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EXPLORING UNIVERSITY ENGLISH TEACHING IN THE CONTEXT OF ARTIFICIAL INTELLIGENCE

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ABSTRACT
This study examines the integration of Artificial Intelligence (AI) in university English teaching, focusing on its impact on educational technology and personalized learning. It highlights the challenges students face in mastering English, including limited exposure, lack of practice, and inconsistent feedback, and explores how AI can address these issues by providing personalized feedback and fostering independent learning. The article further discusses the challenges and opportunities of incorporating AI into existing teaching methods, emphasizing the need for ongoing research into AI's long-term effects on language development. It advocates for a balanced approach that combines AI tools with traditional teaching methods to enhance English education in the AI era. The article concludes by proposing strategies to improve university English instruction, such as strengthening institutional support, enhancing teachers' digital skills, and promoting students' digital literacy. Ultimately, it suggests that the future of English teaching lies in the synergy between AI and traditional methods, aiming to improve language education while preserving the essential human aspects of teaching.

KEYWORDS: *Artificial Intelligence (AI), University English Teaching, Educational Technology, Personalized Learning*

1. INTRODUCTION

English serves as a vital global bridge that unites people from diverse backgrounds, especially in areas like intercultural communication, international trade and diplomacy. While English's prevalence is undeniable, many learners continue to struggle with mastering the language, particularly when it comes to acquiring the skills necessary for effective instruction. Students often face challenges such as limited exposure to English, inadequate real-world practice opportunities, and inconsistent feedback from instructors. These issues can significantly impede students' ability to develop essential language skills, such as grammatical precision, fluency, and the capacity for nuanced self-expression. Unfortunately, traditional teaching approaches often fall short of addressing these obstacles.

In recent years, as a multidisciplinary field, artificial intelligence (henceforth AI) blends elements from computer science, cybernetics, psychology, neurophysiology, linguistics, and other domains (Bin & Mandal, 2019; Crompton & Burke, 2023; Pokrivčáková, 2019). Within the realm of education, and particularly in English language teaching, AI has emerged as a promising tool to help address longstanding challenges. This paper investigates how AI might be leveraged to tackle these difficulties, especially in the context of university-level English instruction. Specifically, it explores how AI can deliver personalized feedback and foster independent learning, both of which are crucial for improving English proficiency (Chun, 2017; Wei, 2023; Wang & Li, 2018). Additionally, the paper examines the challenges and opportunities that arise when integrating AI into existing teaching methodologies. With the rising global demand for English proficiency, particularly in non-English-speaking regions, AI-based language learning solutions are becoming more crucial than ever.

The aim of this paper is to explore how AI can improve teaching and learning outcomes in university-level English instruction. The focus will be on how AI can support both educators and students in advancing language skills while also examining the difficulties of incorporating AI into traditional educational frameworks. Moreover, this study highlights the need for ongoing research into the long-term impacts of AI on students' English language development, advocating for a balanced teaching approach that combines AI-driven tools with conventional methods to further enrich English education in the era of AI.

2. LITERATURE REVIEW

The application of AI in English teaching can be explored through various language acquisition theories. For example, Communicative Language Teaching (CLT) emphasizes the communicative function of language, and AI in language learning often plays a role in providing personalized feedback and interactive experiences. AI technologies, such as ChatGPT and other deep learning-based models, can offer context-specific practice that aligns with learners' current language levels, gradually increasing in difficulty, in line with Input Hypothesis (Krashen, 1982). This hypothesis posits that learners acquire language most effectively when exposed to input that is just beyond their current proficiency level. AI, by providing personalized, progressively challenging language input, supports language acquisition (Shatri, 2020; Rahimi & Fathi, 2022). However, AI tools have limitations in facilitating social interaction in language learning. Although AI can simulate dialogue, it lacks the rich, authentic human interaction that is central to sociocultural learning theories (Thorne, 2016). Hence, AI should complement, rather than replace, traditional teaching methods.

AI significantly impacts English learning by providing supportive tools for both teaching and learning. One of the most

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prominent AI applications is Automated Essay Scoring (AES) systems, which offer automated feedback on writing, helping learners improve grammar, syntax, and style, especially for non-native speakers (Loraksa & Peachavanish, 2007). However, these tools also have limitations, particularly in assessing higher-order cognitive skills such as critical thinking and creativity in writing (Balfour, 2013). Thus, AI should be used as a supplementary tool, rather than the sole evaluator.

