

EMPOWERING TEACHERS: AI TOOLS FOR ENHANCING ENGLISH EDUCATION IN PONTIANAK URBAN SCHOOL

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Abstract

This study explores the integration of Artificial Intelligence (AI) tools in enhancing English education at Highfield School, an urban school in Pontianak. The research aims to understand how AI tools influence English teachers' instructional practices and their perceptions regarding the effectiveness of these tools in improving student engagement and learning outcomes. Using a descriptive qualitative approach, the study conducted semi-structured interviews with six English teachers who have actively incorporated AI technologies into their classrooms. The findings reveal that AI tools have positively impacted personalized learning experiences, increased student engagement and motivation, but also highlighted challenges in implementation and the need for comprehensive training programs. Teachers expressed generally positive perceptions of AI tools, acknowledging their potential to transform teaching and learning, while also voicing concerns about over-reliance on technology. The study underscores the importance of a balanced approach that combines the benefits of AI with traditional pedagogical methods, empowering teachers and ensuring a holistic learning experience for students. The insights gained from this research contribute to the broader discourse on the integration of AI in urban educational settings, guiding future efforts to harness the transformative potential of technology in enhancing English education.

Keywords: *Artificial Intelligence, English Education, Teacher Empowerment, Student Engagement, Urban Education*

INTRODUCTION

The landscape of education is rapidly evolving, particularly in urban settings where teachers face unique challenges due to diverse student populations and varying socio-economic conditions. In this context, the empowerment of teachers is crucial for fostering effective teaching practices and enhancing student learning outcomes. Empowerment, defined as the process of enabling individuals to gain control over their work and decision-making processes, has been shown to positively influence teachers' organizational behaviors and their overall job satisfaction (Tindowen, 2019). By leveraging AI tools, educators can enhance their instructional strategies, thereby creating a more engaging and effective learning environment for their students.

AI technologies have the potential to transform English education by providing personalized learning experiences tailored to the needs of individual students. These tools can assist teachers in differentiating instruction, automating administrative tasks, and offering real-time feedback to students, which can lead to improved academic performance (Saleman et al., 2019). Furthermore, the

integration of AI in the classroom can empower teachers by enabling them to focus on higher-order teaching practices rather than routine tasks, thus enhancing their professional autonomy and decision-making capabilities (Cheasakul & Varma, 2016). As urban schools often struggle with resource limitations, the adoption of AI tools may serve as a viable solution to bridge educational gaps and promote equity in learning opportunities.

Despite the promising benefits of AI in education, the successful implementation of these technologies hinges on teachers' perceptions and their willingness to embrace change. Research indicates that teachers' attitudes toward AI tools are influenced by their experiences, training, and the perceived effectiveness of these technologies in enhancing student engagement (Lu et al., 2022), (Goksoy, 2017). Therefore, it is essential to explore how AI tools can empower teachers in urban schools and to understand their perceptions regarding the effectiveness of these tools in fostering student learning. This study seeks to address these concerns by investigating the impact of AI on instructional practices and the overall educational experience in urban English classrooms.

In Highfield Secondary School Pontianak, teachers are mostly familiar with the digital ecosystem. They have used several AI platforms to assist their teaching and learning process. This familiarity presents a unique opportunity for educators to integrate AI tools into the curriculum, bridging the gap between students' existing knowledge and the formal education they receive. By utilizing these resources, educators can establish a more stimulating learning atmosphere where students are encouraged to think critically and creatively in addition to acquiring new languages.

The integration of AI tools in education has been the subject of numerous studies, highlighting both their potential benefits and the challenges they present. Research has shown that AI-assisted tools can significantly enhance the learning experiences of students, particularly those with special educational needs. For instance, (Barua et al., 2022) found that AI-enabled personalized assistive tools positively impacted the educational outcomes of children with neurodevelopmental disorders, demonstrating their acceptability among teachers and parents alike. This aligns with the broader literature that emphasizes the feasibility of implementing AI technologies in educational settings, suggesting that such tools can help educators meet individual learning goals and foster greater independence among students.

