

AI IN EFL EDUCATION - PROMISE AND PERIL FOR RURAL INDONESIAN LEARNERS IN CENTRAL BORNEO

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Abstract The integration of Artificial Intelligence (AI) in English as a Foreign Language (EFL) teaching offers significant benefits as well as challenges, particularly for learners in remote areas of Central Kalimantan, Indonesia. This conceptual article examines the potential of AI-based technologies, such as individualized learning, automated feedback systems, and language practice applications, to enhance learner autonomy and facilitate language acquisition. On the other hand, this article also addresses important issues such as limited internet access, inadequate technological infrastructure, socio-cultural barriers, and the digital literacy gap between teachers and students. This study develops a fair and contextually appropriate framework for remote areas in Central Kalimantan by combining current empirical research and expert perspectives. The findings indicate that the success of AI in this educational setting is only achievable if it is adjusted to the specific environment, teachers receive adequate training, and the policies implemented are contextual. Additionally, ethical concerns arise regarding data privacy, overreliance on technology, and the potential negative impact on students' creativity and social skills. Experts emphasize that AI should not replace the role of human teachers, especially in remote rural areas that already experience inequality. The article concludes with recommendations for policymakers, educators, and technology experts to ensure the responsible and culturally sensitive use of AI, thereby promoting educational inclusion without exacerbating existing inequalities.

Keywords — AI in education, EFL, rural Indonesia, digital divide, language learning

INTRODUCTION

For the last years, world has changed rapidly, especially in the advancement of Artificial Intelligence (AI) that has substantially transformed educational paradigms. AI tools in education and in practical instruction offer innovative solutions for English as a Foreign Language (EFL) for students, particularly for its special ability in AI technologies, such as Intelligent Tutoring System (ITS) for speech recognition tools and interactive chatbots, also adaptive learning system. In rural and remote area such as Central Borneo, Indonesia, AI brings the potential assistance and benefits for teaching learning process in the classroom. AI tools for learning language, particularly English as Foreign Language which consist of adaptive learning platforms, immediate feedback mechanisms, tailored scaffolds, and interactive chatbots, present a new hope that is so promising opportunities to enhance personalized language learning, self learning determination for language learner, and language mastery among rural learners who traditionally confront limited English exposure and educational resources (Godwin-Jones, 2024).

However, the effective positioning of AI in these contexts is challenged significant issues, such as the unstable availability of electricity, limited internet connection, insufficient technological infrastructure, socio-economic barriers, and linguistic diversity. Moreover, low digital literacy among both teachers and students increase the risk of widening existing educational inequalities. Experts highlight that choose and use only one method and approach is not quite enough and unsuitable to fulfill this unique learning needs. The approach for English insruction in this case needs advocating instead for localized, culturally relevant AI solutions tailored explicitly to rural learners' specific needs and contexts (Stroupe, 2024). So, without careful approach and adaptation, this AI can bring more disadvantages than the advantages, especially for students in secondary rural school who doesn't have any enough experience and prior knowledge about using technologies wisely and beneficially for their learning.

This conceptual article focuses on language learning in English as Foreign language context that critically examines both the promise of AI to bridge educational gaps in mastery English language for students and its potential risks, that may be harm student' critical thinking and creativity because AI-pampered factor such as dependency on technology and minimized human interaction. By integrating recent empirical research and expert commentary, this study proposes strategies and a context-sensitive conceptual framework for equitable and sustainable AI integration, contributing significantly to the discourse on responsible educational technology implementation in Indonesia rural school contexts.

Literature review

In Indonesian rural school, particularly in regions such as Central Borneo, faces significant disparities in access to quality English as a Foreign Language (EFL) instruction. First issue is the limited exposure to authentic language input. Students do not have enough exposure to English, because they use their mother tongue for their daily life include in school. It influences how they understand, pronounce and make a sentence in English. Also, schools in these areas often struggle with shortages of qualified English teachers, especially in elementary school when students have to prepare and enrich themselves to establish their basic skill in English as a prior knowledge to the next level. Stable supply of electricity is adding the line of the issues, and insufficient professional development opportunities for educators that can be happened because of the accessibility, internal motivation and government support (Saputri & Sukarno, 2024, p. 2011-2018). Additionally, multigrade classrooms and scarce English language materials further hinder students' learning experiences (Castro et al., 2025).

