



## **Toward AI-Enchanted English Teaching in Higher Education: Preferences, Potential Opportunities, and Challenges of the Implementation**

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### **Abstract**

*This study explores the preferences, potential opportunities, and challenges associated with the implementation of AI in English language instruction in higher education. Mix method was adopted in this study, by using a questionnaire and semi-structure interview to collect data. 15 English lecturers with approximately 5-10 years of teaching experiences involved in the sample, and 5 of them were interviewed. The result shows that preferences in AI-Implemented English teaching within higher education are multifaceted. Lecturers often prefer AI systems that seamlessly augment their teaching methodologies rather than replace them. Additionally, preferences also extend to the number of AI tools, such as ChatGPT, ELSA Speak, smalltool.ai, paraphrase.io, and language generation systems, etc., being prominent choices. Furthermore, AI transforms English language teaching by personalizing student learning, providing modern teaching and learning tools, delivering timely and objective performance feedback, accelerating core literacy skills, creating immersive virtual reality simulations, and enhancing language acquisition. However, these potential opportunities must be balanced against challenges like cost, data security, and the potential dehumanization of education. As AI continues to evolve, a thoughtful and adaptable approach to its implementation is paramount to harness its full potential while preserving the integrity of higher education.*

**Keywords:** Higher Education, ELT and Technology, AI, AI-Infused ELT.

### **1. Introduction**

Among the most influential innovations is Artificial Intelligence (AI), which has increasingly been integrated into educational practices, particularly in English language teaching and learning (Sumakul & Hamied, 2023). In recent years, AI technologies have significantly influenced teaching and learning processes in schools and universities, especially in the field of English language education (Yang et al., 2022; Zhang, 2020). In higher education, AI-based tools are now widely utilized to support lecturers and students in improving learning efficiency, academic performance, and language acquisition. Chiu et al. (2023) noted that English language teaching is among the educational areas most substantially affected by the growing implementation of AI technologies.

Recent AI-driven applications, such as ChatGPT, ELSA Speak, Lingoda, Lingokids, and WordBrain, have reshaped the landscape of English language instruction (Kashive et

al., 2021). These technologies provide lecturers with innovative approaches to facilitate language learning and classroom interaction. AI-powered applications can support students in practicing speaking skills, improving pronunciation, enhancing writing quality, and fostering independent learning habits (Khalaf & Makhlouf, 2021). Furthermore, AI has been shown to increase learners' motivation and engagement in language learning activities (Liando & Tatipang, 2023). Previous studies have also indicated that the integration of AI tools into English language teaching has become increasingly common in Indonesia, particularly following the emergence of generative AI platforms such as ChatGPT (Auliawan & Ong, 2020; Markauskaite et al., 2022; Tsz et al., 2021).

According to Wuntu et al. (2024) and Pelenkahu et al. (2024), English proficiency is essential not only for communication but also for accessing academic information, conducting research, and supporting students' personal and professional development. Consequently, English language teaching in universities must continue to adapt to technological advancements and evolving educational demands. In this context, AI offers the potential to create more adaptive and personalized learning environments. Khalaf and Makhlouf (2021) argued that AI systems are capable of analyzing students' language proficiency, learning pace, comprehension levels, and learning preferences. Based on these facts, AI can provide customized learning materials and activities suited to individual students' needs.

In addition, AI contributes to the development of interactive and engaging learning environments. AI-supported applications can simulate authentic communication situations that allow students to practice speaking, listening, reading, and writing skills in realistic contexts (Faddouli et al., 2022). As a result, English language learning is no longer limited to traditional teacher-centered instruction but becomes more dynamic and student-oriented (Chiu et al., 2023). Nevertheless, the implementation of AI in education also raises important concerns. One significant issue is the possibility that AI may reduce the role of lecturers in the learning process (Terzopoulos & Satratzemi, 2019). Although AI can assist in content delivery, assessment, and learning analytics, it cannot replace lecturers' roles as facilitators, mentors, and emotional support providers. Human interaction, empathy, and lecturers' understanding of students' cognitive and emotional needs remain essential elements of effective learning (Kashive et al., 2021).

Despite the increasing adoption of AI technologies in education, existing studies have predominantly focused on the effectiveness of AI tools, technological innovation, or students' learning outcomes in general educational settings (Chiu et al., 2023; Yang et al., 2022). Previous studies in Indonesia have largely emphasized the technical use of AI applications or lecturers' readiness to adopt digital technologies, while insufficient attention has been given to the interplay between users' preferences, pedagogical opportunities, and implementation challenges within English language learning environments. Moreover, there remains a lack of comprehensive investigation into how AI integration influences teaching practices, learner engagement, academic interaction, and concerns related to dependency, ethics, and the changing role of lecturers in Indonesian universities.

This gap is particularly important because the successful implementation of AI in higher education is not determined solely by technological availability, but also by how lecturers and students perceive, accept, and utilize these technologies within real classroom contexts. Understanding their preferences and experiences is essential for designing balanced and contextually appropriate AI-supported pedagogical practices. Furthermore, identifying both the opportunities and challenges of AI integration can provide valuable insights for policymakers, curriculum developers, and university institutions in developing sustainable strategies for AI-enhanced English language education in Indonesia. Therefore, this study seeks to examine the implementation of AI technologies in English language teaching and learning within Indonesian higher education. This study specifically addresses the objectives guided by the following research questions:

1. What are students' and lecturers' preferences regarding the use of AI technologies in English language teaching and learning within Indonesian higher education?
2. What opportunities are perceived by students and lecturers in the implementation of AI technologies for English language education?
3. What challenges are encountered by students and lecturers in integrating AI technologies into English language teaching and learning practices?

