Students Attitudes Toward the Use of Artificial Intelligence Tools in English Language Learning

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ABSTRACT

This research intends to assess the point of view of English Education students of Universitas Negeri Makassar regarding the application of Artificial intelligence (AI) resources in the skin of language learning. In this context, the research may engage AI tools Grammarly, ChatGPT, and others and analyze both the benefits and the challenges associated with these applications. The study adopted a convergent parallel design and collected qualitative and quantitative data from 100 respondents through surveys and interviews. The findings revealed that using AI tools increases learning efficiency (89%), enhances writing (82%), and boosts students' self-efficacy toward completing academic work (75%). Nonetheless, difficulties such as excessive dependence on AI, lack of comprehension of the functionalities of the specified tools, to mention a few, and the problem of depending on the accuracy of responses generated by AI were also documented. In addition, the research brings attention to the potential of AI in language education while stressing the importance of integration to avoid dependence. It is recommended for educators to reinforce responsible use of AI, discourage misuse of AI, uphold academic honesty, and discourage autonomous use of AI. In the next strides, the study will require other attention in the areas of most interest when using AI tool inclusion measures better aimed at addressing the barriers identified impacting the use of language tools for students.

I. Introduction

In the context of education, technology has become a strategic tool for shaping how teaching and learning take place over the years. Out of many technological inventions and developments, Artificial Intelligence has come up to be one of the promising technologies that has the potential to completely change the dynamics of English language learning [1], [2], [3]. For instance, students can use AI-based programs such as Grammarly, ChatGPT, and Duolingo that provide automatic instant feedback, intelligent learning systems, and other assistance to the learners [4], [5]. Students of English Education, especially those in English as a Foreign Language context, have the opportunity to exploit the use of AI tools in developing language competencies, critical thinking, and self-directed learning [6]. However, these tools seem to be more efficacious when students approve their uptake and appropriation in the teaching task. Understanding students' attitudes is key because it provides an idea of how students view, accept, and use technology in their studies and the entire learning process. Having a good attitude helps involve enthusiasm, engage more in the given task, and aids one in learning while a bad attitude keeps away the usage of emerging technologies [7], [8], [9]. Although AI is gaining more and more roles in education, little research has been done exploring the student's attitude towards its application, in particular that of EFL. This particular gap is more pronounced in the Indonesian higher education system where the use of AI technology for learning is still in its infancy [3].

This study draws on Vygotsky's social constructivism theory which emphasizes the importance of social interaction for learning [10]. Past studies focused on the anticipated promise as well as the threats of AI-powered applications in language learning. Such publications suggest emphasizing student motivation, and pedagogical and technological competence, as critical success factors in the deployment of AI-based tools [11].

AI has been used as an assistant in writing tools and recent studies have witnessed its usefulness in promoting academic writing skills and motivation among learners of English as a Foreign Language. These educational innovations indicate that the implementation of AI-based tools in EFL writing classrooms has the potential to accentuate not only the level of mastery of students in terms of their written expression but also the students' love and desire to write [10], [11], [12].

At Universitas Negeri Makassar, students of the English Education program have started to utilize AI in their academic activities including but not limited to writing tasks, grammar tools, and even pronunciation exercises. This phenomenon makes it possible to study their perceptions of AI use regarding learning [11], [13], [14]. Do the students consider AI to be a tool that helps them in the learning process or do they think that it is a hindrance to their academic goals?

In seeking this problem, the present study sets out to investigate English Education students' perceptions of the use of AI in their discipline at Universitas Negeri Makassar. The present study seeks to examine students' perceptions of AI tools application in language acquisition and education in the field of English language. This study examines their perceptions by trying to understand the main issues affecting their opinions and how they weigh the AI incremental opportunities and challenges [12], [15]. In an education context, the outcomes of this research are expected to help stimulate educators, technology designers, and institutional administrators to facilitate the integration of AI in the language learning process [3], [11], [12], [15], [16].

