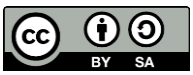
IDEAS

Journal on Language Teaching and Learning, Linguistics and Literature

ISSN 2338-4778 (Print)
ISSN 2548-4192 (Online)

Volume 13, Number 2, December 2025
pp. 8186 - 8198



Issued by English study program of IAIN Palopo

Politeknik Negeri Ujung Pandang Students' Perception on the Use of AI in Learning English

Shanty Halim[1], Nurul Hidjrah Hairuddin[2]
[1,2]Politeknik Negeri Ujung Pandang
Corresponding E-Mail: shantynurul@poliupg.ac.id

Received: 2025-11-02 Accepted: 2025-11-31
DOI: 10.24256/ideas. v13i2.9202

Abstract

This study investigates students' perceptions of the use of Artificial Intelligence (AI) applications in learning English at Politeknik Negeri Ujung Pandang. The rapid integration of AI-based tools—such as grammar checkers, translation engines, and conversational chatbots—has transformed language learning practices, yet students' attitudes and levels of acceptance toward these technologies remain varied. Using a descriptive qualitative approach, data were collected through questionnaires and semi-structured interviews involving diploma-level students from several study programs. The findings indicate that most participants perceive AI as a supportive learning aid that enhances vocabulary acquisition, improves writing accuracy, and increases learning motivation through instant feedback and flexible access to language resources. However, concerns were also identified, including overdependence on automated suggestions, reduced critical thinking in writing tasks, and uncertainty regarding the accuracy and authenticity of AI-generated content. Students emphasized the need for clear guidance from lecturers on ethical and pedagogical use of AI in academic contexts. Overall, the study concludes that AI has significant potential to complement English learning when positioned as an assistive tool rather than a substitute for human instruction. The results highlight the importance of digital literacy, critical awareness, and pedagogically guided integration of AI in higher education language learning environments. Recommendations are offered for educators and curriculum designers to develop balanced strategies for technology-supported language instruction.

Keywords: *students' perception, Artificial Intelligence, English learning, higher education, Politeknik Negeri Ujung Pandang*

ISSN 2338-4778 (Print)
ISSN 2548-4192 (Online)

Introduction

The rapid advancement of digital technology has significantly transformed the landscape of higher education, particularly in the field of language learning. Artificial Intelligence (AI) has emerged as one of the most influential technological innovations in recent years, offering new opportunities for personalization, automation, and learner support. As stated by Luckin et al. (2016), *"AI has the potential to enhance learning processes by providing adaptive feedback and individualized learning pathways."* In English as a Foreign Language (EFL) context, AI-based tools such as grammar checkers, translation systems, and conversational chatbots are increasingly used to support students' writing accuracy, vocabulary development, and comprehension skills (Zou & Xie, 2019).

The integration of AI into language learning is often associated with improved learning motivation and efficiency, as students benefit from instant feedback and flexible access to learning resources. According to Dwivedi et al. (2023), *"AI-driven applications can create interactive and student-centered learning environments that enhance learners' engagement and autonomy."* However, despite its potential, the use of AI in academic settings has also raised concerns related to authenticity, dependency, and ethical learning behavior. Some scholars argue that excessive reliance on AI tools may reduce students' critical thinking and creative language production, particularly in writing tasks (Kohnke, Jarvis, & Ting, 2023).

In Indonesia, the adoption of AI in education is still developing and remains a subject of pedagogical and ethical discussion among educators and policymakers. Vocational higher education institutions such as Politeknik Negeri Ujung Pandang (PNUP) are expected to equip students with technological literacy and professional communication skills, including English proficiency for global and workplace contexts. Many PNUP students have begun to incorporate AI applications in their learning activities, especially for translation assistance, paraphrasing, vocabulary enhancement, and idea generation in academic tasks. As Sabiri (2020) notes, *"students' attitudes and perceptions toward educational technologies play a crucial role in determining the effectiveness of their learning experiences."*

Understanding students' perceptions is therefore essential, because perceptions influence motivation, acceptance, and patterns of technology use in learning. Positive perceptions may encourage meaningful and ethical use of AI as a learning aid, whereas negative or uncritical attitudes may lead to dependence, plagiarism risk, or superficial learning outcomes. Lecturers also require empirical insight into how students perceive AI in order to design appropriate learning guidelines and integrate AI pedagogically rather than merely as a shortcut for task completion.

