The Potential of Web-Based Historical Sources as Learning Resources to Foster Students' Historical Thinking Skills

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Abstract: To foster students' historical thinking in Indonesia, teachers should not merely use textbooks as the only learning resource. They must utilize primary sources in teaching history that are important to encourage students to think historically. Unfortunately, it was not easy to access primary sources in Indonesia. For that reason, this study explored alternative learning resources to overcome the main difficulty faced by history teachers in Indonesia in fostering students' historical thinking skills. This study aimed to develop web-based historical sources as learning resources and evaluate its potential to foster students' historical thinking skills in Indonesia. As evaluation research, this study applied educational research and development approach. The results of this study indicated that the website that had been developed had challenges and opportunities in fostering students' historical thinking skills in Indonesia.

Abstrak: Untuk menumbuhkan keterampilan berpikir sejarah siswa di Indonesia, guru sejarah seharusnya tidak hanya mengandalkan buku teks sebagai satu-satunya sumber belajar. Mereka juga harus memanfaatkan sumber-sumber primer dalam pembelajaran sejarah yang begitu penting dalam mendorong siswa berpikir secara historis. Sayangnya, tidak mudah untuk mengakses sumber primer di Indonesia. Oleh karena itu, penelitian ini mengeksplorasi sumber belajar alternatif untuk mengatasi kesulitan utama yang dihadapi oleh guru sejarah di Indonesia dalam menumbuhkan keterampilan berpikir sejarah siswa. Penelitian ini bertujuan untuk mengembangkan sumber belajar sejarah berupa website yang berisi sumber-sumber sejarah dan sekaligus mengevaluasi potensinya dalam menumbuhkan keterampilan berpikir sejarah siswa di Indonesia. Sebagai kajian evaluasi, penelitian ini menggunakan pendekatan penelitian dan pengembangan. Hasil penelitian ini menunjukkan bahwa website yang telah dikembangkan memiliki beberapa tantangan sekaligus kesempatan baik dalam menumbuhkan keterampilan berpikir sejarah siswa di Indonesia.

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INTRODUCTION

Various history education studies have offered many positive reasons for using historical sources to teach history, specifically in fostering students' historical thinking skills (Reisman, 2012b, 2012a; VanSledright, 2002; VanSledright & Afflerbach, 2005; Wineburg, 1991a, 1991b; Wineburg & Martin, 2009; Wineburg, Martin, & Monte-Sano, 2011). Historical sources, in this case especially primary sources, can arouse and renew students' interest in history because they provide fascinating stories and raise many questions about what happened and why, thus making history relevant and useful to students (Veccia, 2004). Primary sources encourage students to be actively involved in constructing their own knowledge and understanding (Kitson,

Husbands, & Stewards, 2011). In addition, by conducting historical research, primary sources sharpen students' critical thinking, hone their research skills, and help them think like historians (Sheehan & Howson, 2012; Veccia, 2004).

Regardless the benefits of primary sources in stimulating historical thinking, it is not easy for history teachers in Indonesia to use them as learning resources for their students. The main obstacle is the accessibility of primary sources in Indonesia. The experience of the developed countries showed that their success in the application of historical thinking skills in history education was due to being supported by the ease of access to primary sources. In the case of the USA, millions of documents have been digitized and made readily available to teachers and students by a few clicks to the Library of Congress website (Breakstone & Smith, 2013; Lee, 2002; Martin & Wineburg, 2008; Salinas, Bellows, & Liaw, 2011). Meanwhile, during the course of my study, only a small collection of the National Archives of the Republic of Indonesia from the period of the Dutch East India Company (VOC) can be accessed online. Since it contains Dutch-language archives from the 17-18th century, it will not be easily and practically utilised in learning history at the school level due to the language barrier.

Furthermore, in Indonesia, there were no websites containing primary sources that were deliberately developed for the purpose of teaching and learning history. Conversely, many websites like this have been developed and used for teaching history in developed countries. For instance, in the USA there are "Reading Like a Historian" history lessons available at https://sheg.stanford.edu/ (Wineburg et al., 2011) and "Historical Thinking Matters" available at http://historicalthinkingmatters.org/ (Martin, Wineburg, Rosenzweig, & Leon, 2008). In Canada, there are also some websites which can be utilised for teaching and learning historical thinking, such as "The Historical Thinking Project" at https://historicalthinking.ca/lessons directed by Seixas and "The Virtual Historian" at http://www.virtualhistorian.ca/en directed by Levesque. How can Indonesian teachers enable students to attain historical thinking skills if the primary sources are not easily accessible by both teachers and students?

