

Balancing Technology and Humanity in English Language Learning: Students' Perspectives

Rabi'ah¹, Ahmad Munir², Him'mawan Adi Nugroho³

^{1,2,3}Universitas Negeri Surabaya, Indonesia

Email: 24020956027@mhs.unesa.ac.id

ABSTRACT

The rapid advancement of Artificial Intelligence (AI) has significantly reshaped the landscape of English language learning. While AI tools provide efficiency, personalization, and accessibility, they also raise concerns about maintaining the human dimensions of education, such as empathy, interaction, and authentic communication. This study investigates students' perspectives on balancing technology and humanity in English language learning. Using a quantitative survey design, data were collected from undergraduate English major students in Indonesia through a structured bilingual questionnaire. The instrument encompassed dimensions of AI use and learning experience, student engagement, human connection, perceived learning effectiveness, and learning challenges. Descriptive statistical analysis was employed to explore students' perceptions of AI's role within a human-centred learning context. The findings are expected to provide insights into how students perceive the integration of AI without diminishing essential human elements in language learning. Furthermore, the results may serve as a valuable reference for educators seeking to design balanced, empathetic, and human-oriented pedagogical strategies in the digital era.

Keywords: *English language learning, artificial intelligence, human-centred learning.*

1) INTRODUCTION

The rapid advancement of Artificial Intelligence (AI) has significantly transformed the landscape of education, particularly in the field of English language learning. Over the past few years, AI-powered applications such as ChatGPT, Grammarly, and Duolingo have become increasingly integrated into students' daily learning routines. These tools offer various benefits, including instant feedback, adaptive learning pathways, and access to vast linguistic resources that were previously unavailable. The flexibility and personalization provided by AI enable learners to study at their own pace, receive individualized assistance, and engage in interactive learning experiences beyond the traditional classroom setting. In line with this statement Febrianti found that AI has great potential to improve the personalization of learning experiences in schools. With its ability to analyze student data in real-time, AI can provide learning experiences that are tailored to individual needs, learning styles, and levels of understanding. As a result, technology has made English language learning more accessible, efficient, and engaging for students across diverse educational contexts (Febrianti et al.,

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Universitas Islam Negeri Alauddin Makassar

South Sulawesi-Indonesia

2025). More detail Batubara in his research found that AI technologies, such as chatbots, mobile applications, adaptive learning platforms, and virtual tutors, have significantly enhanced learners' language skills, engagement, motivation, and confidence (Batubara, 2025).

Despite these advantages, the integration of AI in education has also raised concerns about the diminishing human aspects of learning. Language acquisition is not only a cognitive but also a social and emotional process (Allahyarova, 2025). It involves communication, empathy, cultural understanding, and interpersonal connection all of which are essential to developing true communicative competence. Excessive reliance on technology, however, may lead to a reduction in human interaction and affective engagement, which are crucial components of meaningful language learning. Teachers and students risk losing the emotional connection that fosters motivation, confidence, and collaborative learning. Consequently, educators are faced with the challenge of finding a balance between embracing technological innovations and preserving the human dimension of education.

Human-centered learning emphasizes the importance of maintaining empathy, interpersonal relationships, and student well-being in the learning process. It promotes a holistic approach that values students not only as learners but as individuals with emotions, experiences, and social identities. In the context of English language education, this perspective underscores that technology should serve as a tool to enhance learning rather than replace human interaction. AI can, for instance, complement the teacher's role by providing data-driven insights into students' progress, identifying areas for improvement, and offering additional practice. However, AI lacks the capacity to replicate the nuances of human communication, such as emotional understanding, encouragement, and cultural sensitivity, which remain central to effective teaching and learning.

Several researchers have also explored students' satisfaction with AI-based tools and their perceived usefulness in facilitating self-directed learning (Shikina, 2025). While these findings illustrate the pedagogical potential of AI, relatively few studies have examined how students perceive the balance between technological efficiency and human connection. The question of whether AI supports or disrupts the emotional and social dimensions of English language learning remains underexplored, particularly in the context of higher education in Indonesia, where digital learning environments have become increasingly prominent after the COVID-19 pandemic.

