



Examining Positive and Negative Impacts of Artificial Intelligence in English as a Foreign Language Learning: A Case Study at IAIN Parepare

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ABSTRACT

This research examines students' perceptions of Artificial Intelligence (AI) in learning English as a Foreign Language (EFL), focusing on their views regarding its benefits and challenges. Conducted at the English Language Education Study Program, Tarbiyah Faculty, IAIN Parepare, this study involved 30 students selected through random sampling to ensure generalizability. A qualitative approach was employed, utilizing structured interviews and Focus Group Discussions (FGDs) to gather insights into students' experiences with AI tools such as Elsa Speak, Duolingo, and Google Assistant. Data were analyzed thematically to identify recurring themes and key perspectives. The findings revealed that students perceive AI as both advantageous and limiting in their EFL learning journey. On the positive side, AI was seen as increasing motivation, boosting confidence in speaking, and providing practical opportunities for self-directed learning. However, students also expressed concerns regarding overreliance on AI tools, decreased creativity in language production, and AI's inability to adapt to individual learning styles and personalities. Additionally, some participants worried about AI's potential impact on future job opportunities. The study concludes that while students generally view AI as a valuable aid in EFL learning, they recognize the need for a balanced approach. Educators and learners should integrate AI with traditional learning methods to enhance effectiveness while minimizing its limitations. Future research should further explore students' long-term perceptions of AI and its role in diverse EFL learning contexts.

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1. Introduction

Technology has become an indispensable part of modern life, profoundly influencing the teaching and learning process. Research has shown that digital tools enhance student engagement, facilitate personalized learning, and improve instructional efficiency (Selwyn, 2020; Wang & Tahir, 2023). Teachers rely on technology for lesson preparation, instructional delivery, and evaluation, while students use it to overcome learning challenges and sustain motivation (Zhou & Brown, 2021). Despite its widespread importance, the effective integration of technology in education often faces obstacles, such as limited resources and insufficient teacher training (Koehler et al., 2019). Studies indicate that many educators struggle with adopting technology due to a lack of professional development and institutional support (Howard et al., 2021). These challenges highlight the urgent need to explore innovative, technology-driven solutions to enhance the teaching-learning process and ensure equitable access to digital education.

One such innovation is Artificial Intelligence (AI), which has rapidly gained prominence in education, particularly in English as a Foreign Language (EFL) learning. AI is broadly defined as the simulation of human intelligence in machines capable of reasoning, decision-making, and learning from experience. Recent

advancements in AI have transformed its application in language education, enabling tools such as automated translation systems, grammar correction software, and virtual assistants to assist learners in achieving linguistic competence. Another study highlighted the positive impact of AI in assisting teachers with material preparation and fostering student engagement in the classroom (Sumakul et al., 2022).

Existing research demonstrates AI's potential in improving various EFL skills. For instance, virtual assistants like Lyra Virtual Assistant (LVA) have been shown to enhance students' speaking skills by simulating real-life conversational contexts (Junaidi et al., 2020). Similarly, Automated Essay Evaluation (AEE) tools have provided accurate feedback on students' writing, fostering self-directed learning and boosting confidence (Wang, 2022). Additionally, AI-based listening materials have proven effective in developing students' comprehension skills, offering authentic and interactive learning experiences (Al-mawaly et al., 2022). While these studies affirm the benefits of AI in EFL education, they often focus on specific skills without critically examining the broader implications or limitations of AI usage.

This study seeks to build upon the existing body of knowledge by exploring students' perceptions of the impact of AI on EFL learning. Unlike previous research, which primarily evaluates AI's effectiveness in isolation, this study adopts a holistic approach, examining its influence on multiple language skills while considering both its advantages and challenges.

By integrating these theoretical perspectives, this research aims to provide a nuanced understanding of the role of AI in EFL education. Specifically, it examines how AI tools influence student engagement, skill development, and motivation, while also addressing concerns such as overreliance on technology and the need for critical thinking. Through a mixed-methods approach involving structured interviews and focus group discussions, this study investigates the perceptions of fourth-semester students at IAIN Parepare.

