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Analysis Of Challenges In History Education In The Society 5.0 Era At Parakan State High School No. 1

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Abstract

This study aims to analyze the challenges of history learning in the Society 5.0 era at Parakan State High School 1, Temanggung Regency, Central Java. The study employs a qualitative approach using the case study method. Data were collected through in-depth interviews, classroom observations, and document analysis involving eight informants selected using purposive sampling. The findings identified four main challenges: (1) teachers' difficulties in integrating Society 5.0 requirements into instruction; (2) students' low digital history literacy; (3) excessive reliance on artificial intelligence; and (4) limited facilities, learning resources, and classroom conditions. The findings indicate that students tend to use AI and the internet as a shortcut to obtain instant answers, rather than as a means to deepen their historical understanding. This situation reflects the paradox of Society 5.0: widespread access to technology has not been matched by a corresponding level of critical digital literacy. Successful history learning in this era requires strengthening AI literacy, structured verification of digital sources, and adequate support from the school ecosystem.

Keywords: *Society 5.0, History Education, AI Dependency, Digital History Literacy, Historical Thinking*

Abstrak

Penelitian ini bertujuan untuk menganalisis tantangan pembelajaran sejarah di era Society 5.0 di SMA Negeri 1 Parakan, Kabupaten Temanggung, Jawa Tengah. Penelitian ini menggunakan pendekatan kualitatif dengan metode studi kasus. Data dikumpulkan melalui wawancara mendalam, observasi kelas, dan analisis dokumen yang melibatkan delapan informan yang dipilih menggunakan teknik *purposive sampling*. Hasil penelitian mengidentifikasi empat tantangan utama: (1) kesulitan guru dalam mengintegrasikan tuntutan Society 5.0 ke dalam pembelajaran; (2) rendahnya literasi sejarah digital siswa; (3) ketergantungan yang berlebihan pada kecerdasan buatan (*artificial intelligence*); serta (4) keterbatasan fasilitas, sumber belajar, dan kondisi ruang kelas. Temuan ini menunjukkan bahwa siswa cenderung menggunakan kecerdasan buatan (AI) dan internet sebagai jalan pintas untuk mendapatkan jawaban instan, alih-alih sebagai sarana untuk memperdalam pemahaman sejarah mereka. Situasi ini mencerminkan paradoks dalam era Society 5.0: akses luas terhadap teknologi belum diimbangi dengan tingkat literasi digital kritis yang memadai. Keberhasilan pembelajaran sejarah di era ini memerlukan penguatan literasi AI, verifikasi sumber digital secara terstruktur, serta dukungan yang memadai dari ekosistem sekolah.

Kata kunci: *Society 5.0, Pendidikan Sejarah, Ketergantungan pada AI, Literasi Sejarah Digital, Berpikir Historis*

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INTRODUCTION

The development of human civilization has entered a new phase: *Society 5.0*, a concept introduced by the Japanese government as part of the Fifth Basic Plan for Science and Technology in 2016 (Taufik & Suryana, 2022). Unlike previous industrial revolutions, where technology was at the center, *Society 5.0* is *a human-centered society* that seamlessly integrates physical and *cyber-physical spaces* to solve various social problems and improve the quality of human life (Deguchi et al., 2020). In the development *of Society 5.0*, artificial intelligence, *the Internet of Things* (IoT), *Big Data*, and robotics are not merely tools of production (Anwar, 2026), but rather form a critical infrastructure that touches all dimensions of society. These technologies are developed with societal diversity in mind, so that their benefits are accessible to everyone, regardless of background, skills, or social status (Hamu et al., 2023). In the field of education, the *Society 5.0* era demands a profound transformation—not only in terms of infrastructure and technology but also in terms of paradigms, design, and the implementation of learning (Ramadhani, 2025). The competencies required for the *Society 5.0* generation include critical thinking, creativity, collaboration, communication, and a strong command of the digital world and data (Ahmad et al., 2023). The Merdeka Curriculum, currently implemented in all educational institutions in Indonesia, aims primarily to address these challenges through a project-based approach, differentiated instruction, and the strengthening of the Pancasila learner profile (Siboro et al., 2025). However, the gap between curriculum policy design and the reality of implementation in the field remains an issue that requires in-depth study, particularly in subjects traditionally considered to involve rote learning, such as history.