Artificial Intelligence (AI) has become an integral part of contemporary educational innovation, particularly through adaptive systems, intelligent tutoring, and automated assessment. Large-scale reviews note that AI is used to "provide personalized, data-driven support for learners and teachers" in various disciplines,

including language education. AI can track learning progress, recommend materials, and generate feedback in real time, making learning more efficient and accessible.

In the field of English as a Foreign Language (EFL), AI is commonly embedded in tools such as grammar checkers, machine translation, voice assistants, and AI-powered chatbots. Studies show that these tools can enhance writing accuracy, vocabulary acquisition, and speaking fluency by offering immediate corrective feedback and practice opportunities beyond classroom time. However, researchers also warn that overreliance on AI may lead to shallow processing and reduced independent problem-solving, especially when students use AI as a shortcut rather than as a scaffold for learning.

Students' perceptions are central to technology adoption in learning. Perception is shaped by factors such as perceived usefulness, ease of use, prior experience, and the learning context. Frameworks such as the Technology Acceptance Model (TAM) highlight that *perceived usefulness* and *perceived ease of use* strongly influence students' intention to use educational technologies, including AI tools. Recent AI-related studies frequently adopt or adapt TAM and related models (e.g., UTAUT) to measure attitudes, behavioral intentions, and ethical awareness in AI use.

Systematic reviews of AI in education emphasize that students generally view AI as helpful for "personalizing learning and reducing routine workload," but they also report concerns about fairness, bias, and academic integrity. In language learning, perception is often multidimensional: students may perceive AI as convenient and motivating while simultaneously worrying about plagiarism, decreased creativity, or dependency on automated suggestions.

A growing body of empirical research has examined learners' perceptions of AI-based tools for specific English skills. Several studies report predominantly positive perceptions of AI writing assistants such as Grammarly, QuillBot, and ChatGPT. For example, a qualitative study on EFL students' views of AI writing tools found that students appreciated these tools for improving grammar accuracy, organizing ideas, and increasing confidence in academic writing. Another investigation of EFL students using ChatGPT as a supplementary writing tool showed that most participants perceived ChatGPT as "helpful for generating ideas and correcting grammatical errors," though some remained cautious about content accuracy and ethical boundaries.

Studies focusing on AI grammar checkers likewise report that students value instant, detailed feedback on their errors and enjoy the autonomy to revise their work independently. Yasa (2025), for instance, found that EFL students using AI grammar checkers perceived them as efficient tools for learning grammar patterns and reducing anxiety in writing tasks, although a few participants expressed fear of becoming overly dependent on the technology.

AI has also been integrated into tools for speaking and pronunciation practice, such as Google Voice Assistant and other speech-recognition applications. A study on the use of Google Voice Assistant in EFL speaking classes showed that

ISSN 2338-4778 (Print)
ISSN 2548-4192 (Online)

students responded positively, viewing AI as a "useful partner" for practicing pronunciation, repetition, and fluency outside class hours. In an Indonesian context, Fanania (2025) found that AI-based pronunciation applications enhanced students' motivation and awareness of phonetic accuracy, although technical issues and inconsistent feedback sometimes frustrated learners.

AI-based adaptive reading platforms and vocabulary tools can adjust text difficulty and provide just-in-time vocabulary support. A study on AI-based adaptive reading systems for English education students reported that learners perceived AI as supportive in improving comprehension and providing individualized reading paths. Students also mentioned that integrated dictionaries and glossaries in AI systems helped them expand vocabulary more efficiently.