Understanding students' perspectives on this issue is crucial because they are the direct users and beneficiaries of AI-assisted learning. Their experiences and attitudes can provide valuable insights into how technology affects engagement, motivation, and the sense of belonging within the learning community. Moreover, as AI tools continue to evolve, students' perceptions may influence how educators design instructional strategies and how institutions integrate technology into their curricula. If students view AI as supportive and complementary to human interaction, it could encourage more thoughtful and balanced implementation of technology in the classroom. Conversely, if they perceive it as alienating or dehumanizing, it may signal the need for pedagogical adjustments that prioritize human-centered approaches.

Therefore, this study aims to explore students' perspectives on balancing technology and humanity in English language learning. It specifically investigates how students experience the integration of AI-based tools, their level of engagement during technology-assisted learning, and their perceptions of learning effectiveness and human connection. By examining these dimensions, the study seeks to identify the extent to which students perceive technology as enhancing or diminishing the human aspects of their learning experience. The findings are expected to contribute to a deeper understanding of how AI can be integrated into English language education in ways that maintain empathy, interpersonal connection, and the holistic development of learners. Ultimately, this research aspires to support educators in designing pedagogical approaches that balance technological innovation with the essential human values that sustain meaningful learning in the digital age.

2) METHODS

2.1 Research Design

This study employed a quantitative survey design to investigate students' perspectives on balancing technology and humanity in English language learning. The survey method was chosen because it allows for the collection of a wide range of opinions and perceptions from a large group of participants within a relatively short period. Data were collected using a structured bilingual (English–Indonesian) questionnaire developed by the researcher based on relevant literature and research objectives.

2.2 Participants

The participants of this study were undergraduate students majoring in non-English education from several universities in Madura. A total of 51 students participated voluntarily. The participants represented various academic years, ranging from the first to the third year. All participants had prior experience using AI-based tools such as ChatGPT, Grammarly, or other educational applications to support their English learning. Participation was anonymous, and informed consent was obtained from all respondents before data collection.

2.3 Research Instrument

The main instrument of this study was a questionnaire consisting of five sections:

- a. Demographic Information (age, gender, year of study, university)
- b. Experience with AI Tools (frequency and purpose of use)
- c. Learning Engagement (motivation, focus, and interaction when using AI)
- d. Human Connection (perceived empathy, communication, and relationship with teachers or peers)
- e. Perceived Learning Effectiveness (usefulness, confidence, and learning outcomes)

2.4 Data Collection Procedure

Data collection was carried out online using Google Forms to ensure accessibility and convenience for participants across different university. The survey link was distributed via WhatsApp Group platforms. Participants were informed about the purpose of the research, their right to withdraw at any time, and the confidentiality of their responses.

2.5 Data Analysis

The collected data were analyzed using descriptive statistics, including frequencies, percentages, means, and standard deviations, to summarize students' responses in each category. Open-ended responses were analyzed qualitatively using thematic analysis to identify recurring themes related to students' perceptions of the balance between technology and humanity in English language learning.

3) RESULTS AND DISCUSSION

3.1 Results

1. Frequency of AI Tool Usage

The analysis shows that the majority of students use AI tools occasionally in their English learning. Specifically, 37 students (72.5%) reported that they *sometimes* use AI tools. Meanwhile, 11 students (21.6%) reported *often* using AI tools. Only 2 students (3.9%) indicated *rare* use, and 1 student (2.0%) reported *never* using AI tools. These findings indicate that although most students are already familiar with AI tools, their usage is not yet fully intensive or consistent. The findings of this study reveal that AI tools are moderately integrated into students' English learning practices. The fact that most students only *sometimes* use AI suggests that AI functions primarily as a supplementary learning tool rather than a main instructional medium. This aligns with current views that AI in education works best as a learning assistant rather than a replacement for teachers.

