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Utilization of Artificial Intelligence to Increase Interactivity in History Learning for High School Students

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Abstract. *This study aims to analyze how artificial intelligence (AI) using ChatGPT can improve the interactivity of history learning for high school students. This study uses a qualitative method with a case study approach, where data is collected through in-depth interviews, classroom observations, and documentation analysis related to the use of AI-based educational technology in history learning. The research participants consisted of history teachers and high school students who had used AI in the teaching and learning process. The data obtained was analyzed using thematic analysis techniques to identify interaction patterns that emerged in AI-based learning. The validity of the data is strengthened through triangulation of sources and methods to ensure the accuracy of the findings. The results show that the application of AI significantly increases student engagement in understanding historical events through more interactive learning experiences. The contribution of this research provides insight for educators in optimizing educational technology to increase the effectiveness of history learning at the high school level..*

Keywords: *Artificial Intelligence, Educational Technology, High School Students, History Learning, Learning Interactivity*.

1. INTRODUCTION

Artificial intelligence (AI) using ChatGPT has become an integral part of various aspects of life, including in the field of educational technology. AI can create a more engaging and interactive learning experience compared to traditional learning methods. AI-driven applications, including virtual reality (VR), create immersive environments that noticeably increase attention and engagement levels among students, as shown by research showing that VR participants are superior to conventional learners in understanding complex programming concepts (Cinar et al., 2024). The incorporation of gamification elements in AI-enhanced platforms has been found to increase student engagement by more than 20% in task completion rates compared to traditional pedagogical approaches (Segizbay & Kozhamkulova, 2024). In addition, artificial intelligence allows for the development of personalized learning paths, allowing students

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to progress according to their individual pace and learning style, features that are often absent in traditional educational methodologies (Putri & Sain, 2025). Data-driven insights empower educators to tailor educational materials based on individual student performance, thereby improving overall educational outcomes (Monika Singh et al., 2024). In history learning, AI can present interactive simulations that allow high school students to experience historical events as if they were at that time. The integration of AI in education is a great opportunity to improve learning interactivity and the effectiveness of student understanding.

One of the main challenges in history learning is the lack of active involvement of students in the learning process. AI can increase learning interactivity by providing various interactive features, such as chatbots, educational games, and digital reconstructions of historical events. AI-driven conversational agents provide instant assistance, handle questions and explain complex subjects through natural language processing (Sarfaraj et al., 2025). Intelligent tutoring systems are designed to accommodate individual learning preferences, providing tailored feedback and evaluation, thereby improving student understanding and retention (Choi et al., 2025). The implementation of gamification in educational contexts significantly increases motivation and engagement, fostering active engagement and critical analytical skills (Hadzhikoleva et al., 2024). Artificial Intelligence technology empowers educators to easily develop interactive pedagogical games, making learning experiences enjoyable and accessible (Hadzhikoleva et al., 2024). By integrating AI-driven AR applications, students can interact with historical artefacts in a virtual environment, fostering deeper understanding and retention of historical concepts. This innovative approach not only enhances engagement but also addresses learning barriers by making history more accessible and interactive.

The implementation of AI in educational technology has opened up new opportunities for more dynamic and interactive history learning. AI can be used to provide learning materials that are tailored to each student's pace and learning style so that they can more easily understand historical concepts. AI algorithms systematically evaluate data derived from student interactions, assessments, and feedback to formulate individualized learning experiences, thereby modifying content and complexity

according to each learner's progress (Rekha et al., 2024). The AI system provides customized instant feedback, facilitating students in recognizing their strengths and areas that need improvement, which is essential for mastery of complex historical concepts (Dei, 2025). Through continuous observation of engagement levels, AI can adjust learning trajectories to maintain students' interest and motivation, effectively addressing the issues of shedding prevalent in conventional educational frameworks (Souza et al., 2024). In one of the experiments, students using an AI platform that provides adaptive quizzes and analysis of learning patterns showed a 30% increase in historical understanding compared to traditional methods. The use of AI in history learning can be an innovative solution to improve students' understanding of the material being taught.

