ABSTRACT

Digital technology's development has significantly influenced the world of history learning in the 21st century. One of the results of this influence is shown through using digital media as history teaching materials in schools. This article aims to embody the trend of using digital media to integrate primary sources as history teaching materials in Indonesia. This research is a qualitative study with a literature study approach. The results of this study indicate that the utilization of digital media integrated with primary sources has been developed by academics in Indonesia. Integrating digital media as teaching materials with primary sources shows an awareness of the use of primary sources in learning history in Indonesia. The trend of digital media integrated with primary sources that have been developed, namely digital comics, historical media websites, and historical digital books. Each of these teaching materials has its advantages and disadvantages. In addition, the utilization of digital media with primary sources that were developed was based on learning needs and problems found in learning spaces in each school.

Keywords: history learning, primary sources, teaching materials, digital media

1.0 INTRODUCTION

Life in the 21st century encourages all elements of society to adapt to the times. Redecker et al. (2011) stated that there are six challenges faced by society in the 21st century, namely (1) multicultural integration, (2) reducing dropout rates, (3) developing talents to create a creative economy, (4) promoting abilities acquired in the world of education to the world of work, (5) facilitating the labour market, (6) updating job training on an ongoing basis so that it is easy to adapt to changes in the rapidly changing world of work environment. To face these challenges, an effort that is both conceptual and practical is needed.

One of the efforts to prepare sufficient provisions to face the challenges of the 21st century is through education. In education, curriculum paradigms and learning methods can be reconstructed to encourage mastery of 21st-century skills. So what are the skills that have to be mastered in the 21st century? Several experts gave their views related to this. Trilling & Fadel (2009) put forward the skills that must be mastered by students, namely creativity and innovation, critical thinking and problem-solving, communication and collaboration. In line with that, Wagner (2010) describes seven skills that must be mastered in the 21st century, namely (1) critical thinking and problem solving, (2) collaboration and leadership, 3) agility
and adaptation, (4) initiative and entrepreneurial spirit, (5) oral and written communication, (6) access and analyze information. Partnership for 21st Century Skills (2015) emphasizes that students are encouraged to have knowledge skills and abilities in utilizing technology, media, communication, and learning, as well as innovation, life, and career skills.

Based on the paradigm of skills that must be mastered in the 21st century, educators and learning developers seek to redefine the concept of learning strategies so that students’ abilities are aligned with the demands of 21st-century skills. One of the concepts of learning strategies implemented to accommodate the demands of 21st-century skills is the development of teaching materials.

In conventional learning, teaching materials are usually fully loaded with the material presented in textbooks (Purba et al., 2020). Sources of knowledge are only obtained through the textbook and lectures from the teacher. Moreover, when the history learning design was designed to memorize the names of heroes, years, and places of events, history learning became boring for students. Educators seek to place students as learning subjects or student-oriented, no longer as objects of learning. Where students can be actively involved in learning, not just listening and recording the knowledge received but trying to find, analyze, and evaluate the knowledge that arises from various learning sources.

Learning patterns in such a way are starting to shift along with understanding the concept of 21st-century learning.

Using digital media as teaching materials align with the spirit of 21st-century learning, which demands technology, media, information, and communication skills (Partnership for 21st Century Skills, 2015). Teachers and instructional design developers need to develop teaching materials integrated with digital media to support student-oriented learning. Son & Kom (2013) and Treasure (2016) suggest that using digital media in learning can help students understand the material to achieve the learning objectives. Besides that, Suryani (2016) explained that digital media can make learning more enjoyable. Adrian et al. (2020) stated that digital media could be alternative learning suitable for certain situations, for example, during the Covid-19 pandemic, which affected learning activities several years ago. Based on some of these studies, the use of digital media can help the teacher's task as an educator while at the same time making students more aware of increasing their competence.

In learning history, digital media is also beneficial for teachers and students. The use of digital media in learning history is inseparable from the concept of digital history, which has previously been studied by several Western researchers, such as Lee (2002), Clarke & Lee (2004), and Levesque (2006). In Indonesia, this concept has also been applied using several media. It is shown by the existence of a study conducted by Dicky Irawan, Ofianto (2019); Efendi et al. (2018); Fauzan et al. (2019); Munawar & Suryadi (2019); Sulistyo et al. (2019; Susanto & Akmal (2018). Based on those studies, teachers, researchers, and historical learning media developers are aware of utilizing digital media for history learning.