Another important development is the use of intelligent tutoring systems, such as Duolingo, which uses AI to personalize language lessons and engage students through interactive activities. Research shows that these tools positively impact vocabulary acquisition and basic grammar skills (Vesselinov & Grego, 2012). In addition, speech recognition technologies, like Amazon Alexa and Google Assistant, offer learners an interactive platform to practice speaking skills (Sindermann et al., 2021). While AI tools are versatile, they may overlook the social and collaborative aspects of language learning, which are central to many traditional teaching approaches. Accordingly, AI should be incorporated into the classroom in ways that enhance communicative, task-oriented, and collaborative learning, rather than replacing or diminishing the role of human interaction.

Understanding how learners perceive and interact with AI tools is crucial for assessing their effectiveness. Many students report positive experiences with AI-powered applications, especially in terms of personalization and immediate feedback. AI platforms enhance engagement and offer personalized learning experiences, ultimately boosting motivation and fostering self-regulated learning (Wei, 2023). AI tools like chatbots and speech recognition software provide a non-judgmental environment where students can practice without fear of embarrassment or failure. This has been shown to increase learner confidence and motivation, particularly for shy or introverted students who may hesitate to participate in traditional classroom settings (Li, 2020). However, while AI can simulate conversational interactions, it cannot replicate the emotional and social nuances of human communication (Annamalai et al., 2023). As such, over-reliance on AI could lead to disengagement, as learners may feel disconnected from the learning process due to the lack of human interaction.

AI holds immense potential to revolutionize English language teaching and learning, yet challenges remain, particularly in integrating it with traditional teaching methods. For AI to be a constructive adjunct to teaching by humans, it is crucial that its integration is deliberate and mindful, particularly with respect to factors like student involvement. Further research is needed to explore how AI can be integrated with existing language teaching methodologies and its impact on learners' cognitive, social, and emotional development. As AI technologies continue to evolve, it is essential to strike a balance between technological innovation and human-centered pedagogical practices, ensuring that AI enhances language learning without replacing the essential role of human teachers.

3. UNIVERSITY ENGLISH TEACHING IN THE AGE OF AI

In today's educational landscape, university English instruction predominantly follows a model that consists of lecture, practice and assessment. In this conventional model, the teacher is the central figure in the teaching process. However, this traditional approach struggles to ignite students' interest in learning, and in the era of the internet, education cannot progress efficiently without the support of AI. Although there have been attempts to implement student-centered flipped classrooms in university English teaching, the overall results have been less than satisfactory.

The arrival of AI in education has given rise to AI-powered tools and their application in teaching. Unlike traditional classroom instruction, AI offers a platform for information sharing and stores vast amounts of teaching resources in the cloud, allowing both teachers and students to access rich educational content anytime and anywhere. The role and value of AI in education have been widely adopted and promoted in university English teaching across higher education institutions. Platforms such as Google Cloud, Microsoft's Azure, and Hugging Face, based on AI, offer a one-stop service for teaching, learning, assessment, and research. These platforms feature rich learning resources, engaging content and effective tools that support both personal computers and mobile devices.

University English teachers, as collaborators, facilitators, and transmitters of data and information, can leverage AI to improve teaching methods, making them more targeted and individualized to meet students' needs. On the other hand, AI should serve to support both teachers and students, adapting to their needs and demonstrating its application value and advantages. It follows that the relationship between artificial intelligence and educators is one of synergy and reciprocal advantage. AI education, as a product of the internet age, is crucial for teachers, enriching teaching methods and content, boosting student engagement, and ultimately improving teaching quality. Hence, it is essential to view the development of AI alongside teachers, rather than seeing AI as a replacement for educators.

With the introduction of AI technology, the roles and positions of both teachers and students in the university English teaching system will undergo fundamental changes. The activities, tasks, and assessments involved in teaching will also transform, leading to the emergence of new models of English teaching.

