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THE ROLE OF ARTIFICIAL INTELLIGENCE IN ENHANCING LANGUAGE TEACHING AND LEARNING

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ABOUT ARTICLE

Abstract: Artificial intelligence (AI) has emerged as a transformative force in education, particularly in language teaching and learning. This study explores educators' awareness, perceptions, and readiness to incorporate AI into teaching practices, highlighting its benefits and challenges. A structured questionnaire conducted with 22 educators exposed that while most of the educators are familiar with AI tools like ChatGPT and Grammarly, their practical application remains limited due to insufficient training and ethical concerns. AI's potential to enhance efficiency, personalize learning, and provide real-time feedback is acknowledged, yet barriers such as data privacy concerns, technological gaps, and resistance to adoption persist. The findings highlight the need for targeted professional development, clearer ethical guidelines, and equitable access to AI technology. Addressing these challenges can enable AI to revolutionize language education, making it more effective, engaging, and tailored to individual learner needs.

Introduction

Artificial intelligence (AI) has become a driving force of human development, achieving remarkable breakthroughs in almost every field imaginable. Once considered a distant technological advancement beyond human reach, AI is now seamlessly integrated into

everyday life, reshaping how we work, learn, and interact. According to (Benson, 2024; Rohail, 2024), 60% of U.S. educators and 65% of European educators use AI tools such as ChatGPT and Grammarly in their classrooms, primarily for automating grading, providing real-time feedback, and supporting language instruction. These tools enhance learning by reducing administrative workloads, offering personalized instruction, and enabling more interactive teaching approaches.

As defined by (Chan, A. 2024; Du & Daniel, 2024) artificial intelligence encompasses computer-based algorithms and systems capable of performing tasks that traditionally require human intelligence. These include language processing, decision-making, and problem-solving, making AI an indispensable tool in modern education.

Krashen's Input Hypothesis (Faltis, 1984) emphasizes the importance of comprehensible input in language acquisition, suggesting that learners acquire language most effectively when they are exposed to input slightly beyond their current proficiency level. The use of AI enhances students' language skills and creates an English-speaking setting for students who are skilled to use Chat GPT. Building on this, Vygotsky's Sociocultural Theory Of Cognitive Development highlights how social interaction and tools such as ChatGPT mediate learning, asserting that language development is deeply embedded in social and cultural contexts. Together, these theories offer a robust foundation for exploring how AI tools can enhance language learning by providing adaptive input and facilitating social interaction.

Literature Review

This research is based on the theoretical frameworks of Vygotsky's Sociocultural Theory as well as Krashen's Input Hypothesis which demonstrates that nowadays in the technologically developed era not only teachers but also tools such as Artificial intelligence may enable teachers to teach English language effectively. Vygotsky's theory emphasizes that learning is mediated through social interaction and tools, which is relevant to this study as AI can act as a mediating tool to facilitate social learning. Krashen's hypothesis suggests that language acquisition is driven by comprehensible input, which aligns with how AI can provide adaptive, meaningful language experiences tailored to learners' needs (Krashen, 1984). This integration helps analyze how AI can support language learning by fostering both social interaction and accessible input.

The development of AI (Uno, 2024) progresses through three stages: Artificial Narrow Intelligence (ANI), Artificial General Intelligence (AGI), and Artificial Superintelligence (ASI). ANI, for instance, powers tools like Grammarly and ChatGPT, which assist with grammar

correction, automated grading, and real-time feedback. AGI aims to replicate human cognitive abilities and can assist in various educational settings by supporting lesson planning and personalized learning, while ASI is envisioned to surpass human intelligence, potentially revolutionizing every field it touches. As (Jin et al., 2024) highlights, the integration of these AI stages into educational settings marks a transformative shift, particularly in language teaching and improved student engagement.

Despite these advancements, (Hu et al., 2025; Kong et al., 2024) emphasizes that the widespread adoption of AI in education presents ethical challenges, particularly around data privacy and potential misuse of AI tools. For example, over-reliance on AI for assignments and assessments may undermine academic integrity and critical thinking among students. Similarly, (Chan, 2023b; Kong et al., 2024) argues that while AI-driven tools offer unparalleled opportunities for personalized learning, their effectiveness hinges on educators' ability to use them creatively and responsibly.

