

Exploration and Application of Artificial Intelligence—The Case of Oral English and English Writing

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Keywords: Artificial Intelligence; English Teaching; Oral English; English Writing

Abstract: In order to improve the traditional oral English teaching and English Writing abilities of learners in China, the study employs artificial intelligence, which revolutionizes the traditional oral English and English writing teaching methods. Based on artificial intelligence, the teachers effectively improve their teaching efficiency, and the learners cultivate their abilities. The teaching practices in oral English and English writing show that the employment of artificial intelligence can effectively improve the learners' oral English and English writing abilities.

1. Introduction

In recent years, with the continuous advancement of educational informationization, artificial intelligence technology has become an important part of English teaching reform and practice, with a revolutionary impact on English teaching. Technologies such as human-computer interaction, intelligent analysis, and deep learning have been continuously integrated into the teaching field, creating an intelligent and personalized intelligent learning environment that effectively optimizes traditional classroom teaching. Artificial intelligence not only provides an intelligent and personalized intelligent learning environment, but also provides new ideas and methods for English teaching. It is an important part of English teaching reform and practice [1].

In the process of artificial intelligence applications, learners engage in formal and informal learning anytime and anywhere on various learning platforms, forming specific learning trajectories and a large amount of learning data. Technology is widely recognized for analyzing massive learning data in digital learning environments, providing students with automatic feedback and evaluation. Teachers use intelligent technology to explore the construction and application models of ubiquitous, flexible, and intelligent education and teaching new environments, and promote the deep integration of information technology and intelligent technology into the entire process of education and teaching. Therefore, the use of intelligent technology and big data analysis to improve the efficiency and effectiveness of educational evaluation has also attracted increasing attention from researchers.

2. Artificial Intelligence and Language Teaching

Educational information technology promotes the reform and development of foreign language teaching in China. In the process of information technology development in China's foreign language education, information technology and foreign language education have gone through three stages: the stage of foreign language electronic teaching (1949-1997); computer-assisted teaching stage (1998-2011); the stage of deep integration of information technology and foreign language education (2012-2019). Its various stages also exhibit different characteristics [3].

To measure whether teaching has achieved its goals and whether students truly master knowledge or skills, it is necessary to detect students' learning behavior and their reactions. A smart classroom based on big data makes precise teaching possible. Educational big data is becoming a powerful driving force for educational innovation and change in teaching. The development of intelligent technology provides sufficient guarantees for the deep integration of information technology and foreign language education. The current learners, as network natives, are characterized by strong logical thinking, good use of technology, and strong hands-on ability. Therefore, they should fully utilize this feature and enhance their language comprehensive application ability with the help of artificial intelligence. The application of formative evaluation methods in English teaching requires teachers to distinguish learning tasks at different stages and divide them into online and offline learning activities. Online task assignments can be completed through the listening and speaking platform, where students complete oral and writing assignments and receive automatic grading. Other learning tasks can be completed offline and evaluated by teachers. This is in line with the learning characteristics of learners in the new era and helps to build a new model of "Internet plus" language learning era[2].

The summative assessment of traditional foreign language teaching evaluation methods only focuses on the final exam results, neglecting the learners' learning process. However, the formative assessment using artificial intelligence is more objective, paying sufficient attention to the learners' learning process, supervising the learners' learning process and providing timely feedback, effectively motivating learners' learning motivation. Therefore, it is considered an effective evaluation tool for promoting teaching.

The mobile internet has the characteristics of interactivity, personalization, timely feedback, and strong situational awareness, making it an excellent medium for foreign language teaching and dissemination. Even if the platform automatically retains data information, it promotes interaction between teachers and students, improves students' self-learning ability, and facilitates teachers to detect learning situations and conduct diversified evaluations.

3. Teaching Practice Based on Artificial Intelligence

There has always been a problem of subjective teacher evaluation in the teaching of oral English teaching and English writing teaching. Teachers are time-consuming and labor-intensive, students have low self-efficacy, and even experience awe and anxiety. They do not know how to improve their speaking and writing abilities, and they are stagnant. In the process of applying artificial intelligence to English speaking and writing teaching, based on feedback from teachers and students, as well as relevant research, it has been found that artificial intelligence speaking and writing learning systems have obvious advantages.