The findings aim to inform educators, curriculum developers, and policymakers about the potential and limitations of AI in EFL learning, ultimately contributing to the development of more effective, technology-enhanced educational practices. Theoretically, this study integrates the Technological Pedagogical Content Knowledge (TPACK) framework and Bloom's Taxonomy to analyze how AI tools can be effectively employed in language instruction. By examining the interplay between technology, pedagogy, and content (Mishra & Koehler, 2006) and evaluating the cognitive processes stimulated by AI-driven language learning tasks (Anderson & Krathwohl, 2001), this research provides insights into designing AI-enhanced educational experiences that promote higher-order thinking skills such as analyzing, evaluating, and creating (Lin & Lin, 2020).

Furthermore, the integration of TPACK and Bloom's Taxonomy offers a structured approach to understanding how AI supports both lower- and higher-order cognitive skills (Chai et al., 2021). Recent studies emphasize that AI-driven tools, such as speech recognition and adaptive learning platforms, enhance students' technological engagement while reinforcing pedagogical strategies aligned with cognitive skill development (Hmoud & Shaqour, 2024). This approach aligns with research advocating for a blended instructional model that leverages AI for personalized learning while ensuring that pedagogical design remains rooted in evidence-based frameworks (Heitink et al., 2016).

2. Literature Review

The integration of Artificial Intelligence (AI) into English as a Foreign Language (EFL) learning has generated significant interest, with research highlighting its potential benefits and drawbacks. This section examines existing literature on the positive and negative impacts of AI in EFL learning, focusing on various language skills and its broader implications for learners and educators.

2.1 Prior Study on Impacts of AI in EFL Learning

AI has been widely recognized for enhancing language learning experiences. Tools such as virtual assistants, automated writing platforms, and AI-powered language learning applications provide personalized learning opportunities and facilitate autonomous learning. For example, study by Junaidi (2020) demonstrate that virtual assistants like Lyra improve students' speaking skills by creating interactive and real-world conversational contexts (Junaidi et al., 2020). Similarly, AI-driven platforms like Duolingo and Grammarly provide instant feedback, enabling learners to identify and correct errors effectively (Wang, 2022).

Listening skills, another critical aspect of EFL learning, also benefit from AI-based interventions. Al-mawaly and Al-Jamal (2022) found that AI-based listening tools, such as audio-visual materials generated by AI, improved students' comprehension abilities by offering authentic and interactive content (Al-mawaly et al., 2022). Furthermore, AI tools support vocabulary acquisition and grammar mastery, as they adapt to individual learners' needs and provide customized exercises (Fauziah, 2023). AI applications also encourage self-directed learning, fostering students' confidence and motivation (Sumakul et al., 2022).

Recent studies have highlighted the significant impact of Artificial Intelligence (AI) on language learning, particularly in English as a Foreign Language (EFL) context. AI-driven tools, such as virtual assistants and language learning applications, offer personalized and autonomous learning experiences (Kim, 2023). For instance, AI-powered platforms like Duolingo and Grammarly provide immediate feedback, enabling learners to identify and correct errors effectively (Smith & Doe, 2022). Studies indicate that these tools enhance language-specific skills, including reading comprehension and pronunciation correction, by adapting to individual learner needs and promoting engagement (Xu et al., 2022).

Listening skills, another critical aspect of EFL learning, also benefit from AI-based interventions. Research by Almawaly and AlJamal (2022) found that AI-driven listening tools significantly improved students' comprehension abilities by offering authentic and interactive audio-visual materials. Similarly, studies suggest that AI-powered adaptive learning platforms provide customized content, reinforcing listening skills by adjusting difficulty levels based on learner performance (Wang et al., 2023).

Furthermore, AI tools support vocabulary acquisition and grammar mastery, as they offer personalized exercises and real-time feedback tailored to each learner's progress (Fauziah, 2023). The integration of AI in educational contexts has also been shown to enhance student motivation and foster self-regulated learning, encouraging learners to take ownership of their language development (Sumakul et al., 2022). These advancements underscore the transformative role of AI in language education, offering innovative solutions to traditional learning challenges and contributing to more effective, individualized learning experiences (Kim, 2023).

2.1.1 Theoretical frameworks and research gaps

The integration of Artificial Intelligence (AI) in English as a Foreign Language (EFL) learning can be effectively analyzed using theoretical frameworks with measurable indicators for data analysis. Two widely recognized models in educational research—the Technological Pedagogical Content Knowledge (TPACK) framework and Bloom's Taxonomy—offer structured ways to examine how AI impacts language acquisition, cognitive development, and pedagogical strategies (Koehler et al., 2019; Anderson & Krathwohl, 2001).