## **2. Method**

This study employed a mixed-method approach using a convergent parallel design, in which quantitative and qualitative data were collected simultaneously, analyzed independently, and subsequently integrated to provide a comprehensive understanding of the phenomenon under investigation. Quantitative data were obtained through questionnaires, while qualitative data were gathered through semi-structured interviews. The convergent parallel design was selected to enable the researchers to triangulate numerical trends with in-depth participants' experiences regarding the implementation of Artificial Intelligence (AI) in English language teaching within Indonesian higher education contexts.

The study involved 15 English lecturers from several universities in North Sulawesi, Indonesia. The participants consisted of 10 female lecturers and 5 male lecturers, with teaching experience ranging from 5 to 10 years in the field of English language education. In terms of educational qualifications, 11 participants held Master's degrees in English Education and Applied Linguistics, while 4 participants were doctoral in Language and Education-related fields. The lecturers taught students at various higher education levels, including first-year and final-year undergraduate students.

In addition, all participants had prior experience using AI-based technologies in their teaching practices and academic activities. The participants reported frequently utilizing AI applications such as ChatGPT, Grammarly, QuillBot, and Turnitin to support instructional preparation, language correction, academic writing, assessment, and classroom interaction. The inclusion criterion for participation required lecturers to have actively integrated AI tools into their English teaching practices for at least one academic

semester. This criterion was applied to ensure that the participants possessed sufficient experience and familiarity with AI-supported teaching environments.

Among the 15 lecturers, 5 participants were purposively selected for semi-structured interviews based on the frequency and intensity of their AI usage in teaching and learning activities. These interview participants were coded as P1–P5 to maintain confidentiality and anonymity. The interview process explored participants' experiences, preferences, perceived opportunities, and challenges related to AI integration in English language education.

The quantitative instrument used in this study was distributed through Google Forms. The questionnaire was adapted from the studies of Yoon (2019) and Koraisi (2023), and subsequently modified to align with the objectives and research questions of the present study. To ensure content validity, the revised questionnaire was evaluated by two experts in ELT and educational technology, focusing on the relevance, clarity, and appropriateness of each item. The instrument consisted of 32 items divided into four major constructs: (1) participants' preferences toward AI technologies in English language teaching and learning (8 items), (2) perceived opportunities and benefits of AI integration (10 items), (3) perceived challenges and concerns regarding AI implementation (9 items), and (4) perceptions of AI-supported pedagogical practices and classroom interaction (5 items). All questionnaire items employed a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5).

To ensure the validity and reliability of the instrument, several procedures were conducted prior to the main data collection. First, the questionnaire underwent content validation by two experts in English language education and educational technology to evaluate the relevance, clarity, and appropriateness of the items in relation to the research objectives. Revisions were subsequently made based on their feedback, particularly regarding wording clarity and contextual suitability for Indonesian higher education settings. Second, a pilot study involving 10 English lecturers outside the primary sample was conducted to assess the reliability and comprehensibility of the instrument. The reliability analysis demonstrated satisfactory internal consistency, with a Cronbach's Alpha coefficient of 0.687, indicating that the questionnaire was reliable for measuring participants' perceptions and experiences related to AI integration in English language teaching.

In addition to the questionnaire, qualitative data were collected through semi-structured interviews. The interview protocol was designed to explore several key aspects, including participants' experiences in using AI tools, preferences toward AI-assisted teaching practices, perceived opportunities of AI integration, challenges encountered during implementation, and perceptions regarding the future role of AI in English language education. Each interview lasted approximately 30–45 minutes and was conducted in a flexible manner to allow participants to elaborate on their responses and experiences in detail.

Several representative interview questions included: (1) "What kinds of AI technologies do you frequently use in English language teaching activities?"; (2) "How

does AI support your teaching and students' learning processes?"; (3) "What benefits do you perceive from integrating AI into English language education?"; (4) "What challenges or limitations have you encountered when using AI technologies in teaching?"; and (5) "How do you perceive the future role of AI in higher education English classrooms?" These semi-structured questions enabled the researchers to maintain consistency across interviews while still allowing participants to provide rich and contextually grounded responses. In addition, the interviews were conducted face-to-face on campus area using semi-structured interview guidelines to obtain more in-depth insights into participants' perspectives and experiences.

### 3. Findings and Discussion

#### 3.1 Findings

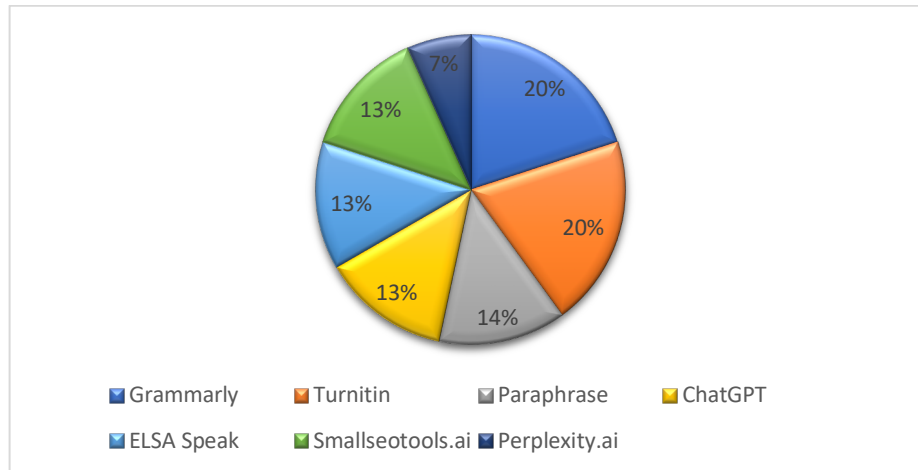
##### 3.1.1 AI Tools-Preferences

The preferences of AI tools users are quite varied, ranging from tools for writing needs to checking grammar. These tools are used by English language lecturers, especially lecturers, to support the language learning process. In this regard, some lecturers' statements regarding the use of AI in English classes actually have quite a positive impact, starting from checking writing errors more easily. **P2:** *One of the AI tools I use most frequently is Grammarly. It has been incredibly helpful for catching grammatical errors in both my own and my students' writing.* Additionally, AI tools help lecturers in enhancing their speaking and paraphrasing skills while also benefiting students, as in the statement by **P4:** *ELSA Speak was a brilliant tool, it actually improves and gives feedback for speaking development. Moreover, perplexity.ai gave so many trusted sources related to the papers that can support my teaching materials. This is awesome!*