3.1 Artificial intelligence improves students' oral expression.

Compared to traditional oral English education, smartphones based apps have unparalleled advantages. It has accumulated a large amount of voice data for English learners, providing the raw

data for subsequent data analysis. Firstly, the learner's English proficiency is determined through testing, followed by personalized learning content tailored to the learner, and finally, an experiential learning scenario with human-computer interaction is promoted. The spoken language system achieves intelligent English oral teaching and training through speech evaluation and recognition technology. The system provides a variety of exercises, and teachers can choose to publish existing exercises to students for evaluation and feedback.

This personalized and interactive language learning approach helps to enhance the oral learning ability of Chinese English learners, making up for the drawbacks of large class sizes and limited opportunities for oral practice in teaching practice. Teachers can utilize the advantages of spoken language apps, integrate appropriate resources suitable for school-based learning situations, and fully utilize the interactivity, convenience, and efficiency of mobile internet terminals to train spoken language. This can not only significantly improve students' oral proficiency, but also indirectly improve their listening skills. This helps to cultivate students' interest in learning, effectively improve their learning efficiency, and achieve the grand goal of smart teaching.

3.2 Artificial intelligence improves students' writing abilities.

In recent years, students' listening and speaking abilities have improved, but their writing skills are not yet satisfactory. This is related to the long-term methods and means of English teaching. The evaluation and interaction of writing teaching are time-consuming and labor-intensive, which objectively leads to a serious lack of English writing training for students.

The writing automatic evaluation system originated in the United States in the 1960s. With the development of artificial intelligence technology, natural language processing, and the development of intelligent language tutoring systems, the development of writing automatic evaluation systems has made rapid progress to this day. Most scholars hold a positive attitude towards this. The application research of writing teaching mainly includes whether online automatic feedback can improve the overall quality and level of writing, whether it can affect the writing process, and enhance autonomous learning. Many studies suggest that the effectiveness of online automatic feedback is largely influenced by learners' language proficiency [4].

The auxiliary writing system correction website supported by big data, www.pigai.org, simply register on this website to enjoy free, comprehensive and specific diagnostic evaluations and overall scoring of learners' language structures. It is timely to use advanced modern information technology to help English teachers solve the problems of high labor intensity and low work efficiency in essay evaluation. Teachers publish writing tasks through the system, and students log in to complete the writing task. The system will automatically score and generate analysis results and statistical data, provide evaluations and suggestions, and teachers can set peer evaluation. On the basis of intelligent evaluation, teachers can manually grade and provide modification suggestions. The system operation is relatively convenient, which helps to cultivate students' autonomous learning ability. The content of grading is relatively comprehensive, which helps to improve the efficiency of writing research. The reliability of grading has reached a level that can be promoted, almost comparable to manual grading, and can be used in exams and daily writing. In addition to completing the essays assigned by the teacher, students can also select essays from the question bank for self-testing, revise and submit them multiple times based on real-time feedback, and improve their English writing skills. Compared with traditional manual writing evaluation, the automatic writing evaluation system based on artificial intelligence introduces natural language processing technology and corpus technology, compares standard corpora, analyzes errors in learners' writing, and evaluates their writing. It provides timely, systematic, and comprehensive tracking evaluation feedback for students' writing from three interrelated dimensions of behavior,

emotion, and cognition, and constructs and mines students' English writing data, assist information technology in assisting writing teaching. Submitting and revising essay drafts multiple times after class can also help cultivate students' autonomy in learning and effectively stimulate their writing motivation.

In short, with the help of artificial intelligence correction networks, quantitative evaluation and qualitative diagnosis feedback of student exercises can be conducted in a timely and efficient manner. This can create an independent and precise intelligent learning ecosystem, effectively stimulate learners' learning motivation, and solve the problem of teachers facing lagging correction of large class sizes of students. And relying on the analysis of writing problems through big data, it is easier for teachers to achieve targeted evaluation, follow-up, and teaching adjustments of students' compositions. Foreign language education technology has developed mature intellectual skills and a wide range of practical applications in disciplines, from assistance to integration, from paradigms to disciplines. There has been significant progress and development in artificial intelligence assisted foreign language teaching, and it will continue to play significant roles in the future.

