

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

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Abstract

This research examines the integration of AI tools in English language education within urban schools in Pontianak, focusing on teachers' perceptions, benefits, and challenges. The study aims to understand how English teachers view the effectiveness of AI tools and the obstacles they encounter. Using a descriptive research approach, data were collected through surveys completed by 4 English teachers from four urban schools. Results indicate that teachers generally find AI tools beneficial for student engagement and classroom management, yet express concerns regarding role replacement and technical support. The insights gathered will support educational stakeholders in formulating policies and developing AI tools that align with teachers' practical needs and enhance the quality of English education in similar contexts.

Keywords: *AI tools, English education, teacher perceptions, educational technology, teacher empowerment*

INTRODUCTION

The integration of artificial intelligence (AI) into education has brought about significant shifts in teaching and learning methodologies. As educational institutions worldwide adapt to the demands of the 21st century, the use of AI-powered tools, such as intelligent tutoring systems, adaptive learning platforms, and natural language processing (NLP) technologies, has become more prevalent. These tools are designed to enhance the educational experience by facilitating personalized learning, improving student engagement, and optimizing classroom management.

In the context of English language education, AI tools have demonstrated their potential to transform teaching practices by offering automated grading systems, language processing software, and interactive chatbots that provide students with real-time feedback and personalized learning paths. For instance, platforms like Grammarly and ProWritingAid assist in improving writing skills, while Duolingo leverages AI to adapt language exercises based on individual progress (Warschauer, 2011). These technologies not only improve language proficiency but also free up teachers' time by automating routine tasks such as grading and error correction (Luckin et al., 2016).

However, despite the clear benefits of AI, its integration into educational systems particularly in English education in urban schools in Pontianak, Indonesia remains limited. The use of AI tools in these settings has not been widely explored, leaving a gap in understanding how teachers perceive these technologies and the extent to which they are used to enhance teaching practices. Teachers in Pontianak's urban schools face challenges in adapting to these technologies due to several factors, including insufficient training, lack of technical support, and limited infrastructure (Zawacki-Richter et al., 2019). The adaptation of AI tools in such environments requires careful consideration of these barriers to ensure effective implementation.

Research has shown that AI tools can support personalized language instruction by adjusting to students' learning paces and providing individualized attention, even in classrooms with large student populations (Holmes et al., 2019). Nevertheless, the successful adoption of AI in education is highly dependent on teachers' perceptions of these tools. Many educators express concerns about the potential loss of teacher autonomy, the complexity of the tools, and the fear of obsolescence (Erickson et al., 2020). Without adequate training and support, the adoption of AI tools can be hindered, thus limiting their potential to improve student outcomes.

This study aims to bridge this gap by investigating the perceptions of English teachers in urban schools in Pontianak regarding the effectiveness of AI tools. It also seeks to identify the benefits and challenges associated with implementing these technologies in English language teaching. Understanding the perceptions of teachers is essential because their attitudes and beliefs directly influence the adoption and integration of AI tools in the classroom (Hew & Brush, 2007). This research is particularly relevant in the context of urban schools, where resources may be constrained, and the successful implementation of AI technologies could significantly enhance teaching effectiveness and student learning outcomes.

The findings of this study will contribute to the ongoing discourse on AI's role in empowering educators, particularly in urban educational contexts. By shedding light on the real-world challenges and benefits experienced by teachers, the study will provide valuable insights for English teacher, school administrators and policymakers, and educational technology developers, helping them design more effective strategies for integrating AI tools into English education. To guide this investigation, the study will address the following research questions:

What are the perceptions of English teachers in Pontianak urban schools regarding the effectiveness of AI tools in enhancing English education?

What challenges and benefits do teachers experience in implementing AI tools in their teaching practices?

Despite the availability of AI tools in the education sector, there is limited research on their impact on English teaching in Pontianak's urban schools.

Teachers often struggle to adopt and integrate these tools effectively into their teaching practices. This study aims to assess the perceptions of English teachers regarding the use of AI-powered tools and identify the challenges and benefits they experience in utilizing these technologies.

METHOD

Research Design

This study will employ a descriptive research design to explore the perceptions of English teachers regarding the use of AI tools in their teaching practices. A questionnaire will be used as the primary data collection method to gather insights from the participants.

Research Setting and Participants

The research will be conducted in four urban schools in Pontianak. The participants will consist of 4 English teachers currently using or exposed to AI-powered educational tools in their classrooms. These participants were selected through a census sampling method due to the small number of teachers in the targeted schools.

Techniques in Data Collection and Analysis

To explore how AI tools empower teachers and enhance English education in Pontianak Urban school, a structured approach to data collection and analysis can provide comprehensive insights into a teacher's experiences, perceptions, and impact on the students. The data will be collected using an online questionnaire distributed via email. Teachers will be given a week to complete the questionnaire. The data collection will involve clear instructions and reminders to ensure a high response rate. Follow-up calls or emails will be made if necessary.

