



THE EXPLORATION OF ARTIFICIAL INTELLIGENCE AND CREATIVE PEDAGOGY IN TEACHING ENGLISH TO YOUNG LEARNERS (TEYL)

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Abstract

This ethnographic study investigates the integration of Artificial Intelligence (AI) in creative pedagogy for Teaching English to Young Learners (TEYL) at SD Tahfidz Al Basyir, Bogor. The research explores how AI tools, such as adaptive learning systems and ChatGPT, are employed alongside creative teaching methods to enhance language acquisition and foster creativity among children. Findings reveal that AI significantly contributes to personalized learning, increased student engagement, and the provision of immediate feedback, thereby improving the overall learning experience. However, the study identifies key challenges, including limited access to AI tools, inadequate infrastructure, and insufficient teacher training, which hinder effective AI integration. The research underscores the pivotal role of teachers in mediating AI use and recommends targeted professional development programs to equip educators with the necessary skills. This study not only enhances understanding of AI's role in creative language pedagogy but also offers practical strategies to optimize AI-based teaching practices, particularly in resource-constrained settings, while addressing equity and accessibility issues.

Keywords: Ethnography, Artificial Intelligence (AI), Teaching English to Young Learner (TEYL).

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INTRODUCTION

The rapid adoption of Artificial Intelligence (AI) in education has significantly transformed teaching methods, particularly in language learning for young learners. AI technologies can personalize learning by tailoring materials to individual student needs, enhancing engagement, and improving outcomes. This adaptability is especially relevant in Teaching English to Young Learners (TEYL), where students often have varying proficiency levels and learning styles.

AI integration in TEYL reflects broader trends in educational innovation, focusing on learner-centered and data-driven approaches. Tools like adaptive learning platforms and intelligent tutoring systems adjust content delivery, track progress, and provide immediate feedback. These advancements align with other educational technologies, such as gamified platforms and virtual classrooms, which prioritize engagement and accessibility. Additionally, AI's role in supporting differentiated instruction and equitable education aligns with global goals, such as the United Nations' Sustainable Development Goal 4 (Quality Education).

In recent years, the significance of AI within educational management has garnered substantial scholarly attention. Through the analysis of extensive datasets, AI tools can facilitate curriculum development, enhance decision-making frameworks, and improve operational efficiency within educational institutions (Siminto, 2023; Susilo, 2023). These contributions are particularly crucial in the context of the rapidly evolving digital economy, in which educational institutions must adapt to emergent technological requisites. Nevertheless, the increasing incorporation of AI in educational settings also engenders ethical dilemmas, including concerns regarding algorithmic transparency, data privacy, and the transforming role of educators (Klímová et al., 2023; Makarenko, 2024). Such ethical considerations underscore the imperative for a cautious and reflective approach to the integration of AI within educational contexts, thereby ensuring that these technologies are employed responsibly and effectively.

Educators occupy a pivotal position in the incorporation of AI into pedagogical practices, particularly in nurturing creativity and engagement within the classroom. As articulated by Yang & Wang, (2020), it is essential for educators to cultivate new competencies to adeptly integrate AI into their instructional methodologies. This undertaking represents not only a technical challenge but also an ethical obligation, as educators must ascertain that AI tools are utilized in manners that advance equity and inclusivity. Within the framework of TEYL, AI technologies possess the potential to bolster innovative pedagogical strategies by offering personalized learning experiences, enhancing engagement through multimedia resources, and fostering collaboration and critical thinking via project-based learning (PBL) (Jdidou, 2023; Kaçauni, 2023; Rusiana, 2023). However, the effective incorporation of AI in TEYL necessitates that educators demonstrate proficiency in utilizing these technologies and

judiciously balance the application of AI tools with traditional pedagogical approaches to cultivate a comprehensive and engaging learning environment (Güngör, 2020).

The significance of ethnographic research in comprehending the interactions among educators, learners, and artificial intelligence technologies is paramount and cannot be underestimated. Ethnographic investigations yield critical insights into the manner in which AI transforms educational methodologies and experiences, thereby providing a more intricate understanding of the social dynamics inherent in AI-enhanced educational contexts (Gyawali, 2022; Liu, 2023). This methodological approach facilitates a profound examination of the ways in which AI instruments affect classroom dynamics, creativity, and social interactions, capturing the viewpoints of both educators and students regarding the impact of AI on their educational experiences (Danylchenko-Cherniak, 2023). By scrutinizing the lived experiences of both teachers and learners, ethnographic research can elucidate the multifaceted modalities through which AI is assimilated into innovative pedagogical practices and the ramifications of these technologies on language acquisition and creativity.