Reflecting on each lecturer's statement regarding the positive impact of AI in English classes, AI offers several advantages in the English classroom. Firstly, it provides personalized learning experiences by analyzing each student's strengths and weaknesses and tailoring lessons accordingly. This adaptability fosters better comprehension and engagement. Additionally, AI-powered language tools offer instant grammar and spelling feedback and help students improve their writing skills. Moreover, virtual language tutors powered by AI are available 24/7, enabling students to practice speaking and listening skills at their own pace. Where the lecturers said that:

**P1:** *AI have transformed language learning by improving speaking and listening skills through flexible, 24/7 access. They simulate real-life conversations in a low-pressure environment, helping students practice confidently without fear of judgment. These tutors adapt to learners' proficiency levels, making sessions both productive and challenging. They also provide instant feedback on pronunciation, intonation, and comprehension, which supports faster improvement.*

Furthermore, AI can generate vast amounts of language-related content, providing lecturers with a wealth of resources and materials. Overall, AI enhances the English classroom by promoting individualized learning, improving language skills, and expanding the available teaching resources. Thus, Figure 1 below provides a clear picture of the preferences of AI tools that are often used by lecturers in English classes.



**Figure 1. AI Tools-Preferences**

Lecturer AI tools have gained significant importance in the modern English classroom, primarily due to their ability to cater to individual preferences and learning styles. These tools enable lecturers to create customized learning experiences for their students. One major advantage is the adaptability of AI tools. The lecturer claimed that:

**P5:** *AI-powered tools are excellent at personalizing the learning experience by adapting to individual preferences. For instance, students who prefer visual learning can benefit from AI-generated graphs and charts that simplify complex language concepts. On the other hand, auditory learners can utilize AI-generated audio materials, such as spoken explanations or language exercises. This flexibility ensures that no student feels overwhelmed or left behind, as lessons can be adjusted in both pace and complexity.*

They can adjust the pace and complexity of lessons to suit the preferences of each student, ensuring that no one is left behind or overwhelmed. For example, if a student prefers visual aids, AI can generate interactive graphs or charts to illustrate complex language concepts, while those who learn better through auditory methods can benefit from AI-generated audio materials.

Another crucial aspect of Lecturer AI tools is their capacity to provide real-time feedback. These tools can instantly analyze students' performance and provide constructive suggestions for improvement. In an English classroom, this means pinpointing grammar errors, pronunciation issues, or vocabulary gaps and offering tailored exercises to address these weaknesses. This not only saves lecturers time but also enhances the overall learning experience by giving students immediate insights into their progress and areas that need improvement.

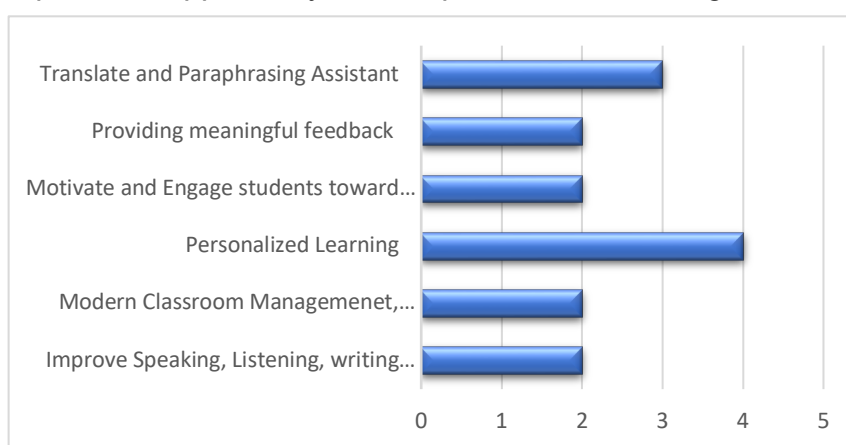
Moreover, AI tools can make English learning more engaging and interactive. They said:

**P2:** *AI tools, such as chatbots and virtual language partners, make English learning more engaging by providing students with interactive conversation opportunities. These tools offer a pressure-free environment where students can practice speaking and communication skills without fear of judgment. Through the stimulation of real-life conversations, they make learning both practical and enjoyable. The constant availability of these AI partners allows students to engage in consistent practice, helping them build confidence and fluency over time.*

With features like chatbots or virtual language partners, students can practice conversation and communication skills in a comfortable and pressure-free environment. This promotes active participation and allows students to build confidence in using the English language.