Beyond specific skills, some studies examine students' general use of AI in English learning. A systematic review of AI writing tools involving students at different educational levels showed that both undergraduate and postgraduate learners widely use AI for drafting, paraphrasing, and checking language accuracy; postgraduates tend to use more varied AI tools and display more critical awareness of their limitations.

Another line of research explores students' general attitudes toward AI in English classrooms. Arifatin's study on AI in English language learning found that most students recognized AI's benefits for efficiency and access to resources, but they also voiced concerns about academic dishonesty and a potential decline in original thinking.

In Indonesia and neighboring contexts, AI adoption in English language learning is increasing, and several recent studies specifically investigate Indonesian students' perceptions. Research at MTsN 4 North Aceh examined students' perceptions of AI as English learning tools and reported generally positive attitudes toward AI's role in motivation and skill development (listening, speaking, reading, writing). Another Indonesian study on students' perceptions of AI tools in English learning showed that learners viewed AI as beneficial for time-saving, efficient learning experiences, and improved English performance, yet they simultaneously highlighted the need for critical evaluation of AI-generated information.

More recently, Mentari (2025) investigated EFL students' perceptions of AI for learning English and found that students hold both positive and negative views: they value AI, especially ChatGPT, for its ability to answer questions quickly and clearly, but some worry that continuous reliance may weaken their own language-processing skills and creativity.

At the same time, broader Indonesian studies on AI in higher education indicate that university students are increasingly exposed to AI in various courses and view AI as part of their everyday learning ecosystem. While these works document enthusiasm toward AI, they also underline a lack of clear institutional guidelines regarding ethical use, plagiarism, and responsible AI literacy.

Although many studies have investigated EFL students' perceptions of AI tools—ranging from grammar checkers and writing assistants to pronunciation and adaptive reading platforms—most existing research focuses on general university contexts, English education departments, or secondary school learners. There is still limited empirical evidence concerning vocational higher education students, whose learning goals, workloads, and technology use patterns differ from those in traditional academic programs.

In particular, research on students' perceptions of AI in **Politeknik** (polytechnic) settings remains scarce, even though these institutions emphasize practical skills, industry alignment, and strong English proficiency for employability. Existing Indonesian studies seldom address how students in technical and vocational programs perceive AI for English learning, how they balance its benefits (e.g., efficiency, accuracy, confidence) with its risks (e.g., dependence, academic misconduct), and what kind of institutional support they expect.

Therefore, a study on **Politeknik Negeri Ujung Pandang (PNUP) students' perceptions of the use of AI in learning English** is timely and relevant. It responds to the need to understand AI adoption in vocational higher education and provides context-specific insights that can inform curriculum design, classroom practices, and institutional policies on ethical and effective AI use. By situating PNUP students' experiences within the broader literature on AI in education and EFL learning, this research aims to fill a significant gap and contribute to ongoing discussions on how AI can be integrated responsibly in Indonesian higher education.

In addition, understanding students' perceptions is therefore essential, because perceptions influence motivation, acceptance, and patterns of technology use in learning. Positive perceptions may encourage meaningful and ethical use of AI as a learning aid, whereas negative or uncritical attitudes may lead to dependence, plagiarism risk, or superficial learning outcomes. Lecturers also require empirical insight into how students perceive AI in order to design appropriate learning guidelines and integrate AI pedagogically rather than merely as a shortcut for task completion.

Based on these considerations, this study aims to examine **Politeknik Negeri Ujung Pandang students' perceptions of the use of AI in learning English**. Specifically, it explores students perceived benefits, challenges, and levels of acceptance toward AI-based learning tools. The findings are expected to contribute to the development of responsible AI integration in higher education and provide recommendations for educators, curriculum developers, and institutions in supporting effective and ethical technology-assisted English learning.