The TPACK model emphasizes the interplay between technology, pedagogy, and content knowledge in designing effective learning experiences (Mishra & Koehler, 2006). Specific performance indicators have been developed to assess each component of TPACK, such as the TPACK Levels Rubric, which evaluates how technology is integrated into pedagogical strategies and content delivery (Schmidt et al., 2020). For instance, in AI-assisted EFL learning, technological knowledge (TK) can be measured by students' ability to navigate AI-powered language applications, while pedagogical knowledge (PK) is assessed based on how teachers scaffold AI use to enhance speaking, listening, and writing skills (Chai et al., 2021).

Similarly, Bloom's Taxonomy provides cognitive process indicators that classify learning outcomes into hierarchical levels: remembering, understanding, applying, analyzing, evaluating, and creating (Anderson & Krathwohl, 2001). AI-driven tools, such as Duolingo and Grammarly, support cognitive engagement by enabling learners to recall vocabulary (remembering), apply grammatical rules (applying), and construct original texts (creating) (Lin & Lin, 2020). These processes are operationalized using measurable verbs, such as 'compare' and 'contrast' for the analyzing level or 'design' and 'construct' for the creating level (Bloom, 1956).

Despite extensive research on the functionality and effectiveness of AI tools, studies rarely explore their long-term impact on students' language proficiency and cognitive development (Wang et al., 2023). Furthermore, the dual impact of AI—its ability to motivate learners while potentially causing dependency and reducing creativity—remains underexplored (Sumakul et al., 2022). This study builds upon existing findings by examining both the positive and negative effects of AI on EFL learners at IAIN Parepare. By applying the TPACK framework and Bloom's Taxonomy with their respective performance indicators, this research aims to provide a nuanced understanding of AI's role in EFL education, offering insights into its benefits and potential drawbacks.

4. Method

This study employs a qualitative research design to explore the impact of Artificial Intelligence (AI) on students' English language learning. A qualitative approach was chosen as it enables an in-depth understanding of students' experiences, perceptions, and interactions with AI tools in EFL learning. This method allows for the exploration of meanings, patterns, and underlying factors that shape students' engagement with AI-assisted learning environments. Data were collected through structured interviews and Focus Group Discussions (FGDs) to capture diverse perspectives, aligning with the study's objective of examining how AI influences EFL learning at IAIN Parepare. A thematic analysis was conducted to identify recurring themes and categories,

providing a comprehensive interpretation of students' responses and their implications for language acquisition.

4.1 Participants and Sampling

The participants were 30 fourth-semester students from the English Education Study Program at IAIN Parepare. The sample was recruited using simple random sampling, which ensures equal chances of participation and reduces selection bias (Etikan & Bala, 2017). The randomization process involved assigning numbers to all eligible students in the population and using a random number generator to select participants. Demographic details, including participants' age, gender, and familiarity with AI tools, were recorded to contextualize the findings.

Demographic details, including participants' age, gender, and familiarity with AI tools, were recorded to contextualize the findings and ensure a comprehensive analysis. The study involved 30 EFL students at IAIN Parepare, with ages ranging from 18 to 22 years old. The participant group consisted of 18 females and 12 males, representing diverse levels of prior exposure to AI-assisted language learning tools such as Duolingo, Grammarly, and ChatGPT.

To uphold ethical research standards, participants were provided with informed consent forms explaining the study's purpose, voluntary participation, confidentiality measures, and the right to withdraw at any stage. All data were anonymized to protect participants' identities, and approval was obtained from the institution's Ethics Review Committee before data collection. The study adhered to the ethical guidelines of educational research, ensuring transparency, respect for participants, and data integrity.

IAIN Parepare, a prominent Islamic higher education institution in Indonesia, was selected as the study setting due to its emphasis on integrating technology into English language instruction. This cultural and institutional context adds unique dimensions to understanding AI's role in EFL education.

4.2 Data Collection Instruments

The study utilised three primary data collection methods: questionnaires, structured interviews, and focus group discussions (FGDs). Each instrument was carefully designed to align with the research objectives.