While AI tools such as ChatGPT and Grammarly have been widely recognized for their role in language learning (Hu et al., 2025), research on their actual integration into teaching remains limited. Many studies highlight AI's benefits in language education (Aldosari, 2020; Hu et al., 2025), but few explore the extent to which educators are prepared to use these tools effectively. Additionally (Chan, 2023a), concerns regarding training, ethical implications, and practical implementation create barriers that remain underexplored. This study addresses these gaps by examining educators' awareness, perceptions, and readiness to integrate AI into language instruction, providing insights into the challenges and opportunities of AI-driven language learning. This study aims to investigate educators' awareness and perceptions of AI, as well as their readiness to integrate these technologies into their teaching practices.

In the context of language learning, ChatGPT, Gemini, and Grammarly have become AI-powered tools transforming teaching and learning. These technologies assist teachers in designing lesson plans, evaluating students' work, and personalizing learning pathways, enabling faster and more efficient language acquisition. However (Chan, 2023b; Rafikova, 2024), teachers and students must develop a clear understanding of AI tools, their functionalities, and ethical implications to maximize their effectiveness.

In order to identify teachers' perception of AI, the following questions were formulated gathering responses from teachers providing valuable insights to the study. For instance: How well are the teachers aware of AI? How effectively are they utilizing it in their classrooms? What are the perceived benefits and challenges of integrating AI into teaching practices?

Methodology

This study employed a qualitative research design to explore how well educators understand AI and its potential applications in language teaching. The research focused on higher education faculty, with 22 teachers participating in a structured questionnaire distributed via Google Forms.
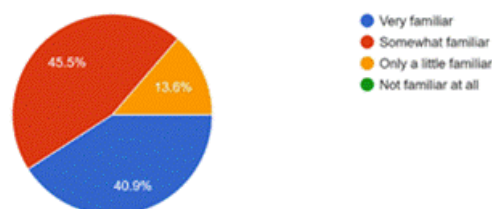
Participants were selected randomly, ensuring diverse perspectives across various institutions. Before completing the survey, all participants provided informed consent, and anonymity was preserved to encourage candid responses.
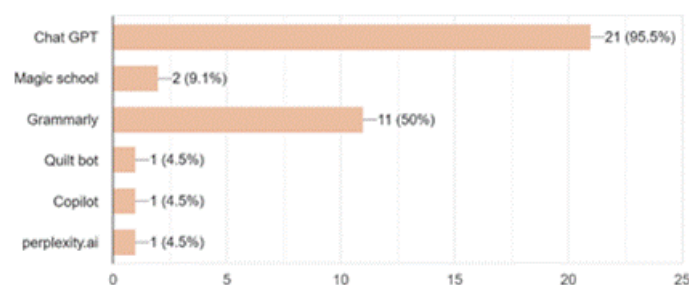
The questionnaire consisted of three core sections:

1.   Familiarity with AI Tools: Questions assessed participants' awareness of tools like ChatGPT, Grammarly, and similar applications.

2.   Usage Patterns: Teachers were asked about their frequency and purpose of AI tool usage in educational contexts.

3.   Perceptions and Concerns: This section explored educators' attitudes toward AI's benefits and drawbacks, along with their willingness to integrate AI into their teaching practices.

Data collected were analyzed qualitatively, identifying trends in teachers' familiarity with and attitudes toward AI.

How familiar are you with AI tools used in education?
22 responses

- Very familiar
- Somewhat familiar
- Only a little familiar
- Not familiar at all

45.5% 13.6% 40.9%

Which of the following AI tools do you use most often?
22 responses

Tool	Value
Chat GPT	21 (95.5%)
Magic school	2 (9.1%)
Grammarly	11 (50%)
Quilt bot	1 (4.5%)
Copilot	1 (4.5%)
perplexity.ai	1 (4.5%)

For what purposes do you primarily use AI tools like ChatGPT?
22 responses

- Content creation (e.g., lesson plans, checking students' assignments)
- Personal productivity (e.g., organization, scheduling)
- Academic research (checking and analysing data)
- General information or answering questions
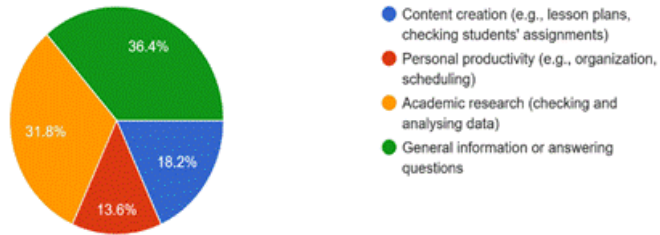
What do you think is the primary benefit of using AI tools like ChatGPT in education?
22 responses

