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Teaching aids as bridge for implementing historical thinking skills in history education

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ABSTRACT

Historical Thinking Skills (HTS) have become essential skills in contemporary education due to technological advancements. HTS, which includes evidence analysis, understanding chronology, and adopting historical perspectives, is crucial for fostering critical and analytical thinking among students. However, the effectiveness of implementing HTS remains a challenge, particularly in selecting appropriate and impactful teaching aids. This study explores the selection and use of teaching aids by secondary school history teachers in implementing HTS. Using a qualitative multiple case study design, the research involved four history teachers from two secondary schools with different academic contexts. Data were collected through semi-structured interviews and classroom observations. Findings indicate that the selection of teaching aids is influenced by teaching objectives, students' ability levels, infrastructure, and the effectiveness of the aids. Teachers utilize various teaching aids, including Information and Communication Technology (ICT)-based tools, printed materials, visual aids, and thinking tools. Experienced teachers demonstrated more critical, reflective, and adaptive approaches, whereas novice teachers relied more on conventional methods. The study highlights the importance of teacher experience and infrastructure in HTS implementation. It recommends targeted professional development to enhance digital literacy, pedagogical strategies, and source evaluation skills among novice teachers to ensure effective HTS implementation in history education, ultimately producing students with critical and analytical skills.

Contribution/Originality: This study contributes to the literature by exploring history teachers' use of teaching aids in implementing Historical Thinking Skills (HTS). It offers new insights into novice and experienced teachers' differences in daily practice and enhances understanding of effective strategies for promoting critical historical inquiry.

1. INTRODUCTION

Collingwood (1965) emphasized that history is not only about historical events and their dates but also about the thoughts and motivations of individuals involved in the historical events. While Malone and Bobbie (2007) mention that history is not the past but the study of the past, therefore, to have a deep understanding of historical events, students must apply critical and analytical thinking in reconstructing the thoughts of individuals involved in the historical events (Ibrahim, 2016). This ability, known as Historical Thinking Skills (HTS), is an essential element in helping students interpret and evaluate historical events critically and analytically (Ministry of Education Malaysia, 2018; Siti-Hawa, 2019).

The use of teaching aids should help increase students' focus, stimulate students' interest, and improve students' understanding (Miralles-Sánchez, Rodríguez-Medina, & Sánchez-Ibáñez, 2024; Rodríguez-Medina, Gómez-Carrasco, Miralles-Martínez, & Aznar-Díaz, 2020). Hence, using a variety of teaching aids such as historical sources, mind maps, Information and Communication Technology (ICT) tools, documents, and pictures can improve students' HTS (Kaviza, 2020; Ofianto et al., 2022; Tirado-Olivares, Navío-Inglés, O'Connor-Jiménez, & Cózar-Gutiérrez, 2023). Therefore, the use of teaching aids in history education not only stimulates students' interest but also develops their HTS (Rodríguez-Medina et al., 2020).

However, one of the challenges in implementing HTS is the use of appropriate teaching aids (Ofianto et al., 2022; Suhaida & Shahabuddin, 2022). The use of appropriate teaching aids can create a conducive learning environment and have a long-term impact on students' thinking skills (Kaur, Saini, & Dhillon, 2008). Unfortunately, some history teachers face difficulties in identifying and using the appropriate teaching aids to implement HTS (Ofianto et al., 2022; Wilke & Depaepe, 2019). There are teachers who use existing teaching aids in schools to implement HTS without considering their suitability (Ofianto et al., 2022).

Furthermore, history teachers rely on the use of textbooks, even though they emphasize factual memorization over critical analysis (Chang, Wegerif, & Hennessy, 2023). The use of teaching aids in history education is limited, and textbooks are often used as teaching aids due to the exam-oriented system, where exams are based on the history textbooks (Hasudungan, 2021; Pratama, Inne, Muhammad, & Sumargono, 2022). As a result, students focused on memorizing historical facts and mastering the techniques to answer examination questions rather than developing critical thinking (Rantala & Khawaja, 2021).