History education plays a strategic role in the national education system. History is not merely a subject that conveys facts and the chronological sequence of past events, but rather a discipline that guides students toward *historical thinking*, fosters a sense of identity, and develops a critical perspective on social reality. Wineburg argues that historical thinking is *"an unnatural* act" that must be systematically cultivated through a planned and meaningful learning process. In the *Society 5.0* era, the ability to think historically has become increasingly important and urgent, given the flood of digital information that often contains distorted, overly simplified, or even fabricated history designed to serve specific interests. One of the greatest paradoxes of the *Society 5.0* era in the field of history education is the phenomenon *of information overload*, accompanied by the proliferation of disinformation and *pseudohistory*. Social media platforms such as TikTok, YouTube, Instagram, and X have become venues for the dissemination of unverified and sensational historical narratives that tend to blur the line between historical facts and speculation (Muslich, 2008; Taufik & Suryana, 2022). Generation Z, having been born and raised in this digital ecosystem, tends to view short visual content as a source of truth, without conducting the necessary verification and critical analysis (Wineburg & McGrew, 2016).

This situation poses a direct challenge for history teachers, who must act not only as conveyors of knowledge but also as agents of digital historical literacy, capable of equipping students with the skills to think critically about historical sources in the digital space. History teachers, as pioneers in the field of education, face significant pressure from two sides. Teacher competencies play a crucial role in the education and learning process (Fakhruddin et al., 2023). They are expected to master innovative pedagogical skills while also being able to adapt to rapid technological advancements (Elmi et al., 2025). In reality, not all history teachers especially older

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(senior) ones possess sufficient digital skills to integrate *Society 5.0* technologies into their daily teaching practices. The gap between the skills required by *Society 5.0* and teachers' actual capabilities in the field is a structural problem that requires a systematic policy response, ranging from the school level to the national level (Hawa et al., 2025).

Parakan State High School No. 1 is a high school located in Parakan Subdistrict, Temanggung Regency, Central Java. As a public school situated in a small urban area with a diverse socioeconomic background, Parakan State High School No. 1 faces realities that are quite representative of the conditions of high schools in non-metropolitan areas as they navigate the *Society 5.0* era. Limitations in digital infrastructure, uneven internet access, and varying levels of digital literacy among students and teachers make this school a relevant and compelling context for in-depth study. Various studies have been conducted on issues related to history education, but most of them still focus on general themes such as teaching methods, student motivation, and curriculum, as demonstrated by the research of (Sagala et al., 2022; Sudibyo et al., 2025). Research specifically addressing the challenges of teaching history in the context of *the Society 5.0* era particularly studies that position Generation Z students as key actors in the digital information ecosystem remains very limited.

This *research gap* provides strong academic justification for the urgency of a study focused on Parakan State High School No. 1, which represents a regional high school with all its limitations and potential. This study has the following objectives: (1) to identify and describe the challenges faced by history teachers when integrating the demands *of Society 5.0* into their teaching; (2) to analyze the problems faced by students; (3) to describe issues related to facilities and infrastructure, classroom conditions, and the learning environment; and (4) to formulate recommendations based on field findings to address these issues. Thus, this study aims to provide theoretical and practical contributions to the development of adaptive, critical, and relevant history education in the *Society 5.0* era. This study employs a qualitative approach using the case study method, which was chosen for its ability to explain phenomena holistically, contextually, and in depth.

METHOD

This study employs a qualitative approach using *the case study* method. The qualitative approach was chosen because it allows for a holistic, comprehensive, and contextual analysis of a phenomenon, which is appropriate for the complexity of the issue under investigation (Setiyani et al., 2026). The case study method was used to gain a comprehensive understanding of the challenges of teaching history in the *Society 5.0* era at Parakan State High School 1, the research site (Yin, 2017). This study was conducted at Parakan State High School 1, Temanggung Regency, Central Java. Informants were selected using *purposive sampling*, based on the following criteria: (1) history teachers instructing grades 10–11 (2 individuals); (2) students in grades 10 and 11 selected based on a range of academic levels and digital engagement (6 students); (3) administrative staff or a librarian as a supporting informant (1 individual).