Method

This study employed a descriptive qualitative design to explore students' perceptions of the use of Artificial Intelligence (AI) in learning English at Politeknik Negeri Ujung Pandang (PNUP). The qualitative approach was selected because it enables researchers to obtain rich, in-depth descriptions of learners' subjective

ISSN 2338-4778 (Print)
ISSN 2548-4192 (Online)

experiences, attitudes, and meanings related to AI-assisted learning. The study focused on understanding how students perceive the benefits, challenges, and ethical considerations of AI use within the context of English as a Foreign Language (EFL) learning.

The participants of this study were diploma-level students enrolled in several study programs at Politeknik Negeri Ujung Pandang who had experience using AI tools in their English learning activities. A purposive sampling technique was used to ensure that participants were relevant to the research focus, particularly those who had used AI applications such as grammar checkers, translation tools, writing assistants, or chatbots. A total of **30 students** participated in the questionnaire phase, and **10 students** were selected for follow-up interviews based on their varied levels of AI usage and learning backgrounds. Participation was voluntary, and students were informed that their responses would be treated confidentially and used only for academic research purposes.

Two instruments were used in this study: (a) **Questionnaire**. A semi-structured questionnaire was administered to obtain an overview of students' perceptions of AI use in English learning. The questionnaire consisted of both close-ended and open-ended items covering: types of AI tools used, frequency and purpose of use, perceived benefits (motivation, accuracy, efficiency), perceived challenges (dependence, ethics, accuracy issues), attitudes toward AI in academic learning. Close-ended items were presented using a Likert-scale format, while open-ended questions allowed students to express opinions freely. (b) **Semi-Structured Interview.** Follow-up interviews were conducted to deepen the findings from the questionnaire. The interview guide explored themes such as: students' experiences using AI in specific learning tasks, expectations toward AI-assisted learning, concerns regarding originality, critical thinking, and academic integrity, perceptions of lecturer guidance and institutional policy. Interviews were conducted in Indonesian to ensure clarity and comfort, and each session lasted approximately 20–30 minutes.

Data collection was conducted in three stages: (a) The researcher distributed the online questionnaire to PNUP students through class groups and academic networks. (b) Questionnaire responses were reviewed, and participants who provided diverse and insightful responses were invited for interviews. (c) Interviews were conducted either face-to-face or via online video calls, with participants' consent for audio recording. All collected data were anonymized and coded using participant identifiers to protect privacy.

Data from close-ended questionnaire items were summarized descriptively to identify trends in students' perceptions. The open-ended questionnaire responses and interview transcripts were analyzed using **thematic analysis**. The analysis followed these steps: (a) Reading and familiarizing with the data, (b) Coding meaningful statements related to perceptions of AI use, (c) Grouping codes into emerging themes, (d) Interpreting patterns and relationships across themes, (e)

Relating findings to the literature and research objectives. The final themes represented students perceived benefits, challenges, learning attitudes, and ethical considerations in using AI for English learning.

Findings

The findings of this study are organized into four major themes derived from the analysis of questionnaire responses and interview data: (1) patterns of AI usage in English learning, (2) perceived benefits of AI tools, (3) perceived challenges and concerns, and (4) students' expectations regarding AI use in academic contexts.

1. Patterns of AI Usage in English Learning

Most participants reported that they regularly used AI-based tools to support various aspects of English learning. The most frequently used applications included grammar checkers, online translation tools, paraphrasing tools, and AI chatbots. Students indicated that AI was primarily used for: (a) checking grammar and sentence structure, (b) translating unknown vocabulary or sentences, (c) generating ideas for writing tasks, and (d) clarifying difficult concepts.

Several students stated that AI tools were particularly useful when completing writing assignments or preparing presentations. One student explained:

"I usually use AI to check my grammar before submitting assignments because it helps me see where my mistakes are."

The majority of students described AI as a **learning companion** rather than a replacement for classroom instruction, noting that they tended to use AI after attending lectures or doing independent study.