For that reason, this study explored alternative learning resources to overcome the main difficulty faced by history teachers in Indonesia in fostering students' historical thinking skills. This study developed web-based historical sources as learning resources and evaluated their potential to foster students' historical thinking skills. The product of this research and development are expected to be used by history teachers in Indonesia to foster students' historical thinking skills.

METHOD

This educational research and development study produced a website which contains digitized historical sources that were deliberately developed to provide alternative learning resources to foster students' historical thinking skills. The development process of the web-based historical sources used Borg's (1987; Gall, Gall, & Borg, 2003) three main steps, namely planning, developing, and evaluating.

Participants

To find out the effectiveness of the product being developed through this study, the website was tested in a real teaching and learning situation. This study was conducted in Malang area, which covers the region of Malang City and Malang Regency, East Java, Indonesia. This region was chosen purposively because it is a service area of Universitas Negeri Malang, a teacher training institution. To determine the teacher participants, the study used purposive and volunteer sampling (Creswell & Clark, 2018). The criteria for selecting teacher participants were their digital literacy and their passion to implement learning innovations. This study involved four teacher participants from four different schools. One of the schools was the location of pilot study and three other schools were the main location for the main trial. Sixty-six students were involved in the pilot study. During the main data collection, the total number of student participants involved in my study was 191. For school A, the number of students involved was 52 students. For school B, there were 68 students involved. While for school C, the number of students involved was 71 students (n = 191). The trial and data collection process lasted for 6 months from August 2018 to January 2019.

Data collection instruments

Prior the trial, the website prototype was validated by an expert in the field of educational technology and a historian in the field of Indonesian history to evaluate the contents of the website and its potential to foster students' historical thinking skills. The instrument of product validation was in the form of media validation questionnaire based on the technology adoption model (Yang, Cai, Zhou, & Zhou, 2005) that evaluates two conceptual foundations,

namely information quality (Loiacono, Watson, & Goodhue, 2002; Yang et al., 2005) and system quality (Aladwani & Palvia, 2002; Loiacono et al., 2002; Yang et al., 2005).

In order to obtain in-depth data regarding the product's potential, this study not only collected responses in the form of a quantitative questionnaire but also used a qualitative approach to gain teacher and student participants' perspectives based on their experience using the website in the teaching and learning process. Therefore, this study used classroom observations to see how the website was used by the teacher and student participants. Then, semi-structured interviews were conducted with the teacher participants to gain their perspective in using the website to teach history. In addition, focus group interviews gained student participants' perspectives when learning history by using the website.

Data analysis
This study has two types of data, both quantitative and qualitative, so it required both data analysis procedures. Firstly, the product validation questionnaire, which produced quantitative data was analyzed with descriptive statistics technique. Secondly, the qualitative data was analyzed with qualitative procedures. The process of analysing data from classroom observations was carried out simultaneously with the implementation of data collection using an interactive model (Miles, Huberman, & Saldaña, 2014). In this model, data analysis consisted of concurrent flow activities that included data reduction or condensation, data display, and conclusion drawing. Meanwhile, thematic analysis was used to analyse the qualitative data from the classroom observations, focus group interviews, and semi-structured interviews. Thematic analysis refers to "a method for systematically identifying, organizing, and offering insight into patterns of meaning (themes) across a data set" (Braun & Clarke, 2012, p. 57).

PLANNING THE WEBSITE
The initial stage of product planning in this study was based on the results of an analysis of various problems in teaching and learning history in Indonesia. Some research shows that the implementation of history as a school subject in Indonesia still experiences some obstacles. First, the learning process that should have been student-centred turns out to be still centred on the teacher who tends to use the lecture method (Pii, 2016). Secondly, because the lecture method emphasises the acquisi-

tion of content knowledge, students tend to learn by memorisation (Irani et al., 2018; Sayono, 2013). Third, due to the limitations of primary historical sources that could be utilised for learning purposes (Irani et al., 2018), teachers tend to use textbooks as learning resources for students (Mardiana & Sumiyatun, 2017; Pii, 2016). Fourth, there were limitations in the use of information and communication technology for learning purposes (Agustinova, 2018; Mardiana & Sumiyatun, 2017). Therefore, it is not surprising if history is seen as a dull and unimportant subject by many students (Utami, Lutfi, Jati, & Efendi, 2019).