The teaching and learning of history still focus on rote memorization rather than information processing, which leads students to understand historical content in depth and critically (Nolgård & Nygren, 2019; Pratama et al., 2022; Rantala & Khawaja, 2021). If HTS are not systematically developed, history will continue to be perceived as a difficult and boring subject (Nurul, Norfiza, Nurul, & Rorlinda, 2020). As a result, students will face difficulties in analyzing sources' content effectively and will have limited ability to apply this skill in daily life, which is increasingly filled with complex information (Muñoz, Torres, Martínez, & Carrillo, 2022; Rivero, Navarro-Neri, & Aso, 2022). Therefore, history teaching requires changes, where students should be involved in the process of constructing historical knowledge, such as evaluating author objectivity and the accuracy of the sources' content, so that they can master the skill of evaluating the accuracy and credibility of the information gathered in daily life (Rodríguez-Medina et al., 2020).

Most of the past studies have evaluated the use or the effectiveness of certain teaching aids, particularly history textbooks, in implementing HTS. However, studies on the teaching aids used by history teachers to implement HTS in daily teaching are still limited. Therefore, this study was conducted to analyze the teaching aids used by history teachers in implementing HTS. In addition, this study aims to identify the factors that influence the selection of teaching aids among history teachers. It also seeks to identify the factors that may influence the effectiveness of teaching aids used in implementing HTS. The objectives of this study are;

1. To identify the factors influencing the selection of teaching aids by history teachers to implement HTS
2. To explore the teaching aids used by history teachers to implement HTS.

2. LITERATURE REVIEW

Historical thinking is unique because it not only shares characteristics with other forms of thinking but also has its own distinctive features (Tholfsen, 1967). It refers to the process by which historians interpret historical sources and construct a historical narrative. It is a concept related to cognitive activities where historians develop an understanding of historical events through a scientific process involving analyzing and interpreting sources. This type of thinking involves understanding the past qualitatively and uniquely (Thorp & Persson, 2020).

The Historical Thinking Model by Seixas (2017) includes the skills required by historians to conduct historical research and is adapted to suit students' cognitive levels (Thorp & Persson, 2020). According to this model, there are six elements in Historical Thinking: (a) historical significance, (b) primary source evidence, (c) continuity and change, (d) cause and consequence, (e) historical perspective-taking, and (f) ethical dimension. These six elements form a conceptual framework of Historical Thinking that should be implemented in history classes. This model also emphasizes the importance of using evidence in analyzing and interpreting historical events (Seixas, 2017). Hence, the Model of Historical Thinking by Seixas (2017) outlines the use of materials or sources as an element in developing HTS. In line with this, this study analyzes the teaching aids or materials used by history teachers to implement HTS in their teaching.

With the advancement of technology, access to information has become easier, and anyone can upload content even if they are not experts in the field (Tirado-Olivares et al., 2023). Hence, the ability to evaluate the validity and accuracy of information is important to avoid the influence of fake news or misleading content. This ability can be developed through HTS, which emphasizes the ability to critically analyze, interpret, and evaluate sources (Rodríguez-Medina et al., 2020). The importance of evaluating the accuracy of information in the era of globalization has made HTS an essential element in history education worldwide (Muñoz et al., 2022; Rantala & Khawaja, 2021; Rodríguez-Medina et al., 2020).

Since HTS plays an important role in history education, the effort to strengthen its implementation also faces challenges. One of the challenges is the use of appropriate teaching aids to support HTS development (Ofianto et al., 2022). The use of teaching aids should assist in the implementation of HTS among students. However, some history teachers struggle to identify and use suitable teaching aids to implement HTS (Ofianto et al., 2022; Wilke & Depaepe, 2019).

Furthermore, history teachers rely on textbooks in their teaching (Chang et al., 2023; Muhammad & Anuar, 2021; Suhaibo, 2010; Zarina, 2013). The use of textbooks is influenced by the exam-oriented education system that emphasizes memorizing historical facts to answer examination questions (Hasudungan, 2021; Rantala & Khawaja, 2021). Textbooks can facilitate teaching, but they are less effective in implementing HTS because most activities and historical sources in textbooks aim at improving students' understanding and do not help develop students' HTS (Álvarez-Martínez-Iglesias, Molina-Saorín, Trigueros-Cano, & Miralles-Martínez, 2021; Fitzgerald, 2019). Studies also highlighted the need to improve the explanation and content in history textbooks to support students in thinking critically (Asmahani, Mohd, & Abdul, 2020; Lau, Ahmad, Awang, & Othman, 2020). Past studies also show that historical sources in textbooks often serve only as illustrations and do not contribute to the development of HTS (Álvarez-Martínez-Iglesias et al., 2021).