Although AI has been shown to improve learning interactivity, there are still challenges in its implementation in school settings. Some of the obstacles include limited infrastructure, lack of teacher training, and high technology procurement costs. Inadequate internet access and the absence of digital tools represent a common barrier in remote areas (Zhang, 2025). A research investigation conducted at Caleb University showed that 85% of architecture students experienced weekly power outages, with 60% experiencing outages that lasted for periods ranging from 1 to 3 hours (Owolabi et al., 2024). This disorder exerts a detrimental effect on academic performance, as 78% of students report negative consequences on their grades and 82% face delays in completing their projects (Owolabi et al., 2024). Professional development initiatives often fail to consider the typical requirements of instructors operating in environments that do not have adequate resources (Raza & Akhter, 2024). The financial constraints associated with acquiring technological resources are substantial barriers, especially in economically disadvantaged contexts (Zhang, 2025). A survey shows that only 40% of schools have access to AI-based devices in the learning process, which shows there is still a need for further support in their implementation. A mature strategy is needed to ensure that AI-based educational technology can be widely applied in history learning in high school, in order to improve the quality of education as a whole.

Artificial intelligence is increasingly developing in the world of educational technology, but its use in history learning is still not widely explored. Most research focuses more on the application of AI in exact subjects, while history is often considered a narrative field that requires less advanced technology. The capacity of the model to assimilate various historical data facilitates the production of outputs that demonstrate greater reliability, thereby increasing educational instruments and resources in the realm of historical studies (Zou, 2024). AI instruments can research a large amount of textual and multimedia content, revealing previously ignored narratives, especially those related to marginalized demographics, thus adding to the richness of historical discourse (Khair Allah, 2023). Artificial intelligence systems can provide customized feedback and assistance, accommodating the diverse learning requirements and preferences of each student (Dila Ram Bhandari, 2023). AI can be used to create historical simulations that allow high school students to experience historical events interactively, such as through digital reconstruction or AI-based educational chatbots. Therefore, there needs to be a more in-depth study of how AI can change the way high school students understand history with more interactive and innovative methods.

One of the challenges in learning history is the difference in students' learning styles, which often makes some students less involved in the learning process. AI can customize the material based on individual needs, allowing each student to have a more personalized and engaging learning experience. The AI system performs a comprehensive analysis of student data to distinguish learning patterns, thereby facilitating the delivery of customized content and the provision of real-time feedback (Taşkın, 2025). Tailored educational experiences encourage high motivation and deeper involvement in the learning process (Singh, 2024; Zailani Iman et al., 2024). Despite the advantages, there are still concerns regarding data privacy, algorithmic bias, and the need for comprehensive educator training (Taşkın, 2025; Zailani Iman et al., 2024). For example, with an AI-based learning system, a student who is more interested in the political aspects of history can be provided with additional learning resources that are more relevant, while other students who prefer the sociocultural aspect will get a different approach. Thus, AI can be a solution to increasing learning interactivity, as it allows students to be more active in understanding history according to their interests and needs.

Evaluation in history learning is often limited to written exams or essay assignments, which lack a thorough understanding of the student. AI can provide a more comprehensive evaluation method by analyzing students' learning patterns, detecting their level of understanding, and providing feedback in real time. AI-driven systems can dynamically modify assessments according to real-time student responses, thus facilitating personalized feedback and individualized learning trajectories (Yuldashev et al., 2024). Sophisticated data analysis empowers AI to evaluate student performance with precision, distinguishing strengths and weaknesses, which in turn enables targeted interventions (Apetorgbor et al., 2024; Hua Liu, 2024). AI technologies, including machine learning algorithms, provide instant feedback, thereby increasing student engagement and promoting the development of high-level cognitive skills (Saputra et al., 2024). The incorporation of AI in the context of education raises significant concerns regarding data privacy and algorithmic bias, requiring careful deliberation and ethical implementation (Saputra et al., 2024). Several AI-based platforms have developed systems that can assess students' responses to historical discussions, identify their conceptual fallacies, and recommend additional materials to improve their understanding. With AI, evaluation in history learning can be more data-based, helping teachers provide more targeted guidance for high school students.