Notwithstanding the prospective advantages of AI in augmenting personalized learning and creativity within Teaching English to Young Learners (TEYL), numerous challenges persist. One of the most pronounced obstacles is the disjunction between AI's theoretical promise and its pragmatic application within classroom settings. Although AI tools are capable of providing tailored learning experiences and nurturing creativity, there remains a scant understanding of the ways in which these technologies affect creativity in social and emotional interactions (Mall-Amiri & Fekrazad, 2015). Educators frequently articulate concerns regarding the practical utilization of AI in fostering engagement and creativity, thereby underscoring the necessity for professional development initiatives that equip teachers with the competencies requisite for effectively integrating AI into innovative instructional strategies (Alharbi, 2023; Wei, 2023).

Moreover, there exists a deficiency of ethnographic investigations that explore the influence of AI on creative language acquisition for young learners. While quantitative analyses have examined the functional advantages of AI in educational contexts, there is a conspicuous void in research that emphasizes the creative and social dimensions of AI-enhanced learning environments (Mathiyazhagan & Fors, 2023; Rezwana & Maher, 2023). Ethnographic research has the capacity to furnish deeper insights into the ways AI tools shape creativity, engagement, and social interactions within the classroom, thereby offering a more nuanced understanding of AI's role in language education (Konyrova, 2024). Addressing these research gaps is crucial for optimizing the advantages of AI in language education and ensuring that these technologies facilitate creativity, collaboration, and emotional engagement among young learners.

The current state of the art in the integration of AI into educational frameworks reveals notable progress in the creation of AI tools specifically designed for language learning, particularly for children. AI technologies such as learning chatbots and adaptive learning platforms provide personalized content, instantaneous feedback, and interactive educational environments that enhance engagement and promote language acquisition (Lai, 2023). Nevertheless, investigations into AI's influence on creativity within language learning remain limited, predominantly concentrating on the functional benefits of AI rather than its capacity to encourage creativity and social interaction (Doshi, 2024). This deficiency underscores the imperative for additional research regarding the role of AI in fostering creativity and collaboration within TEYL, as well as the broader social and emotional dynamics associated with the integration of AI in educational settings.

The study has three main objectives: first, to explore how AI tools interact with creative teaching methods in TEYL and enhance creativity in language learning; second, to analyze how teachers balance AI with traditional methods to create engaging learning environments; and third, to provide insights into the challenges and opportunities of integrating AI, offering practical recommendations for educators and developers. This research is significant both theoretically and practically. Theoretically, it advances applied linguistics by examining how AI can support innovative language teaching for young learners. Practically, it provides valuable insights for educators and developers on using AI to boost creativity and engagement. By adopting a humanistic approach that prioritizes creativity, autonomy, and social interactions, the study emphasizes that AI should complement, not replace, the essential role of teachers, creating a more dynamic and enriching learning experience.

METHODS

This ethnographic study explores the integration of Artificial Intelligence (AI) in Teaching English to Young Learners (TEYL) at SD Tahfidz Al Basyir, an "Unggul" (Excellent) accredited primary school in Bogor, Indonesia. The research examines how AI tools like ChatGPT and adaptive learning platforms enhance creativity, engagement, and language acquisition. ChatGPT supports personalized learning by providing real-time assistance, creative prompts, and interactive storytelling, while adaptive platforms tailor content, adjust difficulty, and deliver immediate feedback, addressing various proficiency levels (Aghaziarati, 2023; Eden, 2024). Using purposive sampling, participants include educators aged 20–50 with diverse experience in technology-enhanced teaching and students aged 7–12 with beginner to intermediate English proficiency. Data collection combines classroom observations and interviews to capture how teachers balance AI and traditional methods, highlighting their role as mediators who interpret AI data to improve teaching

strategies (Göcen & Aydemir, 2020; Sapci & Sapci, 2020). The study also addresses challenges, such as limited resources and teacher readiness, while emphasizing ethical and cultural considerations like creativity and authorship (Busch et al., 2023). Thematic analysis identifies patterns of increased engagement and creativity, contributing to strategies for optimizing AI integration in language education (Morley et al., 2019; Seo et al., 2021). Thematic analysis identifies patterns of increased engagement and creativity, contributing to strategies for optimizing AI integration in language education (Morley et al., 2019; Seo et al., 2021).