### 3.1.2 Potential Opportunities of AI in English Classroom

AI technologies have the potential to revolutionize how English is taught and learned, making education more personalized, accessible, and effective than ever before. From personalized language assessments and real-time feedback to immersive language experiences, the possibilities for AI in English teaching are boundless, promising to empower lecturers and learners alike in their pursuit of linguistic excellence. In this era of technological innovation, exploring the vast potential of AI in English teaching is not just a possibility but a compelling imperative for lecturers and institutions worldwide. Figure 2 below describes the potential opportunity of AI implementation in English classroom:



**Figure 2.** Potential Opportunities of AI in English Classroom

As we stand on the threshold of a new era in pedagogy, AI emerges as a formidable ally, poised to revolutionize the way English is taught and learned. This transformative journey begins with recognizing the vast opportunities AI presents, opportunities that span across various dimensions of education. First and foremost, AI offers the promise of personalized learning experiences tailored to the unique needs and abilities of each student. They claimed that:

**P3:** *AI enables personalized learning by adapting lessons to each student's pace and style, which is difficult in traditional classrooms. It identifies individual needs and offers tailored resources, ensuring students receive targeted support. This flexibility makes learning more efficient and accessible for diverse learners.*

Traditional classroom settings often struggle to accommodate the diverse learning styles and paces of students. AI possess the capability to discern individual strengths and weaknesses, creating a bespoke learning path for every learner. Whether a student excels in reading comprehension but struggles with writing or vice versa, AI can adapt the curriculum accordingly, ensuring optimal engagement and comprehension for each student.

In addition, AI technology can also provide instant feedback to students as they perform exercises or exams:

**P1:** *Instant feedback from AI enhances student motivation by providing immediate insights into their performance. When students know their progress right away, they can quickly identify areas that need improvement and adjust their learning strategies. This real-time feedback helps maintain engagement, as it makes the learning process more dynamic and responsive. Unlike traditional methods, where feedback may be delayed, AI ensures that students stay motivated by continually tracking their growth and addressing mistakes promptly, creating a more interactive learning experience.*

This contributes to increased student motivation and engagement, as they get immediate information about their progress and areas that need improvement. With the help of AI, lecturers can also monitor individual student progress more accurately, so as to provide additional support as needed. Beyond the individual learning aspect, AI can also support collaborative and interactive learning. Chatbot, powered by AI, can provide students with opportunities to practice speaking in English in a structured manner. Students can interact with the chatbot in realistic communicative situations, such as talking to classmates or business partners in English. This assists in building students' confidence in communicating in a foreign language.

The application of AI in English learning can also utilize voice and speech recognition technology. Students can record their speaking practice and get feedback on correct pronunciation, intonation, and emphasis. In addition, the use of AI in English learning can integrate game to make learning more interesting and fun. Game-based learning systems using AI can present challenges and scenarios that are relevant to real-life situations.

**P3:** *As a lecturer, I see AI-powered language tools as transformative in improving students' writing abilities. Instant feedback on grammar and spelling allows students to identify and correct their mistakes in real-time, which is crucial for language acquisition. This immediate correction reinforces learning and helps students become more conscious of common errors they might make. Over time, this leads to a more refined understanding of grammar rules and better command over written language. Additionally, these tools provide personalized learning experiences by highlighting individual patterns of mistakes, which can be incredibly beneficial in a diverse classroom setting where each student may struggle with different aspects of writing.*

The democratization of education through AI ensures that language proficiency is no longer restricted by factors such as location, socioeconomic status, or time constraints. Beyond personalized learning and feedback, AI is poised to redefine the very nature of classroom interaction and engagement. These virtual interactions not only enhance language skills but also instill confidence in students to engage with native speakers and navigate English-speaking environments effectively.

Moreover, AI brings new life into the creation and curation of educational content. Language lecturers can utilize the power of AI to generate vast amounts of language-related materials, from exercises and quizzes to reading materials and multimedia content. This wealth of resources not only eases the loads on lecturers but also ensures that students have access to a wide variety of materials that tailor to their interests and proficiency levels. As AI continues to evolve, it will play an instrumental role in fostering a dynamic and constantly evolving English classroom. It also offers opportunities for a deeper understanding of individual learning patterns and preferences.

Additionally, AI holds promise in addressing the issue of language diversity in

classrooms. English classrooms often comprise students from various linguistic backgrounds, each with their unique challenges and needs. Furthermore, AI-driven language assessment tools offer a more holistic and nuanced evaluation of students' language proficiency. Traditional assessments often focus on standardized tests that may not fully capture a student's true abilities in real-world language usage. AI can analyze a student's performance in diverse contexts, taking into account factors such as fluency, comprehension, and cultural sensitivity.

As we explore the potential opportunities of AI in the English classroom, it's essential to recognize that AI is not a replacement for human lecturers but a powerful complement. They believe that:

**P2:** *AI in the English classroom is a valuable tool, but it cannot replace human lecturers. While AI efficiently handles routine tasks like grammar correction and content generation, it lacks the emotional intelligence, cultural awareness, and personal connection that lecturers provide. Human lecturers bring context, critical thinking, and the ability to adapt to the complexities of individual learners. They offer mentorship, empathy, and cultural insights that AI cannot replicate.*

While AI can handle routine tasks, such as grammar correction and content generation, human lecturers bring a wealth of experience, cultural insights, and emotional connection to the learning process. The synergy between AI and lecturers holds the key to unlocking the full potential of English language education. The infusion of AI into the English classroom represents a monumental leap forward in education. The opportunities it presents, from personalized learning experiences and real-time feedback to constant availability and diverse content generation, promise to reshape how English is taught and learned.

Among the multifaceted challenges surrounding the implementation of artificial intelligence (AI) in English teaching, a notable gap emerges in our understanding of how AI impacts the emotional and social dimensions of language learning. While AI holds tremendous potential for enhancing various aspects of language acquisition, it often falls short in addressing the nuanced human elements that are integral to effective English language instruction.