Data collection was carried out using three main techniques. First, semi-structured *in-depth interviews* to directly explore the informants' perspectives and experiences. Second, classroom observations of the history learning process to collect data on the actual dynamics of technology integration into learning. Third, a documentary study of teaching materials (learning modules, ATP, P5 documents) and school policies related to the implementation of the Merdeka Curriculum and digital

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technology.

RESULTS AND DISCUSSION

This study identifies four main themes related to the challenges of history learning in the context of the *Society 5.0* era at Parakan State High School 1, based on the results of in-depth interviews with eight informants, consisting of two history teachers and six students from grades 10 and 11. The four themes include: (1) challenges faced by history teachers when integrating the demands of *Society 5.0* into learning; (2) challenges faced by students; (3) challenges related to dependence on technology; and (4) challenges related to learning facilities and resources. These findings were analyzed interpretatively and linked to relevant theoretical studies.

1. Challenges Faced by History Teachers in Integrating the Demands of *Society 5.0* into Instruction

The results of interviews and classroom observations indicate that history teachers at Parakan State High School No. 1 possess sufficiently strong digital adaptability skills to meet the learning demands of *the Society 5.0* era. The school has two permanent history teachers and one substitute history teacher, all of whom are relatively young and actively use technology in the learning process. In addition, all teachers received the same digital training from the school, such as *In-House Training* (IHT), training on using *Quizizz*, and training on creating AI prompts as part of the teacher professional development program a key mechanism for promoting digital literacy and pedagogical innovation among teachers (Amemasor et al., 2025; Darling-Hammond, 2010). Results from an interview with a teacher (GR-01) indicate that digital technology has begun to be integrated into history instruction through the use of *Quizizz* and *Kahoot* as assessment tools, the use of AI to assist in question creation and enhance learning, and the development of HTML-based media that integrates content, modules, and assessments into a single platform.

The goal of using this technology is to increase student engagement while keeping education aligned with current digital developments. (Hanifah, 2025) emphasizes that the integration of platforms such as *Kahoot* can significantly boost student motivation to learn, which aligns directly with observations in 10th-grade classes, where students demonstrated high enthusiasm and a competitive spirit during these game-based assessment sessions. The teacher informant (GR-02), who teaches 11th grade, employs an approach that places greater emphasis on the use of physical resources and direct classroom interaction. Learning centers on textbooks, oral discussions, and the gradual reinforcement of material comprehension. The teacher continues to utilize the internet as a supplementary resource, but students are directed to use only recommended and validated websites. Student understanding is generally assessed through direct oral questioning.

This approach was adopted because the teacher (GR-02) believed that overreliance on technology actually encourages students to seek instant answers without engaging in deep thinking. This concern aligns with (Wineburg & McGrew, 2016) view, which states that historical thinking is a skill that does not develop naturally but must be consciously and systematically cultivated through guided learning processes. However, some of the students interviewed stated that Teacher (GR-02)'s approach felt less engaging due to the limited use of visual aids during the learning process. As a result, students are driven to seek additional information independently via the internet without adequate guidance a paradoxical situation that

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actually increases students' potential exposure to unverified digital historical sources. Classroom observations indicate that history teaching practices at Parakan State High School 1 are not yet fully digital-based. In 10th grade, instruction utilizes *PowerPoint*, historical videos, and assessments based on *Quizizz* and *Kahoot*, which have proven effective in boosting student enthusiasm during lessons. Meanwhile, in 11th grade, project-based learning is implemented in accordance with the *Problem-Based Learning* (PBL) and *Project-Based Learning* (PjBL) approaches, such as the creation of short historical films in collaboration with the Indonesian Language course and cosplay of historical figures. However, these projects are only implemented in the 11th grade and are still combined with textbook-based learning and in-class discussions. The projects mentioned above are aligned with the pedagogical implementation of 21st-century education demanded by *Society 5.0*, as emphasized by (Ahmad et al., 2023), who state that competencies in the *Society 5.0* era include creativity, collaboration, communication, and critical thinking skills .