3.1 The Roles of Teachers and Students

In the AI-driven education era, AI can assist English teachers in course design and the personalized adjustment of teaching content. For example, AI can generate customized learning materials based on students' English proficiency and learning progress, and even help teachers grade assignments, check grammar, and correct spelling errors, thus alleviating the workload of educators. Traditional face-to-face teaching may integrate with online learning tools, as AI supports blended learning models, making classroom time more flexible. For instance, students can engage in self-directed learning through

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AI-powered platforms, while teachers can enhance learning outcomes through online feedback and personalized tutoring. Additionally, AI can analyze students' learning progress and provide individualized learning recommendations. This allows university English teachers to offer more targeted guidance based on the students' learning needs. For example, areas where students may struggle in listening, speaking, or writing can be strengthened through AI tools for practice and feedback, enabling teachers to adjust the content more effectively. AI can analyze students' learning data to help teachers understand which teaching methods are effective and which areas need adjustment, thereby optimizing course design.

For learners, AI can tailor learning content according to students' English proficiency and interests, allowing them to learn at their own pace. For instance, AI can automatically adjust learning plans based on the analysis of students' error records, progress, and participation, enabling students to master knowledge more efficiently. Through AI-driven learning platforms, students can engage in English study anytime and anywhere, receiving real-time feedback. Particularly in areas such as writing, speaking, and listening, AI can provide automatic scoring and improvement suggestions, helping students to continuously improve. Moreover, AI technology offers more opportunities for students to engage in self-directed learning. They can use intelligent assistants for language practice, participate in virtual conversations, simulate different learning scenarios, and engage in repeated practice, thus filling learning gaps outside the classroom. Crucially, AI can facilitate students in engaging in English conversations with people from around the world through virtual exchange platforms, fostering cross-cultural communication skills. This global interaction opportunity may be more diverse and enriching than traditional classroom interactions. Students can also enhance the practicality of their language learning through AI applications such as speech recognition, translation tools, and grammar checkers. These tools help students overcome language barriers and improve their language expression and comprehension skills.

3.2 Teaching Activities

AI has the potential to revolutionize English teaching by generating personalized content and activities tailored to each student's learning progress, interests, and needs. Rather than relying on a one-size-fits-all curriculum, English teachers can leverage AI tools to customize lessons for students of different levels and abilities. For instance, AI can suggest reading materials, listening exercises, or writing prompts that match the students' proficiency levels, ensuring that the learning experience is both relevant and effective.

Furthermore, AI enhances the efficiency of grading and feedback. It can automatically grade assignments, particularly in areas such as grammar, spelling, and sentence structure. Once students submit their work, AI provides quick and detailed feedback, highlighting errors and offering targeted practice to help reinforce learning. This process not only saves teachers significant time on grading but also allows them to concentrate on more meaningful classroom interactions and individualized support for students.

In addition to grading, AI facilitates the design of interactive learning activities through intelligent platforms. These platforms enable teachers to create virtual conversations, speech recognition exercises, and listening comprehension drills that actively engage students. Such activities help improve students' practical language skills, particularly in speaking and listening. Moreover, AI allows teachers to monitor real-time student participation, ensuring that they can offer immediate, personalized guidance where needed.

Lastly, AI plays a key role in optimizing teaching strategies by collecting and analyzing student learning data. By examining factors such as online participation, test performance, and assignment completion, AI provides valuable insights into classroom progress. This enables teachers to identify areas where students may be struggling and adjust their teaching methods accordingly. With continuous feedback from AI, teachers can refine their lesson plans and course content, ensuring that their teaching always meets students' evolving needs. Additionally, AI supports blended learning models, where students complete independent tasks online while classroom time is dedicated to interactive discussions, maximizing the effectiveness of both in-person and digital learning experiences.

3.3 Teaching Evaluation

AI can provide personalized assessment plans tailored to students' learning progress and needs. Unlike traditional standardized tests, AI is capable of continuously monitoring students' performance, analyzing their strengths and weaknesses, and automatically generating assessment content that is aligned with their proficiency levels. This approach allows teachers to gain a more accurate understanding of each student's learning status, which in turn enables them to implement more targeted and effective teaching strategies.

In addition, AI technology enables instant feedback, especially in areas like speech recognition and essay grading. For instance, when students practice speaking, AI can evaluate their pronunciation, grammar, and vocabulary usage, providing specific suggestions for improvement. This immediate feedback is crucial, as it helps students promptly correct their mistakes and enhance their learning efficiency. As a result, students benefit from continuous guidance, which helps them make faster progress in their language skills.