- Enhancing creativity and brainstorming
- Saving time on repetitive tasks
- Improving the quality of assignments and lessons
- Assisting with grading and feedback

How concerned are you about students using ChatGPT to complete assignments?
22 responses

- Very concerned
- Somewhat concerned
- Neutral
- Not concerned
- B) Somewhat concerned
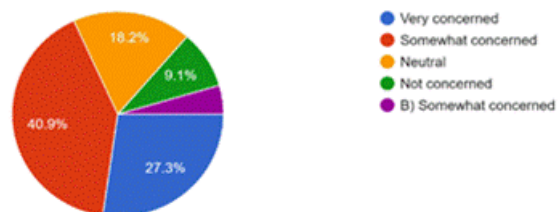
Results and discussion

The analysis of responses revealed several key insights: Approximately 75% of respondents were familiar with popular AI tools like Grammarly and ChatGPT, but only 50% had hands-on experience with these tools. Educators in Namangan were less likely to have

adopted these tools compared to those in the U.S. and Europe, but growing interest suggests this gap may narrow as awareness increases. Growing interest among educators suggests this gap may narrow in the coming years.

Unfortunately, it is evident from the responses that educators were unfamiliar with advanced AI applications specifically designed for language teaching such as AI assisted learning platforms or language learning applications. These tools could support the teaching process more effectively by automating lesson planning, enhancing preparation for new topics, and improving the evaluation of students' work

Among respondents, the most common applications included grammar correction, lesson plan design, and automated grading. Teachers reported a moderate level of confidence in using AI tools but highlighted the need for formal training to maximize their potential. Therefore, specialized teacher training or seminars about advanced AI implementation for effective teaching should be conducted in all educational settings. Covering the topics such as assessment, lesson planning, activity preparation and even research ideas.

Approximately 22.7% of educators noted that AI tools enhanced creativity and brainstorming during lesson preparation, while 54% highlighted time savings on repetitive administrative tasks. Respondents particularly appreciated AI's ability to provide real-time feedback and adaptive exercises, which they believed improved lesson quality and student engagement.

The findings reveal that many teachers have concerns related to the use of ChatGPT and other AI assisted tools to complete assignments. A substantial portion, 40.9%, expressed moderate concern, suggesting anxiety about potential misuse but not outright disapproval. On the other hand, 27.3% strongly disapproved, reflecting a belief that AI usage in this context undermines academic integrity or the learning process. A smaller yet notable percentage, 18.2%, remained neutral, potentially indicating uncertainty or indifference toward its implications.

This division highlights the need for clearer policies and guidelines to address educators' concerns while defining ethical and productive ways to incorporate AI in education. The findings of this study underline a growing awareness of AI among educators, although with varying levels of proficiency in utilizing its tools. Teachers recognize AI's potential to transform language education by automating repetitive tasks, enhancing student engagement, and providing real-time feedback. However, these advantages are tempered by challenges such as insufficient training, ethical dilemmas, and resistance to technological adoption.

One critical observation is the gap between awareness and application. While a majority of educators are aware of tools like Grammarly and ChatGPT, fewer have integrated them comprehensively into their teaching practices. This discrepancy highlights the importance of targeted professional development programs to equip educators with the skills needed to harness AI effectively. Moreover, ethical concerns surrounding data privacy and over-reliance on AI require immediate attention. These issues emphasize the need for clear guidelines and best practices to ensure responsible AI usage in education.

The study also points to the transformative potential of AI in personalizing learning experiences. Adaptive technologies, powered by AI, can cater to individual student needs, enabling differentiated instruction. However, realizing this potential will depend on educators' willingness to embrace innovation and their access to adequate resources.

Conclusion

Artificial intelligence represents a paradigm shift in language education, offering unprecedented opportunities for efficiency and personalization. This study highlights that while educators are increasingly aware of AI's capabilities, challenges such as limited training, ethical concerns, and technological barriers hinder its widespread adoption.

For AI to reach its full potential in education, stakeholders must address these challenges by prioritizing teacher training, fostering ethical AI practices, and ensuring equitable access to advanced technologies. By bridging the gap between awareness and application, AI can revolutionize language teaching, making education more accessible, effective, and engaging.

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