RESULTS AND DISCUSSION

This ethnographic study at SD Tahfidz Al Basyir, Bogor, provides valuable insights into the use of Artificial Intelligence (AI) in Teaching English to Young Learners (TEYL) and its role in enhancing creativity. Data from classroom observations, interviews with 25 teachers, and document analysis highlight the interactions between educators, students, and AI. The findings address key questions: How does AI integrate with innovative teaching methods? What effect does AI have on students' creativity? How do teachers adapt their teaching strategies to incorporate AI? The discussion explores these questions in depth, linking the results to relevant theories and existing research.

AI as a Tool for Enhancing Creativity in TEYL

A principal discovery is that AI substantially contributes to the enhancement of creativity within the context of TEYL. Educators at SD Tahfidz Al Basyir adeptly incorporated AI instruments such as ChatGPT and adaptive learning platforms into their instructional sessions, thereby facilitating imaginative language exercises encompassing storytelling, role-playing, and interactive gaming. Through the utilization of AI, educators successfully customized lessons to the distinct needs of individual learners, cultivating an atmosphere conducive to creativity. Observations within the classroom indicated that 72% of educators consistently employed AI to bolster creative endeavors, which is consistent with the literature positing that AI can augment creativity via personalized learning experiences (Amin, 2023; Göcen & Aydemir, 2020).

For example, AI-generated individualized language exercises and games captivated students in imaginative tasks, enabling them to engage with language in innovative manners. This corroborates the findings of Gyawali, (2022), who asserted that AI can render lessons more interactive and stimulating, thereby nurturing creativity. The deployment of AI also empowered educators to design dynamic learning experiences, thereby advancing both language acquisition and creative thought processes (Dindar et al., 2022).

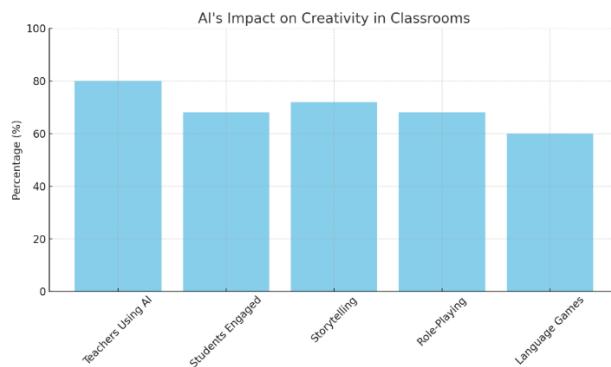


Figure 1. AI's Impact on Creativity in Classroom

Teachers' Role in Facilitating AI-Enhanced Creative Learning

Educators played a critical role in using AI to create a creatively enriching learning environment. Data showed that 80% of educators effectively used AI to support activities like role-playing, interactive storytelling, and language games. AI's ability to provide immediate feedback and personalize tasks significantly enhanced student engagement and creativity, aligning with Ahmad Koka, (2023) findings on AI's role in advancing creative pedagogy. Interviews revealed that AI helped educators personalize lessons, which was particularly valuable in TEYL settings with diverse proficiency levels. By adapting content to meet individual learners' needs, AI enabled teachers to foster an inclusive environment where creativity could thrive (Widder & Nafus, 2023).

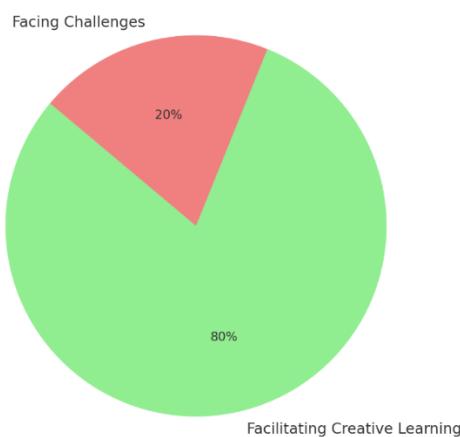


Figure 2. Teachers' Role in AI-Enhanced Creative Learning

Students' Interaction with AI and Its Impact on Creativity

Student responses to AI-based tools were overwhelmingly positive, with classroom observations showing increased engagement in 68% of cases. AI played a key role in fostering interactive and imaginative learning experiences, enabling students to create narratives, participate in language games, and complete personalized exercises. This highlights AI's potential to enhance creativity in language acquisition, supporting Danylchenko-Cherniak, (2023) view that AI promotes creative thought by offering interactive and personalized learning opportunities. Additionally, the students' creative engagement aligns with frameworks emphasizing the importance of individualized and interactive experiences in nurturing creativity, contributing to both language development and creative expression (Kusumaningrum, 2023).