The researchers do surveys and questionnaires to collect quantitative data on teachers' experiences, comfort levels, and perception of AI Tools. The questions include the data of the teacher, open-ended questions, and likeart scale questions. The questionnaire was collected the researcher analyzed the data by using charts and tables to get the percentage of how the effectiveness using AI tools enhances English as a learner.

FINDINGS AND DISCUSSION

The analysis of interview and questionnaire data revealed several key themes regarding Empowering Teachers: AI Tools for Enhancing English Education in Pontianak Urban Schools. The data reveals meaningful insights into teachers' perceptions of AI tools, particularly in relation to enhancing student engagement, managing classroom activities, and addressing role concerns. Most teachers believe that AI tools could play a role in increasing student engagement, as indicated by scores ranging mostly between 3 and 4 on the Likert scale.

This consensus reflects a generally positive attitude towards AI's potential to captivate students' interest and participation in English language learning, especially given the dynamic and interactive nature of many AI tools.

In terms of practical classroom benefits, teachers rated AI highly in aiding classroom management and student progress tracking, with responses centered around 4.

This suggests that teachers find AI useful not only for managing routine tasks but also for helping them monitor students' individual progress, allowing for timely interventions and feedback. Overall, teachers express a moderate to low concern about AI's potential to replace their teaching role, with ratings averaging around 2 to 3. This reflects a recognition of AI as a supportive tool rather than a replacement, although the concern indicates an underlying desire for clarity on how AI will impact traditional teaching roles. The responses provide richer insights into teachers' interests, goals, and observed benefits of AI tools, as well as their suggestions for improvement.

Interest in Interactive Platforms:

Teachers expressed interest in trying out AI-driven platforms like ChatGPT, Quizizz, Kahoot, and Canva. These tools are known for enhancing interactive learning through quizzes, gamification, and real-time language assistance, aligning with teachers' goals to make English classes more engaging and interactive. This preference points to a demand for tools that integrate directly with the dynamics of classroom teaching.

Main Goals for AI Integration:

Teachers commonly cited goals such as improving time efficiency, enhancing engagement, and fostering an interactive learning environment. For example, several teachers highlighted the importance of creating an engaging and interactive classroom experience that captures students' attention and curiosity, which aligns with the broader objectives of student-centered learning.

Observed Benefits in Student Learning:

Teachers have noted specific benefits in students' learning experiences since the implementation of AI tools, such as improved critical thinking, curiosity, and ease in completing tasks. For instance, one teacher observed that students tend to exhibit more curiosity when using AI-enhanced activities, suggesting that the novelty and adaptability of AI may stimulate cognitive engagement. This increased curiosity and interaction aligns with the broader goals of using technology to foster a more engaging and supportive learning environment.

Suggested Improvements for AI Tools:

Teachers recommended that AI tools incorporate a broader variety of learning activities to sustain student interest and provide creativity support. Some teachers noted that additional features enabling more activity diversity would help keep students engaged over time, while tools offering creativity support would empower students to explore and overcome challenges in unique ways. This

feedback underscores the importance of customizable, versatile AI tools in meeting the diverse needs of the English classroom.

The findings from this study align well with existing literature on AI in education. Teachers in urban Pontianak schools recognize the potential of AI tools to increase student engagement and streamline classroom management tasks. This acceptance is consistent with studies emphasizing AI's role in fostering a personalized and interactive learning environment. The observed benefits, such as enhanced critical thinking and student curiosity, reflect AI's ability to engage students more deeply and support individualized learning paths.

However, the moderate concern regarding AI potentially replacing teachers' roles points to an ongoing need for teacher support and training. This sentiment reflects findings in previous research, which shows that while educators may appreciate AI's capabilities, they often need reassurance and clear frameworks on how AI complements rather than replaces human instruction. Addressing these concerns through targeted professional development can help teachers feel more empowered and confident in using AI, enabling them to leverage AI tools effectively without feeling that their roles are being undermined.

The Effectiveness of AI Tools in Enhancing English Education to understand the perception of English Teachers in Pontianak urban schools regarding the effectiveness of AI tools in enhancing English education. The researchers conducted 4 teachers in different schools from multicultural backgrounds in Pontianak to explore their experience using AI Tools for Enhancing English Education and their impact on teaching English. Below is a summary of the responses to each question :

AI Tools can help improve student's engagement in English learning

Teachers expressed a range of their experiences toward teaching English using AI Tools, revealing both challenges and positive aspects:

Challenges experiences: One teacher believes that AI does not improve students' English learning because AI tools cannot give specific aspects including the form of English learning itself and still need the role of the teacher.