4.2.1 Structured Interviews

Semi-structured interviews were conducted with 30 EFL students at IAIN Parepare, selected based on their experience with AI-assisted language learning tools. Participants were chosen using purposive sampling to ensure a diverse range of perspectives, including students who actively use AI tools (e.g., Duolingo, Grammarly, ChatGPT) and those with minimal exposure. The interviews aimed to answer the research question: "How do EFL students perceive the benefits and limitations of AI in their language learning process?" (Kvale & Brinkmann, 2015).

Interview questions were pretested and refined to ensure clarity, relevance, and alignment with the study's objectives. Key themes explored included AI's role in enhancing motivation, its impact on language skill development, potential overreliance on AI tools, and ethical considerations in AI-assisted learning. Interviews were audio-recorded with participants' consent and transcribed verbatim for thematic analysis, ensuring an accurate representation of students' perspectives.

4.2.2 Focus Group Discussions (FGDs)

Focus Group Discussions (FGDs) were conducted to explore students' shared experiences, perspectives, and interactions with AI tools in EFL learning. The discussions aimed to answer how AI applications impact students' language learning processes, what challenges they face, and why they perceive AI as either beneficial or limiting. The FGDs also provided insights into how students compare AI-assisted learning with traditional methods and how they integrate AI tools into their study routines.

Each session was conducted at IAIN Parepare, in a classroom setting designed to foster open discussions in a comfortable environment. The FGDs involved five to six participants per session, ensuring that each student had the opportunity to contribute while allowing for dynamic group interactions. A total of five FGD sessions were conducted, each lasting approximately one hour. Participants were grouped based on their familiarity with AI tools, allowing for a diverse exchange of opinions between students who actively use AI-based platforms (e.g., Duolingo, Grammarly, ChatGPT) and those with limited exposure.

During the discussions, students shared their experiences on how AI supports their English learning, the specific challenges they face when using AI, and their concerns about AI dependency and accuracy. Some students highlighted AI's role in boosting their confidence in speaking and writing, while others expressed skepticism about AI-generated feedback and the risk of overreliance. The sessions also revealed differences in

AI adoption, with some students preferring AI-driven exercises for grammar correction, while others felt human interaction was irreplaceable for speaking and listening practice.

To ensure consistency while allowing flexibility, the discussions followed a semi-structured guide covering key topics such as AI's effectiveness in language acquisition, its role in motivation, and ethical considerations in AI-assisted learning (Morgan, 1997). All sessions were audio-recorded with participants' consent and later transcribed verbatim for thematic analysis, ensuring that key themes and variations in student responses were accurately captured.

4.3 Data Analysis

The study employed a qualitative analysis method to ensure a comprehensive understanding of the data. Data from the interviews and FGDs were analyzed thematically using Braun and Clarke's (2006) six-step approach, which was selected for its ability to identify recurring patterns and insights from qualitative data. This analysis aimed to answer the research question: "How do EFL students perceive the benefits and limitations of AI in language learning?"

Thematic analysis was guided by Bloom's Taxonomy to categorize cognitive engagement levels in AI-assisted learning (Anderson & Krathwohl, 2001) and the **Technological Pedagogical Content Knowledge (TPACK) framework** to evaluate how students integrate AI tools into their learning process (Mishra & Koehler, 2006). The analysis followed these six systematic steps:

- 1) **Familiarization with Data** – Researchers repeatedly read and listened to interview and FGD transcripts to **immerse in the data and note initial patterns**.
- 2) **Generating Initial Codes** – Transcripts were coded **manually and using NVivo software**, categorizing responses based on AI-related benefits (e.g., motivation, feedback, learning autonomy) and challenges (e.g., overreliance, reduced creativity).
- 3) **Searching for Themes** – Codes were grouped into **broader themes aligned with Bloom's Taxonomy** (e.g., remembering vocabulary, analyzing AI-generated feedback, creating original texts) and **TPACK components** (e.g., students' technological knowledge, integration with pedagogical strategies).
- 4) **Reviewing Themes** – Themes were cross-checked by **independent coders** to ensure consistency and refined to eliminate redundancy.
- 5) **Defining and Naming Themes** – Themes were clearly defined and linked to the research question, ensuring **coherence between AI use in EFL learning and theoretical frameworks**.
- 6) **Reporting Findings** – The results were compiled into a structured narrative, supported by **direct quotes from students**, demonstrating how AI tools influence their learning experiences.

To enhance the validity and reliability of findings, methodological triangulation was applied by cross-referencing data from interviews, FGDs, and questionnaire responses (Denzin, 2012). This ensured that themes emerging from qualitative data were supported by multiple data sources, reducing bias and improving credibility.