2. Students' Learning Behavior When Using AI

In terms of learning behavior, students demonstrated a high level of critical awareness. A total of 44 students (86.3%) reported that they read and check the accuracy of AI-generated information before using it. This demonstrates a high level of digital literacy and metacognitive awareness. According to Furbani et al, digital-age learners must develop critical evaluation skills to navigate the abundance of digital information (Furbani et al., 2025). Similarly, Marantika emphasize that metacognitive regulation plays a crucial role in autonomous language learning (Marantika, 2021). The students' behavior in this study indicates that AI does not weaken their critical thinking; instead, it appears to encourage reflective learning practices.

Meanwhile, 6 students (11.8%) stated that they *sometimes revise and sometimes do not*, and only 1 student (2.0%) admitted that they use AI results directly without checking or revising. This result suggests that most students do not blindly depend on AI and still apply critical judgment in their learning process. The results regarding learning behavior show a very positive pattern. More than 86% of students critically evaluate AI-generated output before using it, indicating strong digital literacy and metacognitive awareness. This is an important finding because one of the major concerns in AI integration is students' tendency to accept information uncritically. Your data clearly shows that students remain active and reflective learners, not passive users of AI.

3. Perceived Effectiveness of AI in English Learning

Students reported several clear, pragmatic reasons for using AI tools in their English learning. The most commonly cited reason was to improve writing and vocabulary (reported by 82% of respondents), followed by translation and grammar correction (74%). A substantial minority used AI for speaking practice (about 41%), and other supporting reasons included quick feedback, ease of access, and help with drafting or revising written work. These figures show that students primarily use AI for task-level, corrective, and practice activities rather than for richer communicative or teacher-led functions.

The pattern of reasons suggests that students view AI first and foremost as a practical tool for efficiency and accuracy. High percentages for writing/vocabulary and grammar/translation indicate that learners are attracted to AI's capacity to provide immediate corrective feedback, lexical suggestions, and phrase-level models services that speed up revision and lower the cognitive cost of drafting. Speaking practice as a secondary use ($\approx 41\%$) suggests students also value AI for low-stakes speaking rehearsal, especially where opportunities for live conversation are limited. These motivations align with two complementary pedagogical explanations. First, from a self-regulated learning perspective, AI supports learners' autonomy: it offers on-demand practice, instant feedback, and diagnostics that learners can use to monitor and adjust their learning strategies. Mohebbi in his study stated that AI-driven tools significantly enhance language learning outcomes by promoting engagement, providing immediate feedback, and facilitating personalised learning experiences (Fanania & Priyatmojo, 2025; Mohebbi, 2025). Second, from a skills-practice viewpoint, AI efficiently targets micro-skills (vocabulary, grammar, pronunciation patterns) that respond well to repetitive, adaptive practice and automated feedback. However, because students prioritize AI for corrective and practice tasks, it reinforces the earlier finding that they still regard teachers as essential for higher-order functions (scaffolding, interpretation, communicative judgement, motivation).

Practical implications follow: to maximize benefit, instructors should integrate AI **into** scaffolded activities for example, using AI for pre-task vocabulary building and draft correction, then following up with teacher-led discussion, meaning negotiation, and performance tasks that require real-time interaction and pedagogical judgement. Institutions should also train students in **how** to interpret AI feedback (accuracy limits, bias, and appropriateness) so that AI becomes a reliable learning partner rather than a source of overreliance or misinformation.

4. Human Interaction

Out of the 51 respondents, 25 students (49.0%) reported that human-centered learning, particularly the role of teachers and direct classroom interaction, remains essential, even though AI is helpful in supporting English learning. This percentage represents the largest group among all response categories related to the perceived effectiveness of AI. In comparison, smaller proportions of students perceived AI as useful for error correction (17.6%), vocabulary acceleration (13.7%), overall language improvement (11.8%), and general learning effectiveness (7.8%). These results indicate that nearly half of the students still position human interaction as the core component of effective English learning, while AI is viewed mainly as a complementary tool. The finding that **49%** of students emphasized the essential role of human interaction highlights that the integration of AI has not displaced the pedagogical function of teachers in English learning. This result confirms that students continue to value social interaction, emotional engagement, and pedagogical guidance, which are fundamental elements in successful language acquisition. From a socio-cultural perspective, learning is constructed through interaction and mediation, where teachers play a crucial role in scaffolding students' understanding and performance.