The particular concerns of the research, namely that of English Education students in Indonesia, place this study within the literature on educational technology in its broadening scope [11]. In addition, it is in line with the worldwide trend towards using AI to enhance the educational systems of the countries while taking care of the student voices [3]. This study emphasizes the integration of teaching, learning, and the use of AI tools within the EFL context, hence addressing the interaction between technology and pedagogy in the current and future higher education landscape and arguing for a broader and more pedagogically neutral approach to technology integration in higher education [3].

The particular concerns of the research, namely that of English Education students in Indonesia, place this study within the literature on educational technology in its broadening scope [11]. In addition, it is in line with the worldwide trend towards using AI to enhance educational systems while considering student voices [3]. The novelty of this research lies in its focus on exploring English Education students' attitudes toward AI tools in an Indonesian higher education context, which remains underexplored despite the growing adoption of such tools globally. By investigating the students' perceptions and their weighing of AI's opportunities and challenges, this study provides unique insights into the interplay of technology, pedagogy, and cultural context in shaping EFL learning experiences. This perspective contributes to the broader discourse on AI integration in education and offers specific recommendations to educators, technology developers, and institutional leaders for optimizing AI-assisted language learning in Indonesia and beyond.

II. Method

This paper follows a qualitative case study design to explore students' perceptions of the use of Artificial Intelligence tools during English language learning [17], which was held at the Universitas Negeri Makassar and was centered on undergraduate students specializing in English Education. The subjects had experience employing AI tools during the learning process.

Three sources were used for data collection: semi-structured interviews and an online questionnaire. The purpose of the interviews was to get deep insight into students' attitudes, beliefs, and experiences with the use of AI tools when engaging in academic-related activities like writing, speaking, and correcting grammar. The online questionnaires that had both closed and open-ended questions were used to obtain demographic data, measure attitudes about AI tools, or both. The participants were selected from a large pool with the aid of purposive sampling. This was done to ensure the participants presented a wide range of academic performance and technological skills.

The six phases of thematic analysis proposed by Braun & Clarke (2013) were used to analyze the qualitative data. It involved familiarization of data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report. The interviews were transcribed and coded systematically to ensure precision and depth in identifying recurring themes and meaningful patterns. To complement these findings, the questionnaires provided a broader perspective on students' attitudes toward AI tools. The questionnaire responses were analyzed using descriptive statistical methods, including measures of central tendency and variability to summarize the overall trends in students' perceptions. Additionally, frequency distributions were used to highlight patterns in agreement or disagreement with key survey items. The combination of thematic analysis for qualitative data and descriptive statistical analysis for quantitative data enabled a comprehensive understanding of the student's attitudes. The questionnaires complemented the qualitative findings with descriptive analysis while providing a wider view of the students' attitudes [10], [19]

There were no violations against ethical principles, as informed consent was acquired from the authors, and anonymity and confidentiality were guaranteed during the study. The limitations that may exist in bias were mitigated through the research design and collection of the data. The data analysis is also devoid of any bias.

This research ascertains and expands the existing research that deals with the use of AI in English language learning in regards to students' understanding, experience, and use of it [3], [19]. The qualitative method of case study used in this research provides rich information to aid in addressing the concerns emerging from the use of AI tools in language pedagogy development and their implementation [20].

III. Results and Discussion

The findings of this study revealed diverse attitudes among English Education students at Universitas Negeri Makassar toward the use of Artificial Intelligence (AI) tools in their language learning processes. Three major themes emerged from the analysis: perceived benefits of AI tools, challenges and concerns, and the influence of prior technological familiarity on attitudes.

A. Perceived Benefit of AI Tools

The theme of Perceived Benefits of AI Tools was derived from participants' responses highlighting the practical advantages and positive impacts of AI tools on their English language learning. This section presents key insights supported by direct quotes and descriptive statistics from the collected data.