The various problems mentioned above made it difficult to instill historical thinking skills in students. The main impediment was the absence of primary sources which is important in triggering students' historical thinking skills. History teaching and learning in Indonesia relies heavily on the textbook as a learning resource and tends to present a single version of the past. To overcome this condition, teachers and students need to be provided access to primary sources.

The most practical and efficacious way to bring historical sources to the classroom is in the form of digitised primary sources. Moreover, several studies have shown its benefits in teaching and learning history, specifically in fostering students' historical thinking skills (Fránquiz & Salinas, 2011; Lee, 2002; Salinas et al., 2011; Tally & Goldenberg, 2005). Despite having identical content, the use of digitised historical sources as learning resources certainly has advantages over non-digital historical sources (Kalpakis, Palaigeorgiou, & Kasvikis, 2018; Lee, 2002; Sulistyo, Lukmanul K, & Kurniawan, 2020). As a preliminary stage, the website that was developed contained the battle of Surabaya because it had many versions of historical interpretation.

DEVELOPING THE WEBSITE
The first step in developing the website was collecting historical sources that became the website content. The website was named "*berpikir sejarah*" which means historical thinking or think historically and can be visited by typing its address in http://berpikirsejarah.com/. This website provides both primary and secondary historical sources. For secondary sources, the website presents excerpts about the flag incident and the death of Mallaby in the battle of Surabaya from two textbooks, namely the official textbook for 11th-grade students (Sardiman & Lestariningsih, 2017) and the national history of Indonesia which is the official textbook from the Indonesian government (Poesponegoro & Noto-
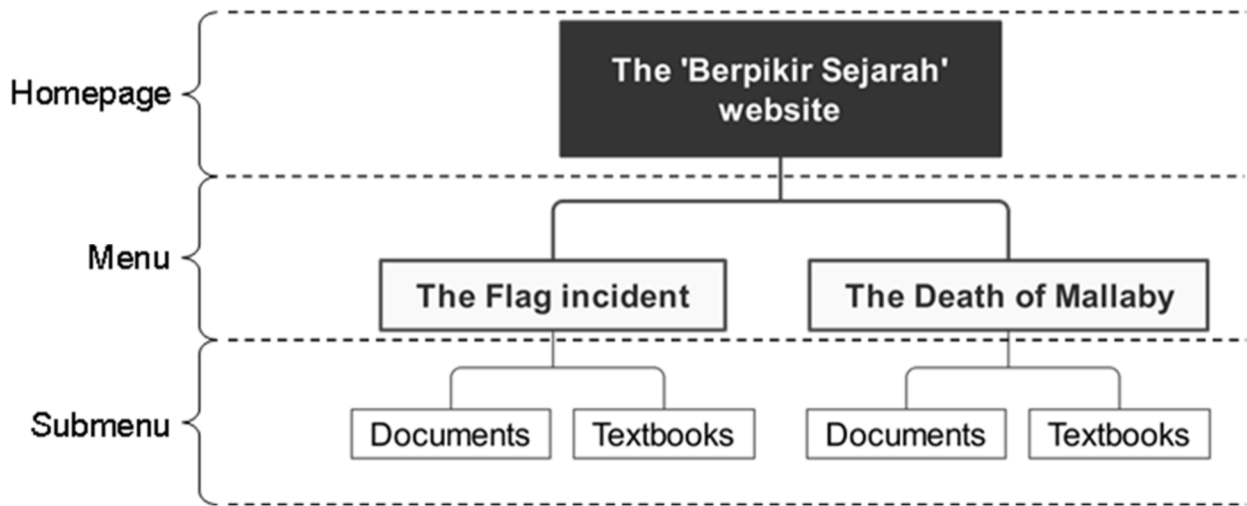
Figure 1. The website design

susanto, 2010). These two historical incidents were chosen because they are significant events in Indonesian history and must be studied in schools. The website design and appearance that contains two topics related to the battle of Surabaya can be seen in the figure 1.

