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Artificial Intelligence in English Instruction: A TAM-Based Study on Benefits, Challenges, and Ethical Issues

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Abstrak

Implikasi perkembangan teknologi AI berkontribusi signifikan terhadap praktik pendidikan. Studi ini mengkaji integrasi AI dalam pengajaran Bahasa Inggris, dengan fokus pada manfaat, tantangan, dan dimensi etikanya. Meskipun penggunaan AI dalam pendidikan semakin meningkat, penelitian yang membahas adopsi AI melalui Model Penerimaan Teknologi (TAM) masih terbatas, dengan tetap mengintegrasikan dimensi etika. Delapan belas pendidik dan peserta didik yang sangat terlibat dengan platform pendidikan berbasis AI diperhadapkan pada wawancara semi-terstruktur, yang memungkinkan eksplorasi mendalam tentang pengalaman, persepsi, dan masalah etika peserta terkait perangkat AI. Data yang terkumpul dianalisis menggunakan analisis tematik. Berdasarkan Model Penerimaan Teknologi (TAM), penelitian ini mengeksplorasi konstruk seperti manfaat yang diterima, Kemudahan Penggunaan, pengaruh sosial, serta kondisi yang memfasilitasi. Temuan ini mengungkapkan potensi AI untuk meningkatkan pembelajaran yang dipersonalisasi dan menyederhanakan proses pembelajaran, sekaligus menyoroti tantangan terkait nuansa budaya, hambatan teknis, dan masalah etika, termasuk privasi data dan bias algoritmik. Studi ini memadukan etika sebagai penentu inti dalam TAM dan menunjukkan bahwa, tidak seperti studi sebelumnya, kemudahan penggunaan tetap sangat berpengaruh dalam konteks Indonesia dengan sumber daya rendah, yang menyoroti kepekaan kontekstual dan pentingnya tata kelola etika dalam adopsi AI untuk pengajaran bahasa Inggris.

Keyword: *Artificial Intelligence (AI), English Instruction, Benefits, Challenges, and Ethics.*

Abstract

The implications of AI's technology development significantly contribute to educational practice. This study examines the integration of AI in English instruction, focusing on its advantages, challenges, and ethical dimensions. Despite the growing use of AI in education, limited research has addressed its adoption through the Technology Acceptance Model (TAM) while incorporating ethical dimensions. Eighteen educators and students who are highly engaged with AI-powered educational platforms were interviewed using Semi-structured interviews for in-depth exploration of participants' perceptions, experiences, and ethical concerns dealing with AI tools. The collected data were analyzed with thematic analysis. Grounded in the theory of TAM (Technology Acceptance Model), the research explores models such as Perceived Usefulness, Perceived Ease of Use, social influence, and facilitating conditions. The findings reveal the potential of AI to enhance personalized learning and streamline instructional processes, while also highlighting challenges related to cultural nuances, technical barriers, and ethical concerns, including data privacy and algorithm bias. This study integrates ethics as a core determinant within TAM and demonstrates that, unlike prior studies, ease of use remained highly influential in the low-resource Indonesian context, highlighting both contextual sensitivity and the importance of ethical governance in AI adoption for English instruction.

***Keyword**: Artificial Intelligence (AI), English Instruction, Benefits, Challenges, and Ethics.*

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INTRIDUCTION

The unification of Artificial Intelligence into English instruction has drawn wide interest due to its ability to revolutionize established instructional approaches. AI tools offer capabilities starting from Tailored educational journeys, instant evaluative responses, and dynamically adjusted learning routes that align with contemporary educational goals of enhancing learner engagement and outcomes. However, AI in language education comes along with barriers, including technical limitations, ethical concerns, and the need for effective integration into existing curricula. Most prior studies on the Technology Acceptance Model highlight perceived usefulness as a dominant predictor of technology utilization, with sense of ease losing influence once PU is considered, and ethical issues treated only as peripheral concerns. However, the Indonesian context reveals a different reality: limited infrastructure makes ease of use a decisive factor, while ethical and social concerns often outweigh technical benefits. Existing literature also rarely addresses low-resource settings or integrates ethics as a core determinant of adoption. An investigation led by the Ministry of Communication and Informatics (Kominfo) and the Katadata Insight Center shows that Indonesians' technological literacy is at a moderate level, with a score of 3.54 out of 5.00. This indicates that although many people have been exposed to digital technology, their skills in key aspects such as digital ethics, digital security, and digital culture are still not optimal. This study addresses these gaps by advancing an Ethical-TAM, contextualized for English instruction in Indonesia, and utilizing qualitative insights to capture factors overlooked in large-scale surveys. Based on that description, the researcher was motivated to conduct research examining AI's multifaceted impact on English instruction, focusing on its benefits, challenges, and ethical implications to provide an extensive understanding of its role in contemporary education.