No.	Sub-theme	Description	Supporting Excerpts
1	Immediate and Personalized Feedback	AI tools provide instant feedback, helping students identify and correct errors, particularly in writing tasks.	"Grammarly helps me identify mistakes that I didn't even notice. It not only corrects my grammar but also suggests better ways to express my ideas."
2	Enhanced Writing Skills	Tools like ChatGPT assist in expanding vocabulary, improving sentence coherence, and offering paraphrasing examples."When I struggle to find the right words or connect my ideas, ChatGPT gives me examples that inspire me to write better."	
3	Accessibility and Flexibility	Students appreciate the 24/7 availability of AI tools, enabling them to learn independently and receive feedback anytime.	"AI tools are available anytime. I can work on my tasks at midnight and still get feedback, which is impossible with traditional methods."
4	Support in Pronunciation and Listening	Applications like text-to-speech and pronunciation trainers help improve speaking and listening skills through repeated practice.	"I use a pronunciation app to check how I sound when practicing English. It helps me compare my accent with native speakers and improve my intonation."

Table 1. The theme of perceived benefits of AI tools.

According to the student teachers of English, the use of AI tools in English language instruction has several advantages. One of the benefits of these tools is that they allow for instantaneous and individual feedback, especially on writing. Grammarly, for example, has been credited with helping students polish their language skills, by detecting mistakes in grammar and offering suggestions on how the language should be worded. The authors note that such tools are in line with established literature which stresses the significance of real-time feedback in the development of accuracy and fluency during language learning [10]. Also, one of their major advantages is the automation of various speech tasks which facilitates instant recognition of multimodal materials. Text correction is one of the most elementary tasks while simple sentence editing is deep automatic translation without mnemonics.

Besides the above mentioned, writing skills are also significantly improved. It is remarkable that such tools as ChatGPT were seen by the participants as extending vocabulary, enhancing sentence connection, and serving as examples of how to tautologize and write more effective academic texts. These tools encouraged upper-tier writing skills of being clear and precise. But this benefit has to be countered against the challenge of being too dependent on the use of AI which stifles the cultivation of critical reasoning and problem-solving skills [10], [19], [21].

Another key area of advantage relates to the availability of AI tools and their flexibility. There was no time limit on when the tools were available, which meant that the students could study by themselves and get assistance at any time they wanted, thus helping the students who had different hours and preferences. This accessibility not only accommodated diverse learning schedules but also supported students in managing their workloads more effectively. Additionally, the flexibility of AI tools allowed learners to revisit content or feedback multiple times, reinforcing their understanding at their own pace. Such features are particularly beneficial for fostering autonomous learning, which is essential for developing self-directed and lifelong learning skills.

This level of flexibility is even more advantageous in a non-synchronous learning setting where the students being served have various types of needs and time limitations. Apart from assisting in writing activities, some AI-oriented programs such as text-to-speech and pronunciation trainers were also recognized for enhancing the speaking and listening components. These devices facilitated repetitive practice as well as on-the-spot correction of pronunciation, allowing nearnative performance in speaking by practicing along with competent users.

The result of this research shows how AI tools have the potential to transform the learning process of English language learners by making it tailored, efficient, and highly flexible [22], [23],

[24]. The following figure shows quantitative data on the perceived benefit of AI tools theme. These data reinforce the qualitative findings, demonstrating the widespread recognition of the benefits AI tools bring to language learning. However, participants emphasized that the tools were most effective when used as a complement to traditional learning methods, not as a replacement.



Figure 1. The students' perception of AI tools in language learning

Grammarly and ChatGPT are just two examples of AI-driven technologies that have completely altered the space for pupils attempting to learn the English language. The figure provided indicates what students have benefitted from substantially in three key areas with the aid of technology - learning efficiency, growth of writing skills, and academic confidence. These tools provide instant, personalized feedback, enabling students to identify and correct errors in real time, which accelerates the learning process. Furthermore, by offering suggestions and explanations, they empower students to understand the rules and nuances of the language better. This not only improves their proficiency but also fosters a sense of independence and self-assurance in their academic endeavours.

According to Song & Song (2023), the most significant outcome with 89% of students agreeing, is the accentuation of learning tools aided by AI. These tools have rendered support to students by giving them instant action-oriented feedback, thus optimizing the time wasted in combing through the language and correcting errors. Dong (2023) and Song & Song (2023) add to this by implying that as the tools help students manage their language better, they end up being able to get further optimization as their productivity increases.