One crucial facet of this gap centers on the emotional engagement and motivation of learners. **P5** said:

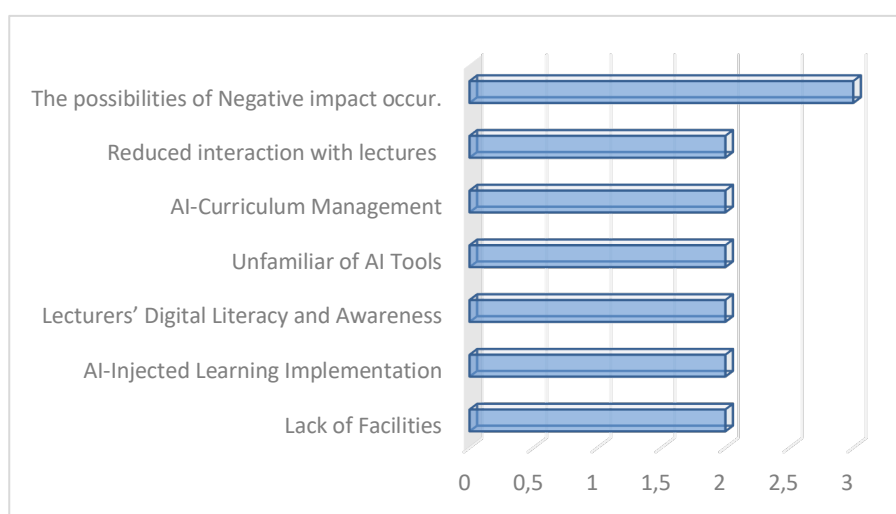
*Emotional engagement is vital in language learning, as it drives motivation, trust, and a sense of belonging among students. Human lecturers excel in creating emotional connections with their students, offering encouragement, understanding, and support that AI cannot replicate. This connection fosters a safe learning environment where students feel inspired to take risks and engage more deeply with the material. Lecturers can read emotions, offer personalized encouragement, and adapt their teaching style to students' emotional needs, building trust and confidence.*

Human lecturers have an innate ability to inspire and connect with their students emotionally, fostering a sense of belonging, trust, and encouragement. In contrast, AI-driven language instruction, while efficient in delivering content and exercises, often struggles to provide the warmth and empathy that human lecturers offer. The absence of emotional connection in AI-led lessons can lead to demotivation and disengagement, particularly in language learners who require support, encouragement, and a sense of

community to persevere through the challenges of language acquisition.

### 3.1.3 Challenges of AI-Implemented in English Classroom

Moreover, the social aspect of English language learning represents a fundamental challenge within this gap. Human lecturers facilitate language learning through conversations, debates, group activities, and real-life scenarios that allow students to practice and apply their language skills in authentic social contexts. Through these, the challenges within the gap of AI implementation in English teaching encompass emotional engagement and motivation, the social aspect of language learning, emotional intelligence, the human element in pedagogy, and ethical considerations.



**Figure 3.** Challenges of AI-Implemented in English Classroom

Integrating artificial intelligence (AI) into the realm of English teaching promises to revolutionize how languages are learned, making education more personalized and accessible than ever before. Yet, this exciting vision is not without its significant challenges. The implementation of AI in English teaching faces a complex landscape that involves technical, ethical, and pedagogical hurdles. **P4** asserts that:

*One of the primary challenges in implementing AI in English teaching is ensuring equitable access for all students. While AI offers powerful tools for personalized learning, not all students have equal access to the necessary technology or internet connectivity, creating a digital divide. This can disproportionately affect students from lower socioeconomic backgrounds, limiting their ability to benefit from AI-enhanced learning. Additionally, there are concerns about how AI tools are designed and whether they are inclusive of diverse learning needs and cultural backgrounds.*

At the forefront of the challenges facing the implementation of AI in English teaching is the issue of equity and accessibility. Not all students have equal access to the technology required for AI-based learning, which can lead to a digital divide, where those with access to advanced technology benefit disproportionately. This raises concerns about the fairness of AI-enhanced language education, as it may inadvertently widen the gap between privileged and underprivileged learners.

Additionally, AI-powered systems often collect vast amounts of data on student performance, behavior, and interactions. Safeguarding this data and ensuring that it is used solely for educational purposes is a challenging task. The risk of data breaches or misuse of sensitive information can erode trust in AI-driven educational platforms. Striking a balance between the collection of necessary data for personalized learning and protecting students' privacy is an ongoing challenge that lecturers and AI developers must navigate. Moreover, there is the risk of over-reliance on AI, which may lead to a one-size-fits-all approach that disregards the unique requirements of each student.

One of the core challenges is teacher-student interaction and the human element in education. Language learning is not solely about mastering vocabulary and grammar; it also involves cultural nuances, context, and communication skills. **P3** believes that:

*Teacher-student interaction is essential in language learning because it involves more than just vocabulary and grammar. Human lecturers provide cultural context, emotional support, and communication skills that AI cannot replicate. They help students navigate the nuances of language, including idiomatic expressions, tone, and body language, which are critical for effective communication. Lecturers also foster a learning environment that encourages participation, empathy, and real-time feedback, helping students build confidence and cultural awareness, both of which are key to becoming proficient in a new language.*

AI can provide valuable language exercises and assessments, but it often lacks the ability to engage in meaningful, empathetic interactions. The role of a human teacher in providing guidance, motivation, and emotional support remains irreplaceable. Thus, there is an ongoing debate about how AI can complement human instruction without diminishing the critical role that lecturers play in language education. Moreover, cultural sensitivity and linguistic diversity present significant challenges in AI-driven English teaching. Developing AI that respects and adapts to the rich tapestry of linguistic diversity and cultural contexts is an ongoing challenge.