Moreover, the attitudes of educators towards AI integration have been explored in various contexts, revealing a generally positive outlook on its potential to enhance teaching and learning experiences. (Bobrytska et al., 2024) conducted a comprehensive study on stakeholder attitudes in Ukrainian higher education, which echoed findings from previous research that acknowledged the transformative potential of AI in educational environments. This body of work underscores the importance of understanding teacher perceptions, as their acceptance and effective use of AI tools are critical for successful implementation. The literature suggests that when teachers are empowered and equipped with the necessary skills to utilize AI, they can significantly improve student engagement and learning outcomes.

Taking into consideration the role of AI tools in enhancing English education in an urban school, Highfield School Pontianak, particularly from the

perspective of English teachers, this study examines how these technologies influence instructional practices and teacher empowerment, the research aims to provide insights into the potential benefits and challenges associated with the integration of AI in the classroom. The study seeks to understand the perceptions of educators regarding the effectiveness of AI tools in fostering student engagement and improving learning outcomes. Through qualitative methods, the research will explore the lived experiences of teachers who have adopted AI technologies, shedding light on their attitudes, concerns, and the overall impact of these tools on their teaching practices. This exploration is particularly relevant in the context of urban education, where diverse student needs and resource limitations often pose significant challenges for educators.

The integration of Artificial Intelligence (AI) tools in education has gained significant attention, particularly in urban school settings where diverse student populations present unique challenges. AI technologies offer innovative solutions to enhance teaching methodologies and improve learning outcomes. This research article explores the potential of AI tools in empowering English teachers in urban schools, focusing on two primary research questions:

1. How do AI tools influence English teachers' instructional practices in Highfield School Pontianak?
2. What are the perceptions of English teachers regarding the effectiveness of AI tools in enhancing student engagement and learning outcomes?

METHOD

This study employed a descriptive qualitative research design to explore AI tools for enhancing English education in Pontianak urban schools. Qualitative research is well-suited for investigating complex, real-world experiences and gaining an in-depth understanding of a particular issue from the perspective of the individuals involved (Creswell & Poth, 2018). This methodology enables the researcher to provide a comprehensive summary of the events or experiences under study (Colorafi & Evans, 2016).

Research Design

Descriptive qualitative was utilized because it allows for a deeper understanding of the settings or contexts, which is necessary for this study. The qualitative descriptive design was chosen to explore these objectives, allowing for an in-depth understanding of teachers' experiences and perceptions. This approach facilitates the collection of rich, detailed data through semi-structured interviews, enabling researchers to capture the nuances of teachers' interactions with these AI tools. Moreover, this approach is particularly suitable for exploring the complexities of language teaching and learning, offering a comprehensive understanding of educational practices (Wang, 2018).

Population and Sample

Since this study utilizes a descriptive qualitative research design to explore the experiences and perceptions of English teachers at Highfield School in Pontianak regarding the integration of AI tools in their teaching practices, the researcher aims to gather in-depth insights from six English teachers who have actively incorporated AI technologies into their classrooms. The selection of participants was based on purposeful sampling, ensuring that the chosen teachers possess diverse experiences with AI tools and represent various teaching styles

and backgrounds. This approach allows for a comprehensive understanding of how AI tools are perceived and utilized in enhancing English education within the unique context of an urban school.

Instruments

Data collection was conducted through semi-structured interviews, which provided flexibility for participants to express their thoughts and experiences in their own words. The interview questions were designed to elicit detailed responses regarding the teachers' experiences with AI tools, their perceptions of these tools' effectiveness in improving student engagement and learning outcomes, and any challenges they faced during implementation. Each interview lasted approximately 45 to 60 minutes and was audio-recorded with the participant's consent to ensure accuracy in data capture. Additionally, field notes were taken during the interviews to document non-verbal cues and contextual factors that may influence the participants' responses.

Data Analysis

The data analysis process involved thematic analysis, which allowed for identifying recurring themes and patterns within the interview transcripts. The researchers began by transcribing the audio recordings verbatim and then engaged in an iterative coding process to categorize the data into meaningful themes. This approach facilitated a rich understanding of the teachers' perspectives on AI tools, highlighting both the positive impacts and the challenges associated with their use in the classroom. The findings from this qualitative analysis will contribute to the broader discourse on the role of AI in education, particularly in urban settings where teachers and students face distinct challenges and opportunities.