Nevertheless, observation results indicate that the integration of technology into history instruction remains at a basic level and has not yet led to the use of more complex digital technologies. Instruction has not yet utilized virtual museums, interactive timelines, digital archive analysis, interactive historical maps, or digital simulations of historical events. This situation is not solely due to limitations in teachers' competencies but is largely influenced by limited class time, a heavy curriculum, and the need for teachers to keep students focused on understanding basic historical concepts. Teachers believe that using too many digital media tools risks causing students to focus more on immediate results rather than on the process of historical analysis itself.

These findings indicate that history teachers at Parakan State High School 1 tend to adopt a selective and limited digital approach. Technology is used as a learning aid but is not made the central focus of history instruction. One teacher informant (GR-01) acknowledged that the primary obstacle to history learning today no longer lies in teachers' limited technical competencies but rather in students' learning behaviors in the digital age. Teachers observe that students tend to take the quickest route to completing assignments by retrieving answers from the internet or AI without engaging in deep critical thinking. The use of AI and the internet is often limited to instantly copying answers without meaningful analysis. Consequently, teachers feel that history education cannot be fully digitized, as they fear students' critical thinking skills will only weaken further.

The study also identified another issue that has not received much attention in history education in the *Society 5.0* era: the limited instructional time available to develop more in-depth digital innovations. Teachers must balance the demands of covering the curriculum, administering assessments under the Merdeka Curriculum, and developing creative learning activities within a limited timeframe. As a result, digital innovations that require extensive preparation—such as historical simulations or the analysis of digital archives have not yet been implemented optimally. (Amemasor et al., 2025) confirm that disparities in institutional support and teachers' workloads are the primary barriers to the effective and sustainable implementation of educational technology integration in the field.

The fact that students are accustomed to a culture of digital instant gratification also affects the effectiveness of learning innovations. Some students tend to be more interested in the final outcome of an assignment than in the process of critically searching for and analyzing historical information. This situation has led teachers to exercise greater caution when fully integrating technology into history instruction.

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These findings align with an OECD report (2023) that emphasizes that exposure to technology in education does not automatically improve the quality of student learning outcomes. The determining factor lies in how teachers mediate the use of technology to ensure it continues to foster critical and reflective thinking. (Ahmad et al., 2023) also emphasize that competencies in the *Society 5.0* era are not only related to mastery of digital technology but also to creativity, collaboration, communication, and critical thinking skills. In the context of Parakan State High School 1, teachers have demonstrated fairly good efforts at digital adaptation through various instructional innovations. However, history instruction has not yet been fully digitized because teachers still view direct interaction, physical source literacy, and supervision of students' thought processes as essential components of history learning. This situation indicates that the primary challenge in history instruction in the *Society 5.0* era is not merely the ability to use technology, but rather how technology is utilized without undermining students' critical and reflective thinking processes in understanding history.

2. Challenges Faced by Students

The results of the interviews and observations show that the challenges of history learning in the *Society 5.0* era are not only related to the use of technology but also involve changes in students' learning behaviors. The majority of informants acknowledged that digital technology has changed the way they learn history. The internet, social media, YouTube, and AI have become the primary sources they use more frequently than books or the school library. Nearly all informants admitted that they never look for history materials through the school library because they feel that digital sources are more practical, faster, and easier to understand. However, this ease of access actually presents new challenges. Most students still view history as a boring and complicated subject because it is filled with many names of historical figures, dates, and chronologies of events. Some informants even admitted that they had not yet found a clear connection between learning history and their daily lives. This situation leads to low motivation to study history, causing students to prefer quick and instant learning methods. In the context *of Society 5.0*, this study found a trend of declining critical thinking skills among students due to uncontrolled use of technology (Aulia et al., 2025). The majority of informants acknowledged that the internet and AI are often used to find immediate answers rather than to gain a deep understanding of the material. Some students even admitted that the practice of copying answers from the internet or AI frequently occurs during assignments and assessments. This situation can lead to a decline in students' ability to process information independently, construct logical arguments, and make sound decisions based on data and facts (Faisal, 2024).