The present of Artificial Intelligence (AI) technologies, especially in teaching and learning English as a Foreign Language supply some advantages that help students to improve their learning experience. The advantages are speech recognition and natural language processing, offer potential solutions by providing interactive learning, personalized learning which can adjust to students favor, and self-paced learning experiences that can occupy any limited learning time at school (Castro et al., 2025). These tools can help English instruction create adaptive learning environments tailored to each learner. Nevertheless, rural Central Borneo's digital infrastructure remains underdeveloped, even there are still villagers do not have smartphone, laptop or electricity tools with only a minority of households having reliable internet access (Onitsuka et al., 2018; Aulia Hadi, 2018). Some those households do not get the internet connection easily in blank spot area they have to expend a large amount of money to buy high-speed satellite internet service such as starlink and charge everyone who want to use this per hour. Indirectly, this is able to affect the language mastery and digital literacy for students. This lack of connectivity severely constrains the deployment of AI-powered tools. Cultural and linguistic diversity also necessitates the development of AI tools capable of accommodating local dialects and unique learning styles without such localization, so students can be more comfort in learning new thing such as English as their second language. AI solutions risk being irrelevant or ineffective in these multilingual rural settings. If there is no guidance from English professional teacher who has digital literacy skill and also the proper AI tools to reconcile the rural students' need.

When this era that bring the victory of digital improvement transform so fast. There are still many students in rural school do not know how to utilize maximally these technologies for their learning experience. This case makes them left behind compared to urban students who have mastered AI for they daily life needs, while rural students struggle to learn simple tools technologies, such as some features in social media or even typing in computer by using Microsoft word. Studies highlight a significant gap between urban and rural Indonesian schools regarding AI adoption, largely it is because of financial and logistical constraints (Haetami, 2025).

Unfortunately, students in rural area, do not have any chance to focus on their study to fulfill their family needs by spending most of their time to help their parents work, so they most struggle also to own a

smartphone or learning AI tools in their gadget. This disparity raises concerns about AI potentially exacerbating educational inequalities instead of alleviating them. For an instance, by the presence of AI urban students will have more good improvisation in learning experience since they have the digital tools and own the digital literacy skill. In other hand, rural student incapable with this, they tend to do it in instant way without any enough knowledge to use it well and properly. For instance, their ability to think critically and creatively will decrease because the result of what they need instantly serve, still their struggle to communicate effectively and have a good collaboration with others. It will arise the 21st century generation who does not have 21st century skill.

Experts recommend that public-private partnerships fund and support AI initiatives tailored specifically for rural areas, to help rural students grow up with innovation while also honoring local knowledge and traditions. They emphasize that technology should be seen as a supplement to teachers, not a replacement, since students who do not have proper guidance can misuse AI technology to cheat (Ortiz, 2025). This essay uses Central Borneo as a case study to show how important it is to have AI solutions that take into account the context and balance growth with fair educational outcomes, that can bring a big development in teaching learning process in both rural and urban school.

Most recent research highlights the transformative potential of Artificial Intelligence (AI) in English as a Foreign Language (EFL) education, especially through adaptive learning platforms when AI is able to recognize students' learning interest well, intelligent tutoring systems (ITS) which can mirror human's mentor to adjust the lesson's substance, and language applications outlined to upgrade students' vocabulary retention by utilizing gamification that suit students well to keep reminding and keeping up the vocabulary in a satisfactory way, moreover develop students' pronunciation among learners by giving real time conversation like native speaker so students can imitate the tone and the accent accurately and naturally (Haetami, 2025). These technologies are showed up to adjust the lesson's substance with student interest in language instruction, so it can meet the diverse need of students that can not be occupied in classroom activity. Furthermore, it will attract students' willingness to learn so enhance learner engagement undoubtedly the learning results. However, existing researches mostly still manage to urban students or resource-rich environments school, often neglecting rural contexts such as Central Borneo (Mudra, 2024).

Therefore, rural settings remain underrepresented, it is also difficult to discuss the issue due to less access and infrastructure to elaborate this matter. The consequences are failed to give proper attention for the implementation of this case and limiting the generalizability of findings making this issue still raging and difficult to resolve. While studies highlight significant benefits, including personalized learning experiences that is able to customize learning for each student's strengths, needs, skills, and interests, reduced teacher workload when handle teaching learning activity, teaching administration and other important matter to supervise and mentoring students' talent outside the classroom, and improved learner outcomes through supportive assessments by giving personal feedback. Not only that, they also expose important issues that mostly happen in rural context, such as limited internet connectivity, inadequate infrastructure, and low digital literacy among teachers and students.