RESULTS AND DISCUSSION

Research Findings

The Influence of AI Tools Influence for English Teachers' Instructional Practices

The results of this study reveal several key themes regarding the integration of AI tools in English education at Highfield School in Pontianak, as articulated by the six participating teachers. The following are:

Enhancement of Personalized Learning Experiences

One of the most significant findings from the interviews was the enhancement of personalized learning experiences through the integration of AI tools. Teachers at Highfield School reported that AI applications, such as adaptive learning platforms, allowed them to customize lessons based on individual student needs and learning paces. For example, one teacher described using an AI-driven assessment tool that provided immediate feedback on students' writing assignments, enabling them to identify specific areas for improvement. This personalized approach not only catered to diverse learning styles but also fostered a sense of ownership among students regarding their learning journeys. The teachers noted that AI tools helped them track student progress more efficiently, allowing for timely interventions, when necessary, which is crucial in urban educational settings where students often face various challenges.

Increased Student Engagement and Motivation

The second key theme that emerged from the data was the notable increase in student engagement and motivation attributed to the use of AI tools. Teachers observed that interactive AI applications, such as gamified language learning platforms, significantly captured students' interest and encouraged active participation in lessons. One teacher shared a specific instance where students were more enthusiastic about completing language exercises when using an AI chatbot that simulated real-life conversations. This gamification aspect not only made learning more enjoyable but also reduced anxiety among students, particularly those who were hesitant to speak in front of their peers. Teachers reported that the use of AI tools allowed for collaborative learning opportunities, where students could work together on projects and share their insights, further enhancing their engagement.

Challenges in Implementation and Training Needs

Despite the positive impacts of AI tools, the results also revealed several challenges faced by teachers in their implementation. A recurring concern was the lack of adequate training and professional development related to AI technologies. Teachers expressed feeling overwhelmed by the rapid pace of technological advancements and indicated a desire for more comprehensive training programs to enhance their proficiency in using these tools effectively. One teacher articulated the frustration of navigating new technologies without sufficient support, stating that this often led to a reluctance to fully integrate AI into their teaching practices. Some teachers voiced skepticism regarding the reliability of AI-generated feedback, raising concerns about over-reliance on technology at the expense of traditional pedagogical methods. This highlights the need for a balanced approach that combines the benefits of AI with the foundational principles of effective teaching, ensuring that educators feel confident and competent in their use of these innovative tools.

The Perceptions of English Teachers

Positive Perceptions of AI Tools

Teachers expressed a generally positive perception of AI tools as an effective means to enhance student engagement. Many educators noted that AI applications, such as interactive language learning platforms and AI-driven tutoring systems, significantly increased student motivation and participation in lessons. One teacher remarked that students were more eager to engage with learning materials when using gamified AI tools, which transformed traditional exercises into interactive challenges. Teachers reported observing improvements in students' language skills, attributing this progress to the personalized feedback and adaptive learning pathways provided by AI tools.

Concerns About Over-Reliance on Technology

Despite the positive perceptions, teachers also voiced concerns regarding the potential over-reliance on AI technologies. Some educators expressed apprehension that excessive dependence on AI tools might diminish the importance of traditional teaching methods and interpersonal interactions in the classroom. One teacher articulated a fear that students might become too reliant on AI-generated feedback, which could hinder their ability to think critically and independently. Several teachers highlighted the need for a blended approach that combines AI tools with conventional teaching strategies to ensure a holistic learning experience. This perspective underscores the importance of integrating

technology thoughtfully and purposefully within the curriculum, rather than allowing it to overshadow fundamental teaching practices.

Discussion

The findings of this study provide valuable insights into the integration of AI tools in English education at Highfield School in Pontianak, particularly regarding their impact on teaching practices and student engagement. The positive perceptions of teachers regarding the effectiveness of AI tools in enhancing personalized learning experiences and increasing student motivation underscore the transformative potential of technology in urban educational settings. This study contributes to that discourse by illustrating how AI can catalyze improved teaching and learning outcomes, particularly in environments characterized by diverse student needs.