2. Perceived Benefits of AI in Learning English

Participants expressed generally positive perceptions toward the use of AI in learning English. The perceived benefits were identified across three main dimensions:

a. Improvement in Language Accuracy

Students believed that AI helped them produce more accurate and well-structured English sentences. Grammar checkers and paraphrasing tools were perceived as useful for reducing writing errors and increasing confidence in academic writing.

"Before using AI, I was not sure about my grammar. Now I can see corrections and learn from them."

ISSN 2338-4778 (Print)
ISSN 2548-4192 (Online)

b. Efficiency and Learning Support

Many students emphasized that AI made learning more efficient because it provided instant feedback and quick explanations without waiting for lecturer assistance. AI was also perceived as a helpful tool for independent learning outside class hours.

Students stated that AI helped them:

- save time,
- access explanations easily, and
- study autonomously.

c. Increased Motivation and Confidence

Some students reported that the availability of AI tools increased their motivation to engage in English learning activities.

They expressed that AI:

1. reduced fear of making mistakes,
2. encouraged them to write more frequently, and
3. provided reassurance when working on assignments.

Overall, AI was viewed as a **supportive and motivating learning aid** that complemented classroom learning.

3. Perceived Challenges and Concerns

Despite the positive perceptions, students also expressed several concerns regarding AI use in English learning.

a. Risk of Overdependence

A number of students admitted that frequent reliance on AI sometimes reduced their initiative to think independently.

One participant stated:

"Sometimes I feel I depend too much on AI, especially when doing writing tasks."

Students worried that excessive use might hinder their ability to construct sentences on their own.

b. Accuracy and Reliability Issues

Some students expressed doubts about the accuracy of AI-generated answers, particularly in translation or complex explanations.

They noted that:

1. AI sometimes provided unclear or inappropriate word choices,
2. certain explanations lacked context, and
3. not all outputs could be accepted without revision.

This led students to emphasize the need to recheck AI feedback.

c. Ethical and Academic Integrity Concerns

A portion of participants acknowledged potential misuse of AI, such as copying AI-generated content without modification.

They highlighted concerns related to:

- plagiarism,
- lack of originality,
- and reduced critical thinking.

Several students believed that AI should be used as **guidance rather than a substitute** for personal effort.

4. Students' Expectations for AI Use in Academic Settings

Participants expressed the need for clearer guidance from lecturers and institutions regarding appropriate AI usage in learning activities.

Their expectations included:

1. explicit instructions on ethical and responsible AI use,
2. lecturer supervision in AI-assisted tasks,
3. opportunities to learn how to use AI critically,
4. and training to develop digital literacy skills.

Students emphasized that AI should be integrated pedagogically in a way that supports — not replaces — learning processes.

One student remarked:

"AI is helpful, but we still need guidance on how to use it properly for learning."

ISSN 2338-4778 (Print)
ISSN 2548-4192 (Online)

Summary of Findings

Overall, the findings indicate that:

1) Students at Politeknik Negeri Ujung Pandang generally perceive AI as a **beneficial and supportive learning tool** in English learning.
2) AI contributes to improvements in accuracy, motivation, and learning efficiency.
3) However, students are also aware of challenges such as dependence, accuracy limitations, and ethical risks.
4) They express the need for institutional and pedagogical guidance to ensure responsible and meaningful AI integration.

These findings highlight the importance of balancing technological support with critical awareness and instructional regulation in AI-assisted English learning.

Discussion

The findings of this study indicate that students at Politeknik Negeri Ujung Pandang perceive Artificial Intelligence (AI) as a supportive learning aid that enhances their English learning experience, particularly in writing, grammar checking, translation support, and idea generation. Students tend to position AI as a *learning companion* rather than a substitute for teacher instruction, suggesting that AI is integrated as a complementary resource rather than a dominant learning tool. This pattern is consistent with previous studies showing that AI tools function as scaffolding technologies that extend learning opportunities beyond classroom boundaries (Kohnke, Jarvis, & Ting, 2023; Zou & Xie, 2019).