Although the use of digital media has been developed in learning history, some of these studies have yet to demonstrate the position of historical thinking in the media being developed. Remember, one of the characteristics of learning history is to encourage students to master historical thinking skills (Purwanta, 2019). Seixas (2017) argues that if the history teacher
wants to know the development of students' historical knowledge, then an assessment using the concept of historical thinking needs to be used.

Another benefit that teachers and students will obtain is to encourage of critical thinking skills (Morgan & Rasinski, 2012), understanding of historical texts that are multi-interpretive (Breakstone et al., 2013), and encourage historical research skills (Waring et al., 2015). In the concept of historical thinking, primary sources as teaching materials must be used so that students can have a sense of history and are not alienated from the images of the past. History teachers understand this concept, but only some apply it because some history teachers still need help accessing primary sources (Widiadi et al., 2022).

Digital media as a learning tool can develop the concept of historical thinking, especially in using primary sources in learning history. Several Indonesian researchers in history learning have made efforts related to this. This article attempts to present these emerging efforts as a discourse to see how far the trend of using primary historical sources within interactive media is in history learning, especially in Indonesia.

2.0 RESEARCH METHODS

This article aims to manifest the trend of using interactive media integrated with primary sources as history teaching materials in Indonesia. This study was qualitative research with a literature study approach. Creswell (2009) stated that qualitative research is used to investigate social phenomena. In qualitative research, researchers analyze an event through a methodological framework to find the required analysis results. Meanwhile, a qualitative literature study is used to find answers to the research questions posed, namely, how is the use of digital media integrated with primary sources in learning history in Indonesia? Zed (2008) explained that literature studies could be carried out by analyzing various references such as books, scientific articles, news texts, survey results, regulations and official government reports. Through the framework of the method, the author seeks to embody the research results and discussion.

3.0 RESULTS AND DISCUSSION

Primary sources become an integral part of historical methodology. The use of primary sources in historical research is mandatory for historical researchers. According to Gottschalk (1985), primary sources can be understood as a testimony from a historical witness who saw or was present at that past event. Primary sources can be considered contemporaneous with past events that will be studied.

Even though, in Gottschalk's view, a primary source is a testimony, it does not mean that the form of a primary source only consists of one type. Kuntowijoyo (2005) explained that traces of the past that can be used as primary sources could be founded in written documents, artefacts, oral sources, and quantitative sources. In some historical studies, historical researchers tend to use more written documents.

Sjamsuddin (2007) manifested that written documents can be obtained from chronicles, autobiographies, memoirs, newspapers, public publications, personal letters, diaries, minutes of meetings, and literature. Meanwhile, artefacts and oral sources are part of non-written
primary sources. The forms of these artefacts vary as traces of the past that can still be found, for example, photographs, buildings or sites, paintings, and various tools used by ancient peoples. The oral sources refer to an oral testimony from a historical witness who experienced an event in the past. Using oral sources as primary sources to accommodate past events not recorded by written sources so that they can complement each other. In addition, the use of oral sources is also a support for oral traditions from past events that developed in society (Thompson, 2012).

The importance of using primary sources in historical research has encouraged historical education experts to encourage using primary sources in history classrooms. Using primary sources in teaching history in the classroom is inseparable from efforts to encourage students' historical thinking (Waring et al., 2015; Wineburg, 2006). It is a challenge for students (Kaviza, 2018). The application of primary sources in learning history encourages students to have the ability to think like historians. From the teacher's perspective, the use of primary sources in learning history requires a practical approach so that the learning objectives formulated can be achieved (Lee & Dolittle, 2006; Reisman, 2015; Nordgren, 2016; Waring et al., 2015; Armond et al., 2017).

Abidin (2020) offers a simple primary source-based historical learning model by elaborating on historical thinking concepts from Wineburg, Seixas, and Mayer. In his study, Abidin explained that the concept of historical thinking as the basis for using primary sources is complex, so it needs to be simplified to make it easier to apply through engagement, anatomy, and reconstruction (EAR) (Abidin, 2020). The study of historical learning models based on primary sources can be a basis for learning syntax, which can be integrated with developing teaching materials based on primary sources. Several historical education researchers have tried to develop teaching materials, although not all of them refer to the learning model proposed by Abidin.

Trends in 21st-century learning concepts influence how primary source-based teaching materials are developed. Moreover, primary historical sources must be used in the learning achievement document in the Kurikulum Merdeka (independent curriculum). Therefore, the influence on the spirit of 21st-century learning, supported by the concept of an independent curriculum, makes the tendency for teaching materials based on primary sources to be developed. A literature review by researchers found that learning history in Indonesia uses several teaching materials based on primary sources integrated with digital media by utilizing written documents and artefacts. Meanwhile, digital media developed include comics, websites, and books.