Therefore, past studies have reported that history textbooks should be used with other teaching aids to ensure the effectiveness of HTS implementation (Fitzgerald, 2019; Muhammad & Anuar, 2021). If history teachers only rely on history textbooks to implement HTS, the entire textbook content would have to be reviewed (López-García, 2023). According to the Model of Historical Thinking by Seixas (2017), primary source evidence is one of the elements in developing Historical Thinking. Past studies also prove that the effective use of historical sources as teaching aids helps in developing students' HTS (Claravall & Irey, 2022; Holdinga, Janssen, & Rijlaarsdam, 2021; López-García, 2023; Miralles-Sánchez et al., 2024). The use of historical sources as teaching aids gives students opportunities to think and work like historians, and this process represents the implementation of HTS (Nolgård & Nygren, 2019).

Besides the use of textbooks and historical sources, the use of appropriate teaching aids, such as visual aids or thinking tools, also plays an important role in implementing HTS (Ofianto et al., 2022; Ponsoda-López de Atalaya, Blanes-Mora, & Moreno-Vera, 2023). A study by Ofianto et al. (2022) showed that the use of timeline media supports the implementation of chronological understanding (one of the constructs under HTS). In addition, a study by Ponsoda-López de Atalaya et al. (2023) reported that the use of photography helped students make inferences and visually interpret historical information. These two forms of teaching aids demonstrate that visual aids are not only

supplementary but can support the implementation of HTS through a contextual approach and visual stimuli that enhance students' critical and analytical thinking.

Due to technological advancement, ICT aids also have significant potential in implementing HTS. A study by Tirado-Olivares et al. (2023) showed that online platforms such as ChatGPT guide students to analyze and critique historical sources argumentatively. Similarly, Sumardi, Nisa, and Naim (2025) found that the use of digital scrapbooks can improve students' HTS. Meanwhile, a study by Muhammad, Bayu, Rika, and Fahruddin (2025) found that embedding technology systematically improved students' achievement. Therefore, ICT plays an important role in implementing HTS and self-directed learning with structured and appropriate pedagogical guidance.

The Historical Thinking Model by Seixas (2017) provides a clear framework for the elements of historical thinking that should be implemented in teaching. However, the model can only be applied effectively if teachers are able to select and use appropriate teaching aids to support HTS. From a pedagogical perspective, constructivist, inquiry, and source-based approaches emphasize that students must actively engage with historical materials to develop critical understanding. This indicates that teaching aids are not supplementary tools but serve as essential media for implementing HTS.

Past studies show a gap between theory and practice. Teachers depend heavily on textbooks due to examination and time constraints, even though textbooks are often criticized for being less effective in enhancing HTS. However, past studies show that historical sources, visual aids, and ICT can help students develop critical thinking skills. These differences suggest that, even though theory supports using various teaching aids, teachers in real classrooms often do not fully apply them.

Therefore, this study builds on past studies by exploring the teaching aids used by history teachers to implement HTS and the factors influencing their selection. By using the Historical Thinking Model by Seixas (2017) and constructivist pedagogy, this study addresses the gap between theory and classroom practice. It also adds to the discussion on effective strategies in history teaching. Hence, this study will provide insight into how teaching aids can either support or limit the development of HTS among students.

3. METHODOLOGY

This study employed a qualitative multiple case study design to explore the use of teaching aids by history teachers in implementing HTS. According to Thomas (2016), a case study is conducted to gain an in-depth understanding of an issue. A multiple case study was selected to enable comparison across different contexts; in this case, between two schools with different academic backgrounds. In this study, each school represented one case, and the participants (novice and experienced teachers) provided insights into practices within their respective contexts. By examining more than one case, the study was able to identify the similarities and differences in the use of teaching aids across different school settings, thereby increasing the transferability of the findings.

Hence, purposive sampling was used, where participant selection criteria were determined to avoid bias or subjectivity in the selection of participants (Noraini, 2013). The criteria for participant selection were:

(a) History teachers who use Secondary School Standard Curriculum documents to plan history lessons.
(b) History option teachers

This study was conducted in Klang Valley, Malaysia. Two national secondary schools from this area were selected, where S1 is a school with high academic performance in the subject of History (100% passing rate in History for the Malaysia Certificate of Education (SPM) in 2023), while S2 is one of the regular daily secondary schools in Klang Valley. As a result, four participants were identified, consisting of two novice teachers (teaching experience of less than 3 years) and two experienced teachers (at least 10 years of teaching experience) (refer to Table 1).