One of the major findings of this study is students' perception that AI contributes to **improvement in language accuracy and writing quality**. Students reported that grammar-checking and paraphrasing tools help them identify linguistic errors and refine sentence structure, thereby increasing confidence in academic writing tasks. Similar results have been reported in earlier studies, which found that AI-based writing assistants provide meaningful corrective feedback that can promote linguistic awareness and language development among EFL learners (Dwivedi et al., 2023; Yasa, 2025). Furthermore, the instant feedback generated by AI enables students to revise their work autonomously, supporting the notion that AI encourages active engagement in self-regulated learning (Luckin et al., 2016).

Students also perceived AI as beneficial for **learning efficiency, autonomy, and motivation**. AI tools were valued for their accessibility, speed, and flexibility, particularly when students worked independently outside classroom time. This echoes prior findings that AI-driven applications enhance learner motivation and autonomy by providing personalized and adaptive learning support (Dwivedi et al., 2023; Sabiri, 2020). Within the vocational higher-education context, such autonomy is particularly relevant, as students are expected to develop both technological

literacy and workplace communication competence.

However, alongside positive attitudes, students also expressed several **critical concerns**. A prominent concern relates to the potential risk of **overdependence on AI**, where frequent reliance on automated suggestions may weaken students' initiative to construct sentences independently. This concern is consistent with scholars who warn that uncritical or excessive reliance on AI may lead to reduced critical thinking and diminished originality in writing (Kohnke et al., 2023). Students' awareness of this issue suggests that they recognize the need to balance technological assistance with cognitive engagement.

Another concern raised by students regards **accuracy and reliability of AI output**. Participants reported that AI-generated responses occasionally lacked contextual appropriateness or produced lexical inaccuracies, particularly in translation tasks. Similar observations have been documented in previous research, which emphasizes that AI tools, although useful, are not infallible and must be used with critical judgment (Zou & Xie, 2019). In this study, students' practice of rechecking AI responses reflects the development of *critical digital literacy*, an essential competency in AI-mediated academic environments.

The study also revealed students' concerns about **ethical and academic integrity issues**, including plagiarism risk and reduced originality when AI-generated content is used uncritically. This aligns with emerging literature that highlights ethical dilemmas associated with AI use in academic writing and calls for awareness-based approaches to mitigate misuse (Kohnke et al., 2023; Dwivedi et al., 2023). Interestingly, although students acknowledged the possibility of misuse, they also emphasized that AI should function as guidance rather than a substitute for personal effort, indicating the presence of ethical awareness among learners.

An important contribution of this study is students' strong expectation for **institutional guidance and pedagogical regulation** regarding AI use in learning. Participants expressed the need for clearer rules, lecturer supervision, and learning opportunities that foster responsible and reflective AI use. This aligns with recommendations in the literature that stress the importance of embedding AI literacy into instructional design to ensure meaningful and ethical integration in educational contexts (Luckin et al., 2016; Sabiri, 2020).

Overall, the findings suggest that students' perceptions of AI are characterized by a **balanced and reflective stance**: AI is viewed as beneficial for enhancing accuracy, confidence, and learning efficiency, yet simultaneously associated with risks related to dependence, accuracy uncertainty, and ethical misuse. In the context of vocational higher education, these perceptions reinforce the need for a **pedagogically guided and ethically oriented integration of AI**, in which technology strengthens—rather than replaces—students' cognitive engagement and language competence.

ISSN 2338-4778 (Print)
ISSN 2548-4192 (Online)

Conclusion

This study explored Politeknik Negeri Ujung Pandang students' perceptions of the use of Artificial Intelligence (AI) in learning English by examining how they experience, evaluate, and respond to AI-based tools in their learning activities. The findings reveal that students generally hold positive perceptions toward AI, particularly in relation to its role in improving writing accuracy, providing instant feedback, supporting independent learning, and increasing learning motivation. AI is perceived not as a replacement for lecturers, but as a complementary learning aid that assists students in completing academic tasks and understanding language structures more effectively.