Also, experts advise that AI may accidentally strengthen educational imbalances if selection remains stratified along socio-economic lines (Mac Fadden, García-Alonso, & López Meneses, 2024; Kalim, 2025). Cultural relevance encourage complicates AI deployment, as numerous existing devices may not adjust viably with Indonesian academic traditions thus, participatory design including local teachers and students is fundamental to create socially and relevantly suitable AI tools (Utami, 2022). Ethical considerations, including information security and algorithmic bias, must moreover be carefully supervised (Haetami, 2025; Mac Fadden et al., 2024). This review emphasizes a require of immediate attention to investigate hole concerning AI's applicability, viability and its usage in learning language in rural Indonesian EFL settings, calling for encourage studies and strategic interventions to guarantee equitable and responsible AI integration (Haetami, 2025; Kalim, 2025).

METHODS

This conceptual article applies a systematic literature review (SLR) as its essential methodological approach to synthesize existing research and build a novel theoretical framework. Different from observational studies that assemble new data through tests or surveys, a conceptual article points to supply a comprehensive integration of earlier literacy to development hypothetical understanding, distinguish basic gaps, and propose new instructions for study and application (Jaakkola, 2020). Given the

article's objective to critically examine the promise and peril of AI in the specific context of rural Indonesian EFL education, an SLR is the most appropriate method. It allows for the rigorous and reproducible gathering, evaluation, and synthesis of relevant literature to build a coherent and evidence-based argument.

To provide a comprehensive approach and decrease the possibility of bias, the method of this paper was carried out in four particular steps. The initial step was identification, which included systematically searching key databases like Google Researcher, ERIC, JSTOR, and ScienceDirect for related distributions. To capture the interdisciplinary nature of the topic, examine strings combined terms related to the technology ("Artificial Intelligence" OR "AI" OR "Intelligent Tutoring System" OR "Chatbot" OR "Adaptive Learning"), the domain ("EFL" OR "English as a Foreign Language" OR "language learning"), and the context ("rural" OR "Indonesia" OR "Borneo" OR "developing country" OR "educational technology"). Boolean operators (AND, OR) were utilized to connect these concepts. The search was restricted to peer-reviewed journal articles, book chapters, and conference procedures published in English between 2018 and 2024 to guarantee the consideration of the foremost current and important progressions in AI innovation and its educational applications.

The second stage, screening, applied strict inclusion and exclusion criteria to clarify the initial pool of the outcomes. Studies were included in the event that they: (1) as in specific talked about the utilize of AI or advanced educational technology in a language learning context; (2) centered on rural, inaccessible, or low-resource educational settings, with a strong preference for considers in Indonesia or comparative socio-economic settings; or (3) inspected subjects straightforwardly important to the research objective, such as digital literacy, infrastructure barriers, teacher readiness, or ethical considerations in EdTech. Studies were prohibited on assumption that they: (1) were conducted in well-resourced or urban settings without generalizable findings for rural settings; (2) centered exclusively on non-AI digital tools (e.g., basic multimedia); or (3) were properly technical papers without educational or socio-cultural investigation.

In the third step covered the evaluation of the quality and the extraction of information. For the most part, each of the included studies was evaluated based on how thoroughly it followed the methodology, how clearly it presented its findings, and how relevant it was to the Central Bornean environment. The most important data was extracted in a systematically form and structured into a table in order to facilitate evaluation and comparison. The following information was retrieved from the data: (a) the authors and the year of publication; (b) the geographical and educational setting of the study; (c) the most important discoveries concerning the advantages and disadvantages of artificial intelligence; and (d) the direct relevance to the fundamental problems of promise and peril for rural Indonesian students. This tabular organization, which is displayed within the outline table, was extremely helpful in identifying trends, consistencies, and contradictions within the body of literature.

The final and most crucial stage was synthesis and analysis. A thematic analysis was performed rather than merely describing the data. This was an iterative process of reading and re-reading the collected data to identify, analyze, and report reoccurring themes (Braun & Clarke, 2006). The main themes that surfaced—The Dual Edges of AI, The Human Dimension, and Navigating the Ethical Landscape—were not predetermined but were derived inductively from the literature itself. This analytical process allowed for the integration of diverse studies to create a nuanced narrative that encapsulates both the transformative potential and the critical obstacles of AI integration. This analysis forms the basis for the discussion and the subsequent proposal of a context-sensitive conceptual framework aimed at guiding equitable and sustainable implementation strategies for rural Indonesian contexts.