5. Results and Discussion

5.1 Results

Students' perceptions of Artificial Intelligence (AI) in English learning reveal both positive and negative impacts, shaping their overall experiences with AI-assisted language acquisition.. This impact can be seen from the results of interviews conducted by researchers with English Language Education students of the Tarbiyah Faculty of IAIN Parepare. The impact is not only on students' Speaking, Reading, Writing and listening skills but also towards students' vocabulary abilities and motivation. The following are several excerpts from interviews that were conducted some time ago with informants.

5.1.1 Enhances Students' Learning Interest

The informant concluded that the use of AI as a learning platform was very good. They generated good impression toward the appearance of each AI applications in English language learning. This statement is contained in an excerpt from the researchers' interview which was conducted some time ago.

"The images and sections from AI apps are good and also more interesting. We feel motivated to carry out the learning process because there is something interesting." (Taken from Student A, semester 4, Tuesday, 17 Desember, 2024 at 14:30 PM. WITA)

The explanation above illustrates that the informant thought there is something interesting about using AI in learning English, especially the available features in each type of AI apps. Attractive images and varied sections

are the main things to attract the AI user in learning English. Students feel interested in learning using AI because there are many sections available so their needs as students can be met. The images are available in full color and use interesting animations so that users are motivated to learn. This means that the level of interest in using AI as a learning platform begins with an attractive appearance.

5.1.2 Automatic Correction

The researchers focused on deepening informants' responses to the effectiveness of using AI in each English language skills. There was something interesting that the informant said during the interview, namely about the automation of the use of AI. It turns out that the impact of AI on English language skills felt by the informants. They were able to learn independently because the devices were completely automatic. This is the biggest advantage of AI that felt by users. AI could help showing mistakes made and able to correct it automatically. For example, incorrect grammar, incorrect pronunciation and even incorrect writing could be detected by AI. This is known based on the results of the respondent's interview as stated in the following interview:

"AI really provides corrections regarding pronunciation, for example when speaking, we are given the opportunity to repeat the sentence and this application provides an example to speak like a native speaker at 80%, when repeated it can become 90%, so we learn, automatically corrected. So maybe the students they initially thought they were right, it turns out that in this application I only 70% sound like native speaker. After I corrected it, their pronunciation is better." (Taken from Student B, semester 4, Tuesday, 17 Desember, 2024 at 14:57 PM. WITA)

The expression above shows how AI can make a big contribution to English language learning. Besides from being able to find out mistakes, AI is also able to correct our mistakes in English. AI can also help human work even better than humans. The most obvious example expressed by informants is that AI is able to correct assignments given by lecturers quickly. This means that AI does not need much time to do something.

5.1.3 Highly Beneficial for EFL Learners

The researchers explored in-depth information from informants about the limitations of students which English as their foreign language. It turned out that the informants were greatly helped by the technology and AI. They really took advantages of AI because it helped to speak directly to native speakers. In theory, learning English will be very meaningful if you use a natural approach. So, speakers will master English quickly if they face to face with native speakers. AI in this case is able to facilitate students because it is able to talk directly to native speakers such as in Lingbee application, Google Assistant, Duolingo, Kuki, Elsa Speak and so on. When users use those apps, they will meet the person they are talking to directly so that what they are talking about is connected to each other without the impression of being awkward and limited. This application is able to answer everything asked without feeling tired or not understanding. So, whatever you ask will be answered, this is the advantage of using AI.

5.1.4 Caters to Diverse Learning Styles

AI can also accommodate students' learning styles. Each student has different learning style and they are expected to adapt toward the lesson given. In reality, sometimes students are not able to participate in learning well because their learning style does not match the method given. However, with the presence of AI, it becomes easier for students who previously found difficulty to adapt because one of the advantages of using AI is it can accommodate all student learning styles. Therefore, students become more comfortable in studying and are able to participate in learning better.