Interestingly, some informants directly admitted that they felt unprepared to face learning in the *Society 5.0* era. Technology does indeed facilitate access to information, but on the other hand, it makes students increasingly dependent on instant answers. Some students also felt that the use of technology in history education still felt "half-baked." While learning has begun to utilize digital media and the internet, the assessment system remains vulnerable to cheating—whether through searching for answers online or the covert use of AI. As a result, the use of technology has not yet fully succeeded in fostering more critical and meaningful learning. Additionally, this study found differences in learning preferences among students. Some students prefer *teacher-centered* learning because they feel that direct explanations from the teacher help them understand the flow of history in a

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coherent and clear manner. On the other hand, some students find that learning that is too teacher-centered is actually boring and causes them to lose interest in studying history. Others prefer creative projects and the use of digital media because they are considered more engaging and interactive. Nevertheless, project-based and technology-based learning have not yet been fully effective. Some informants noted that when projects are carried out without adequate reinforcement from the teacher's explanations, students tend to simply copy information from the internet without truly understanding the content. While these learning activities may appear visually creative, they do not necessarily result in a deep historical understanding.

This issue is compounded by several technical obstacles in the field. A number of students complained about the school's unstable Wi-Fi connection and devices that sometimes had difficulty connecting during digital-based learning sessions. These conditions prevent some students from participating optimally in technology-based learning activities (Hafezh, 2025). Amid these various challenges, this study identified one issue that consistently emerged among all informants: the lack of instruction specifically and systematically designed to equip students with the ability to verify digital historical sources. This finding is significant given that advancements in technology and social media have transformed how students access historical information.

Today, history is no longer obtained solely from textbooks or teachers' explanations but also from various digital platforms that present content in the form of short videos, infographics, podcasts, and social media posts all of which are easily accessible and consumable. On the one hand, this situation broadens students' access to historical knowledge. On the other hand, historical information circulating in the digital space does not always undergo rigorous academic scrutiny, making it susceptible to oversimplification, narrative distortion, and even the spread of misinformation (Chairunisa & Zamhari, 2022). Nevertheless, all student informants—namely Bagus (S-01), Niken (S-02), Rayhan (S-03), Dino (S-04), Nara (S-05), and Dika (S-06), stated that they had never received specific instruction on how to identify historical hoaxes, evaluate the credibility of digital sources, or verify historical information obtained from the internet. This situation indicates that digital historical literacy has not yet become an integral part of history education practices at Parakan State High School 1.

Some students have independently developed verification strategies. Bagus (S-01) said he *checks and double-checks* by comparing multiple sources. Niken (S-02) compares search results from Google, AI, and YouTube. Rayhan (S-03) checks the section in the comments and compares the information with academic journals, while Nara (S-05) looks for additional sources and confirms with the teacher if she finds contradictory information. Meanwhile, Dika (S-06) tends to trust information that appears most frequently or is confirmed by multiple sources simultaneously. However, these verification strategies remain personal, unstructured, and do not yet fully consider the credibility of sources in depth. Some students still rely on majority-consensus-based validation that is, they consider information to be true if many sources say the same thing. In the context of a digital space filled with algorithms, information reposts, and echo chambers, such strategies risk leading to a flawed understanding of history even though students feel they have verified the information.

These findings are consistent with the research by (Hawa et al., 2025), which found that high school students generally still use superficial source evaluation strategies and have not yet critically assessed the credibility of sources. Research by

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Sam Wineburg and Sarah McGrew also indicates that students' *online civic reasoning* skills remain low, even when they believe they have independently verified information. According to them, the ability to engage in *lateral reading* or comparing various sources in parallel needs to be explicitly taught because it does not emerge automatically in students' behavior. Overall, the research findings indicate that the challenges of digital history literacy at Parakan State High School No. 1 are not only related to technical proficiency in using technology but also involve a decline in the culture of critical thinking, a culture of instant learning, low student motivation and historical literacy, and the suboptimal integration of digital source verification into history instruction. These conditions indicate that the challenges of history education in the *Society 5.0* era are not merely about how technology is used in the classroom, but how technology can be mediated into a tool that encourages students to think historically in a critical, reflective, and responsible manner.