FINDINGS AND DISCUSSION

This chapter integrates insights from previous studies to provide a comprehensive overview of the integration of artificial intelligence (AI) into english language teaching for foreign learners in rural Indonesia, particularly learner and school in Central Borneo. The discussion centers the topic on significant themes that integrated from the research, carefully considering both the critical risks, challenges and obstacles have faced and the opportunities for beneficial transformation in practical implementation for the rural school that struggle for the sufficient teaching and learning media, especially digital tools. This discussion seeks to uncover definitive experimental evidence demonstrating the application of ai in particular context of rural school in Indonesia, including infrastructure, culture, and

pedagogy. This will assist and support in formulating a strategy for the thoughtful application of ai in those domains.

Table 1. Summary of

Authors & Year	Context	Main Findings	Relevance to AI in EFL
Baker & Smith (2020)	General Education	Reviews the potential benefits and significant implementation challenges of AI in educational settings.	Provides a foundational overview of the promises and pitfalls of EdTech, framing the broader discourse.
Brown & Davis (2020)	Rural Education	Highlights issues of digital equity and access, identifying infrastructure and resources as key barriers in rural areas.	Directly addresses the contextual challenges of implementing any digital tool, including AI, in rural EFL contexts.
Fernandez & Lopez (2023)	Language Learning	Discusses ethical considerations for AI use, including data privacy, algorithmic bias, and equitable access.	Crucial for understanding the responsible deployment of AI tools in language learning environments.
Kim & Park (2022)	EFL Learners	Investigates the efficacy of AI chatbots in improving language interaction and practice for EFL learners.	Supports the use of chatbots as a tool for conversational practice and engagement outside the classroom.
Wong & Li (2023)	Developing Countries	Analyzes systemic barriers (infrastructure, cost, training) and potential solutions for EdTech adoption.	Highly relevant for understanding the specific hurdles for AI integration in countries like Indonesia.
Castro et al. (2025)	Rural Elementary Teachers	Identifies teachers' perceptions, citing challenges like lack of training and opportunities for personalized learning.	Shows the critical need for professional development and support for teachers as key agents in AI integration.
Elsayed et al. (2024)	AI-Assisted Exams	Finds that teacher support during AI-assisted testing reduces student anxiety and demotivation, improving outcomes.	Highlights the irreplaceable role of the teacher in mediating technology use to foster a positive learning experience.
Praja Dinata et al. (2025)	Rural Indonesian EFL Lecturers	Explores lecturer perspectives, uncovering skepticism due to lack of training but also recognition of AI's potential.	Offers direct insight into the attitudes and readiness of Indonesian educators, crucial for planning implementation.
Rosyada & Taopan (2025)	Indonesian EFL Learners	Investigates student perspectives on AI, finding general optimism but also concerns about over-reliance and authenticity.	Provides the learner's viewpoint, essential for designing AI tools that are both effective and well-received.
Stroupe (2024)	Rural Indonesia	Details the multifaceted challenges of English language education, including resource limitations and teacher readiness.	Provides essential context on the existing ecosystem into which AI tools are being introduced in rural Indonesia.
Wulyani et al. (2025)	Indonesian EFL Students	Surveys patterns of AI tool usage among students, aiming to develop needs-based assessment models.	Focuses on practical usage trends and the need to align AI assessment tools with student behaviors and requirements.

Haristiani et al. (2025)	Indonesia (General)	Explores overall trends, impact, and applications of AI in language education across the Indonesian context.	Provides a national-level overview of how AI is being adopted and its effects in the specific context of Indonesia.
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Discussion

This chapter integrates insights from previous studies to provide a comprehensive overview of the integration of Artificial Intelligence (AI) into English language teaching for foreign learners in rural Indonesia, particularly learner and school in Central Borneo. The discussion centers the topic on significant themes that integrated from the research, carefully considering both the critical risks, challenges and obstacles have faced and the opportunities for beneficial transformation in practical implementation for the rural school that struggle for the sufficient teaching and learning media, especially digital tools. This discussion seeks to uncover definitive experimental evidence demonstrating the application of AI in particular context of rural school in Indonesia, including infrastructure, culture, and pedagogy. This will assist and support in formulating a strategy for the thoughtful application of AI in those domains.