For primary sources, the website presents some documents from various archival institution. From the National Archive of the Republic of Indonesia, the website presents a document related to the background of the flag incident (Djogja Documenten number 1011) and a document related to

Figure 2. Menu display for the topic of the death of Mallaby and the flag incident

the Indonesian government's response to Allied Force's accusation regarding the battle of Surabaya (Djogja Documenten number 161). From the archival office of Dewan Harian Daerah (DHD45, a veterans' affairs office in East Java), the website presents veteran testimonies related the battle of Surabaya. From the hundreds of testimonies, we deliberately chose ten testimonies related to the flag incident. From the National Library of the Republic of Indonesia, we obtained two newspapers which contained news of the battle of Surabaya. The website also presents Ruslan Abdulgani's testimonies and some collection of archives regarding Mallaby's death.

All the primary and secondary sources that we posted on the website, were deliberately chosen because they have contradictions and multi-perspectives in order to provoke students' historical thinking skills. Besides that, the level of complexity of sources also had a gradual level of difficulty. Starting from the low level of difficulty on the material about the flag incident and then increasingly difficult on the material about the death of Mallaby. The website was developed using the platform from www.wordpress.org because easily developed and friendly designed for novice website developer (Jones & Farrington, 2013).

EVALUATING THE WEBSITE
Before the field trials of the website, the prototype was validated by two experts in the field history education and history of Indonesia. The first validator was Dr Joko Sayono, an expert in the field of educational technology and history education evaluation. The second validator was Dr Ari Sapto, a historian in the field the history of Indonesia in time of revolution. Both of them filled out the same validation
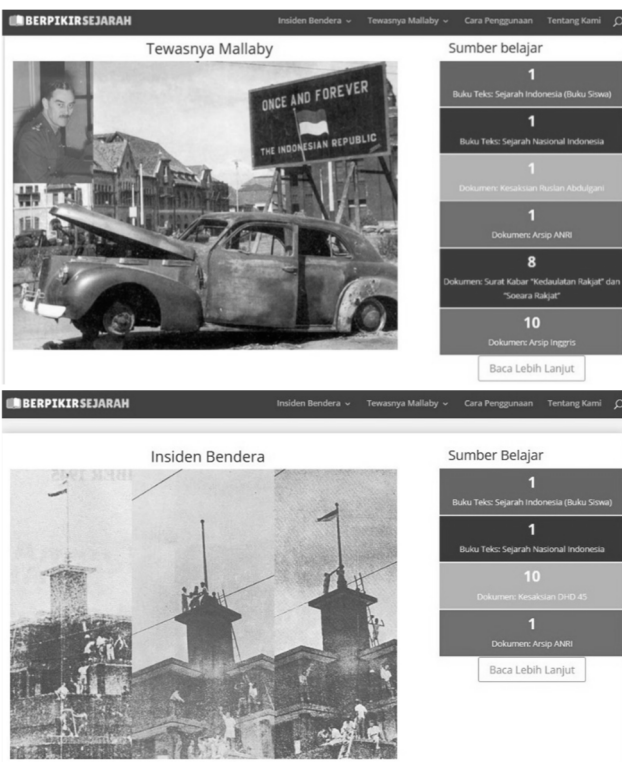
Table 1 . The results of the validation.

Conceptual Foundation	Dimension	Description items	Total score
Information quality (Yang et al., 2005)	Usefulness of content (Loiacono et al., 2002; Yang et al., 2005)	Usefulness of the website content	100
		Accuracy of the website content	87.5
	Adequacy of information (Yang et al., 2005)	Completeness of the website content	87.5
		Clarity of the website content	100
	Functional fit-to-task (Loiacono et al., 2002)	The ability of the website content to meet the need of learning objective	100
System quality (Yang et al., 2005)	Usability (Loiacono et al., 2002; Yang et al., 2005)	Easy to read and understand	87.5
		Easy to operate and navigate	100
	General information (Aladwani & Palvia, 2002)	Availability of general information	100
		Details of how to use the website	100
	Accessibility (Aladwani & Palvia, 2002; Yang et al., 2005)	Adequate search facilities	87.5
		Always up and available	87.5
		Easy to access	100
	Entertainment (Aladwani & Palvia, 2002; Loiacono et al., 2002)	Looks attractive	87.5
		Looks organized	100
		Uses fonts properly	100
		Uses colors properly	100
Total score			95.3

questionnaire instruments. The results of the validation are presented in the table 1.