Although AI offers many benefits in learning interactivity, its application in history learning still faces various obstacles. Some of the main challenges include the readiness of school infrastructure, teachers' skills in managing AI, and limited access to technology for all students. Many educational institutions, especially those located in rural areas, face significant challenges due to inadequate infrastructure, characterized by inconsistent internet access and the scarcity of digital devices (Pradana & Josiah, 2024). Research shows that strategic investments in technology infrastructure are essential to facilitate the integration of artificial intelligence and to improve the learning environment (Leong, 2024). Educator readiness is a considerable obstacle, as a large number of teachers do not have the skills or confidence necessary to proficiently use AI tools (Pradana & Josiah, 2024). Ongoing professional development and training initiatives are essential to equip educators with the digital skills necessary for the effective integration of AI technologies (Riyanda et al., 2025). Limited access to technology intensifies educational gaps, resulting in many students not being able to take advantage of advances in AI (Leong,

2024). In some studies, it was found that schools in areas with limited technology experienced difficulties in integrating AI, so alternative technology-based solutions such as mobile apps or text-based chatbots were more suitable to use. With careful planning and the right education policy support, AI can be a very effective tool in improving the interactivity of history learning, providing a richer learning experience for high school students.

History learning at the high school level often faces challenges in attracting students' attention, especially in the digital era that demands a more interactive learning approach. Conventional methods such as lectures and textbook reading tend to make students passive, making them less effective in increasing their understanding and engagement in history learning. A research investigation revealed that the interactive pedagogical approach resulted in a significant increase in cognitive, emotional, and behavioural engagement among learners, in contrast to conventional methodologies (Fahruddin et al., 2024). Active learning techniques, including discourse and project-based education, promote students' ability to critically analyze and synthesize historical data rather than simply entering facts into memory (Ismayilova, 2024). Tailored learning frameworks address the different requirements of individual learners, nurturing deeper understanding and motivation through tailored strategies (Komariyah & Fajar, 2024). The incorporation of technological elements in this methodology facilitates direct feedback, thus enriching the educational experience (Komariyah & Fajar, 2024). Several studies show that students are more interested in learning with the help of educational technology, such as the use of Artificial intelligence (AI) which can present interactive historical simulations. Therefore, this research is important to explore how AI can improve the interactivity of history learning so that students are more active in understanding historical events in depth.

The use of artificial intelligence in history learning offers a new approach that can significantly increase student engagement. AI can deliver a more dynamic learning experience through features such as educational chatbots, augmented reality-based simulations, and real-time analysis of student responses. Chatbots provide personalized assistance, thereby increasing student engagement and motivation (Saifullah et al., 2024; Virvou & Tsihrintzis, 2024) Empirical research shows that 87% of students who use

chatbots have reported increased engagement, with 75% noting an increase in self-efficacy (Saifullah et al., 2024). Artificial intelligence chatbots can provide direct feedback and modify content according to student development, thus fostering a more dynamic learning atmosphere (Golla, 2024). AI-enhanced reality builds flexible learning settings that significantly increase student engagement through real-time content modification (Ubale, 2024). AI could develop platforms that allow students to explore digital reconstructions of historical events, interact with virtual characters, and receive automated feedback regarding their understanding. Thus, this research seeks to present innovative solutions based on educational technology that can increase the interactivity of history learning among high school students.

This study aims to analyze how the use of artificial intelligence can increase the interactivity of history learning for high school students. The study will identify the most effective elements of AI in increasing student engagement as well as evaluate their impact on historical understanding. AI algorithms adapt educational materials according to individual learning preferences, a practice that has been empirically demonstrated to increase motivation and participation rates among learners (Gjermeni & Prodani, 2024; Singh, 2024). Artificial intelligence technologies, which include gamification and intelligent guidance systems, foster a dynamic learning environment that promotes active engagement among students (Wadhwa et al., 2024). AI can deliver contextual historical content that adapts to students' specific interests, thus fostering a deeper understanding of historical events and concepts (Singh, 2024). Through the analysis of engagement data, educators can discern which history topics resonate most with students, allowing for the implementation of more focused pedagogical strategies (Wadhwa et al., 2024). The focus of the research includes the implementation of AI in learning activities, students' responses to this method, and the challenges that may be faced in its application. The results of this research are expected to provide new insights for educators in optimizing educational technology, so that history learning becomes more interesting,