Table 1. Participant profile.

Participant	Teacher type	School
T1	Novice teacher	S1
T2	Novice teacher	S2
T3	Experienced teacher	S1
T4	Experienced teacher	S2

After obtaining consent from the participants, three semi-structured interview sessions and two sessions of classroom observations were conducted with each participant to gather information related to their experiences in selecting and using teaching aids for implementing HTS. After all the data were collected and transcribed, member checking was conducted. The transcripts were referred back to the participants for review and confirmation to ensure their accuracy and validity. This method aims to enhance the accuracy, credibility, validity, and transferability of the study (Mertens, 1998; Noraini, 2013). Finally, the data were thematically analysed based on the procedure proposed by Braun and Clarke (2006).

4. RESULTS AND FINDINGS

This section summarizes the key findings from the case study analysis, organized around the two research questions. It identifies the factors influencing the selection of teaching aids and the teaching aids used by teachers in implementing HTS.

4.1. The Factors Influencing the Selection of Teaching Aids

The study's findings indicate that the selection of teaching aids by history teachers to implement HTS is influenced by several factors: (a) alignment with teaching objectives, (b) students' ability level, (c) effectiveness of teaching aids, and (d) existing infrastructure and teaching aids (Refer to Table 2).

Table 2. Factors influencing the selection of teaching aids.

Participant	Factors influencing	Supporting quotes
T1	Students' thinking level	"…look at the students' ability according to their class…suitable to their level of thinking…"
	Effectiveness of teaching aids	"…whether it's effective or not… what I can receive from what I had done…"
	School infrastructure	"…looking at what the school has…take the opportunity to use it…"
T2	Teaching objectives	"…teaching objectives… Yes…"
	Students' ability level	"…focus on students' ability level…"
	Effectiveness of teaching aids	"…use the more effective way…"
	Classroom infrastructure	"…each class had LCD, projector…get use of it…"
T3	Teaching objectives	"…based on the teaching objectives, I will prepare the teaching aids needed…"
	Students' understanding level	"…according to the variety of student levels…"
	Effectiveness of teaching aids	"…if I don't see its effectiveness, I will make some change to a different teaching aid…"
	School infrastructure	"…our school has existing infrastructures… use them…"
T4	Teaching objectives	"…I determined the teaching aids based on the teaching objectives…"
	Students' ability level	"…I consider the students' ability level to determine the teaching aids…"
	Effectiveness of teaching aids	"…if the teaching aids are not effective, we usually won't use them…"
	Existing materials	"…materials available around the school…"

The findings show that teaching objectives were a key factor in the selection of teaching aids. T4 demonstrated a systematic approach by planning teaching aids based on teaching objectives to ensure their suitability and effectiveness. T2 and T3 also mention that the selection of teaching aids is based on teaching objectives, reflecting an awareness of the importance of lesson planning. However, T1 stated that it never considers teaching objectives as a factor when selecting teaching aids. This difference highlights how an experienced teacher like T4 is able to adapt teaching aids based on lesson needs, while novice teachers like T1 are less flexible.

Besides, all participants agreed that teaching aids have to be used according to students' ability to ensure the effectiveness of history lessons. However, experienced teachers (T3 and T4) demonstrated a more systematic adaptation. For example, T3 uses ICT-based teaching aids to carry out presentations which involve high-performing students, group activities, and mind maps for average-performing students, and simple exercises for low-performing students.

Additionally, T4 prepares different teaching aids and exercises based on students' ability levels. On the other hand, novice teachers (T1 and T2) also consider students' ability levels but prefer traditional approaches such as differentiated exercises and slight content adjustments. This shows that teaching experience influences how teaching aids are adapted to students' needs.

The study also showed that all participants evaluated the effectiveness of teaching aids in implementing HTS. T1 evaluated the effectiveness based on the outcomes achieved after classes. T2 selected teaching aids such as videos, pictures, and colorful notes because they are more engaging and help students remember the teaching content. However, further analysis showed that experienced teachers (T3 and T4) were more reflective and adaptable. T3 would improve or modify the teaching aids if they were found ineffective, while T4 would not use teaching aids that did not impact students.