4. Discussion

The intelligent learning scenarios created by new technologies such as artificial intelligence and big data have expanded students' learning time and space, making their learning no longer limited to classrooms and textbooks. With the guidance of the classroom and the assistance of online platforms, students choose appropriate times and locations to use mobile clients for pre-class learning, fully access high-quality educational resources, plan and adjust their learning progress according to their own situation, improve their self-learning ability, and meet personalized learning needs. Online learning presents teaching resources through various methods such as text, sound, images, and videos, which can attract students more and improve learning efficiency than printed materials.

Artificial intelligence-based oral and writing learning software has improved students' self-efficacy, enhanced their confidence and interest, and reduced their anxiety. Students listen in class and actively participate in classroom activities. After class, they complete assignments posted by the teacher on the intelligent review system. The system's immediate feedback motivates students to make multiple revisions and improve the quality of assignments. It improves the efficiency of teachers' work. With the help of artificial intelligence and big data analysis, the system provides suggestions for homework submitted by students, allowing them to make independent corrections and learn, reducing the repetitive workload of teachers. Moreover, the system can also calculate the overall situation of students' homework and rank the class ranking, enabling teachers to quickly grasp students' learning status and effectiveness, and adjust teaching content in a timely manner based on the common problems identified, correcting errors in a timely manner, so that teachers can grasp the learning situation in a timely manner. Meanwhile, students have a high level of acceptance. For students who have grown up in the internet age, the evaluation system for oral and writing based on artificial intelligence and big data analysis has a high level of recognition among students. Moreover, the system itself has a high level of informatization, allowing students to receive timely modification suggestions, stimulating their motivation and initiative, and significantly improving their scores, especially for low-level students. Teachers can also integrate with other teaching modes, timely supervise and provide feedback, and the teaching effect is obvious.

5. Conclusion

In recent years, with the rapid development of artificial intelligence technology, the education industry has attached increasing importance to how to effectively utilize artificial intelligence to promote educational evaluation reform. The technology helps teachers comprehensively understand and master the status of learners, and accurately evaluate learning conditions based on the data generated by learners, promoting the improvement of learners' comprehensive abilities and qualities [5].

The real-time monitoring of big data makes assessment both a temporary endpoint for learning tasks and a new starting point for the next task. It always focuses on students, teachers as guides, and technology as intermediaries. Through the "scaffolding" function, learners have the awareness and ability to learn independently, and solve problems. To achieve authentic and effective teacher-student interaction, student-student interaction, and dynamic interaction both inside and outside the classroom, teachers must change their way of thinking, update their educational concepts, improve their knowledge structure, enhance their modern information technology application ability and literacy, fully leverage the technological advantages of artificial intelligence, push students' English learning level to a new level, and ultimately promote their comprehensive development to meet the requirements of the new era.

Educators need to comply with the teaching reform in the era of artificial intelligence and the demands of teachers and students for scene change, fully combine the advantages and characteristics of offline and online, fully apply intelligent technology and information technology to various scenes, make teaching methods more diverse, and continuously expand teaching content. At the same time, teachers should guide students to utilize rich online resources and learning tools for self-directed learning, effectively exploring students' learning characteristics. They can also evaluate teaching effectiveness through data recorded on the platform and system to adjust the next round of teaching and further highlight the dominant position of learners and teachers.

Foreign language teachers should actively comply with the development requirements of the times and maintain lifelong learning. Firstly, they should strive to improve information literacy while constantly updating knowledge, continuously improve the application ability of network information technology, integrating high-quality educational resources. Secondly, they should conduct in-depth research on educational and teaching laws through data statistics and analysis, fully utilize the advantages of offline and online teaching, and actively carry out research and practice on educational and teaching reform. Thirdly, they should explore foreign language teaching models suitable for the era of artificial intelligence, fully mobilize students' enthusiasm through teaching methods, cultivating and improving students' language expression and communication abilities, and assist students in their comprehensive development. In addition, teachers should actively enhance students' information awareness and literacy in teaching, cultivate and enhance their ability to actively use online platforms, smart platforms, and intelligent terminals for autonomous and lifelong learning, and continuously meet the needs of society for talent cultivation.

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