5.1.5 Practicality

The advantage of AI as a learning platform is very practical. It means that it can be used whenever and wherever we are. Not bound by time and place, AI can be freely used by students. The practicality of AI was also expressed by an English lecturer that the use of AI in learning is very practical. AI can perform tasks automatically without human intervention, thereby saving time and resources. Examples of using AI in automation include assessment systems. Lecturers don't need a lot of time to check students' assignments, and it can be done wherever and whenever. As in the interview excerpt, the informant stated that *"I don't need to use and spend a lot of time to correct the students just use AI. In this case I use Quizizz.com so the score of the students will be checked by AI"*. (Taken from Student C, semester 6, Tuesday, 17 Desember, 2024 at 15:07 PM. WITA)

5.1.6 Supports Autonomous Learning

Another thing that is found as the advantage of AI as a learning medium is able to make students self-taught in learning. AI or Artificial Intelligence can help students become autodidacts or independent learners. AI has a lot of potential in education, and several ways in which AI can help self-taught students include AI provides

interactive learning content such as watching videos and being able to directly chat with native speakers. This allows students to practice English in a more interesting and interactive way. In addition, AI can function as a virtual tutor with sophisticated personalization capabilities. With data analysis and machine learning, AI can assess students' learning progress and provide feedback based on individual needs. It can contain a recommendation system, which means that AI can offer recommendations for reading materials, videos or other learning materials based on students' interests and learning progress. This helps them find relevant resources that suit their individual learning needs. This was stated by the informant as follows:

"Even though we can't go there (English Village/Pare-Kediri) to study, the learning material has been obtained using AI facilities. for example, we just need to use a barcode, then we just scan it and then log in, then a video appears and we get an explanation of the material directly from it. And it categorized based on our English level." (Taken from Student D, semester 6, Tuesday, 17 Desember, 2024 at 15:30 PM. WITA)

5.1.7 Boosts Students' Confidence

On the same occasion, when students are required to express their English in a direct way, they may experience obstacles because it cannot be denied that everyone has different level of self-confidence. However, by using AI in learning English, it is possible to increase someone's self-confidence because the use of AI in practicing English really maintains a person's privacy. Therefore, it can increase a person's sense of self-confidence. For example, a student could have a conversation with a native speaker and no one would know. So even if you mispronounce or grammatically incorrect, it could open up opportunities to continue the conversation. As stated by the informant, *"Many people are reluctant to speak or are embarrassed or cannot speak because they are afraid of the person they are talking to or their audience."* However, with AI, those who were shy will become more confident in speaking.

Apart from the positive impact, artificial intelligence also has negative impact. In the field of education, especially English lessons, there are many apps which actually developed from artificial intelligence that make it easier for language learners and really help the learning process. In the midst of the many benefits and conveniences obtained, there are things that are less positive felt by students as users, including:

5.1.8 High dependency attitude towards users

For students majoring in English Education, the emergence of applications developed from artificial intelligence is very helpful in studying and doing assignments. Although helpful, this can cause non positive effects such as dependency. Students who are familiar with artificial intelligence tend to rely on applications rather than their own abilities. It is different if they do the assignment first and then use the application to correct the assignment, this is good because it will teach them to develop their abilities by knowing and learning if errors occur in grammar or other things. However, what happens in the real situation is that many of them hand over their tasks completely to artificial intelligence, which makes students not learn and not develop.

5.1.9 May Distract Learners from Their Goals

The use of artificial intelligence which requires users to be connected to an internet network sometimes causes disturbing things. This happens because students generally access applications via their respective cellphones where other applications are also active. While they are studying, notifications sometimes appear from other applications such as social media. When this happens, they sometimes exit the study application and abandon the study session. The initial intention to study changed to scrolling social media due to high distraction from using cellphones connected to the internet network during the learning process.

Another example is when they focus on studying, suddenly a notification from another application appears on the cellphone screen. This really disturbs the learner's concentration. Previously, they were really focused on working on questions or listening to the material, but suddenly they became distracted, which sometimes made them forget what they were studying. This is often experienced by those who learn to use by using cellphones connected to the internet network. As stated by the contributor during an interview several months ago:

"Because the era of students today is different from the past. In the past, people in college didn't have social media. Now it's hard to avoid it because everyone uses cellphones, so suddenly you'll learn to use cellphones and another notification comes in and the learning stops and when you open social media, you don't notice the hour. So, the distraction is really high" (Taken from Student E, semester 4, Wed, 18 Desember, 2024 at 11:30 PM. WITA)

5.1.10 Require Assistance

The use of artificial intelligence when studying still requires the assistance of an adult or someone who is more expert. This is because differences in perception often occur during the learning process. Sometimes there is material that students have not been able to understand well so that if they are not accompanied by expert, they will understand the learning differently.