 In contrast, novice teachers (T1 and T2) relied more heavily on commonly used teaching aids and were less likely to critically evaluate their effectiveness.

Lastly, the participants also considered infrastructure and the availability of existing teaching aids. T1 made use of all existing infrastructures in the school. T2's school was equipped with projectors and LCDs in every classroom, which can be used to display presentation slides, videos, images, and colorful notes. T3 also stated that the infrastructure in the school, such as Wi-Fi and projectors, supports the use of PowerPoint slides during history teaching. Meanwhile, T4 extended beyond classroom tools and utilized resources such as a "History Pathway," world maps, and displays of historical information for outdoor learning, providing more interactive and contextual learning experiences.

In conclusion, experienced teachers were more systematic and flexible in selecting teaching aids based on lesson needs. They were more prepared to adapt teaching aids according to students' needs and continuously evaluate and modify the teaching aids to ensure their effectiveness. In contrast, novice teachers tended to rely on predetermined methods and showed less adaptability in modifying teaching aids.

4.2. The Teaching Aids Used by History Teachers

The findings of this study indicate that various types of teaching aids have been used by history teachers to implement HTS. These include: (a) ICT-based teaching aids, (b) printed materials, (c) visual aids, and (d) thinking tools (refer to Table 3).

Using various types of teaching aids reflects teachers' efforts to support students in developing historical understanding that is more critical, analytical, and contextual.

Table 3. Teaching aids used by history teachers to implement HTS.

Teaching aids used		T1	T2	T3	T4
ICT-based teaching aids	Presentation Slide	PowerPoint	PowerPoint	PowerPoint	PowerPoint Canvas
	Internet search materials	Chat GPT, websites, YouTube	Websites, YouTube	Website, Wikipedia	Websites, journal online
Printed materials	Books	Textbooks, reference books, notebooks	Textbooks, reference books, magazines	Textbooks, The library's books	Textbooks, newspapers
	Handouts	Worksheets, module	Printed handouts	Module	Printed handouts
Visual aids	Video	Video from YouTube	Historical Video	Documentary Videos	Prehistory Era Videos
	Pictures	Through a presentation slide or the Internet	Images of Historical Sites	In Textbooks Internet Sources	Historical figures, Artifacts' picture
Thinking tools	Mind Maps	Flow chart	Charts	Charts	Flow charts
	Questions	HOTS questions	HOTS questions	HOTS questions, oral questions	Oral questions

The findings of the study indicate that all participants used ICT-based teaching aids. However, differences were observed in the approach to using ICT between novice teachers (T1 and T2) and experienced teachers (T3 and T4), as well as between schools (S1 and S2). Novice teachers were more likely to use ICT-based teaching aids such as presentation slides, Internet search materials, and online platforms such as ChatGPT and YouTube in implementing HTS. For example, T1 and T2 frequently used slide presentations, Internet search materials, and online platforms to help students understand the historical chronology. Although novice teachers were aware that some historical information may lack credibility and validity, they did not take any appropriate action to address this issue. On the other hand, experienced teachers emphasized the credibility and validity of information obtained, especially sources from the Internet. They were more selective when choosing sources or materials and often reminded students not to rely solely on online sources that may contain inaccurate information, such as Wikipedia and ChatGPT. For example, T3 reviewed the sources that would be used by students, while T4 provided some Internet search materials with higher credibility, such as newspapers, articles, or academic journals.

However, teachers in S2 (T2 and T4) faced challenges related to Internet accessibility in their schools. Hence, they needed to assign homework so that students could search for the information at home. T4 emphasized that the Internet connections in their schools were unstable, which had become a constraint to optimizing the use of ICT in the classroom. Meanwhile, teachers from S1 (T1 and T3) reported that they used ICT-based teaching aids more frequently, such as liquid crystal displays (LCDs), projectors, and online learning platforms such as Google Classroom and Quizizz. This is due to the better technological infrastructure available in their school (S1). T3 mentioned that they utilized ICT to encourage students' self-directed learning.

In addition, the findings also indicate that printed materials, especially textbooks, still play an important role in implementing HTS. In terms of school types, teachers from S1 are more flexible in using printed materials and encourage students to use various types of reference sources, such as textbooks, reference books, and materials from tuition centers. On the other hand, teachers from S2 are more rigid in their use of textbooks as the main source and are less likely to encourage the use of extra materials that may contain information different from textbooks.