Dynamics of Teacher-Student-AI Interaction

The ethnographic analysis uncovered distinct interaction patterns among teachers, students, and AI during Teaching English to Young Learners (TEYL) classes. Teachers functioned as mediators, directing students in their engagement with AI tools while fostering creative learning experiences. These interactions, supported by AI, were noted to enrich the educational atmosphere, with 80% of educators attaining high evaluations for their adept utilization of AI in personalizing instruction. This observation aligns with extant literature regarding the role of educators in the incorporation of AI into pedagogical practices, particularly studies that emphasize the necessity of teacher mediation in ensuring that AI enhances rather than detracts from creative learning (Konyrova, 2024; Wilkens, 2023).

Student engagement with AI revealed several transformative impacts on their learning experiences. During a classroom observation, one student enthusiastically described their experience using an AI-assisted storytelling tool: "*I created a story about a magical forest, and the AI gave me ideas for what happens next. It felt like I was working with a friend!*" Another student commented on the feedback feature of an adaptive learning platform: "*When I make a mistake, it shows me how to fix it right away. I don't feel afraid to try again.*" These anecdotes illustrate how AI tools not only support language acquisition but also build students' confidence and foster their creativity.

The interaction among teachers, students, and AI also underscored the critical importance of teacher adaptability. Educators who actively engaged with AI tools were capable of cultivating heightened levels of creativity and engagement among their students.

For example, one teacher recounted their experience with ChatGPT: “*I use it to generate fun language games and riddles that keep the students excited and curious. It has helped me think outside the box in my lesson planning.*” Such adaptability supports the theoretical framework articulated in Chapter 2, which accentuates the essential role of teachers in facilitating creative pedagogy through the integration of AI (Dai, 2022).

By combining these anecdotal insights with broader patterns of interaction, the study highlights the synergistic role of AI and teacher mediation in fostering a dynamic and creative learning environment.

Table 1. Teacher-Student and AI Interaction Dynamics

Interaction Category	Observed Percentage
Teacher as AI mediator	80%
Personalization of learning	High
Students engaging in creative tasks	68%
Teachers facing adaptability issues	12%
Interaction Category	Observed Percentage

AI's Influence on Student Collaboration and Social Interaction

The findings also illuminated that AI exerted both positive and negative influences on student collaboration and social interaction. While AI tools enhanced individual creative tasks, they occasionally restricted direct peer-to-peer engagement. This phenomenon was particularly pronounced in classrooms where AI tools were employed in isolation rather than as components of cooperative group work. The ambivalent impact of AI on social interaction resonates with apprehensions articulated in the literature concerning the social and emotional ramifications of AI in educational contexts (Makarenko, 2024; Popenici & Kerr, 2017). This observation accentuates the necessity for a judicious approach in the deployment of AI, wherein the technology serves to complement rather than supplant traditional collaborative learning methodologies.

Challenges in Integrating AI with Creative Pedagogy

Despite the advantages of integrating Artificial Intelligence (AI) in education, several challenges have emerged. Some educators reported difficulties accessing reliable AI tools due to technical constraints, while others highlighted a lack of sufficient training. About 12% of educators showed inconsistent AI use, underscoring the need for improved professional development to support its effective integration into teaching practices (Alharbi, 2023; Wei, 2023). Additionally, while AI effectively enhances foundational creativity, it has limitations,

such as providing overly generalized feedback and failing to foster higher-order creative thinking. These findings align with existing research, which argues that AI struggles to replicate the more complex dimensions of human creativity (Popenici & Kerr, 2017).