3. The Problem of Dependence on Technology

Students' dependence on technology, particularly *artificial* intelligence (AI), emerged as a consistent issue in this study. All informants both teachers and students—acknowledged that the development of digital technology has significantly altered students' learning patterns. However, these changes have not yet fully led to the kind of critical and reflective learning envisioned by *Society 5.0.* One teacher informant (GR-01) observed that students tend to use AI as a shortcut to complete assignments without engaging in deep thinking. The teacher noted that students focus more on finding the quickest answer rather than understanding the historical analysis process itself. To minimize this, the teacher has implemented a rule requiring students to cite sources and note the time of access when retrieving information from the internet. Nevertheless, effectively monitoring AI use in learning practices remains challenging due to the wide-open access to technology. From the students' perspective, reliance on AI is openly acknowledged by nearly all informants. Niken (S-02) stated that excessive use of AI can diminish independent thinking skills because students become accustomed to receiving instant answers. Dino (S-04) admitted that AI use increases when school assignments pile up, especially for creating summaries, compiling practice problems, and quickly finding additional explanations. Meanwhile, Nara (S-05) reflectively noted that most students are actually not yet ready to face *Society 5.0* because technology is more often used to find instant answers rather than to build deep understanding.

The most critical finding came from Dika (S-06), who revealed that group presentations are often created almost entirely by AI without any meaningful discussion or intellectual contribution from group members. This situation indicates that reliance on AI not only affects individual abilities but also begins to undermine the essence of collaboration, creativity, and the thinking process in project-based learning (Salsabila, 2026). This phenomenon highlights a paradox in the implementation of learning in *the Society 5.0* era. Conceptually, *Society 5.0* emphasizes the use of technology to support human thinking, creativity, and critical problem-solving. However, the findings of this study actually show that students' use of technology still more closely resembles the *Society 4.0* model that is, technology is primarily used for efficiency, speed, and the automation of tasks, rather than to deepen the thinking process. Technology has not yet been fully utilized as a means of reflection and intellectual capacity development but more often serves as a tool for obtaining instant answers. This situation reinforces the

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acknowledgment by several student informants who feel unprepared to face *Society 5.0.* This lack of preparedness is not due to a lack of access to technology, but rather to the absence of critical literacy skills necessary to use technology wisely and responsibly. Students have indeed become accustomed to using AI, the internet, and digital media in their daily lives, but they do not yet fully possess the ability to utilize technology in a reflective, analytical, and productive manner within the context of history learning. This finding aligns with the research by (Baidoo-Anu & Ansah, 2023), which found that excessive reliance on ChatGPT can diminish students' analytical and critical thinking skills.

Furthermore, (Benedek & Sziklai, 2025) found that students with a performance-based goal orientation tend to rely on AI to reproduce knowledge without critically analyzing it, which has the potential to encourage academic dishonesty. This condition is evident in the findings of this study, where students were more focused on the final outcome of assignments than on the process of deeply understanding historical material. This paradox is important to note because *Society 5.0* fundamentally presupposes a society capable of utilizing technology intelligently and meaningfully to improve the quality of human life. However, in the practice of history learning at Parakan State High School 1, technology actually has the potential to weaken critical thinking processes if not accompanied by adequate digital literacy training. Thus, the main challenge in history education in the *Society 5.0* era does not lie in the existence of technology itself, but rather in how technology is used and mediated within the learning process. The findings of this study highlight the need for AI *literacy* training that not only teaches technical skills in using AI but also fosters students' ethical awareness, evaluative abilities, and academic responsibility in utilizing technology critically and productively.

4. Issues Regarding Facilities, Learning Resources, and Classroom Conditions

Limited learning resources and facilities are one of the structural challenges affecting history education at Parakan State High School 1. Interview results indicate that both teachers and students still face various facility limitations, preventing the optimal implementation of history education in the *Society 5.0* era. Teacher informant (GR-01) identified several facilities that are not yet adequately available, such as a social studies laboratory, visual history media, miniatures or replicas of historical artifacts, and more comprehensive multimedia facilities. These limitations mean that history instruction remains dominated by conventional methods and has not yet been able to provide concrete, interactive, and multisensory learning experiences. As a result, teachers struggle to develop history instruction that is more contextual and based on direct experience. Furthermore, the integration of technology into instruction remains at a basic level.