In this regard, Carobene et al. (2024), Dong (2023), and Ju (2023), indicate that 82% of participants went on to improve their writing skills, which further supports their claim that AI tools improve their vocabulary, sentences, and idea paraphrasing. All these tools have been greatly useful in advancing higher-order writing skills and ensuring the students were able to construct fine academic texts.

Finally, 75 % of students noted a higher self-perception toward accomplishing academic problems because of the incorporation of AI [5], [27]. This self-belief is probably due to the tools being able to give areas for improvement suggestions while also correcting the linguistic limits of a particular user focus, namely grammar and vocabulary. This made students more confident in their capacity to complete classroom assignments and contribute to class discussions.

This study proved the possibilities of using AI-based tools, including, for instance, automatic assessment tools, to reshape the process of teaching and learning academic English writing. These tools are capable of advancing learning opportunities, encouraging learners, and saving time in the

writing process [27], [28], [29]. Concerning the expanding trends of students' access to AIpowered pedagogy, present and future teachers are obliged to assess the accuracy and effectiveness of traditional academic writing teaching and learning methods against those offered by AI technologies at the time and approaches shortly.

B. Challenges and Concerns in AI Tools

While the benefits of AI tools in English language learning are significant, the findings also reveal several challenges and concerns that students face. These challenges can impact their ability to fully utilize AI tools and highlight areas where additional support is needed.

No.	Sub-themes	Excerpts
1	Over-reliance on AI Tools	"Sometimes, I feel like I rely too much on Grammarly for grammar and sentence correction. It makes me wonder if I'm really learning or just fixing my mistakes temporarily."
2	Limited Understanding of Tool Functions	"I only use basic features in AI tools because I don't know how to utilize the advanced ones. It feels like I'm missing out on their full potential."
3	Concerns about Academic Integrity	"AI can write essays or answer questions, but I'm worried that it might lead to plagiarism or make me dependent on the technology instead of developing my own writing skills."
4	Difficulty in Adapting to AI Usage	"At first, I found it challenging to incorporate AI tools into my routine. It took me some time to understand how they work and how they could help me with my studies."
5	Accuracy of AI-generated Responses	"I've noticed that ChatGPT sometimes gives responses that are too general or even incorrect. This makes it hard to trust the tool completely, especially for assignments that require precision and detailed explanations."

Table 2. The theme of challenges and concerns in AI tools.

The incorporation of AI tools in academic settings has brought new benefits but also fresh challenges especially to the students. Students, in as much as they favor the use of these tools, have, however, raised so many issues that revolve around their use. One of the strong concerns raised by students is the dependence on AI tools since it might restrict them from developing any critical or problem-solving skills [30]. Students, however, have expressed reservations about the credibility of AI's responses, particularly in tools like ChatGPT which sometimes provides overly generalized and misleading information. Grieve et al., 2021 Furthermore, there have been concerns regarding academic honesty and students writing essays and determining if using AI to write them is against the code of ethics [30], [31], [32]. It is these challenges that make the development of AI skills together with upholding academic integrity drastically complex. The heavy dependence on AI tools such as proper grammar and sentence structuring is a more infuriating factor because it diminishes creativity.

According to this paper, students have a wrong perception while using scribe correction tools such as Grammarly as they tend to think it helps them learn the language through embedding. In a sense, tools like Grammarly would encourage academics to ghostwrite non-native speakers. Grammar tools can impact student' self-editing skills by impairing their self-editing development muscle. In turn, not effectively learning such vocabulary can result in an over-dependence on these tools [33], [34], [35].

In places where English isn't spoken natively, the teachers should clarify to the students AI tools should be used in conjunction with writing training and should not be relied on entirely. Incorporating both language-enhancing sessions and language-editing practice sessions would help with the reliance issue on AI tools. All such measures would foster and enhance a student's engagement in the mechanics of language and on the wider language editing sidewalk [36], [37].

Moreover, even for idea generation and writing detailed explanations for complex ideas, students can turn to AI tools, however, students still only turn to basic features of such tools, which is highly inefficient. Turning to broader use of these tools would make students turn to more extensive and advanced use of these tools, and strengthen their interaction with AI tool features [38], [39]. In all the above-mentioned situations, comprehensive guidance and tutoring over a tool would encourage an efficient utilization of said tool.