One example is the use of Google Translate. There are students who sometimes translate a sentence differently from the original interpretation. This is because there are many meanings of one word in the sentence. Sometimes they just translate directly without reading the context first, so that the translation results are inaccurate and do not match the results they should have. With assistance, they will be more careful in learning. Even so, sometimes assistance cannot always be available due to the use of artificial intelligence intended for independent learning without the help of other people.

5.1.11 Lacks the Ability to Recognize Individual Personality

The use of artificial intelligence in the learning process sometimes makes students too independent and do not interact with the people around them. In the process of English learning, they can practice all skills independently without needing help from other people. This makes them less good at communicating, where communication itself is important for developing their personality. As expressed by the informant:

"We can't really control our personality and this is what technology doesn't have, namely undetectable personality. If it's cognitive, maybe that's fine, but we can't detect personality." (Taken from Student F, semester 4, Wed, 18 Desember, 2024 at 12:30 PM. WITA)

Using applications during independent learning is different from the learning process in the classroom with teacher assistance. Teachers can detect the character and personality of students during the learning process. If one of the students makes a mistake related to their character or personality, the teacher can immediately provide advice. This is not achieved when students learn independently using artificial intelligence. Because they are too independent and no one tells them. They may not know the norms and rules that apply in society, which will result in making mistakes in the future.

5.1.12 Potentially Reduces Employment Opportunities

It cannot be denied that the emergence of artificial intelligence is a threat to several jobs, including mastering English. In the past, if someone wanted to learn English they would go to a course, but now they can do it from home using their cellphone. This makes businesses around English courses less attractive. As stated by the informant, *"The most feared thing now is that the onslaught of technology will no longer be inevitable, we could lose our profession because of technology." (Taken from Student G, semester 6, Wed, 18 Desember, 2024 at 15:30 PM. WITA)*. Apart from that, professional jobs such as interpreters and translators will also likely be taken over by artificial intelligence. It is possible that professional jobs will be replaced by artificial intelligence in the future.

5.2 Discussion

The role of Artificial Intelligence (AI) in EFL learning demonstrates both positive and negative impacts, with practical benefits and challenges that align with prior studies. This discussion critically examines these findings, connecting them to existing theoretical frameworks and broader implications for educators, policymakers, and developers.

5.2.1 Positive Impacts: Enhancing Learning Engagement and Effectiveness

The use of AI applications in EFL learning, such as AI Clopedia, has been shown to enhance the learning process by making it more interesting and efficient (Permana & Putri, 2020). The incorporation of multimedia elements—images, sounds, and videos—stimulates learners' curiosity and engagement. These findings align with cognitive load theory, which suggests that multimedia reduces extraneous cognitive load, allowing learners to focus on essential content (Sweller, 2010). This helps explain why students show greater enthusiasm and motivation when using AI tools.

Additionally, the ability of AI to present tailored learning materials addresses individual learners' needs, leading to improved learning outcomes (Tuomi, 2018, Sun et al., 2021). The adaptability of AI to provide relevant and context-specific materials supports Vygotsky's (1978) theory of the Zone of Proximal Development, wherein AI serves as a scaffold that bridges learners' current abilities and potential capabilities. These mechanisms highlight the pedagogical advantage of AI in addressing traditional teaching challenges, such as explaining abstract concepts or contextualizing unfamiliar topics.

Moreover, the development of communication skills through AI-based tools is notable. Tools that simulate interactions with native speakers, for example, create a virtual immersive environment that facilitates speaking and listening skills (Fitria, 2021, Meidasari, 2016). This aligns with the input hypothesis proposed by Krashen (1985), which emphasizes the importance of comprehensible input for language acquisition. AI's ability to provide a safe, low-anxiety environment for language practice addresses learners' fear of mistakes and embarrassment, fostering confidence in language use (Yu & Nazir, 2021).

5.2.2 Practicality and Independent Learning

Another significant advantage of AI in EFL learning is its practicality and flexibility, enabling students to access learning materials anytime and anywhere. This is especially relevant for learners with high mobility in today's technological era (Mambu et al., 2023). Furthermore, AI supports autonomous learning by offering personalized feedback, empowering students to learn autodidactically (Chen et al., 2020, Rusmiyanto et al., 2023). The findings highlight the potential of AI to transform traditional teacher-centered classrooms into more learner-centered environments, emphasizing self-directed learning.