2. METHODS

This study uses a qualitative approach with a case study method to explore the use of artificial intelligence (AI) in increasing the interactivity of history learning for grade X students of Depok High School. The case study was chosen because it allows for an in-depth exploration of the experiences of students and teachers in integrating AI-based educational technology into history learning. AI technology generates personalized educational experiences that cater to the diverse needs and preferences of students, as evidenced in the pedagogical domain of Middle Eastern history (Bih Ni, 2024). Role-playing games (RPGs) that use adaptive artificial intelligence build immersive settings, thus allowing students to actively engage in historical events, which noticeably increases engagement and retention (Yang & Boulom, 2024). Artificial intelligence fosters a critical discourse on authenticity and creativity in the historical paradigm, as exemplified in the art history curriculum (Ruiz Colmenar & Mariné Carretero, 2024). Ethical considerations regarding data privacy and utilization are essential, requiring a thoughtful approach to technology integration (Ruiz Colmenar & Mariné Carretero, 2024). This research was conducted in schools that have used AI in learning, by observing how AI affects student interaction during the learning process. This approach helps in understanding how AI can be adopted more broadly in history learning to improve student engagement and understanding.

The population in this study is high school students who take history subjects with the application of AI-based educational technology. The sample was selected using a purposive sampling technique to ensure the participation of students and teachers who have experience in using AI in history learning. The targeted sampling allows researchers to concentrate on individuals who have direct experience with artificial intelligence in the domain of history education, thus ensuring that the data collected is substantial and relevant (Wang & Shi, 2024). Through the selection of participants from diverse backgrounds, researchers can compile a broad spectrum of perspectives and experiences, thus adding to the analytical depth of the research (Rostami & Longo, 2024). Participants often articulate beneficial effects, such as increased engagement and motivation, as well as barriers, which include technical challenges and the need for adequate training (Rostami & Longo, 2024; Yatri et al., 2023). In the context of art history education,

artificial intelligence tools facilitate critical discussions regarding authenticity, thus fostering critical thinking skills among students (Ruiz Colmenar & Mariné Carretero, 2024). The research sample consisted of history teachers and grade X students in schools who had applied AI in teaching and learning activities. The selection of this sample ensures that the study obtains relevant and in-depth data on the role of AI in improving the interactivity of history learning.

This study uses semi-structured interview guidelines and participatory observation sheets as the main instruments. Interviews and observations were selected to explore the experiences of students and teachers directly regarding the impact of AI on history learning interactivity. AI systems modify educational content to align with individual learning preferences, as exemplified by role-playing that heavily engages students in historical events, thus facilitating the active investigation and decision-making processes (Yang & Boulom, 2024). The direct feedback mechanism empowers students to interact more comprehensively with complex historical narratives, thereby improving their critical thinking competence (Ni, 2024). Qualitative interviews show that while educators recognize the transformative potential of AI, they often use it for basic tasks instead of promoting deeper critical reflection (Giovannella et al., 2024). Students convey a high level of motivation and enjoyment in their history studies when using interactive AI tools, in stark contrast to conventional methodologies that often result in student release (Yang & Boulom, 2024). Teachers and students were interviewed about the effectiveness of AI in increasing student participation, while observations were made in several class sessions to see patterns of student engagement. This combination of methods allows researchers to obtain richer and more comprehensive data on the implementation of AI in history learning.

The data was analyzed using thematic analysis methods, which aimed to identify key patterns in the use of AI to improve the interactivity of history learning. The thematic analysis allows researchers to organize interview and observation data into key themes that emerge from student and teacher experiences. Thematic analysis is distinguished by inherent adaptability, allowing scholars to modify it according to diverse qualitative paradigms and research questions (DeJonckheere et al., 2024). In an inquiry that addresses the challenges faced by students in writing, thematic analysis reveals

substantial barriers such as ambiguity and limited lexical variation, underscoring the need for a tailored pedagogical approach (Ristati et al., 2024). Despite its benefits, thematic analysis is prone to misapplication stemming from misunderstandings regarding its diverse branches and methodological frameworks (Braun et al., 2024). The data was inductively coded to find themes such as increased student engagement, challenges in the use of AI, and the effectiveness of AI in supporting history learning. This approach helps in generating deeper insights into how AI can be optimally utilized in history learning at the high school level.

3. RESULTS

Interviews conducted with educators specializing in history and high school students show that the integration of artificial intelligence (AI) in the domain of history education has the potential to increase the interactivity of the learning process. A large number of students report increased engagement in their educational experience, as AI provides a more customized and adaptive approach to learning. Educators have also articulated that these technological advances facilitate the presentation of historical content in a much more captivating way, especially through AI functions that can change the complexity of the material according to the level of students' understanding. Nonetheless, some educators have identified barriers to AI incorporation, particularly regarding the readiness of school infrastructure and limitations in the training available to teaching staff.