Moreover, AI can process vast amounts of data, including students' learning behaviors, test results, and study time. By analyzing this data, AI can identify patterns in students' learning and detect potential issues, providing teachers with insights into which teaching methods are most effective and which students may require additional support. Furthermore, this data-driven approach can be used to evaluate the effectiveness of teaching content and methods, helping educators make data-informed decisions to improve the overall learning experience. Additionally, AI helps minimize human bias, ensuring fairness in the evaluation process by adhering to consistent and transparent grading standards.

Finally, AI plays a significant role in reducing the workload of teachers by automating certain aspects of assessment. For example, AI can replace manual grading, particularly in essays

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and multiple-choice questions, using natural language processing technology to assess the quality of students' writing, detect grammar and spelling errors, and offer suggestions for improvement. This not only ensures a more objective and consistent evaluation process but also allows teachers to dedicate more time to interactive classroom teaching and individualized support for students.

4. STRATEGIES FOR ENHANCING UNIVERSITY ENGLISH TEACHING IN THE AGE OF AI

4.1 Strengthening Institutional Support

The government and educational institutions should introduce relevant policies to guide the integration of AI into English language teaching. For instance, they should establish clear standards for the use of AI tools, ensuring that these technologies adhere to educational ethics and quality requirements. Policies should prioritize critical issues such as data privacy and security to prevent the misuse of students' personal information, while also ensuring transparency and fairness in AI applications. Additionally, the government could offer financial support and incentives to encourage schools and teachers to explore and apply AI technology, ultimately enhancing the quality of education.

While AI technology holds significant potential, its successful application still depends heavily on teachers' understanding and mastery of the tools. Consequently, educational institutions must provide comprehensive training for teachers, helping them learn how to effectively apply AI in the classroom, utilize AI tools to enhance teaching outcomes, and interpret the data analyses provided by AI systems. This training should cover essential areas such as using AI for personalized instruction, automating grading processes, and adjusting teaching strategies based on AI feedback. Furthermore, schools should offer ongoing technical support to ensure that teachers can effectively use AI platforms and tools with confidence.

Moreover, educational institutions should actively encourage and fund research into AI's role in English language teaching, exploring how AI can further improve teaching effectiveness. Through research, institutions can evaluate the practical impact of various AI tools, analyzing their strengths and weaknesses to continuously refine teaching methods. These findings will help institutions make informed decisions, while also providing more efficient and effective AI-assisted teaching solutions for both teachers and students. It is also crucial that AI applications consider the diverse needs of all students, ensuring equal access to AI tools to avoid exacerbating educational inequality. By ensuring that AI services are personalized and cater to students' individual learning needs, whether they are struggling or excelling, educational institutions can provide targeted support for all learners. Additionally, AI's ability to support blended learning models, combining online and face-to-face instruction, should be promoted, allowing students to engage in self-directed learning outside of class while benefiting from personalized teacher guidance during in-class time.

4.2 Improving Teachers' Information Technology Skills

To enhance their information technology (IT) skills, teachers can take advantage of numerous online platforms that offer courses specifically designed for educators. Websites like Coursera, edX, Udemy, and LinkedIn Learning provide access to courses on a variety of topics, including AI in education, digital tools for teaching, coding, and data analysis. By enrolling in these courses, teachers can learn at their own pace and gain valuable insights into integrating AI and other technologies into their classrooms. Many of these platforms also offer certificates, which can enhance a teacher's professional profile and demonstrate their commitment to technological advancement in education. Vitally, to effectively address the lack of student interest in traditional teaching models, teachers can leverage AI to design personalized, interest-based learning materials and incorporate gamified activities, while simultaneously utilizing teacher-led interactive strategies to create a more engaging and emotionally supportive learning environment.

In addition to online courses, teachers can participate in free or low-cost webinars and virtual conferences organized by universities, tech companies, and educational associations. These events help teachers stay updated on the latest trends in AI and digital tools, while also offering practical advice, case studies, and demonstrations on how to apply these technologies in the classroom. Furthermore, webinars provide opportunities for networking and collaboration, allowing educators to connect with peers and experts in the field, which can enrich their learning and professional growth.

Another effective way for teachers to improve their IT skills is through hands-on experience with AI tools and educational software. Many platforms offer free trials or versions for educators, which enables teachers to explore these tools on their own. By experimenting with AI in areas such as lesson planning, grading, and student assessments, teachers can familiarize themselves with how AI can assist in personalized learning. Additionally, teachers can join online communities and forums where they can share experiences and insights, ask questions, and learn from colleagues who have successfully integrated AI into their classrooms.