5 Challenges and Concerns

The primary challenges identified by respondents included overreliance on AI (56%), limited critical thinking (39%), and reduced collaboration with peers (35%). Some students also expressed concerns about AI-generated content being inaccurate or overly mechanical, reinforcing the need for human guidance in interpreting and validating learning materials.

3.2 Discussion

The findings reveal a complex relationship between technology use and human connection in English language learning. Consistent with previous studies, students generally view AI as a powerful support system that enhances self-paced learning and provides immediate, individualized feedback (Bungsu Keumalasari et al., 2024). The high engagement and effectiveness scores demonstrate that students appreciate the convenience and personalization offered by AI tools.

However, the results also highlight a critical need to preserve the human dimension of learning. Despite their positive attitudes toward AI, many students remain aware of the emotional and social aspects that technology cannot replicate (Chan & Tsi, n.d.). Human teachers provide empathy, encouragement, and contextual understanding elements essential to sustaining motivation and

building communicative competence. In line with this Harahap and Ardi stated that Teachers have a vital role in establishing the improvement of students' academic abilities, expertise, emotional maturity, moral character, and spirituality (Harahap & Ardi, 2023). This aligns with the concept of human-centred learning, which emphasizes that education should nurture not only cognitive but also emotional and interpersonal growth (Amini et al., 2025). The concern about reduced human connection suggests that AI should be positioned as a complementary tool, not a substitute for human interaction (Chan & Tsi, n.d.). Teachers can leverage AI to handle repetitive or analytical tasks such as providing grammar feedback while dedicating more time to fostering dialogue, critical thinking, and collaborative learning. In this way, technology and humanity can coexist harmoniously to create a more balanced and holistic learning experience.

Furthermore, the mixed responses regarding human connection imply that educators must actively design pedagogical frameworks that integrate both digital and interpersonal elements (Børte & Lillejord, 2024). For instance, incorporating AI-assisted writing exercises followed by peer discussions or reflective activities can help students benefit from both technological efficiency and human engagement. Overall, this study reinforces the idea that AI can enrich language learning when guided by human-centred pedagogy. Maintaining the human touch in AI-assisted education ensures that learners develop not only linguistic competence but also empathy, collaboration, and cultural awareness skills that remain irreplaceable in an increasingly digital world.

4) CONCLUSIONS

This study explored students' perspectives on balancing technology and humanity in English language learning, focusing on their experiences with AI-based tools, engagement levels, perceptions of learning effectiveness, and sense of human connection. The results revealed that while students generally perceive AI as a beneficial and efficient aid in improving their English proficiency, they also express concerns about the potential reduction of human interaction and emotional engagement in the learning process.

Students acknowledged that AI tools such as ChatGPT and Grammarly enhance learning efficiency by providing immediate feedback, personalized guidance, and accessible resources. These features support learner autonomy and motivation, enabling students to practice language skills independently and confidently. However, participants also emphasized that technology cannot replicate the empathy, encouragement, and cultural understanding offered by human teachers.

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Excessive reliance on AI risks diminishing social interaction and the affective dimensions of learning, which are essential for fostering communication competence and collaborative learning.

The findings highlight the importance of adopting a balanced, human-centred approach to technology integration in English language education. Educators should leverage AI as a complementary tool to support, rather than replace, the teacher's role. Combining AI-assisted learning with meaningful classroom interaction, reflective discussion, and peer collaboration can create a more holistic learning environment.

In conclusion, technology should be seen as an enabler of human learning, not its substitute. Maintaining empathy, interpersonal connection, and authenticity in the age of AI will ensure that English language learning remains both innovative and profoundly human. Future research may further investigate how teachers can design pedagogical frameworks that harmonize digital tools with emotional and social aspects of learning in diverse cultural contexts.

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