Based on the validation results above, the website obtained a total mean score of 95,3 (very good) and therefore did not need any revision. The next stage of the evaluation process was through a pilot study conducted in August 2018. The results of classroom observation and the focus group interview after the trials showed that the students could operate the website without any significant problems. Therefore, the final product did not require any revision.

THE MAIN FINDINGS

The main trials were conducted in three schools during September-December 2018 and followed by the interview process during December 2018 to January 2019. Based on the qualitative data, the findings showed that the digitised primary sources presented on the website which were deliberately developed as learning resources to foster students' historical thinking skills also contain challenges and difficulties for its users, both teachers and students, especially in fostering students' historical thinking skills.

Although, some student participants claimed that they did not have any difficulties in learning history by using the website, but there were some difficulties. Firstly, students claimed to have difficulty reading the digitised primary sources because they accessed the website using their smartphone. Only a small portion of students accessed the website using their laptops. This, for example, was revealed by Bangelicae who said, "For me, I had difficulty reading it because I read using my smartphone. So, if it is not clear, I have to read it again, then read it again". The same difficulty was expressed by Ciputrie who explained "I became dizzy. Because I looked at the screen continuously, due to the screen radiation. So, when we wrote an essay about the flag incident, we print it too." In the same vein, Cahyuninge stated that "the negative is maybe our eyes are tired, because we see it on the handphone. Actually, it can be zoomed too but it's still tired anyway." Thus, one of challenge in reading digitised primary sources was to cause eyestrain because most students read the sources on a small smartphone screen and the exposure to screen radiation.

Secondly, there were some students who con-

fessed that sometimes they could not concentrate on reading the sources because they were distracted by the notifications received on their smartphone. For example, this was recognised by a student named Cakrahardiane who stated, "the difficulty was, while I was studying if there was a notification above [the smartphone screen], I immediately left the source [on the website] that was being read". The loss of concentration of these students was also captured by Teacher A who explained, "There was a chance, to open WhatsApp and the other [applications]. That was what actually made their focus split."

Thirdly, most of the students stated that the biggest difficulty in using the web-based historical sources was when the internet connection was unstable or when they did not have an internet data plan. In addition, during classroom observations, we have captured some moments when students shook their handphones or pointed it towards the classroom windows or door to get a better internet connection. For example, on October 25, 2018, a student named Cakrahardiane shook his handphone towards the classroom door to get an internet connection. During the focus group interview session, some students also said that the main challenge was the poor internet connection. For example, a student named Balfiane revealed, "the difficulty was the internet access, the connection was unstable, depending on the internet". Meanwhile, Buregise stressed the problem of internet data. She said, "the problem was the internet data as well because sometimes, there are times when I do not have data plan". This situation was also realised by the teacher participants. Teacher B stated, "[the challenge was] if the [internet] connection was difficult when the *Wi-Fi* was unstable, that's it, inaccessible." The instability of internet connections in developing countries such as Indonesia has indeed become a challenge for teaching history by using web-based historical sources as learning resources. However, this should not be an excuse to avoid using web-based historical sources.

Fourthly, based on the perspectives of the two teacher participants, they considered the contents of the website to be very good but needed to be developed further for other materials. Teacher C stated that "for the material presented on the website for this study, there are already enough to teach [the battle of Surabaya]. Maybe, I hope. My hope is that [the website is] not only about the Surabaya battle". In a different interview session, Teacher A also stated the same thing. He said that "my difficulty now [after the intervention process was over], my

student start asking, 'where are the primary sources, Sir?'. So, I hope it contains more [not only about the battle of Surabaya]". Thus, from the teacher participants' perspectives, one of the deficiencies contained in the website www.berpikirsejarah.com is the currently limited content of the learning resources.