Another pressing concern is the transparency and explainability of AI algorithms in language education. Students and lecturers need to understand how AI systems arrive at their assessments and recommendations. Ensuring that AI is not perceived as an arbitrary authority but as a tool that promotes understanding is essential for its acceptance and effectiveness. Furthermore, the rapid evolution of AI technology poses a challenge in terms of keeping curricula and resources up-to-date. English language teaching materials and approaches may need to adapt continually to incorporate new technological advances.

The cost of implementing AI in education is a practical concern that institutions must grapple with. Developing and maintaining AI-driven systems, especially those capable of providing personalized instruction, can be expensive. **P1** mentioned:

*The high cost of implementing AI in education is a major challenge for smaller and underfunded schools. AI systems require significant investment in technology, software, maintenance, and teacher training, which many institutions cannot afford. This can widen the gap between wealthy and low-income schools. To make AI education more accessible, governments, tech companies, and educational organizations should collaborate to reduce costs through subsidies, public-private partnerships, shared resources, and open-source platforms. Proper teacher training and affordable integration strategies can also help schools adopt AI effectively despite limited budgets.*

Smaller schools and underfunded educational institutions may struggle to access and afford these technologies. Balancing the potential benefits of AI with the financial burden it can impose on educational budgets is a challenge that policymakers and administrators face. Finally, the ethical considerations surrounding AI in English teaching demand careful attention. Plagiarism detection tools, for example, raise questions about intellectual property and originality. Additionally, AI can inadvertently encourage cheating if not properly monitored. Ethical guidelines and practices must be established to ensure that AI is used in ways that promote honesty, integrity, and academic rigor.

## **3.2 Discussion**

### **3.2.1 AI Tools Preferences and Their Pedagogical Implications in English Language Teaching**

The findings of this study demonstrate that lecturers' preferences for AI tools in English language teaching are largely influenced by their practicality, adaptability, and capacity to provide immediate feedback. Tools such as grammar checkers, speaking assistants, and AI-powered research engines were frequently mentioned by lecturers as beneficial for supporting writing accuracy, pronunciation development, and material preparation. This preference reflects a broader transformation in language pedagogy where artificial intelligence is increasingly used as a supportive instructional technology rather than a replacement for human instruction. Previous studies similarly indicate that AI-driven language tools significantly enhance teaching efficiency and improve learning outcomes by automating repetitive tasks and offering data-driven feedback (Chiu et al., 2023; Fitria, 2021).

One notable implication of the lecturers' AI preferences is the enhancement of writing instruction through automated feedback systems. This aligns with previous research showing that AI-based writing assistants can function as scaffolding tools that help learners develop greater grammatical awareness and accuracy (Auliawan & Ong, 2020). Instant feedback is particularly valuable in language learning because it enables students to identify errors immediately and adjust their linguistic production accordingly. In traditional classroom settings, feedback from instructors is often delayed due to time constraints, whereas AI systems can provide immediate responses that support continuous learning.

Another important aspect revealed in the findings is the role of AI tools in improving speaking and pronunciation skills. Lecturers reported that applications such as speech-recognition-based learning tools help students refine pronunciation, intonation, and fluency through real-time feedback. This finding is consistent with the work of Khalaf and Makhlof (2021), who argue that AI-powered speech recognition technologies can significantly improve learners' oral proficiency by providing interactive pronunciation practice. Such tools simulate authentic communication scenarios that allow learners to practice speaking in a less intimidating environment compared to face-to-face classroom interaction. For many learners, especially those experiencing speaking anxiety, AI-mediated communication provides a supportive learning environment where they can practice repeatedly without fear of negative evaluation.

Furthermore, the findings highlight the role of AI in facilitating personalized learning experiences. Lecturers noted that AI tools can adapt instructional materials based on students' preferences and learning styles, including visual or auditory learning modes. This adaptability is consistent with the principles of adaptive learning technologies, which

analyze learners' performance data and modify instructional content accordingly (Xu & Margevica-Grinberga, 2021). Personalized learning has become a major focus in contemporary education because traditional classroom instruction often struggles to address the diverse abilities of students simultaneously.

Moreover, the findings suggest that AI tools contribute to increased engagement and interactive learning. Chatbots and virtual language partners were mentioned as tools that create conversational opportunities for students to practice English in real-time simulations. According to Kashive et al. (2021), conversational AI systems can mimic real-life dialogues and provide students with immersive language practice opportunities. These interactions allow learners to develop communicative competence through practical engagement rather than passive learning. In addition, the availability of AI tools beyond classroom hours expands learning opportunities and encourages continuous language practice.

Despite these benefits, the lecturers also emphasized the importance of maintaining a balanced integration of AI and human instruction. While AI tools offer efficiency and adaptability, they cannot fully replicate the contextual understanding and emotional support provided by human lecturers. Lin et al. (2021) argue that effective AI integration requires a hybrid pedagogical approach where AI supports routine instructional tasks while lecturers focus on higher-order cognitive and social aspects of learning. Therefore, lecturers' preferences for AI tools indicate not only technological adoption but also the emergence of a human-AI collaborative model in language education, where both elements complement each other in improving learning outcomes.

### **3.2.2 Transformative Opportunities and Emerging Challenges of AI in the English Classroom**

The findings further reveal that artificial intelligence offers transformative opportunities for reshaping English language teaching, particularly in terms of personalized learning, real-time feedback, and enhanced classroom interaction. AI technologies enable a data-driven approach to language education where learning pathways are tailored to individual students' abilities and progress. This aligns with the broader shift toward learner-centered pedagogy, which prioritizes flexibility and responsiveness to diverse learning needs. Zhu (2017) highlights that AI systems can analyze learner performance patterns and generate customized learning paths that support more efficient language acquisition. Traditional classroom environments often struggle to accommodate varying proficiency levels, but AI technologies can identify individual learning gaps and provide targeted resources. This capability allows lecturers to move beyond the "one-size-fits-all" teaching model and adopt more inclusive instructional strategies. Personalized instruction has been shown to improve learner engagement and motivation because students receive content that directly addresses their learning needs (Xu & Margevica-Grinberga, 2021).