A. Primary source-based digital comics

One of the studies that can represent the use of digital comics based on primary sources is the development of teaching materials carried out by Azmi, Murfuah, Zulfikar, and Hendrina (2022). In their study, they tried to develop historical digital comic teaching materials based on the primary source of Yupa's inscriptions. They explained that the teaching materials being developed were still like preliminary studies. However, the study already has a reasonably mature concept. The development of these digital comics was based on a needs analysis which showed that the development of historical digital comic materials based on the primary source of Yupa's inscriptions was more applicable than the possibility of developing other teaching materials based on primary sources.
materials. Bearing in mind that in their preliminary study, the developer of teaching materials stated that in terms of accessibility, reuse, and the resources and funds needed have met the requirements.

Yupa is an inscription artefact left by the Kutai kingdom. According to historical records, the Kutai kingdom was the first kingdom in Indonesia around the IV century AD. Yupa's inscription as a historical trace of the Kutai kingdom explains that the Kutai kingdom is a Hindu kingdom where the king and his people at that time adhered to Hinduism. The narration in the Yupa inscription helps developers of teaching materials to visualize the characters, characters, and events that will be told. Four Yupa were used as source materials to create the digital comic content.

The developer of teaching materials manifests the first Yupa inscription, which tells about political life during the reign of the reigning king, Mulawarman. The first Yupa inscription also explains the genealogy of the king. Meanwhile, in the second Yupa inscription, written notes are about the community's social life during the reign of King Mulawarman. The Yupa inscription said that the two kings of Mulawarman were wise figures. The third Yupa inscription describes the wise character as the figure of an ideal king. That is why Mulawarman's character in digital comics is very dominant.

In the fourth Yupa inscription, the narrative is about the people's religious life under the reign of King Mulawarman. When King Mulawarman was in power, religious life was arranged in such a way. According to Yupa's instructions, the Hindu tradition states that Brahmins, who are religious leaders, carry out the Wapraokeswara ritual. This ritual is essential to Hindu religious beliefs and is related to the Trimurti God. In addition to religious life, the fourth Yupa inscription also describes the Brahmanas, highly respecting King Mulawarman as the ruler of Kutai. This respect is shown by the construction of a monument dedicated to Mulawarman.

Additionally, the Vratyastoma ritual also appears in the fourth Yupa inscription allowing visualizations of the ritual to be depicted in digital comics.

Through the efforts made, students become interested in learning history through digital comics. The visualization helps students imagine the lives of the people of the Kutai kingdom in the past.

The use of Yupa inscriptions as a primary source that forms the basis for creating digital comic content is fascinating.

Although digital comics can present students’ imagination about the past, some things need to be considered in using primary sources in the form of inscriptions, such as Yupa. Making inscriptions is inseparable from power relations. Therefore it is likely to be found in the dominance of the narrative of the ruler in the inscriptions. As a result, glorification appears on the one hand and allows for negation on the other. It all depends on how the maker of historical sources, in this case, the ruler, positions the parties to be narrated. So it is no wonder there is an assumption that history belongs to the victors.

Taufik & Sjafarin (1999) stated that many narratives about royal history describe the lives of kings with very elitist narratives called sacred history. It has become a critique of Indonesian
historiography, which in its development tries to break down glorifying historiography of the elite and then shifts towards a just historiography, which also narrates the grassroots. (Kurniawan et al., 2019).

Using inscriptions as the only historical source must improve the depicted narratives balance. The inscription can also be referred to as a memorial monument which contains information about events that are considered necessary. The legitimacy of the inscription maker in the inscription has a high probability. As a result, this can form a perception that tends to focus more on one side in viewing historical events. In a more distant context, it can form the politics of historiographical memory (Kurniawan et al., 2019).

B. Historical media website based on primary sources

The development of history-based websites is inseparable from digital information and communication development. The website, originally only developed as an information provider, has now been transformed as well as a place to provide primary sources, written documents and photographs. Primary sources are now more accessible to historical researchers, which is excellent for the research community.

Through digitizing primary sources, historical researchers can easily access documents, whether in archives, newspapers or personal records. Especially now that access to these documents is easy using the internet network, and there is no need to go to a location where the documents needed are available. This convenience encourages the development of knowledge decentralization regarding historical access (Levesque, 2006).