Therefore, from various challenges in the use of web-based historical sources as mentioned by research participants, it was discovered that the main difficulty was related to the unstable internet connection in Indonesia. However, this difficulty should not be an obstacle to teaching students' historical thinking skills by using digitised primary sources. The teacher must be able to facilitate connections in the classroom and help students critically examine sources (Barnett, McPherson, & Sandieson, 2013; Siemens, 2004). Alternative solutions for students who do not have internet data include downloading sources while at school and then reading those sources offline. For students who claim to be tired by their smartphone screens, they can print the resources at school so they can read the printed version instead.

Besides having challenges, the website developed in this study also offers several opportunities. The main opportunity of teaching history by using web-based historical sources was to make it easier for students to learn the history and at the same time facilitate teachers to teach history. This, in turn, made it easier for teachers to foster students' historical thinking skills. The ease of teaching and learning the history was revealed by all research participants during focus group interviews with the student participants as well as during the semi-structured interview sessions with the teacher participants. These affordances are presented below.

The first affordance of using digitised primary sources presented in the web-based learning resources was that teachers and students had easier access to primary sources. From the students' perspectives, the availability of learning resources presented on the website made it easy for them to study history because they only had to access and read the sources without having to search by themselves. For example, this was stated by Bhernandae who said, "easier to access primary sources" or by Amalzae who said, "it was easier for us to read primary sources," while Besane considered those two affordances, access and read, can be obtained at once. He stated, "we do not need to look for the sources. Since from the beginning, there is already provided, we only need to read".

According to the teachers' perspectives, the

availability of learning resources in the form of digitised primary sources on the website made it easy for them to teach history. For example, Teacher A acknowledged the availability and quality of learning resources from a website that was deliberately developed for educational purposes. He felt that the availability of primary sources was far better than his students ordinarily used: unverified internet sources which were not intended for educational purposes. Teacher A said, "it really made me easy to teach, Sir." The same response was expressed by Teacher B. She claimed to have tried to find primary sources related to the battle of Surabaya but was unable to find them. Thus, the existence of the website has made it easier for teachers and students to access learning resources, specifically to access primary sources.

Second, another affordance of using digitised primary sources from the web-based historical sources was made it easier for students to access the learning resources at any time and from anywhere. Students claimed that they found it easier to learn because they could access web-based historical sources whenever they wanted to learn. Asalmae stated the website was "comfortable, [because] it can be read at any time, so it becomes easier [to read]". Cakhendrye said, "The benefit is that we can open and access it anytime. That is the advantage. Then, I also don't need to bring a lot of books. We have been provided [learning resources], we only need to use smartphones". Besides being accessible at any time, another advantage was that students could access it from anywhere. For example, this was recognised by Buregise who stated, "more efficient and effective, it can be taken anywhere, can be read anywhere, it's practical." Cakbaguse also stated, "the advantage is that we can learn everywhere". This advantage was also recognised by Teacher B who stated, "by using digitised sources, it's easy for them to be able to access learning resources from anywhere."

Third, the availability of digitised historical sources in the web-based learning resources made it easy for students to learn because in their daily life they cannot be separated from their smartphones. For example, a student named Balfiane stated that "I like to study like this because I rarely open books. I even more often open my smartphone. So, I can learn by using my smartphone. I am too lazy to read books." This was recognised by Teacher C during the teaching intervention process, she stated, "they were more enthusiastic than they were told to open books."

Fourth, the opportunity to foster students'

historical thinking skills by using digitised primary sources was due to the availability of primary sources as well as their transcription on the website. For example, this was stated by Cakhendrye, "the primary sources that have been transcribed were also very helpful for us." Teacher A also stated that "the advantages of using primary sources that were digitised, students could directly get information from primary sources. They could easily understand because there were the digital formats as well as the transcripts." Based on the results of classroom observation, indeed most students preferred to read primary sources in the transcript version because it was easier and more practical. For example, Balfiane said: "I prefer to read the transcript version because it is clearer. If the original document version is a bit blurry." However, there were also some students who preferred to read the digitised primary sources rather than the transcription version. For example, Cayuninge stated that "I prefer to read the original source because it is more challenging, we really see from the physical form, it feels more like [the reality], we must also carefully read it. If from the transcript, its like reading ordinary text". Thus, the digitised version challenged students to read historical documents while the transcript version made it easier for students to understand the contents of the documents.