The present study is underpinned by the Technology Acceptance Model, an influential theoretical construct proposed by Davis in 1989 in (Rukmana et al., 2024) to shed light on how technology is accepted and put into practice by users. TAM posits that both of the central factors, articulated as 'Perceived Usefulness' and 'Perceived Ease of Use,' are strongly influenced by an individual's propensity to incorporate a designated technology into practice. This construct of Perceived Usefulness reflects the degree to which users regard that their performance will be enhanced by technology as beneficial; in contrast, Perceived Ease of Use denotes the level at which a user experiences the system as being free from complexity. These constructs are pivotal in assessing AI and English instruction integration. An expanding corpus of international and domestic studies has investigated the implementation and utilization of AI in language education, often interpreted within the framework of the TAM.

In the English instruction discourse, TAM offers a solid theoretical lens through which to investigate how educators and learners perceive AI's utility and usability in enhancing language acquisition. Perceived Usefulness is particularly relevant in evaluating AI's ability to foster better academic attainments, such as personalized language exercises, instantaneous response, and adaptive learning pathways aligned with unique learner conditions. Similarly, Perceived Ease of Use is critical in understanding the measure of comprehensibility and usability that AI systems afford to teaching staff and learners, ensuring seamless integration into existing pedagogical practices. By focusing on these dimensions, TAM enables a systematic exploration of the positive outcomes alongside the difficulties that emerge in adopting AI. TAM aligns with the ethical dimensions of AI integration, emphasizing transparency, accountability, and informed consent. Ethical considerations are intertwined with Perceived Ease of Use and Perceived Usefulness, as educators and learners must trust that AI systems operate responsibly and safeguard their privacy. The theory underscores designing AI platforms that serve as more than effective tools, as they are additionally ethically sound, ensuring equitable access and minimizing biases. By incorporating these ethical principles, TAM serves as a well-rounded evaluative lens for examining the conscientious use of AI in English pedagogy.

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Founded in (Wu et al., 2024) that the factors of perceived utility and ease of operation persist as central motivators in shaping students' decisions to integrate AI into second language learning, while subjective norms and institutional support further strengthen technology acceptance. Similarly, (Dahri et al., 2024) extended TAM by incorporating trust and ethical considerations in their study on ChatGPT for self-regulated learning. Their findings highlighted that ethical aspects such as data privacy and plagiarism concerns are as influential as usability in shaping users' behavioral intention. From a critical standpoint, (Baker & Hawn, 2022) emphasized that algorithmic bias within AI-powered educational systems may reinforce linguistic and social inequalities, underscoring the urgent need for accountability mechanisms, algorithm audits, and human oversight in implementation.

In the Indonesian context, recent studies also underline both opportunities and challenges of AI integration in English instruction. Reported benefits include faster material preparation, personalized learning activities, and automated feedback, while challenges arise from limited infrastructure, varying levels of digital literacy, and ethical concerns related to privacy and cultural appropriateness. Overall, the literature suggests that while TAM is effective in explaining technology acceptance, the model must be enriched with ethical dimensions, social context, and institutional support to ensure that the utilization of AI across language instructional settings is sustainable, equitable, and responsible.

The accelerated embedding of AI technologies across educational contexts highlights an urgent need to examine its pedagogical and ethical implications, particularly in English language instruction, where its adoption is accelerating (Alcivar et al., 2024; Vera, 2023). While prior studies have explored AI adoption through the Technology Acceptance Model (TAM), limited research has contextualized its application in Southeast Asia, where cultural, infrastructural, and institutional factors differ significantly from Western settings. This study offers novelty by extending TAM with ethical dimensions, for example, the privacy of the data and the bias of algorithms, and by incorporating the perspectives of both educators and learners rather than focusing on a single group. Furthermore, the use of qualitative methods provides in-depth insights into contextual nuances often overlooked in large-scale quantitative surveys. Dealing with these gaps, this study contributes not only to the theoretical enrichment of TAM but also to practical recommendations for responsible and situationally contingent governance of AI in English education.