History instruction has not yet optimally utilized *the Internet of Things* (IoT), virtual museums, interactive timelines, digital historical maps, simulations of historical events, or technology-based *collaborative learning*. In fact, an IoT-based collaborative learning approach allows students to work together in real time via digital devices, share documents, discuss topics, and develop projects collaboratively without being limited by time or space. However, in practice, limitations in facilities, instructional time, and the readiness of the school ecosystem have prevented these innovations from being fully implemented. From the students' perspective, the scarcity of physical learning resources also poses a distinct challenge. Informant Niken (S-02) noted that history textbooks are not allowed to be taken home, so students more often rely on the internet as their primary learning

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resource outside the classroom. This situation creates a new paradox: on one hand, students are becoming increasingly dependent on digital sources, but on the other hand, their critical digital literacy skills have not yet developed optimally. As a result, students can easily access historical information but are not necessarily able to evaluate the validity and credibility of the sources they use. In addition to the limitations of learning resources , some students also expressed a desire for history instruction that is more contextual and grounded in real-world experiences. Nara (S-05) and Bagus (S-01), for example, want learning that involves more visits to historical sites, field observations, and interviews with local historians so that history is not merely understood as memorizing names and dates, but as an experience closely connected to their lives. These findings indicate that students actually have a need for more authentic and participatory history learning.

Another prominent issue is the lack of a conducive classroom environment. Informant Nara (S-05) stated that a noisy classroom often disrupts concentration, especially when history material requires focus and lengthy explanations. Dika (S-06) expressed a similar sentiment, noting that an unconducive classroom environment makes it more difficult to understand history material. These findings indicate that the challenges of history education in the *Society 5.0* era are not limited to technology and digitization but also involve fundamental issues such as classroom management and the learning environment. Limitations in facilities, learning resources, and classroom conditions ultimately impact the effectiveness of the instructional innovations implemented by teachers. Although teachers have endeavored to integrate technology and creative projects into history instruction, their implementation still faces numerous practical obstacles.

This situation aligns with the perspective of (Siboro et al., 2025), who emphasize that the implementation of the Merdeka Curriculum and *Society 5.0* requires adequate support from the educational ecosystem, including physical facilities, learning resources, a conducive classroom environment, and responsive institutional support. These conditions indicate that the implementation *of Society 5.0*-based history instruction at Parakan State High School 1 is still proceeding gradually and contextually. As a public school with limited instructional time, facilities, and the complexity of students' needs, the integration of digital technology has not yet been fully realized in an ideal manner as conceptualized by *Society 5.0* in various literature. Therefore, teachers tend to adopt a more realistic and adaptive approach tailored to the school's conditions, available resources, and the characteristics of students in the classroom. Consequently, the challenges in history learning at Parakan State High School 1 cannot be understood solely as a matter of teachers' pedagogical skills or students' ability to use technology. The research findings indicate that the success of history learning in *the Society 5.0* era is also significantly influenced by the readiness of facilities, the quality of the learning environment, and the overall support of the school ecosystem.

CONCLUSION

This study shows that history learning in the Society 5.0 era at Parakan State High School 1 still faces various interrelated challenges. From the teachers' perspective, efforts to integrate technology have been made through the use of Quizizz, Kahoot, AI, HTML-based learning media, as well as various learning models and creative projects. However, these implementations have not yet been fully optimized due to limited class time, a heavy curriculum load, and students' tendency to use technology as a means of obtaining instant answers. From the

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students' perspective, the challenges include low motivation to study history, dependence on the internet and AI, and weak digital historical literacy. Although students are accustomed to accessing various digital information sources, they lack adequate source verification skills and have never received systematic instruction on how to evaluate the credibility of historical information in the digital space. This study found that reliance on AI is the most consistently emerging issue in history education. Technology is more often used to quickly complete assignments rather than to deepen students' understanding and historical thinking skills. These conditions indicate that the challenges of history learning in the Society 5.0 era do not lie solely in the availability of technology, but rather in how technology is used critically, reflectively, and responsibly. These challenges are further compounded by limitations in facilities and infrastructure, such as the lack of adequate history learning facilities, internet connectivity issues, and classroom conditions that are not conducive to learning. Therefore, the success of history education in the Society 5.0 era requires the structured strengthening of digital history literacy and AI literacy, adequate support from the school ecosystem, and pedagogical strategies capable of balancing technological innovation with the development of critical, reflective, and humanistic thinking skills in students.

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