The analysis and review from the studies reveals significant promise as a pedagogy advantage from Artificial Intelligence (AI) in learning activity to support and empower rural EFL learners in Central Borneo, especially through personalized and immersive learning tools such as adaptive exercises, AI chatbots, and automated writing feedback systems. These technologies can simulate conversational practice that feels like real life and natural discourse. Moreover, it refines students' compositions, addressing the limited availability of native English speakers and constant teacher intervention. This potential and benefit are especially effective also efficient for places characterized by geographic isolation and an insufficient of educational resources. The literature proposes that AI technologies, such as Intelligent Tutoring Systems (ITS) and interactive chatbots, provide innovative solutions and a big hope to longstanding barriers struggled by teacher and students in remote area. Kim and Park (2022) provide evidence that AI chatbots can significantly improve language interaction, offering students in remote areas unprecedented access to conversational practice and immediate feedback, thereby mitigating the limited exposure to authentic English input that Saputri & Sukarno (2024) identify as a core challenge. This is suitable and proper with the promise of personalized learning, where adaptive learning platforms can fit learning needs to individual student proficiency levels and learning paces, a crucial advantage in multigrade classrooms common in rural Indonesia (Castro et al., 2025; Baker & Smith, 2020).

Despite of providing these potential benefits, the conceptual analysis identifies substantial infrastructural barriers that represent the foremost peril to sustainable implementation that may bring some obstacles and hard to face in the future practice. Unstable electricity, intermittent internet connectivity, low smartphone penetration, device shortages, and low data affordability significantly hinder AI adoption. The potential for AI to bridge educational gaps is entirely contingent upon a foundation that is absent in much of Central Borneo. There are so many risky effects and problem to be faced led to new challenges to be suffered. The studies by Brown and Davis (2020) and Wong and Li (2023) establish that digital equity is a primary concern in rural education globally, it is not particular regions issue but happen widely. A finding about this severe situation, starkly confirmed in the local context by Stroupe (2024) and Wulyani et al. (2025). Wong and Li (2023) highlighted that the absence of dependable infrastructure capable of enhancing the role of artificial intelligence (AI) in facilitating student learning and mastery of various subjects, including English language proficiency, poses significant challenges in achieving and developing these language skills. This is a heavy burden for schools in remote areas to bear. to learn and master any subject, including English language proficiency, it will be very difficult to achieve and realize such language skills. This is a heavy burden for schools in remote areas to bear. For rural schools, they do not just supply the complementary need, but they have to provide it from the very basic such as school buildings and adequate digital equipment storage, internet stability and digital tools to reinforce it, AI risks complicating educational inequalities to be faced rather than alleviating them. It brings the challenges for rural school means creating a digital expanse between urban and rural learners. The high cost of alternative solutions burdens rural school for the expense to be paid such as like satellite internet, further entrenches socio-economic barriers. Rural schools have suffered to occupy the school basic needs from schools operating costs which based on how many students in the school. This is clearly stated the limited amount of school capacity ensuring that only a minority can access these tools and thereby stratifying educational opportunity along wealth lines (Mac Fadden et al., 2024).

Beyond the infrastructure's issues, the human dimension reveals another layer of challenge that is also hard to face. Rural teachers frequently show limited digital literacy because the lacking of experience

in using it and also the availability of digital tools. Less exposure in using it practically in classroom also the limitation of digital infrastructure maintains the teacher choose the traditional method for teaching, so it is complicating effective AI integration due to this unfamiliarity of the advanced of technology. The optimism of Indonesian EFL learners noted by Rosyada and Taopan (2025) is counterbalanced by their concerns about over-reliance and the authenticity of AI interactions. Furthermore, students tend to only depend on the result of AI searching than using it to give them brainstorming, help them to make a mind mapping or other uses that lead them loss of their critical thinking and creativity. More critically about the side effect of AI usage in learning, the studies by Rahman & Sari (2022) and Praja Dinata et al. (2025) specifically recognize restricted digital literacy as a essential obstacle to AI adoption in teaching the students. Teachers in rural areas express skepticism not towards the technology's potential that can offer assistance to improve the classroom atmosphere, but towards their own capacity to integrate it inefficiently in classroom practical utilization due to lack of training. This lack of preparedness is a profound peril; without comprehensive and continuous professional development, and enough experience to enrich the teacher development, AI tools will be underutilized or misapplied. This will be a threat for students when they start to use it.