METHOD

Design of the Study

This study adopted a qualitative design to examine the integration of AI in English instruction, focusing on educators' and learners' perceptions within the framework of the TAM. Core constructs, which are perceived usefulness, perceived ease of use, and extended variables, including social influence and facilitating conditions, were analyzed. Detailed exploration of participants' experiences, highlighting both pedagogical benefits and ethical concerns, is enabled by a case study approach. Conducted over 34 days, the study ensured adequate time for data collection and analysis while maintaining methodological rigor. The main data collection technique employed was semi-structured interviews. The interview protocol examined interactions with AI tools, perceived utility, ease of integration into teaching practices, and ethical issues, for example, data privacy, bias, and transparency.

Participants and Sampling

The study employed purposive sampling by snowball sampling to select participants who had significant experience with AI tools in English instruction. The sample consisted of 18 educators and learners in Kupang, East Nusa Tenggara Province, ensuring a diverse representation of perspectives. The number was guided by the principle of data saturation, which is typically achieved with 12–20 interviews in small, context-specific qualitative studies (Hennink & Kaiser, 2022). This criterion was essential to gather insights into the

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practical integration of AI in English instruction. The sample included educators from varying institutional contexts, such as universities and secondary schools, and learners with different proficiency levels, ensuring a comprehensive exploration of AI's impact across diverse educational settings.

Participants represented diverse ages, genders, teaching experiences, and levels of AI familiarity. Learners were chosen based on their active use of AI platforms for English language acquisition, including tools for grammar correction, pronunciation improvement, and vocabulary building. This approach facilitated an inclusive examination of AI's perceived usefulness and ease of use in English instruction.

Data Collection Procedures

Semi-structured interviews were the main data collection approach, structured around the constructs of the Technology Acceptance Model (TAM) and its extended factors. The interview protocol examined participants' experiences with AI tools, focusing on perceived usefulness, ease of use, and ethical issues such as privacy, bias, and transparency. Interviews were carried out flexibly, either face-to-face or online, lasted approximately one hour, and were audio-recorded with participants' consent. Transcriptions were anonymized, and data collection continued until saturation was reached, ensuring comprehensive and contextual insights.

To maintain consistency and rigor, the interviews followed a structured yet flexible format, enabling researchers to probe specific areas while accommodating participants' unique perspectives. paraprase: researchers to probe specific areas while accommodating participants' unique perspectives. Each interview, lasting between 45 and 60 minutes, was carried out either face-to-face or through video conferencing, depending on the participants' preferences and logistical feasibility. The interview protocol was structured to generate in-depth insights into how AI tools are practically integrated, the benefits and challenges they present, as well as ethical issues, including privacy, bias, and transparency. To enrich the findings, participants were prompted to provide concrete examples of their experiences with AI-driven platforms, enabling the data to remain both contextually grounded and practically relevant.

Interviews were recorded, with prior consent from participants, to ensure precise transcription. Anonymization was applied to the transcripts, and pseudonyms such as Teacher A or Learner B were used to protect identities. The researchers adopted a structured data collection strategy to ensure saturation, meaning no additional themes surfaced from the interviews. This rigorous approach enabled the development of thorough insights into AI integration in English instruction, laying a solid groundwork for the ensuing thematic analysis and discussion.

Data Analysis Techniques

Data were analyzed thematically, involving coding, categorization, and refinement into key themes aligned with TAM and ethical considerations (Yeung & Yau, 2022). The analysis opened with a familiarization stage, where the researchers immersed themselves in the interview transcripts, reading them multiple times to capture nuanced meanings and build a rich understanding of the data. At this stage, preliminary notes were made to capture recurring concepts and possible themes. This familiarization also enabled the identification of core constructs consistent with the technology acceptance model.