Observations are made systematically during history education sessions using advanced AI technology, allowing for a thorough analysis of student-content interactions. The findings show an important pattern: students show high participation and deeper engagement with history material while using AI resources. In addition to their enhanced participation, students showed an increased tendency to ask more questions, actively engage with interactive quizzes designed to test their understanding and learn various historical simulations cleverly provided by AI technology. Comparisons with conventional teaching methods reveal an important increase in student engagement. This is especially evident in sessions that use AI to dynamically recreate historical events through animation or virtual reality, thus revolutionizing the educational experience.

Documentation related to this investigation includes analysis of academic records, assessment of student submissions, and audio-visual documentation of interactions that occur during the application of artificial intelligence in the context of historical education. The results obtained from the documentation show that artificial intelligence not only improves student engagement but also promotes a deeper understanding of complex historical concepts. Certain records have shown an important improvement in students' comprehension scores after the application of artificial intelligence when compared to conventional pedagogical methods. In addition, students' reflective entries in their educational journals show that they experienced an increased interest in history caused by the more dynamic and interactive pedagogical strategies used.

Based on data obtained from interviews, observations, and documentation, it has been determined that the integration of Artificial Intelligence in the field of history education has a beneficial influence on the interactive engagement of high school students. Artificial intelligence facilitates a more visual and contextual understanding of historical events, which ultimately increases their enthusiasm for this discipline. Nevertheless, certain barriers, such as limited access to technological resources and inadequate professional development for educators, continue to pose significant challenges to the extensive adoption of artificial intelligence in educational settings, the following is a summary of the research results.

Summary of Research Results

Aspects	Key findings
Interview	AI increases student engagement and assists teachers in presenting materials, but there are infrastructure and training constraints.
Observation	Students are more active in historical discussions and exploration with AI compared to conventional methods.
Documentation	Student assignments show increased comprehension and reflection journals reveal a higher interest in history.
Analysis Findings	AI contributes positively to the interactivity of history learning, despite the challenges in its implementation.

The summary in the table above shows that artificial intelligence has great potential to improve the interactivity of history learning for high school students, but optimal implementation still requires support from various aspects, including infrastructure and teacher training. This study found that the use of artificial intelligence (AI) in history learning in high school increased student engagement and assisted teachers in presenting materials, although there were still infrastructure and training constraints. Observations show that students are more active in historical discussion and exploration compared to conventional methods. In addition, analysis of student assignment documentation indicates increased comprehension, while reflection journals reflect a higher interest in history. Overall, AI contributes positively to the interactivity of history learning. However, challenges in implementation remain, especially in the technical aspects and readiness of educators. Adequate infrastructure support and a comprehensive training program for teachers are needed. With the right support, AI has the potential to be an effective tool in enriching students' learning experiences. This summary emphasizes that the optimization of technology in education must be balanced with the readiness of adequate resources.

4. DISCUSSION

Interviews with history teachers and high school students showed that the application of Artificial intelligence (AI) in history learning contributed to increased learning interactivity. AI helps present historical material in a more dynamic and interactive form, allowing students to explore historical events through digital simulations and data-driven analysis. The HistoryLens framework uses advanced language models (LLMs) to create interactive simulations that immerse students in historical narrative analysis, thereby encouraging active learning and critical evaluation (Breen, 2025). AI-enhanced platforms provide individualized learning experiences, adapting to diverse student needs and preferences, especially in complex subjects such as Middle Eastern history (Bih Ni, 2024). Empirical research reveals that students engaged with AI-generated summaries of historical events showed superior factual memory compared to their counterparts who read human-written texts, implying that AI can significantly improve comprehension and retention (Karell et al., 2024). AI instruments such as

Litmaps promote dynamic research methodologies, allowing students to visualize academic dialogue and interact more deeply with historical content (Michalak & Ellisson, 2024). For example, one teacher revealed that AI allows students to access interactive maps and reconstruct historical events in real time, which makes them more interested and active in class discussions. Students also stated that the AI-based chatbot feature helps them understand the material by answering questions directly. Thus, this interview indicates that the use of AI can increase student engagement in history learning, although there are still challenges in terms of technology readiness and teacher training.