Positive experiences: Many teachers believe that AI tools can help improve students' engagement in English learning. These teachers also believe AI tools can make students creative or help them as a source of English learning, especially by making their subjects fun.

AI Tools replace the role of the teacher

Teachers expressed AI tools cannot replace the role of the teacher because AI tools can only help some sources of knowledge. Moreover in the school, the students need the role of teacher to build their creativity, soft skills, and build their critical thinking. The students also build how they make society with their friends. AI tools are indeed reshaping education, but rather than fully replacing teachers, they are more likely to transform and support the teacher's role, enhancing what teachers can accomplish rather than rendering them obsolete.

AI tools can certainly automate routine tasks, provide personalized content, and even identify learning gaps, but they act best as supportive tools rather than replacements. By taking over administrative tasks or providing supplemental tutoring, AI allows teachers to focus more on interactive, hands-on, and critical-thinking aspects of their role. This partnership enables teachers to maximize their impact on student learning and development.

AI Tools manage the classroom

The teacher expressed that AI Tools also can help them manage the classroom. AI tools are increasingly being developed to help teachers manage the classroom more efficiently, support personalized learning, and enhance student engagement. AI tools also contribute to classroom management. For example Automated attendance and meetings, personalized learning plans, and classroom layout and resource management. By incorporating these AI tools, teachers can streamline their classroom management.

Benefits and challenges of implementing AI Tools

Exploring the challenges and benefits the teacher in their teaching practices can reveal both the potential and the limitations of AI in education

Benefits :

Personalized Learning and Differentiation: AI tools can adapt to individual student needs and customize the lesson.

Increase efficiency and Reduced Workload: Automating repetitive tasks such as grading quizzes, ChatGPT, Kahoot, Canva and learning source AI.

Enhanced Student Engagement means AI tools can make learning more interactive and engaging through Quizzez, gaming and others.

Challenges:

Lack of training: Many teachers may not have formal training on using AI effectively in their teaching.

Technical issues are technically difficult including connectivity issues, networking, software, or compatibility problems.

Resistance to change and fear of replacement: Some teachers may fear that increasing reliance on AI could eventually reduce the need for human instructors.

CONCLUSION AND SUGGESTION

The findings from this study provide a nuanced understanding of English teachers' experiences and perceptions regarding AI tools in urban schools in Pontianak. AI technology is increasingly recognized for its potential to enhance engagement, streamline administrative tasks, and personalize student learning experiences. However, successful implementation in the classroom relies on overcoming challenges related to technical infrastructure, teacher support, and integration into existing curricula.

Teachers in this study reported positive outcomes from AI tools, particularly in fostering student curiosity and critical thinking. This aligns with

broader research indicating that AI can facilitate active learning environments that adapt to student needs. Tools like ChatGPT, Quizizz, and Canva were highly regarded for their ability to enhance interactivity, reinforcing the importance of diverse, engaging learning resources in language education. The teachers' preference for tools that support gamified learning, real-time feedback, and student autonomy highlights a shift towards learner-centered teaching practices in the digital age. This approach can lead to more effective language acquisition by providing students with a platform to explore and practice language skills at their own pace.

Despite these benefits, teachers expressed concerns about AI's potential to replace traditional teaching roles. Although most saw AI as supportive rather than a replacement, the underlying apprehension about job security and autonomy is a crucial area for future research. Ensuring that AI tools are positioned as complementary resources can address these concerns, fostering a collaborative human-AI environment where educators retain authority over pedagogy while leveraging AI for enhanced effectiveness. Additionally, the moderate concerns about obsolescence signal a need for professional development and clear policy guidelines that outline AI's role in education.

Furthermore, technical limitations in Pontianak's urban schools present another barrier to AI adoption. Many teachers pointed to inadequate infrastructure, which hampers the consistent use of AI tools and limits their effectiveness. Investment in educational infrastructure, particularly in urban settings, is essential for realizing the full potential of AI in education. Educational policymakers and school administrators should prioritize technical support and resources, including reliable internet access and well-maintained hardware, as these are prerequisites for sustainable AI integration.

In conclusion, while AI tools hold great promise for enhancing English education, their successful integration depends on balancing technological, pedagogical, and human considerations. For educators, AI serves as a powerful tool to engage students and simplify complex administrative tasks, yet its impact hinges on adequate support systems and careful attention to teachers' professional roles. The insights from this study can guide efforts to develop contextually relevant, accessible, and teacher-friendly AI solutions that align with educational goals, ultimately enriching language learning outcomes in urban schools. Future research should continue to explore the long-term effects of AI on teaching efficacy, student performance, and the evolving role of educators in AI-augmented classrooms.

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