Digitizing primary sources is also an effort to save past documents whose condition is very vulnerable to damage. The integration of digitalization of primary sources and websites proves that historical studies, which incidentally are past studies, can coexist with digital technology in the current era. Technology can help find information about the developing times (Printing, 2017). Here are some web addresses used to digitize primary sources in the form of written documents or photographs.

**Table 1 website digitization of primary sources**

<table>
<thead>
<tr>
<th>No</th>
<th>Website Address</th>
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<tbody>
<tr>
<td>1</td>
<td><a href="https://opac.perpusnas.go.id">https://opac.perpusnas.go.id</a></td>
</tr>
<tr>
<td>2</td>
<td><a href="https://delpher.nl">https://delpher.nl</a></td>
</tr>
<tr>
<td>3</td>
<td><a href="https://repository.monash.edu/collections">https://repository.monash.edu/collections</a></td>
</tr>
<tr>
<td>4</td>
<td><a href="https://digitalcollections.universiteitleiden.nl">https://digitalcollections.universiteitleiden.nl</a></td>
</tr>
<tr>
<td>5</td>
<td><a href="https://sastra.org">https://sastra.org</a></td>
</tr>
<tr>
<td>6</td>
<td><a href="https://khaustara.perpusnas.go.id">https://khaustara.perpusnas.go.id</a></td>
</tr>
<tr>
<td>7</td>
<td><a href="https://history-nusantara.anri.go.id/id">https://history-nusantara.anri.go.id/id</a></td>
</tr>
<tr>
<td>8</td>
<td><a href="http://www.manassa.id/">http://www.manassa.id/</a></td>
</tr>
<tr>
<td>9</td>
<td><a href="https://digital.soas.ac.uk/r_idn">https://digital.soas.ac.uk/r_idn</a></td>
</tr>
<tr>
<td>10</td>
<td><a href="https://history-nusantara.anri.go.id/id/">https://history-nusantara.anri.go.id/id/</a></td>
</tr>
</tbody>
</table>
Efforts to digitize past documents carried out by the government, universities, and even the private sector provide opportunities for teachers and developers of history learning to make these documents a source of learning history. According to the study by Barracks (2017), web technology can encourage students' ability to seek and find knowledge. Through websites, as shown in Table 1, history teachers can present and introduce primary sources to students directly. Teachers can invite students to read and analyze, even evaluate the primary sources used, so that they can understand directly the thoughts, conditions, and even the mentality of former people.

Websites based on primary sources in learning history in Indonesia have been used. Based on a literature search, there are two trends for websites developed with primary source content. First, regarding websites integrated with virtual tour technology regarding sites (artifacts). Second, websites that contain the contents of written documents from the past, such as personal notes, newspapers, and other archives.

C. Virtual Tour website

Cho et al. (2002) provide that a virtual tour is an attempt to present a virtual experience using computer media. Based on this concept, virtual tours can be developed as a historical learning media regarding historical sites. Through these efforts, historical sites as part of primary sources can be integrated with digital technology. There are several studies and historical site-based virtual tour products that can serve as representations, namely studies by Irawati (2015) regarding Historical Information Media Virtual Tour 3D Sungosari Temple Malang Regency, Wikanningrum (2016) regarding Making a Virtual Tour on Indonesian Historical Sites using Digital Photo Crowdsourcing to Promote Archipelago Sites, Sukardi et al., (2018) regarding Web-Based Dutch Prison Huis van Behauring Bengkalis Virtual tour.

Irawati (2015) developed an information media in the form of a 3D virtual tour containing content about the Singasari temple's history in Malang Regency, East Java. In her study, Irawati tried to use a virtual tour to visualize the Singasari temple's condition. The virtual tour media being developed is equipped with interactive features through the support of digital technology.

Meanwhile, Wikanningrum (2016) tried to develop a virtual tour of the archipelago's historical sites using digital photos. The research utilize digital photos or videos taken at historical sites and then combines them into a single unit. In the developed virtual tour, photos of historical sites appear, which can be navigated according to the user's wishes. Using the virtual tour media developed, users who have never visited historical site locations can see the conditions of the historical sites in virtual form.

In contrast to the previous virtual tour development, Sukardi’s research (2018) tried to develop a web-based 3D virtual tour of the Dutch Huis van Behauring Bengkalis prison. Sukardi tried reconstructing the Dutch Huis van Behauring prison building in 3D animation. From the developed virtual tour, an overview of the 3D animation of the building was obtained, along with information about the building on the website.