Another important opportunity is the role of AI in providing instant and continuous feedback, which is critical for language acquisition. AI-powered assessment systems can analyze written and spoken responses instantly, allowing students to understand their mistakes and correct them immediately. According to Auliawan and Ong (2020), real-time feedback accelerates language learning because learners can quickly refine their linguistic performance. In addition, real-time feedback encourages reflective learning, where students actively evaluate their own progress and develop metacognitive awareness of

their language skills. However, despite the transformative potential of AI, the findings also highlight several significant challenges that must be addressed to ensure its effective implementation. One of the primary concerns is the issue of equity and accessibility. AI-based learning systems require stable internet access, digital devices, and technological infrastructure that may not be equally available to all students. Markauskaite et al. (2022) warn that unequal access to technology may widen the digital divide between advantaged and disadvantaged learners, potentially reinforcing existing educational inequalities.

Another critical challenge relates to data privacy and ethical considerations. AI systems often collect extensive data on students' learning behaviors and performance, raising concerns about how this information is stored, analyzed, and protected. Zhang et al. (2022) emphasize that robust data governance frameworks are essential to prevent misuse of sensitive student information. Ensuring transparency in AI algorithms is also necessary so that lecturers and students understand how learning recommendations and evaluations are generated.

In addition, the findings underscore the irreplaceable role of human lecturers in language learning. While AI can automate certain instructional tasks, it lacks the emotional intelligence, cultural awareness, and interpersonal skills that lecturers bring to the classroom. Language learning is inherently social and cultural, requiring human interaction to develop pragmatic competence and intercultural communication skills (Liando et al., 2023). Lecturers provide mentorship, encouragement, and contextual explanations that AI systems cannot fully replicate. Lecturers must continuously update their technological skills to effectively integrate AI tools into their teaching practices. Without adequate training, the potential benefits of AI may not be fully realized (Mhlanga, 2023). Therefore, institutions must invest in professional development programs that equip lecturers with the knowledge and competencies required to integrate AI in pedagogically meaningful ways.

#### **4. Conclusion and Future Direction**

The findings reveal that lecturers strongly prefer AI tools that provide practicality, adaptability, and immediate feedback, particularly grammar-checking applications, speech-recognition systems, and AI-powered research platforms. These technologies were perceived as effective in supporting writing accuracy, speaking development, personalized learning, and interactive classroom engagement. The study further demonstrates that AI has transformative potential in reshaping ELT through adaptive instruction, real-time assessment, and immersive learning experiences that promote learner autonomy and motivation. AI-driven systems also enable more inclusive and flexible learning opportunities by accommodating diverse learning styles and proficiency levels. However, the findings also indicate several critical challenges related to equity, accessibility, data privacy, ethical concerns, teacher readiness, and the limitations of AI in addressing the emotional and social dimensions of language learning. Participants emphasized that AI cannot replace the human role of lecturers in providing emotional support, cultural understanding, contextual explanations, and meaningful interpersonal interaction. Therefore, the study highlights the importance of a balanced human-AI collaborative approach in ELT, where AI functions as a pedagogical support system rather than a substitute for lecturers. The findings suggest that successful AI implementation requires adequate technological infrastructure, ethical governance, and continuous professional development for lecturers to ensure pedagogically meaningful and equitable AI adoption. This study was limited to lecturers' perspectives within a specific educational context, which may not fully represent broader ELT practices. Future research should

involve students, policymakers, and cross-institutional comparisons to obtain more comprehensive insights. Further studies are also recommended to investigate the long-term pedagogical impact of AI integration on language proficiency, learner motivation, and classroom interaction using mixed-method or longitudinal approaches.

### Declaration of the Use of AI

Through this declaration, the authors declare the use of artificial intelligence (AI) in this paper, where AI is used as a translation medium, language checking, and grammar error checking.