The subsequent phase was data coding, in which portions of the text were systematically assigned descriptive labels that captured their key meaning. This open coding was carried out iteratively to ensure all relevant details were included. The coding process culminated in the formation of broader categories that mirrored the study's central focus on the benefits, challenges, and ethical considerations of integrating AI into English instruction. For example, elements such as "personalized learning" and "real-time feedback" were woven into the theme of Perceived Usefulness, while aspects like "user interface design" and "technical support" were grouped under Perceived Ease of Use. To enrich the analysis, extended TAM constructs, including social influence and facilitating conditions, were also embedded within the thematic structure, creating a more holistic perspective.

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Finally, themes were refined and defined to ensure they accurately represented the data and aligned with the study's objectives. This involved reviewing the coded data within each theme to confirm its coherence and relevance. Themes were then named and described in detail, with illustrative quotes from participants used to support the findings. For example, themes such as "adaptive learning pathways" and "data privacy concerns" were elaborated upon to highlight both the opportunities and ethical challenges of AI integration. The thematic analysis not only provided a structured approach to data interpretation but also ensured that the findings were grounded in participants' lived experiences, offering valuable insights into the implementation of AI in English instruction. Validity was ensured through trustworthiness strategies, including credibility, transferability, dependability, and confirmability, implemented via triangulation, member checking, thick description, and audit trails, following contemporary qualitative research standards (Nowell et al., 2017).

Ethical Considerations

To mitigate issues concerning data privacy, the study implemented strict data management procedures. Digital recordings and transcripts were stored securely on encrypted devices with access limited to the research team. Data handling complied with the General Data Protection Regulation and other applicable data protection standards, ensuring participants' personal details were protected from unauthorized use or disclosure. Furthermore, transparency was prioritized by informing participants in detail about how their data would be utilized, stored, and ultimately disposed of once the research concluded.

The study also considered the ethical implications of using AI in education, particularly in relation to bias, fairness, and accountability, as emphasized by (Aljabr & Al-Ahdal, 2024). Participants were encouraged to discuss their perspectives on these issues, and the research team took care to analyze these concerns critically. The findings were contextualized within the broader framework of ethical AI practices, emphasizing the importance of designing AI tools that are equitable, transparent, and free from bias. By integrating these ethical considerations into the research design, the study sought to promote the responsible use of AI in English instruction, aiming to maximize its benefits while upholding ethical standards.

RESULT AND DISCUSSION

Thematic analysis of 18 semi-structured interviews produced five principal themes that align with TAM and its extensions. Participants reported tangible pedagogical benefits (personalized learning paths, instant corrective feedback, and reduced administrative workload), broadly positive usability impressions tempered by technical reliability issues, strong effects of peer and institutional endorsement on uptake, a decisive role for infrastructure and training, and pervasive ethical worries (privacy, opacity, and algorithmic bias). Importantly, ethical concerns functioned as a moderator: where trust was low, reported PU and PEOU were reduced despite feature-rich platforms.

Evaluation of AI's Perceived Usefulness in Enhancing English Instruction

The study found that participants viewed AI as highly beneficial for enhancing English instruction, particularly through personalized learning experiences. Educators emphasized AI's ability to tailor exercises to individual proficiency levels, optimizing language acquisition. Learners valued features like real-time feedback on grammar and pronunciation, which enabled immediate improvement. These findings align with the TAM's concept of perceived usefulness, demonstrating AI's significant impact on learning outcomes in diverse settings.

AI was also seen as useful in streamlining educators' tasks, such as automating grading and generating exercises, allowing more focus on complex teaching activities. Its ability to analyze large datasets provided insights into learners' progress, supporting data-driven decisions and improving instructional efficiency. However, limitations were noted, including AI's difficulty in addressing cultural and contextual nuances

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critical for advanced language proficiency. Learners voiced worries about the absence of human-like engagement, emphasizing the necessity for AI systems to more effectively handle complex linguistic and cultural dimensions.

Successful AI integration into teaching frameworks was found to enhance learner engagement and outcomes, whereas misalignment limited its benefits. Participants further emphasized that transparency, data privacy, and bias prevention are crucial for building trust, making ethical governance essential to sustaining AI's perceived usefulness in English instruction.