Fifth, another advantage in using web-based historical sources was that it made it easier for students to learn because learning resources could be downloaded. For example, Cakpurwantoe who stated, "it was interesting to use because the sources on the website could be downloaded." Thus, students who did not have internet facilities at home or did not have internet data on their smartphones could still read the sources, as long as they have downloaded the learning resources available on the website.

Sixth, the availability of digital learning resources provides an opportunity to foster students' critical thinking, which is essential in historical thinking skills. For example, a student named Cakpurwantoe felt he had new information that he never knew before. He stated that "it's like opening our minds. It's like 'oh, so the flag incident in Surabaya was like this, the one who tore the flag was actually two persons'…. it's like giving us real evidence" The teacher also realised there was a change in students' critical thinking skills. As Teacher A said, "my students are more able to think critically, Sir. So, they are not, no longer like previously, only giving short answers. Now, they are trying to find answers coherently". Students' critical thinking

skills grew because they obtained diverse information presented on the website.

Seventh, from the perspective of the teacher participants, the existence of web-based historical sources as learning resources enables them to teach history more easily and effectively. This is in a country where accessing learning resources other than the official history textbook from the government is difficult, especially if they want to obtain additional learning resources in the form of primary sources for teaching purposes.

DISCUSSION

Thus, the existence of web-based historical sources as learning resources facility is very essential to support efforts to foster students' historical thinking skills because it is not easy for teachers and students to access primary sources in Indonesia. Therefore, from various opportunities offered by web-based historical sources to foster students' historical thinking skills, it can be found that the main advantage of this website is that it makes it easier for teachers to teach and makes it easier for students to learn history. Digitised historical sources are "easier to access" (Lee, 2002) because they can be accessed anytime and anywhere. Besides, digitised primary sources also encourage students to learn history because it stimulates their reading interest. Digitised primary sources presented on the www.berpikirsejarah.com are also "flexible" to use (Lee, 2002) because the students can download the learning resources and choose to read the original digitised documents or the transcripts. The study data shows that most students did read the transcript version but many of them also preferred and were challenged to read the original digitised document version. Although Wineburg and Martin (2009) suggest that students do not need to be given original primary sources and a simplified transcript is sufficient, however, the results of this study indicate that students should be given the opportunity to read the original digitised primary sources because it can challenge them to read the sources and obtain different historical insights. Web-based learning resources which contain digitised primary sources made it easy for teachers to teach and encourage students to develop critical thinking skills which are needed to foster their historical thinking skills (Federspiel, 2004; Fránquiz & Salinas, 2011; Lee, 2002; Tally & Goldenberg, 2005).

Finally, the findings of this study indicate that there were some students who claimed that learning history using web-based historical sources to access learning resources had no weaknesses at all and even made it easier for them to access historical sources. However, their perspectives did not prove that learning history by utilising this learning website was without challenges. The main challenge of a learning process that relies on internet access was the availability of a strong and stable internet network. This counters the results of other studies, which are usually conducted in developed countries and emphasise the positive potential (Lee, 2002; Martin et al., 2008; Salinas et al., 2011).

Another challenge felt by students when accessing primary sources available on the web-based learning resources was that they were sometimes distracted by notifications received on their smartphones. This was because most students access the website using their smartphones, only a few students own and use laptops to access sources. This finding might still not have been thought of by Cohen (2004) more than a decade ago, who was still concerned about the availability of an internet-connected computer, but Lee (2002, p. 512) was already worried about the time spent by students who were distracted by "viewing websites unrelates to the research". The next difficulty, since most students used their smartphones to access the website, some of them complained of being dizzy from screen radiation. However, some students deal with this obstacle by printing the sources.

Meanwhile, based on the teacher participants' perspectives, the challenges emerging from the web-based historical sources as learning resources were only felt after the intervention process had ended. This was stated by Teacher A who claimed that his students start asking, 'where are the primary sources, Sir?'." This statement seems to resonate with Salinas et.al.' (2011, p. 191) findings where teachers tend to think that "more is better" because they see the website "as opportunities to gather primary sources for their teaching". This is supported by Teacher C's expectations who states, "my hope is that [the website is] not only about the Surabaya battle". Thus, based on teachers' perspective, the use of www.berpikirsejarah.com website did not have significant difficulties, they only hoped that the content would be further developed.