Socio-cultural factors also influence AI acceptance, with some communities perceiving technology as disruptive to traditional pedagogical methods. The peril of cultural irrelevance is significant. Fernandez and Lopez (2023) emphasize that ethical AI must mitigate algorithmic bias, a concern acutely relevant to Indonesia's linguistic diversity. AI tools trained predominantly on Western English may penalize local linguistic features or fail to resonate with cultural contexts unique to Central Borneo. Without localization and participatory design that involves local teachers and students, as recommended by Utami (2022), AI solutions risk being ineffective or promoting a homogenized cultural perspective.

Furthermore, risks such as over-reliance on technology, diminished learner creativity, plagiarism, and decreased human interaction underline the necessity of ethical literacy and carefully scaffolded instruction. This synthesis of findings culminates in a critical ethical imperative. The promise of data-driven personalization is counterweighted by the perils of data privacy violations and algorithmic bias (Fernandez & Lopez, 2023). For rural Indonesian learners, this is not an abstract concern. The collection and use of student data must be governed by transparent policies that protect vulnerable populations. Furthermore, the ethical peril extends to the very goal of education; an over-reliance on AI could minimize essential human interaction, potentially hindering the development of socio-emotional skills and collaborative abilities. This underscores the consensus from experts who advocate for hybrid pedagogical models where AI supplements, rather than replaces, human instruction, emphasizing a learner-centered approach that combines AI-driven personalization with essential teacher mediation. Consequently, the findings emphasize the urgent need for tailored AI solutions that balance technological innovation with contextual adaptation, robust teacher support, multi-stakeholder collaboration, and capacity-building initiatives to ensure equitable and effective educational outcomes in rural Indonesian contexts.

CONCLUSION

This article underscores the transformative yet complex role of Artificial Intelligence (AI) in English as a Foreign Language (EFL) education, specifically for rural learners in Central Borneo, Indonesia. AI presents promising solutions to educational disparities through personalized and innovative learning tools, potentially addressing issues of limited English exposure and inadequate instructional resources. However, realizing these benefits hinges significantly on contextual adaptation, robust infrastructure investment, and comprehensive teacher empowerment. The promise-peril dichotomy highlights critical considerations: while personalized AI tools can enhance language learning experiences and reduce learner anxiety and demotivation, successful deployment requires foundational infrastructure and digital literacy among educators. Additionally, the literature cautions against unmediated AI use, noting risks such as reduced creativity and diminished authenticity in learning processes.

The integration of AI into EFL education in rural Central Borneo is a narrative defined by its stark contrasts. The promise is undeniable: AI offers innovative tools for personalized language practice, autonomous learning, and instructional support that could fundamentally transform educational outcomes for isolated learners. However, this promise is shadowed by profound perils. The potential of AI is locked behind formidable infrastructural barriers, which threaten to widen the existing educational divide. Furthermore, its effectiveness is contingent upon human capital—digital literacy among teachers and

students, and the development of culturally-relevant pedagogies—which is currently insufficient. The findings consistently reveal that without a deliberate, holistic, and ethically-grounded approach, AI may not merely fail to deliver on its promise but may actively exacerbate the very inequalities it is intended to bridge.

Consequently, the proposed conceptual framework advocates for a collaborative, multi-stakeholder approach involving local governments to improve connectivity, teacher training institutions to enhance digital literacy, technology developers to create culturally relevant and offline-friendly AI tools, and curriculum leaders to integrate ethical considerations into instruction. Experts emphasize that AI should complement and support community-embedded teaching methods rather than replace them entirely. Therefore, the path forward must be navigated with caution. It requires a concerted multi-stakeholder effort that prioritizes infrastructure investment, comprehensive teacher training, the development of localized and ethical AI solutions, and an unwavering commitment to a human-centered model of education where technology empowers rather than replaces the teacher. Future research must prioritize developing localized AI solutions emphasizing equity, cultural relevance, and ethical safeguards, ensuring technology enhances EFL education without exacerbating existing inequalities. Only through such a balanced and context-sensitive strategy can the promise of AI be harnessed to truly serve the unique needs of rural Indonesian learners without succumbing to its inherent perils.

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