Analysis of AI's Perceived Ease of Use in Educational Contexts

The study revealed that participants generally found AI tools to be user-friendly, with intuitive interfaces and straightforward functionalities that facilitated their integration into educational contexts. Educators highlighted the simplicity of setting up and navigating AI platforms, which reduced the learning curve and encouraged adoption. Learners similarly appreciated the accessibility of AI tools, noting features such as guided tutorials and user-friendly dashboards. These findings align with the Technology TAM's construct of perceived ease of use, emphasizing the importance of usability in promoting the adoption of AI in English instruction.

Despite the overall positive perceptions, challenges related to technical proficiency emerged as a barrier to ease of use for some participants. Educators with limited technological experience reported difficulties in customizing AI tools to align with specific teaching objectives, which occasionally hindered their instructional effectiveness. Learners also encountered issues with technical glitches, such as system crashes or inaccurate feedback, which disrupted their learning experiences. These challenges underscore the need for robust technical support and user training to enhance the usability of AI in diverse educational settings.

Participants stressed that the usability of AI tools was strongly shaped by the level of support offered by developers. Teachers pointed out that having access to detailed training resources, including video tutorials and manuals, made it much easier to incorporate AI into their instruction. Likewise, learners appreciated prompt customer service and built-in guidance, which enabled them to quickly overcome technical challenges. Overall, the results underscore the importance of robust support systems in making AI tools user-friendly and encouraging broader adoption.

The study also identified a correlation between the perceived ease of use of AI tools and their adaptability to diverse educational contexts. Educators working in resource-constrained environments appreciated AI platforms that required minimal infrastructure and were compatible with existing devices. Learners from varied backgrounds similarly valued tools that offered multilingual support and customizable features. This adaptability not only enhanced the usability of AI tools but also ensured their relevance across different teaching and learning scenarios, reinforcing their appeal to a broader audience.

Ethical considerations were found to intersect with perceptions of ease of use, particularly in terms of transparency and data handling. Participants expressed a preference for AI tools that clearly communicated their functionalities and data usage policies, as this transparency fostered trust and confidence in their use. Concerns about opaque algorithms and potential misuse of data were noted as factors that could diminish the perceived ease of use. These insights suggest that ethical design principles, such as transparency and accountability, are integral to enhancing the usability of AI in educational contexts.

Social Influence Impact on AI Adoption in English Language Learning

The study found that social influence plays a major role in the adoption of AI tools for English language learning. Teachers indicated that encouragement from colleagues and institutional support strongly affected their decision to incorporate AI into instruction. Similarly, students mentioned that peer suggestions and favorable feedback from classmates shaped their openness to using AI platforms. These results are consistent

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with the extended Technology Acceptance Model (TAM2), which identifies social influence as a key determinant of technology adoption, especially within educational settings.

Institutional support emerged as a key component of social influence, with educators emphasizing the importance of administrative encouragement and resource allocation for AI adoption. Participants noted that institutions promoting AI integration through training sessions and workshops created a favorable environment for its acceptance. Learners also reported increased motivation to use AI tools when their educational institutions actively endorsed these technologies. This underscores the role of institutional advocacy in amplifying social influence and fostering widespread adoption of AI in English language learning.

The study also found that social influence extends beyond formal institutional settings, with informal networks playing a significant role in AI adoption. Educators highlighted the impact of professional communities and online forums in sharing best practices and success stories related to AI integration. Learners similarly valued social media platforms and peer discussions as sources of information and encouragement. These informal channels of influence were particularly effective in addressing initial apprehensions and promoting confidence in the use of AI tools, demonstrating the multifaceted nature of social influence in educational technology adoption.

However, the study identified challenges associated with social influence, particularly in cases where negative experiences or skepticism were shared within professional or peer networks. Educators reported instances where colleagues' unfavorable opinions about AI tools discouraged adoption, even when the tools were objectively beneficial. Learners similarly noted that critical feedback from peers sometimes led to hesitation in using AI platforms. These results of the study underscore the twofold impact of social influence, showing that it can either promote or obstruct AI adoption based on the dominant attitudes within one's social circles.

Ethical considerations were found to intersect with social influence, particularly in relation to trust and transparency. Participants emphasized that social endorsements were more impactful when AI tools demonstrated ethical practices, such as safeguarding user data and providing unbiased feedback. Educators and learners expressed a preference for AI platforms that were perceived as reliable and ethically sound, as these attributes enhanced the credibility of social recommendations. These insights suggest that ethical integrity is integral to leveraging social influence effectively in promoting AI adoption in English language learning.