### References

- Auliawan, A. G., & Ong, S. (2020). The Usage of AI Robot in English Language Teaching for City Revitalization Case Study: Toda Daini Elementary School, Toda City, Saitama, Japan. *IOP Conference Series: Earth and Environmental Science*, 436(1), 012022. <https://doi.org/10.1088/1755-1315/436/1/012022>
- Chiu, T. K. F., Moorhouse, B. L., Chai, C. S., & Ismailov, M. (2023). Teacher support and student motivation to learn with Artificial Intelligence (AI) based chatbot. *Interactive Learning Environments*. <https://doi.org/10.1080/10494820.2023.2172044>
- Faddouli, E. ;, Harouni, N.-E. ;, Lu, M. H. A. ;, Titrek, O., Biasutti, M., Hamal, O., Faddouli, N.-E. El, Hachem, M., Harouni, A., & Lu, J. (2022). Artificial Intelligent in Education. *Sustainability*, 14(5), 2862. <https://doi.org/10.3390/SU14052862>
- Fernández-Martínez, C., Hernán-Losada, I., & Fernández, A. (2021). Early Introduction of AI in Spanish Middle Schools. A Motivational Study. *KI - Kunstliche Intelligenz*, 35(2), 163–170. <https://doi.org/10.1007/S13218-021-00735-5/TABLES/3>
- Fitria, T. N. (2021). Grammarly as AI-powered English Writing Assistant: Students' Alternative for Writing English. *Metathesis: Journal of English Language, Literature, and Teaching*, 5(1), 65. <https://doi.org/10.31002/METATHESIS.V5I1.3519>
- Kashive, N., Powale, L., & Kashive, K. (2021). Understanding user perception toward artificial intelligence (AI) enabled e-learning. *International Journal of Information and Learning Technology*, 38(1), 1–19. <https://doi.org/10.1108/IJILT-05-2020-0090/FULL/XML>
- Khalaf, M., & Makhlof, I. (2021). Effect of Artificial Intelligence-Based Application on Saudi Preparatory-Year Students' EFL Speaking Skills at Albaha University. *International Journal of English Language Education*, 9(2). <https://doi.org/10.5296/ijelev.v9i2.18782>
- Koraishi, O. (2023). Teaching English in the Age of AI: Embracing ChatGPT to Optimize EFL Materials and Assessment. *Language Education and Technology*, 3(1). <https://langedutech.com/letjournal/index.php/let/article/view/48>
- Liando, N. V. F., Dallyono, R., Tatipang, D. P., & Lengkoan, F. (2023). Among English, Indonesian and local language: Translanguaging practices in an Indonesian EFL classroom. *Indonesian Journal of Applied Linguistics*, 13(1), 204–216. <https://doi.org/10.17509/IJAL.V13I1.58270>
- Liando, N. V. F., & Tatipang, D. P. (2023). *Enlightened Minds: Navigating The Nexus of Artificial Intelligence and Educational Modernization*. Penerbit Tahta Media. <https://tahtamedia.co.id/index.php/issj/article/view/615>

- Lin, P. Y., Chai, C. S., Jong, M. S. Y., Dai, Y., Guo, Y., & Qin, J. (2021). Modeling the structural relationship among primary students' motivation to learn artificial intelligence. *Computers and Education: Artificial Intelligence*, 2, 100006. <https://doi.org/10.1016/J.CAEAI.2020.100006>
- Markauskaite, L., Marrone, R., Poquet, O., Knight, S., Martinez-Maldonado, R., Howard, S., Tondeur, J., De Laat, M., Buckingham Shum, S., Gašević, D., & Siemens, G. (2022). Rethinking the entwinement between artificial intelligence and human learning: What capabilities do learners need for a world with AI? *Computers and Education: Artificial Intelligence*, 3, 100056. <https://doi.org/10.1016/J.CAEAI.2022.100056>
- Mhlanga, D. (2023). Open AI in Education, the Responsible and Ethical Use of ChatGPT Towards Lifelong Learning. *SSRN Electronic Journal*. <https://doi.org/10.2139/SSRN.4354422>
- Pelenkahu, N., Ali, M. I., Tatipang, D. P., Wuntu, C. N., & Rorintulus, O. A. (2024). Metacognitive strategies and critical thinking in elevating EFL argumentative writing proficiency: Practical insights. *Studies in English Language and Education*, 11(2), 873–892. <https://doi.org/10.24815/SIELE.V11I2.35832>
- Sumakul, D. T. Y. G., & Hamied, F. A. (2023). Amotivation in AI injected EFL classrooms: Implications for lecturers. *Indonesian Journal of Applied Linguistics*, 13(1). <https://doi.org/10.17509/ijal.v13i1.58254>
- Terzopoulos, G., & Satratzemi, M. (2019). Voice assistants and artificial intelligence in education. *ACM International Conference Proceeding Series*. <https://doi.org/10.1145/3351556.3351588>
- Tsz, D., Ng, K., Kai, S., & Chu, W. (2021). Motivating Students to Learn AI through Social Networking Sites: A Case Study in Hong Kong. *Online Learning*, 25(1), 195–208. <https://doi.org/10.24059/olj.v25i1.2454>
- Wuntu, C. N., Tatipang, D. P., & Ali, M. I. (2024). Literature Pedagogy for English Development: Investigating Preferences, Motivation and Best Practices Toward the Implementation. *Teaching English Language*, 18(2), 1–34. <https://doi.org/10.22132/TEL.2024.456555.1608>
- Xu, B., & Margevica-Grinberga, I. (2021). A Discourse on Innovation of English Teaching in China from the Perspective of Artificial Intelligence. *Cypriot Journal of Educational Sciences*, 16(5), 2313–2323. <https://doi.org/10.18844/cjes.v16i5.6347>
- Yang, H., Kim, H., Lee, J. H., & Shin, D. (2022). Implementation of an AI chatbot as an English conversation partner in EFL speaking classes. *ReCALL*, 34(3), 327–343. <https://doi.org/10.1017/S0958344022000039>
- Yoon, S. Y. (2019). Student Readiness for AI Instruction: Perspectives on AI in University EFL Classrooms. *Multimedia-Assisted Language Learning*, 22(4), 134–160.
- Zhang, H., Lee, I., Ali, S., DiPaola, D., Cheng, Y., & Breazeal, C. (2022). Integrating Ethics and Career Futures with Technical Learning to Promote AI Literacy for Middle School Students: An Exploratory Study. *International Journal of Artificial Intelligence in Education*, 33(2), 290–324. <https://doi.org/10.1007/S40593-022-00293-3/TABLES/5>
- Zhang, X. (2020). The application research of artificial intelligence and big data analysis

technology in university foreign language teaching. *Journal of Physics: Conference Series*, 1684(1). <https://doi.org/10.1088/1742-6596/1684/1/012022>

Zhu, D. (2017). Analysis of the Application of Artificial Intelligence in College English Teaching. *Proceedings of the 2017 2nd International Conference on Control, Automation and Artificial Intelligence (CAAI 2017)*, 235–237. <https://doi.org/10.2991/CAAI-17.2017.52>