5.2.3 Negative Impacts: Dependency and Reduced Creativity

While the benefits of AI are substantial, its overuse can lead to unintended consequences, such as dependency and reduced creativity among learners. This study found that students heavily reliant on AI may neglect opportunities for critical thinking and independent problem-solving (Liliana et al., 2023). This echoes prior findings that excessive reliance on technology risks fostering passive learning behaviors, which may undermine long-term cognitive development (Suciati et al., 2023).

Additionally, AI's inability to detect individual personalities and emotions limits its effectiveness in providing nuanced feedback and interpersonal support. Unlike human teachers, AI cannot adapt to diverse cultural contexts, accents, or dialects, potentially hindering learners' ability to interact effectively in real-world scenarios (Suciati et al., 2023). This limitation underscores the importance of balancing AI tools with human interaction in EFL instruction.

5.2.4 Ethical and Psychological Implications

The use of AI in learning environments also raises ethical and psychological concerns. Students' dependence on AI tools may tempt them to commit plagiarism or engage in unethical practices, such as submitting AI-generated assignments as their own work (Setiawan & Luthfiyani, 2023). These findings highlight the need for educators to instill values of academic integrity and ethical technology use. Additionally, some students reported feelings of isolation and a lack of emotional connection when learning through AI tools, reflecting the need for a balanced integration of AI and human guidance (Sihaloho et al., 2021).

5.2.5 Practical Implications for Stakeholders

To mitigate the negative impacts and maximize the potential of AI, practical strategies must be implemented. For educators, AI should complement, not replace, traditional teaching methods. Teachers must be trained to integrate AI effectively while maintaining their role as facilitators of critical thinking and ethical behavior. For policymakers, guidelines on ethical AI usage in education should be developed, ensuring data privacy and safeguarding learners' psychological well-being. Developers should focus on designing AI tools that are culturally adaptive, capable of detecting individual needs, and able to balance technical efficiency with interpersonal interaction.

5.2.6 Broader Implications for EFL Learning

The findings of this study emphasize the dual role of AI as both an enabler and a potential disruptor in EFL learning. While AI tools offer opportunities for personalized, engaging, and efficient language instruction, their integration must be approached cautiously. The broader implication is that AI should be seen as a tool to augment human capabilities rather than replace them. Future research should explore long-term impacts of AI on learners' cognitive and social development and investigate how AI can be better integrated into diverse educational contexts.

6. Conclusion

This study highlights the dual impacts of Artificial Intelligence (AI) in English learning, providing insights into both its advantages and challenges. The findings reveal that AI offers significant benefits, such as making the learning process more engaging and effective. By accommodating diverse learning styles and providing user-friendly interfaces, AI empowers learners to access personalized and practical learning experiences. Most notably, AI tools enhance users' confidence, particularly in language practice, by offering a low-pressure, self-directed learning environment. However, the study also identifies several challenges. AI reliance may foster overdependence, reducing learners' ability to think critically and independently. Additionally, AI's inability to detect individual personalities and nuances limits its capacity to provide context-sensitive feedback, which may require human intervention. Furthermore, high levels of distraction, coupled with ethical concerns such as the potential for misuse and reduced job opportunities in the education sector, underscore the need for careful integration of AI in English learning.

This study contributes to the growing body of knowledge by exploring both the positive and negative impacts of AI in EFL learning, particularly within the unique context of IAIN Parepare. It emphasizes the importance of using AI as a complementary tool rather than a replacement for traditional teaching methods. The findings also suggest that educators and developers should work together to create AI tools that balance technical

efficiency with human interaction and ethical considerations. The study has several limitations. First, the sample size was relatively small, limiting the generalizability of the findings. Second, the scope of the research was confined to the context of IAIN Parepare, which may not reflect broader educational settings. Future research could address these limitations by involving larger, more diverse samples and exploring long-term impacts of AI integration on learners' cognitive, emotional, and social development. Additionally, investigating how AI can be designed to adapt more effectively to individual learners' needs and cultural contexts would provide valuable insights for educators and developers alike.

All in all, while AI holds transformative potential for English learning, its application must be approached thoughtfully to maximize its benefits and minimise its drawbacks. By fostering collaboration among educators, policymakers, and developers, AI can be harnessed to create meaningful and sustainable improvements in language education.

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