Facilitating Conditions and Their Role in AI Integration in English Education

The study showed that successful AI integration in English education depends heavily on facilitating conditions. Participants stressed the value of institutional support, especially through reliable internet and modern technological equipment. Educators noted that the availability of these resources significantly reduced barriers to adopting AI tools, enabling seamless integration into their teaching practices. Learners similarly highlighted the role of accessible technology in ensuring uninterrupted engagement with AI platforms, underscoring the foundational importance of facilitating conditions in educational settings.

Training and professional development emerged as pivotal facilitating conditions for effective AI integration. Educators reported that workshops, tutorials, and hands-on training sessions provided by institutions or AI developers enhanced their confidence and competence in using AI tools. These opportunities allowed them to explore the functionalities of AI platforms and align them with their pedagogical goals. Learners also benefited from orientation sessions that familiarized them with AI tools, ensuring a smoother learning experience. The results also emphasize the importance of specialized training to fully optimize the use of AI in English instruction.

The study also found that technical support systems are a critical facilitating condition for the adoption of AI in education. Participants noted that responsive customer service and readily available troubleshooting

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resources were essential in addressing technical challenges. Educators particularly valued ongoing support that enabled them to resolve issues promptly, minimizing disruptions to their teaching. Learners echoed this sentiment, emphasizing the importance of accessible help desks and in-app guidance. These insights suggest that robust technical support mechanisms are indispensable for sustaining the effective use of AI tools in educational contexts.

Institutional policies and leadership were identified as additional facilitating conditions influencing AI integration. Educators reported that clear guidelines and administrative encouragement fostered a positive environment for adopting AI technologies. Institutional leadership that prioritized innovation and allocated resources for AI implementation was seen as a driving force behind successful integration. Learners similarly noted that institutional endorsement of AI tools increased their trust and willingness to engage with these platforms. These results highlight the significance of organizational commitment in fostering an environment supportive of AI integration in English education.

Participants further emphasized that contextual adaptability serves as an essential facilitating condition. AI tools that were compatible with diverse educational environments, including resource-constrained settings, were perceived as more effective. Educators working in underfunded institutions appreciated AI platforms requiring minimal infrastructure, while learners valued tools offering multilingual support and customizable features. This adaptability ensured that AI technologies could cater to varied needs, enhancing their relevance and usability. These results emphasize the need for AI systems to be designed with flexibility to accommodate diverse educational contexts.

Ethical Considerations in the Deployment of AI Tools for English Instruction

The study revealed that ethical considerations significantly influence the deployment of AI tools in English instruction, with participants emphasizing the importance of transparency in algorithmic processes. Educators and learners expressed concerns about the opacity of AI systems, particularly in understanding how decisions, such as feedback or grading, are made. This lack of transparency was seen as a barrier to trust, highlighting the need for developers to provide clear explanations of AI functionalities. Transparent systems were perceived as more reliable, fostering confidence in their integration into educational practices.

Data privacy emerged as a critical ethical concern in the adoption of AI tools for English instruction. Participants underscored the importance of safeguarding sensitive information, such as learners' personal data and academic performance records. Educators noted apprehensions regarding the potential misuse of data by AI platforms, which could lead to breaches of confidentiality. Learners similarly emphasized the need for robust data protection measures to ensure their privacy. These findings suggest that ethical data handling practices are essential for promoting trust and widespread adoption.

Algorithmic bias was identified as another ethical challenge in the deployment of AI tools. Educators reported instances where AI systems provided feedback that appeared biased or inconsistent, particularly in assessing language use across diverse cultural contexts. Learners highlighted concerns about the fairness of AI-driven evaluations, which could disadvantage certain demographic groups. These insights underscore the necessity for developers to address biases in AI algorithms, ensuring equitable treatment of all users and enhancing the ethical integrity of these tools in educational settings.

Participants highlighted the ethical implications of equitable access to AI tools, particularly in resource-constrained environments. Educators noted disparities in the availability of AI technologies, which could exacerbate existing inequalities in educational opportunities. Learners from underprivileged backgrounds emphasized the importance of designing AI systems that are affordable and accessible, ensuring that their benefits are not limited to well-resourced institutions. These findings stress the need for ethical frameworks that prioritize inclusivity and accessibility in the development and deployment of AI tools.