Besides, findings also showed the difference between novice teachers and experienced teachers. Novice teachers prefer using printed materials that are easily accessible, such as textbooks, reference books, and modules. They emphasized the use of academic reading materials less. As T1 explained, academic books were seldom used by students. Meanwhile, experienced teachers used not only textbooks, modules, and handouts but also included some

academic reading materials, such as newspapers and books from the library. Besides, experienced teachers always involve students in the process of obtaining information. According to T3, students were encouraged to go to the library and refer to the books to find the information they needed.

Visual aids such as videos and pictures play an important role in developing HTS. Experienced teachers are more likely to use visual aids to deepen students' knowledge and develop their HTS compared to novice teachers. Experienced teachers believe that using visual aids helps students to imagine and understand better in historical events, which then supports students in interpreting historical events. T4 explained that visual aids play an important role for students nowadays as they can improve understanding and help them to remember it. Similarly, T3 emphasized that visual aids help students imagine the historical event more clearly. Meanwhile, novice teachers think that visual aids are mainly used to increase student focus or attention. T1 and T2 explained that without visual aids, students would feel bored.

Upon deeper analysis of the use of visual aids, novice teachers used them at a moderate level, meaning there is still room for improvement. Novice teachers usually show pictures or videos and ask students to imagine based on those visual aids. This approach mainly helps to develop the imagination skill only. Meanwhile, experienced teachers are able to use visual aids more effectively. After showing pictures or videos, they guide the students to a deeper understanding. For example, T4 guided students to compare the past and the present, while T3 prepared HOTS questions to ensure the visual aids are fully utilized. Therefore, besides imagination, other HOTS such as interpretation and rationalization skills can also be implemented.

Thinking tools such as mind maps and questions were used by history teachers to help students understand history more deeply and to develop their Historical Thinking Skills (HTS). Overall, there were no differences between novice teachers and experienced teachers in using thinking tools. To implement understanding of chronology skills and exploring historical evidence skills, history teachers preferred to use mind maps as teaching aids. Meanwhile, to implement imagination and interpretation skills, history teachers preferred to use questions, especially HOTS questions. However, differences were observed between novice teachers and experienced teachers regarding their views on the effectiveness of thinking tools in implementing HTS. Novice teachers believed that using thinking tools could increase students' understanding and help students memorize historical facts, as they enable students to visualize historical events more clearly. Meanwhile, experienced teachers believed that thinking tools help students to think and generate ideas through the tasks given. T4 explained that the effectiveness of thinking tools depends on how teachers use them. This shows that experienced teachers place more emphasis on the role of thinking tools in helping students think critically, rather than merely memorizing facts.

In conclusion, the findings show that history teachers use various teaching aids to implement HTS. However, their usage and effectiveness differ based on teacher experience and school context. Novice teachers focus more on accessible and engaging teaching aids, while experienced teachers emphasize source credibility and critical thinking. Technological infrastructure also influences ICT integration, with better-equipped schools enabling better learning experiences. Visual aids and thinking tools are widely used, but experienced teachers apply them more effectively to support HTS. Overall, using appropriate teaching aids is important for deeper students' understanding and developing their HTS.

5. DISCUSSION

The findings of this study indicate that history teachers considered a few factors when selecting teaching aids to implement HTS. These factors include alignment with teaching objectives, students' ability level, the effectiveness of the teaching aids, and the availability of infrastructure and existing resources. Besides, teachers employed a variety of teaching aids, including ICT-based teaching aids, printed materials, visual aids, and thinking tools to support students in implementing HTS.

Overall, the study shows that history teachers are intentional in their use of teaching aids to implement different aspects of HTS, such as understanding chronology, exploring historical evidence, making interpretations, rationalizing facts, and forming historical imagination. However, differences were found between novice and experienced teachers, as well as between schools with varying levels of academic performance and infrastructure. Novice teachers rely more on conventional approaches such as textbooks, notes, and PowerPoint slides. They tend to prefer using online sources like ChatGPT and Wikipedia without critically evaluating the credibility of these materials. While these tools capture students' attention, the limited evaluation of content accuracy indicates gaps in pedagogical judgment. This aligns with the Theory of Development by Trotter (1986), which states that novice teachers often struggle to integrate pedagogical and content knowledge, as they are still in the early stages of their careers. Implementing HTS should provide students with opportunities to work and think like historians and to apply skills that differentiate true from false information in daily life. If teachers do not emphasize the importance of ensuring the credibility and accuracy of sources, then the objective of these skills cannot be achieved.