However, the concerns raised by teachers about over-reliance on AI technologies and the need for balanced pedagogical approaches are critical considerations. The apprehension that AI tools might overshadow traditional teaching methods reflects a broader tension within the educational community regarding the role of technology in the classroom. In this study, the teachers' desire for a blended approach that combines AI tools with conventional instructional strategies suggests that successful integration requires careful consideration of pedagogical frameworks and the potential implications for student learning. This aligns with findings from other studies that emphasize the need for educators to maintain a critical perspective on technology use, ensuring that it complements rather than replaces essential teaching practices (Bice & Tang, 2022)

Moreover, the expressed need for ongoing professional development and training in AI technologies is a crucial finding that warrants further exploration. As educators navigate the complexities of integrating AI into their teaching, the provision of targeted training programs can empower them to utilize these tools effectively and confidently. By investing in comprehensive training initiatives, educational institutions can better equip teachers to harness the benefits of AI tools while addressing their concerns and challenges. The findings of this study underscore the importance of a holistic approach to technology integration in education, one that prioritizes teacher empowerment, ongoing support, and a balanced pedagogical framework to maximize the potential of AI in enhancing student engagement and learning outcomes.

While this study provides valuable insights into the integration of AI tools in English education at Highfield School, several limitations must be acknowledged that may affect the interpretation and generalizability of the findings. First, the sample size of six teachers, although sufficient for qualitative analysis, limits the breadth of perspectives captured. A larger sample could provide a more comprehensive understanding of the diverse experiences and perceptions of teachers regarding AI integration across different contexts within urban education. As noted by (Sneyd, 2019), insufficient acknowledgment of limitations can lead to a skewed understanding of research findings, particularly in educational studies where participant diversity is crucial for capturing a range of insights. Future research should consider expanding the sample size to include a broader array of educators from various backgrounds and teaching experiences.

Another limitation pertains to the specific context of Highfield School in Pontianak. The findings may not be easily generalizable to other urban schools or educational settings, as the unique socio-cultural dynamics and resource availability at Highfield may influence teachers' experiences with AI tools. While the insights gained from this study are valuable, they should be interpreted with caution when considering their applicability to other educational environments. Future research could benefit from comparative studies across different schools or regions to explore how contextual factors influence the integration of AI in education.

Lastly, the reliance on self-reported data from interviews introduces the potential for bias, as participants may present their experiences in a manner that aligns with perceived expectations or social desirability. This limitation is common in qualitative research, where personal reflections and subjective interpretations can influence the data collected. To mitigate this limitation, future studies could incorporate multiple data collection methods, such as classroom observations or student feedback, to triangulate findings and provide a more holistic view of the impact of AI tools on teaching and learning. Overall, recognizing these limitations is crucial for advancing the discourse on AI integration in education and guiding future research endeavors in this evolving field.

CONCLUSION

The integration of AI tools in English education presents both opportunities and challenges. On one hand, AI can empower teachers by automating administrative tasks, allowing them to focus more on instructional quality and student interaction (Roshanaei et al., 2023). Additionally, AI tools can provide real-time feedback to students, fostering a more responsive learning environment (Owan et al., 2023). On the other hand, the skepticism surrounding AI, often rooted in algorithm aversion, poses a barrier to its widespread adoption in educational settings (Smyrniou et al., 2023). Teachers' perceptions of AI's effectiveness are influenced by their familiarity with technology and the perceived usefulness of these tools in enhancing student learning.

The study uncovered important concerns among teachers regarding the over-reliance on AI technologies and the need for balanced pedagogical approaches. Educators expressed apprehension that excessive dependence on AI might undermine traditional teaching methods and interpersonal interactions, which are vital for effective learning. The expressed need for ongoing professional development and training in AI technologies highlights the importance of equipping educators with the skills and confidence necessary to effectively utilize these tools in their classrooms. Providing educators with adequate training is crucial for maximizing the benefits of technology in education and addressing the challenges associated with its implementation.

In conclusion, while AI tools hold significant promise for enhancing English education in urban schools, their successful integration requires careful consideration of pedagogical frameworks, ongoing support for teachers, and a commitment to maintaining a balanced approach to technology use. Future research should continue to explore the long-term impacts of AI on teaching practices and student outcomes, as well as the effectiveness of professional

development programs in fostering educators' technological competencies. By addressing these areas, educational stakeholders can better harness the potential of AI to create equitable and effective learning experiences for all students.

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