, and antonyms, and point out the places and shortcomings of grammatical errors. At the same time, it provides further expansion of knowledge for the knowledge points in the essay. Students can continue to revise their essays according to their grading comments, and they will see a noticeable improvement in their scores. AI can automatically evaluate, revise, and mark students' writing and provide timely feedback in real-time through natural language processing and grammar correction technology according to preset grading standards and give targeted suggestions and improvement directions, helping students improve their writing skills and reducing the burden on teachers. For example, students can use the Smart Writing Assistant to get real-time grammar correction and advice during the writing process, helping them improve sentence structure and vocabulary selection. In this way, it reduces the teacher's marking burdenando improves students' interest in writing. Students can keep abreast of their mistakes and correct them. With this system, teachers no longer have to worry about grading essays. Gradually, Students' writing skills can be improved.

5. Translation skill is an essential skill in teaching English in universities. In language learning, the previous human translation speed was relatively slow, and the cost was relatively high. Under the background of the rapid development of the Internet, the convenience brought by artificial intelligence translation to people's lives is more prominent. The so-called artificial intelligence translation is an intelligent translation technology thatconstantly improving. Popular human translation websites include Baidu Translation, Youdao Translation, and Kingsoft Word Ba.

AI translation combines a variety of technical means, including speech recognition, image recognition, and significant data resources. AI translation is a very representative technology in the field of artificial intelligence. Allowing machines to better understand human language can also make human-computer interaction more convenient. For this reason, many scholars have also shown strong interest in this research field. AI can provide intelligent composition aids to help students improve their writing skills. Students can use AI's grammar correction and writing suggestion functions to improve their writing skills and language accuracy. Therefore, AI can be used as an intelligent assisted translation tool. AI can provide intelligent aided translation tools that enable students to better understand and translate English texts. Students can use AI translation tools to deal with new words, sentence structure, and grammar issues to better understand and apply learning materials.

6. AI can provide students with a personalized learning experience customized according to the student's language level and learning needs. For example, AI can design corresponding conversation exercises according to students' comprehensive ability and adjust the teaching content and difficulty according to students' learning progress and feedback.

AI can provide learning resources, such as online courses, self-directed learning, learning videos, practice question banks, etc., to help students learn independently. Students can learn at their own pace and schedule and track and manage their learning progress through the AI system. AI can also recommend relevant learning materials and activities based on different students' s learning history and performance.

AI can interact with students through voice dialogue and emotion recognition technology to understand students' learning situations and emotional states to provide personalized learning support and feedback. For example, students can have a dialogue with the intelligent education assistant to share learning progress, confusion, and feelings, and the intelligent assistant will give positive emotional support and suggestions to better participate in the learning process.

More importantly, AI can help students communicate and collaborate across cultures through language translation and communication technologies. Students can engage in online conversations and collaborative projects with students from other countries to learn about each other's language and culture. AI systems can provide real-time translation and grammar correction, help students overcome language barriers, and facilitate cross-cultural communication and understanding. Therefore, students can introduce splendid Chinese culture, including famous places, food, arts and crafts, etc., to other countries and let more and more foreigners understand China and love China to increase China's influence in the world.

It should be pointed out that although the application of AI in integrated English course teaching brings many benefits, it cannot completely replace traditional teaching methods and the role of teachers. Teachers still play an essential role in guiding and motivating, and AI only serves as an auxiliary tool to provide a better learning experience and support. Therefore, while using AI, teachers need to interact with students and engage in interaction and discussion that leads students to think and explore deeply. Students ' English proficiency and language use skills can be maximized only by combining various teaching methods and tools.

Outlook for the future

The integrated English course teaching mode based on artificial intelligence is constantly evolving, and it is expected to make more extraordinary breakthroughs and progress in the future. Here are some possible trends:

1. Emotional intelligence: The future artificial intelligence education system can more accurately identify students' emotional states, such as anxiety, excitement, confusion, etc., and provide them with corresponding emotional support and guidance to better meet the emotional needs of students.

2. Virtual and Augmented Reality: Combining virtual reality and augmented reality creates a more immersive learning experience that enables students to engage in English learning in an immersive way and provides immediate feedback and guidance.

3. Collaborative learning and social interaction: Through artificial intelligence technology, students can engage in collaborative learning and social interaction with other students and promote the improvement of the learning effect through cooperation and competitive incentives.

4. Adaptive learning path: Based on each student's learning style, ability, and interests, the AI education system can automatically adjust the learning path and content to meet the students' personalized learning needs.

5. Multimodal learning: Combining multiple modalities such as voice, image, and text, AI can more comprehensively assess students' learning performance and provide more accurate feedback and guidance.

Conclusion

Overall, the application of AI in integrated English teaching can provide students with personalized learning experiences, automatic marking and feedback, language learning aids, virtual teachers and learning partners, learning resources, self-directed learning, and opportunities for cross-cultural communication and cooperation. These applications improve students' learning effect and motivation and provide teachers with more teaching resources and support tools. The English teaching mode of integrated English courses based on artificial intelligence brings innovative opportunities for English education. Through intelligent learning aids and personalized learning support, students can improve their listening, speaking, reading, and writing skills and have a better learning experience and sense of achievement.

However, AI technology is still in the stage of continuous development. It faces some challenges, which require in-depth research and exploration regarding privacy protection, human-computer interaction, ethical norms, and technological innovation. However, we also need to recognize the limitations of AI technology, which cannot completely replace the role of human teachers but should be used as an auxiliary tool and resource to provide a better learning experience and support. Therefore, in applying AI to integrated English teaching, it is necessary to balance the application of technology and the guidance of teachers to better serve students' learning and development. Only with the joint efforts of education practitioners, researchers, and policymakers to promote the sustainable development of AI in English education and provide students with better teaching experiences and learning outcomes can the advantages of AI be fully utilized to provide sustainable support and guidance for the development and improvement of integrated English curriculum teaching modes.

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