The observation results show that students are more active in learning history using AI compared to conventional methods. AI-based educational technology allows students to learn through more interactive experiences, such as visualization of historical events in the form of animation and augmented reality. AI-generated visualizations facilitate the creative exploration of historical narratives by students, thus adding to the analysis of conventional sources (Megan VanGorder, 2025). Through the formulation of hints for AI, students cultivate essential competencies in contextual analysis and ethical reasoning, critically assessing the reliability of AI-generated outputs (Megan VanGorder, 2025). AI-AR systems encourage flexible learning environments, allowing for real-time content modifications that meet different individual learning requirements (Ubale, 2024). Empirical evidence suggests that this system increases student engagement and provides a personalized educational experience across a variety of contexts, including the domain of history education (Ubale, 2024). A comprehensive meta-analysis revealed that AI-driven educational media significantly improved academic performance, underscoring the efficacy of incorporating technologies such as augmented reality and gamification in educational settings (Setiawan et al., 2025). The results imply that the role of AI in education should be expanded to optimize academic outcomes and broader non-academic achievement (Setiawan et al., 2025). In one of the class sessions, students were seen as more enthusiastic when using AI applications to explore important historical events through digital simulations. They also ask questions and participate in group discussions more often. These observations show that AI not only improves student engagement but also provides a more immersive and contextual learning experience.

Documentation of learning outcomes shows a positive change in student understanding after using AI in history learning. AI helps students in organizing and analyzing historical information more systematically, improving their understanding of cause-and-effect relationships in historical events. AI technology allows for comprehensive analysis of vast historical data sets, revealing patterns that conventional methodologies may fail to identify (Özkan & Samur, 2024). Special artificial intelligence systems can correct inaccuracies in historical data, thereby increasing the reliability of information disseminated to learners (Zou, 2024). Empirical research shows that students who interact with AI-generated synopses of historical events show superior memory and comprehension when compared to their counterparts who use human-written texts (Karell et al., 2024). AI instruments can tailor educational experiences, modify content to align with individual student needs and encourage active engagement with history subject matter (Camino Herrera et al., 2024). While artificial intelligence contributes positively to educational outcomes, it simultaneously raises concerns about the potential for strengthening bias in historical narratives (Frimpong, 2024). Analysis of students' assignment notes showed that they were able to structure a history essay with stronger arguments after using AI to analyze historical sources. In addition, students' reflections in the study journal showed that they felt more interested and understood history better after using AI. This documentation supports the findings that AI technology can improve students' understanding of history, especially in event analysis and historical data-driven problem-solving.

Analysis from interviews, observations, and documentation shows that Artificial Intelligence has an important role in increasing the interactivity of history learning for high school students. AI can make history material more interesting, increase student engagement, and help them understand historical concepts with a more visual and analytical approach. AI-driven image generation can significantly improve conventional source analysis, allowing students to formulate visual depictions of historical narratives, which facilitates a deeper contextual understanding (Megan VanGorder, 2025). AI systems enable customized learning experiences, tailoring content to accommodate individual learners' unique requirements, which has been shown to improve engagement and understanding of historical content (Singh, 2024). The intelligent tutoring system offers instant feedback, further enriching the educational experience and encouraging

students to investigate history subjects with more depth. AI applications support students in crafting short narratives of history, fostering literacy and creativity by providing access to historical information and assisting in the development of characters and plot structures (Hartati & Hendrawan, 2024). Students who use AI in history learning show improvements in-class participation, comprehension of the material, and the quality of their academic assignments compared to students who learn using conventional methods. Although there are still obstacles such as infrastructure readiness and teacher training, this study confirms that the integration of AI-based educational technology can be an effective strategy for increasing student engagement and understanding in history learning.

5. CONCLUSION

This study aims to analyze how artificial intelligence (AI) using ChatGPT can increase learning interactivity in history learning for high school students through the application of innovative educational technology. The results show that AI can improve student engagement by providing more interactive learning experiences, such as historical simulations and AI-based data analysis. In addition, AI assists students in understanding cause-and-effect relationships in historical events with a more visual and analytical approach. Thus, this study confirms that AI has the potential to be an effective tool in improving the quality of history learning in schools. The contribution of this research is to provide insight for educators and policymakers regarding the benefits of AI integration in educational technology, as well as to offer recommendations for AI implementation strategies in the history curriculum. In addition, this research enriches the literature on the use of AI in improving interactivity and historical understanding at the high school level. This study has limitations in the scope of the sample and still requires further exploration related to the readiness of technological infrastructure in various schools.

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