4.3 Enhancing Students' Digital Literacy

In the age of AI, students can enhance their digital literacy by engaging with a variety of online resources. Platforms like Coursera, edX, and Khan Academy offer structured courses on topics such as coding, data analysis, and digital media, which help students build a solid foundation in technology. These courses not only provide valuable skills for both academic and personal use but also offer certifications that can boost students' resumes and digital competence.

In addition to formal courses, students can further develop their digital literacy by exploring free resources such as tutorials, blogs, and videos on platforms like YouTube or Medium. These resources cover a wide range of topics, from basic technical skills to advanced concepts, allowing students to learn at their own pace. By participating in online communities or forums, students can stay informed about the latest technology trends, ask questions, and collaborate with peers, strengthening their problem-solving abilities in the process.

Students can also gain practical experience by using digital

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tools in real-life projects. For instance, they can create websites or blogs using platforms like WordPress or Wix, or use software to develop presentations and digital portfolios. These hands-on projects help students apply their skills creatively while gaining valuable experience. Additionally, experimenting with AI-driven applications, such as personal assistants or educational apps, allows students to explore how AI works and how it can enhance learning, further building their digital literacy for the future.

5. CHALLENGES OF AI IN UNIVERSITY ENGLISH TEACHING

The integration of AI in university English instruction brings significant promise but also presents a series of challenges. While AI has the potential to transform the learning experience, its adoption is often met with resistance, primarily due to unfamiliarity and apprehension. Teachers play a critical role in addressing these concerns, as they are essential for fostering a deep understanding of language and nurturing independent thought. Without proper human guidance, AI feedback might become overly simplistic and fail to address the complexities of student learning. Moreover, relying too heavily on AI for tasks like grammar correction and content generation could undermine students' development of crucial language skills and dampen their creativity and intrinsic motivation.

Additionally, the use of AI tools often requires students to submit their work online, raising significant concerns about privacy and data security. Universities must ensure that AI platforms comply with stringent privacy standards to protect sensitive student information. Furthermore, the integration of AI with traditional teaching methods poses another challenge, as educators struggle to balance the efficiency of AI with the richness of conventional pedagogical approaches, particularly in large or resource-limited educational settings. This balance is crucial to ensuring that AI supports, rather than replaces, valuable human interaction in the classroom.

To overcome these challenges, universities need to adopt a comprehensive strategy. Professional development workshops for teachers and orientation sessions for students can help ease the transition and address resistance to AI integration. Implementing pilot programs that allow students and educators to gain hands-on experience with AI in language instruction can provide valuable insights. A blended approach that combines AI feedback with human evaluation will offer a more holistic assessment of student progress. Moreover, ensuring that AI tools are transparent, ethical, and adhere to privacy regulations is essential to maintaining academic integrity. Universities must also develop clear policies on ethical AI use and provide equal access to AI resources for all students. Finally, to combat potential issues like plagiarism, educational institutions should implement academic integrity programs and use plagiarism detection tools to ensure AI is used responsibly. By addressing these concerns, universities can ensure that AI is integrated effectively and responsibly into English education.

6. CONCLUSION

This paper has demonstrated that AI's integration into university English instruction offers significant benefits, such as personalized feedback and enhanced learning experiences. However, it is essential to maintain a balanced approach, using AI as a supplement to traditional teaching rather than a replacement. While AI tools have improved language acquisition and learner engagement, they cannot fully replicate the nuances of human interaction and higher-order thinking skills. The shift towards AI requires redefining teacher and student roles, with a focus on personalized learning and reduced teacher workloads. Despite the challenges, including privacy concerns and ethical issues, a multifaceted strategy can ensure AI's effective and responsible use in education. This includes professional development, pilot programs, and a blend of AI and human feedback to maintain academic integrity and support skill development. In addition, future research should explore the long-term sustainability of AI-driven learning and assess whether these tools can support learners in acquiring deeper cognitive and metacognitive skills, which are essential for advanced language proficiency. In summary, the future of English teaching in universities lies in the synergistic combination of AI and traditional methods, aiming to enhance language education while preserving the irreplaceable aspects of human instruction.

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