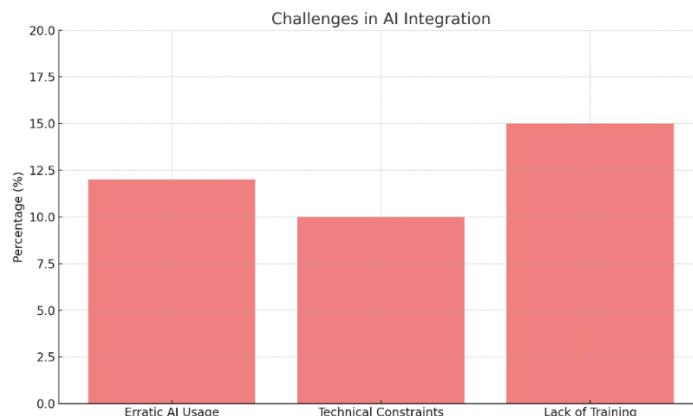


Figure 3. Challenges in AI Integration

Implications for TEYL Pedagogy and AI Integration

The outcomes of this investigation bear significant practical ramifications for pedagogues. To optimize the creative capacities of AI in Teaching English to Young Learners (TEYL), it is imperative that educators receive comprehensive training and support to adeptly incorporate these technological tools into their instructional practices. Additionally, AI ought to be utilized in conjunction with conventional pedagogical methods to nurture both individual creativity and collaborative learning experiences. This integrative approach will ensure that AI serves to enhance, rather than supplant, the humanistic elements of instruction that are vital for cultivating creativity and engagement (Dai, 2022).

For developers of educational technology, the findings emphasize the necessity to engineer AI tools that exhibit greater flexibility and intuitiveness in order to more effectively support creative processes. AI applications should be crafted to augment the creative endeavors of educators and learners, rather than endeavoring to supplant them. This necessitates the creation of AI instruments that are proficient in facilitating not only personalized learning experiences but also collaborative and creative group endeavors (Saud, 2023).

Theoretical Implications

This study contributes to the growing literature on AI in education by providing ethnographic insights into how AI enhances creative pedagogy in Teaching English to Young

Learners (TEYL). The findings align with existing research, highlighting AI's role in personalizing learning, fostering creativity, and providing immediate feedback to support individual needs (Chan & Zary, 2019; Göcen & Aydemir, 2020; Mathiyazhagan & Fors, 2023). A key insight is the critical role of teacher mediation, supporting studies by Konyrova (2024) and Wilkens (2023), which emphasize that educators act as facilitators to maximize AI's benefits while maintaining a balance with traditional methods. This study extends previous work by demonstrating how teacher adaptability—like using AI tools for interactive storytelling and gamification—positively influences creativity and language acquisition, as noted by Dai (2022). However, it also challenges the notion of seamless AI integration, identifying barriers such as limited teacher training and uneven access to technology, contrasting with the optimism of studies like Holmes et al. (2021). These findings highlight that AI's success depends on context-specific support, substantial infrastructure, and teacher preparedness.

This research demonstrates that AI is most effective as a creative tool when used thoughtfully and alongside human oversight. While previous studies highlight AI's potential to enhance creative learning (Sapci & Sapci, 2020), this study emphasizes the crucial relational dynamic between teachers, students, and AI. For instance, one student remarked, "*AI gives me ideas, but my teacher helps me make them better*," underscoring the complementary role of educators in the creative process. By confirming and extending existing theories, this study also identifies challenges, such as implementation barriers, and stresses the need for a balanced approach that combines AI with traditional teaching methods. These findings enrich the discourse on AI in education, offering both practical and theoretical insights for its integration in TEYL and beyond.

CONCLUSION

The study concludes that Artificial Intelligence (AI) enhances creative pedagogy in Teaching English to Young Learners (TEYL) by offering personalized, immersive, and interactive learning experiences through tools like adaptive learning systems and chatbots. AI customizes lessons to individual needs, promoting autonomy and creativity, while enabling dynamic activities such as storytelling and gamification to boost engagement. However, AI's limitations—like its inability to replicate human creativity and its generic feedback—underscore the critical role of teachers in guiding its use. Educators must balance AI tools with human oversight to ensure AI supports rather than hinders creativity.

To optimize AI integration in Teaching English to Young Learners (TEYL), educators should engage in professional development programs that focus on creative and collaborative learning approaches, use AI tools selectively to complement traditional teaching methods, and reflect on their effectiveness to adjust strategies accordingly. Policymakers need to invest in equitable infrastructure, design teacher training programs that emphasize digital pedagogical skills and ethical AI use, and develop guidelines to position AI as a complement to traditional teaching. Technology developers should create adaptable, intuitive tools that facilitate peer collaboration, promote creative problem-solving, and provide actionable insights for educators. Future research should explore AI's longitudinal impact on creativity, engagement, and learning outcomes, its scalability in diverse and resource-limited contexts, its potential to enhance collaborative social creativity, and its ethical implications, including privacy and educator control over AI systems.

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