The development of a virtual tour website provides opportunities for developing media and teaching materials for learning history. However, making a virtual tour website with historical site objects still tastes bland if it is not followed by the history teacher's ability to package and
convey the relevance of virtual tour media to learning history to students. To achieve the goals of media development, the teacher must possess sufficient syntax and skills to demonstrate the media being developed effectively.

Website archive documents and newspapers of the past

Documents and newspapers are part of the primary sources that can be a source to see pictures of the past. As explained earlier, efforts to digitize primary sources in documents and newspapers have basically been carried out in Indonesia. Development research conducted by Widiadi et al. (2022) tried to offer a website containing primary source documents to improve students' historical thinking skills. The topic raised was the Battle of Surabaya on 10 November 1945 which focused on the flag incident and the death of AWS Mallaby.

On the developed website, Widiadi displayed various document archives regarding the events of the Surabaya battle on 10 November 1945. In addition, students usually use textbooks as a source of learning history in Indonesia. The source narration of the battle of Surabaya on 10 November 1945 is from the textbook as a comparison with the primary source in document archives, which has been presented on the website. Through these two historical sources (textbooks and document archives), students are directed to critically examine the events of the Surabaya battle on 10 November 1945, especially the flag incident and the death of Mallaby. With these efforts, in a study conducted by Widiadi, the developed website can improve students' historical thinking skills.

The development of a website based on primary sources in the form of document archives and newspapers needs to be further developed by teaching material developers, researchers and history teachers. The number of historical topics in the curriculum allows the development of primary source-based historical websites to present various document archives related to the topics studied in history. The diversity of document archives that have been digitized provides an opportunity for history teachers to use them as historical sources. However, on the one hand, it is a challenge for history teachers in reading and interpreting the document archives. In addition, it is necessary to integrate learning models appropriate for using primary source-based historical learning.

D. History Digital Book

The digital era encourages the transformation of conventional printed books into digital books. Digital books are books in digital form that can be integrated with various media, both audio and visual media. Along with the times, in general, the use and development of digital books have been carried out by learning developers, teachers and researchers in Indonesia.

There were many historical education academics in Indonesia doing research in developing digital books as history teaching material. The reason is that developer's feel implementing conventional history learning is boring for students. Therefore, developing digital history books may provide a fun learning experience for students (Susilo, 2020).

The development of local historical materials has also become a trend for the content presented in history digital books. For example, Agung, L., & Akhyar (2019) seek to develop local history digital teaching materials based on Toponymy in Vorstenlanden Surakarta. Besides that,
Fauzan et al. (2019) developed a digital book on the local history of the Cilegon commotion in 1888. Moreover, Djono (2022) offered the concept of the Kenduri tradition, which has the potential as local history teaching material.

The development of digital history books based on local history or local wisdom is inseparable from the condition of textbooks that do not allow all local history throughout Indonesia to be narrated. History teachers have the potential to understand the history and culture of their place of residence, which can be used as material to foster awareness of local culture and history in students. For this reason, history teachers have a significant role in exploring local history learning through developing history digital books.

The concept of developing digital history books in Indonesia varies. Usually, the development of digital books in Indonesia is conceptualized based on the problems that occur in learning spaces. For example, a school has a problem regarding low historical thinking ability. In that case, the digital book developed also aims to overcome the problem of low historical thinking. If the problem found in learning is low historical consciousness, then digital books are developed to overcome this problem. These efforts are adapted to the context of the field so that they are specific. However, this does not rule out the possibility of developing universal digital books to use a particular digital book in various schools. However, it should be underlined that the success or failure of digital books in overcoming problems cannot be separated from the role of the teacher who applies them, except if a digital book is designed for independent learning of students with a particular syntax.

4.0 CONCLUSION

Using integrated digital media with primary sources as teaching materials for history learning in Indonesia has been applied in various forms. This development is inseparable from adjustments to the digital age, which is supported by the transformation of the learning paradigm from teacher centre to student centre. Using digital media integrated with primary sources can facilitate students to learn independently. Digital comics based on primary sources, historical media websites based on primary sources, which are divided into virtual tour websites and document or newspaper archive websites, and historical digital books, is a digital media-based teaching material that is integrated with primary sources to meet the demands of the times and the problems found in history learning. However, the development of digital media integrated with primary sources does not rule out the possibility of creating various challenges, such as the teaching skills of teachers in using the media used.

REFERENCE