On the other hand, experienced teachers demonstrate greater flexibility and systematic thinking in selecting teaching aids. They adapt teaching aids to match students' ability levels and lesson objectives, and place a strong emphasis on information credibility. These teachers integrate out-of-classroom learning experiences and refer students to academic resources such as newspapers, journals, and library books. This aligns with the Technological Pedagogical Content Knowledge (TPACK) framework by Mishra and Koehler (2006), which emphasizes that effective integration of technology into teaching requires a deep understanding of how content, pedagogy, and technology interact. Furthermore, a critical analysis of the findings highlights a gap in digital literacy and pedagogical reasoning between novice and experienced teachers. While all teachers used ICT-based teaching aids, experienced teachers were more selective and guided students in evaluating source credibility. They demonstrated better alignment with TPACK, suggesting that their teaching was not only technologically enhanced but also pedagogically sound and content-appropriate. Meanwhile, novice teachers used ICT more for engagement purposes rather than for developing deeper historical thinking.

Next, the school context plays an important role. Teachers from S1, a high-performing school, made greater use of ICT-based teaching aids due to better infrastructure, such as LCDs, projectors, and stronger internet connectivity. They were more open to students using varied sources. Meanwhile, teachers from S2 with fewer resources relied more on textbooks and were hesitant to encourage external sources. School infrastructure shaped not only the availability of teaching aids but also teachers' openness to alternative instructional strategies. Despite the widespread use of ICT-based teaching aids and their potential for implementing HTS, challenges remain. These include the credibility of online information, disparities in infrastructure between schools, and teachers' ability to evaluate and adapt materials effectively. Experienced teachers show better pedagogical content fluency, while novice teachers are still developing confidence and strategies for effective teaching aids selection.

In conclusion, this study found that history teachers consider multiple factors when selecting teaching aids to implement HTS. They use a variety of teaching aids, including ICT-based teaching aids, printed materials, visual aids, and thinking tools. However, differences exist between novice and experienced teachers. Novice teachers rely more on traditional materials and use digital resources without evaluating their credibility. Meanwhile, experienced teachers apply a more flexible and critical approach, demonstrating stronger pedagogical and technological integration as reflected in the TPACK framework. Differences between schools also matter. Teachers in well-resourced schools have greater access to technology and more freedom to allow students to explore various reference sources. Teachers in less-equipped schools rely more on textbooks and discourage the use of conflicting information. This reinforces the idea that both teacher experience and institutional support are critical in enabling effective implementation of HTS. Hence, while various types of teaching aids can support HTS, their impact depends on teacher expertise, infrastructure, and the ability to evaluate and adapt teaching aids to meet students' needs. Addressing gaps

in digital literacy, pedagogical judgment, and school resourcing is key to ensuring effective HTS-based history education for all students.

6. CONCLUSION

This study found that history teachers use various teaching aids, including ICT-based teaching aids, printed materials, visual aids, and thinking tools, to implement HTS. Their selection is influenced by a few factors, including students' ability, teaching objectives, and school infrastructure. However, novice teachers tend to rely more on conventional materials and use digital sources with limited source evaluation, while experienced teachers are more critical and flexible in designing lessons aligned with pedagogical goals. The findings suggest that teacher experience and contextual factors such as school resources directly affect the effective implementation of HTS. Therefore, professional development programs should focus on enhancing novice teachers' digital literacy, source evaluation skills, and pedagogical reasoning to support effective teaching aid selection and HTS implementation. Further studies could explore students' perspectives on the effectiveness of different teaching aids in developing HTS. Additionally, comparative studies across different school settings or states may be carried out to understand how institutional influences affect HTS implementation. In conclusion, effective HTS implementation in history education depends not just on the variety of teaching aids used, but also on how well they are adapted to students' needs, learning context, and historical thinking goals. Supporting teachers and improving infrastructure are essential for ensuring meaningful HTS learning can be implemented for all students.

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