The study also revealed that ethical considerations intersect with perceptions of accountability in AI deployment. Educators and learners emphasized the importance of holding developers responsible for the

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outcomes and impacts of AI systems. Participants expressed a preference for platforms that actively addressed ethical concerns, such as bias and privacy, and provided mechanisms for user feedback. This accountability was seen as integral to fostering trust and ensuring the responsible use of AI in English instruction. The study results emphasize the importance of ethical oversight in designing and applying AI technologies.

Some divergences emerged. Unlike earlier TAM studies, where PEOU lost predictive power after PU (Rukmana et al., 2024)Ease of use remained decisive here, likely due to infrastructural challenges in the Indonesian context. Moreover, qualitative data showed that ethical and social narratives often outweighed technical benefits, differing from large-scale surveys but highlighting contextual depth (Smith & Storrs, 2023); (Zawacki-Richter et al., 2019)

Theoretically, this study advances TAM by integrating ethics as a core determinant and demonstrating context sensitivity in low-resource environments. Practically, it suggests institutions must combine AI adoption with transparent governance, professional development, and equity-oriented policies (Holmes et al., 2022); (Akgun & Greenhow, 2022). Developers should prioritize explainability and cultural adaptability to build trust (Ali Derakhshan, 2024).

Practical perspective highlighted a need for digital pedagogy frameworks that integrate AI in ways that enhance learner engagement without diminishing the role of human educators. Recent studies emphasize that effective digital pedagogy requires aligning AI tools with instructional design, fostering teacher digital competence, and promoting critical digital literacy among learners (Blume, 2022) (Johannesen et al., 2024). This suggests that the incorporation of AI cannot simply be treated as a mere technological upgrade, but as a pedagogical transformation that reshapes the learning process.

Equally important are governance frameworks for AI in education. Responsible adoption demands clear policies addressing transparency, accountability, inclusivity, and data protection (Miao, 2021);(Holmes et al., 2019). As highlighted by (Floridi et al., 2018) algorithmic governance must confirm that AI applications in education remain in accordance with moral and human-centered standards, avoid reinforcing social inequalities, and maintain mechanisms for human oversight. For developing contexts such as Indonesia, this means institutional leaders and policymakers must balance innovation with equity by providing infrastructure, professional development, and ethical safeguards.

Limitations include the small, purposive sample of 18 AI users in Kupang, potential self-selection bias, and a short (34-day) cross-sectional design. Data were perception-based, without technical audits of AI systems. Future research should test an Ethical-TAM with larger samples, mixed methods, and cross-regional comparisons.

In short, this study confirms AI's pedagogical value while showing that ethical trust and contextual support are as crucial as usefulness and usability. By framing ethics as integral to TAM, it contributes both to theoretical refinement and to practical guidance for responsible AI in English instruction.

CONCLUSSION

This study demonstrates that AI has a significant capability to fundamentally alter English instruction by making tailored educational experiences possible, providing real-time feedback, and reducing teachers' administrative burden, thereby enhancing both efficiency and learner outcomes. Beyond these technical benefits, the findings advance the Technology Acceptance Model by showing that in low-resource contexts, ease of use remains a decisive factor, while ethical trust, notably in relation to transparency, the protection of personal information, and inequities embedded in algorithms, proves to be a catalyst for acceptance of adoption. This highlights a theoretical novelty: ethics and contextual constraints can moderate the influence of perceived usefulness and usability, challenging earlier TAM assumptions. Practically, the results suggest that successful integration of AI into education demands not just technological deployment, but also pedagogical

alignment, institutional readiness, and ethical oversight; it entails alignment with curricular objectives, robust organizational endorsement, and governance mechanisms that ensure equity and accountability. Infrastructure, professional development, and peer or institutional endorsement were found to strongly shape adoption, indicating that social and organizational ecosystems are as critical as the technology itself. In conclusion, AI's value lies not only in its capacity to automate and personalize learning but in how responsibly it is governed and contextually adapted. Developers must prioritize explainable, culturally sensitive, and user-friendly systems, while institutions should provide resources, training, and ethical oversight. By combining innovation with responsible governance, AI can move from being a promising tool to a sustainable force for equitable language education.

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