At the same time, the study also shows that students maintain a cautious and reflective attitude toward AI use. They recognize several potential drawbacks, including the risk of overdependence, uncertainty regarding the accuracy of AI-generated responses, and ethical concerns related to plagiarism and originality. These perceptions indicate that students are aware of both the educational value and the limitations of AI, and that meaningful learning still requires critical thinking, personal effort, and lecturer guidance.

Overall, the study concludes that AI has significant potential to support English learning in vocational higher education when it is integrated as an assistive and pedagogically guided tool. Responsible and constructive AI use depends not only on students' access to technology, but also on their digital literacy, ethical awareness, and ability to evaluate AI-generated information critically. Therefore, institutions and lecturers are encouraged to provide clear guidelines, learning support, and instructional strategies that help students use AI productively while maintaining academic integrity and independent learning skills.

References

Annishah, A. (2025). *EFL students' use of AI writing tools across educational levels*. English as Foreign Language (EFL) Students … ojs.fkip.ummetro.ac.id

Arifatin, F. W. (2023). *Students' perception on the use of AI in English language learning*. TELL-US Journal. ejournal.upgrisba.ac.id

Chen, L., Chen, P., & Lin, Z. (2020). Artificial intelligence in education: A review. *IEEE Access*, 8, 75264–75278. openresearch.amsterdam

Darmawan, K. A. (2024). Students' perceptions and effect of using Google Voice Assistant on speaking skills. *Journal of English Education Studies*. jurnal.stkipahsingaraja.ac.id

Dwivedi, Y. K., Hughes, L., Baabdullah, A. M., Ribeiro-Navarrete, S., Giannakis, M., & Wamba, S. F. (2023). Artificial intelligence (AI): Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. *International Journal of Information Management*, 71, 102642.

Fanania, R. A. (2025). Students' perception on the use of AI-based applications for pronunciation practice. *Journal of English Language Education*.

Huang, J., Saleh, S., & Liu, Y. (2021). A review on artificial intelligence in education. *Asian Journal of Interdisciplinary Research*. IDEAS/RePEc

Keumalasari, B., et al. (2024). Students' perception of artificial intelligence (AI) as English learning tools at MTsN 4 North Aceh. *International Journal of English Education and Pedagogy*. international.aripi.or.id

Kohnke, L., Jarvis, A., & Ting, K. (2023). Utilizing artificial intelligence (AI) in second language writing: Students' perceptions and challenges. *Language Learning & Technology*, 27(1), 1–20.

Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2016). *Intelligence unleashed: An argument for AI in education*. London: Pearson.

Mentari, D. (2025). *EFL students' perception towards the use of artificial intelligence in learning English*. Undergraduate thesis, UIN Palopo. repository.uinpalopo.ac.id

Ningsih, S. (2024). Indonesian students' perceptions on the use of artificial intelligence in English learning. *Proceedings of ICLC 4*. Atlantis Press

Sabiri, K. A. (2020). Students' attitudes towards the use of digital technologies in EFL learning. *International Journal of Language and Literary Studies*, 2(3), 240–256.

Sari, M. N. (2025). University students' perceptions of AI-based adaptive learning platforms for reading comprehension. *Journal of Educational Research*. iicls.org

Wang, S., et al. (2024). Artificial intelligence in education: A review. *Expert Systems with Applications*. ScienceDirect

Yasa, I. M. B. (2025). Students' use and perceptions of AI grammar checkers in English grammar learning. *Electrum: English Education Journal*, 15(1), 45–57.

Yasa, I. M. B. (2025). Students' use and perceptions of AI grammar checkers in English grammar learning. *Electrum: English Education Journal*. unkartur.ac.id

Zou, D., & Xie, H. (2019). Personalized vocabulary learning through AI-based applications: Students' experiences and perceptions. *Computer Assisted Language Learning*, 32(6), 1–26.