Finally, the accuracy of AI-generated responses is another concern. Some students have noticed that AI tools like ChatGPT occasionally provide responses that are too general or even incorrect. This undermines their trust in the tools, especially when assignments require precision and detailed explanations. This issue highlights the importance of teaching students how to critically evaluate AI-generated content. AI should be seen as a starting point or aid in the research process, not as a final authority. Educators can help students develop the necessary skills to crosscheck information and evaluate responses from AI tools carefully [40], [41].

In conclusion, while AI tools have great potential to support learning, they also present challenges related to dependency, academic integrity, and adaptation. These challenges underscore the need for a more thoughtful approach to integrating technology into education. To address these concerns, educators can provide structured guidance on how to use AI tools effectively, teach students about academic integrity, and encourage critical thinking. By doing so, we can ensure that AI tools enhance students' learning experiences without compromising their development or the integrity of their work [42], [43].





Figure 1. The student's perception of challenges and concerns in AI tools in language learning

The growing trend of using software models based on artificial intelligence integration into the teaching process raises both new opportunities and impressive problems in the case of English language learning as a foreign language or as a second language [11], [37], [44]. A study conducted regarding student views on the application of AI-based tools aimed at teaching English had some significant concerns that need more care in them.

Of concern, the most common one, as stated earlier, was Understanding the functions and scope of work of these tools (AI) which was high among 74% of the participants [27], [45], [46]. The evidence gathered suggests that this unfamiliarity often is the reason which makes the students find it difficult to properly exert the resources at hand for them to make the more desired merits of the AI-enhanced language learning programs. One way of cutting this knowledge gap is by targeting training for such students and equipping them with enough knowledge and directions on how best to utilize the AI interfaces[33], [47], [48], [49]. Such students would therefore far better in terms of engagement as well as proficiency.

One more issue of varying emphasis was the fear that 68% of students had of becoming too comfortable with AI and relying on it to perform their schoolwork. There is a realistic fear that if learners rely heavily on AI for content or language assistance, they will not develop the requisite language skills and critical thinking needed to solve problems by themselves [27], [45]. In addition, 59 percent of the participants were worried about the ethical considerations in education, as a result of this there exists the need for rules and regulations together with mechanisms that prevent and protect the use of AI morally in education [30], [49], [50], [51].

Popular DALL-E artwork has once again stirred controversy due to claims that it is AIgenerated and stems from the MLP film, which makes a bad name for BRP. Such tools are claimed to enhance creativity and productivity on the users' side. AI is simply a tool that expands the creative potential of humanity, so it should be treated with cautious optimism [24], [52], [53]. When combined with other technologies, AI generates interesting artistic ideas that a single person would not be able to conceive. I see a big future with AI applications and tools in creative industries.

As many authors note, overcoming the ethical boundaries and principles of authorship in the AI world is not difficult. There are many debates on the ECMI and TME IP in the AI art world, many simplify the use of AI in different ways [54]. However, I stick to the stance that most people do not comprehend or are unwilling to comprehend how AI impacts the construction of art. Because nobody looks at art from this perspective, the constructivist view is underappreciated.

IV. Conclusion

This study explored English Education students' attitudes toward using AI tools in language learning at Universitas Negeri Makassar. The findings revealed that AI tools, such as Grammarly and ChatGPT, offered significant benefits, including personalized feedback, enhanced writing skills, and increased accessibility. However, challenges such as over-reliance on AI, limited understanding of its full potential, concerns about academic integrity, and accuracy issues were also noted. The implications of this study suggest that while AI tools can greatly enhance language learning, their integration must be balanced to avoid dependency and preserve critical thinking skills. Educators should guide students in using AI tools responsibly, emphasize academic integrity, and encourage independent learning. For future research, it is recommended to explore the long-term impact of AI tool usage on language proficiency, investigate strategies for overcoming challenges in AI adaptation, and examine how AI can be effectively integrated into different learning environments.

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