Despite the challenges that have arisen, the existence of the website also offers many opportunities to foster Indonesian students' historical thinking skills. Based on the research participants' perspective, the main advantage of this website was the ease of access to learning resources in the form of primary sources. The ease of access was mainly because the website was developed intentionally for educational purposes, all historical sources present-

ed on the website were deliberately chosen according to mandated specific content knowledge and which could stimulate students' historical thinking skills. This is for example expressed by a student named Bhernandae who stated, "easier to access primary sources" and teacher felt "it really made me easy to teach" (Teacher A). This ease of access has been predicted by Lee (2002, p. 504) who stated: "through the World Wide Web, learners have a level of direct access to the raw materials of history that educators could never have imagined". Since the primary sources were available on the website, students can access them anytime and anywhere. Like a student named Amalzae who was excited because "it can be read at any time" or Buregise who felt facilitated because the sources "can be read anywhere". The advantage of the website which contains primary sources has been acknowledged by Cohen (2004, p. 295) because it "enabling the storage and transmission of huge amounts of information" that can be accessed by students "regardless of physical location". This ease of access made it easy for students to learn history.

To support students learning history in a better way, the learning process should follow the learning styles preferred by students of the "digital age". We do not want to be trapped in hyperbole terms like "digital native" vis-à-vis "digital immigrant" or "Gen Z" and this study also does not intend to respond to the polemics arising from these terms (Gentina, Tang, & Dancoine, 2018; McGrew, Ortega, Breakstone, & Wineburg, 2017; Noonan, 2013). However, our findings show that many students who claimed to have a tendency of excessive dependence on the smartphone (Ahn & Jung, 2016) and felt they could learn history better and benefited from the existence of the www.berpikirsejarah.com website. Thus, regardless of the polemic, student participants who could be categorised as digital natives claimed to be able to learn history better by being provided with web-based historical sources that they accessed with their mobile devices.

The findings of this study indicate that the contents of the website which contain both the original and transcribed version of primary sources was considered by students to better understand history through the lens of primary sources material. Of the two versions, there were some students who liked to read the transcript version and not a few of them who preferred to read the original version. For example, Cayuninge who stated, "I prefer the original source because it is more challenging". In that regard, I would argue that some studies

from Wineburg and his colleagues (Reisman & Wineburg, 2012; Wineburg & Martin, 2009) which suggest modifying the content of the documents is not relevant in an Indonesian context. Their reasons for making it easier for students to read the historical text are unacceptable because it would result in students losing the opportunity to study the past by themselves and from the original version of the primary sources. How is it possible to awaken students' historical thinking skills if previously they only obtained an "unoriginal" version of the past from their textbooks and then were given "unoriginal" version of the documents. Students would miss many opportunities to think critically.

The biggest benefit of having web-based historical sources as learning resources is the opportunity to foster students' critical and historical thinking skills. Students must be given the experience to deal with historical sources in their original version. If they have difficulty, they can read the transcript version but without any content modification. Lee (2002, p. 504) has suggested creating a "learner-centred experience" because "web-based digital historical resources empower students to construct a more personal understanding of history" which is needed to foster students historical thinking skills. This enables many students to acquire conscientization (Freire, 2000, 2005; Monchinski, 2008), as Cakpurwantoe has gained, which indicated from his statement: "....that lessons from elementary school until now, it turns out there is information that is true, and sometimes is wrong. So, it's like giving us real evidence". The findings of this study highlight that students are not born with historical thinking skills so they must be taught (Noonan, 2013), by being given the opportunity to think independently and by being provided access to historical sources available on the learning website.

CONCLUSION

This study has revealed that www.berpikirsejarah.com has the potential to be used as a web-based learning resource that can be utilised by history teachers to foster students' historical thinking skills in Indonesia. As a digital learning resource that requires the availability of devices and stable internet connectivity, indeed its use could pose certain challenges and difficulties in Indonesia. However, the research participants' perspectives also obviously revealed that the advantages outweighed its challenges

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