



Digital Literacy Index Improvement for History Teachers in East Java

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Abstract. The 21st century is marked by the rapid development of information technology which has an impact on changes in human behavior. Information technology has become a necessity and the internet has become a repository for search as well as human connection. The internet has become everything and an important part of human life today, something that has never been imagined. The speed of change due to the rapid pace of technology requires human ability to adapt and be ready to face all things that change rapidly. Digital literacy competence for teachers is needed in order to be able to adapt and live life in the 21st century. To be able to take advantage of digital technology, teachers need digital literacy skills, namely skills in knowledge and skills in using digital devices such as smartphones, PCs, or laptops and being able to operate supporting applications, so that they can assist teachers in designing quality learning. In order for teachers to have the ability to utilize digital media, it is necessary to strengthen digital literacy for teachers. Strengthening digital literacy for teachers is intended so that teachers have the ability to use digital media to increase teacher professionalism. In an article explaining, strengthening digital literacy can be done by explaining the use of information and communication technology in helping carry out tasks as a teacher.

Keywords : History Teacher, High School, East Java, Digital Literacy.

1 Introduction

The 21st century is marked by the rapid development of information technology which has an impact on changes in human behavior. Information technology has become a necessity and the internet has become a repository for search as well as human connection [1]. The internet has become everything and an important part of human life today, something that has never been imagined [2]. The speed of change due to the rapid pace of technology requires human ability to adapt and be ready to deal with things that change rapidly the. Digital literacy competence for teachers is needed in order to be able to adapt and live life in the 21st century [3].

To be able to take advantage of digital technology, teachers need digital literacy skills, namely skills in knowledge and skills in using digital devices such as *smartphones*, PCs, or laptops and being able to operate supporting applications, so that they can assist teachers in designing quality learning [4]. In order for teachers to have the ability to utilize digital media, it is necessary to strengthen digital literacy for teachers. Strengthening digital literacy for teachers is intended so that teachers have the ability to use digital media to increase teacher professionalism [5].

Teachers can use the internet as an additional learning resource to support printed books used in learning [2]. For example, *first*, electronic school books provided by the Ministry of Education and Culture on the <http://bse.kemendikbud.go.id> page and from digital libraries. In addition, other learning resource services can also be accessed through Google Scholar which provides electronic books and scientific articles;

Second, the use of digital technology for digital technology-based learning media. In the industrial era 4.0, learning media is more varied by utilizing the internet. Currently, many learning videos can be accessed via the internet and teachers can use them as more interesting learning media;

Third, the use of digital technology for supervision of students. With social media, teachers can use it so they can see the progress of their students through social media accounts;

Fourth, the use of digital technology to access information quickly. Currently, all government agencies use website pages and social media to convey various kinds of information. Teachers who do not update various information from digital media will be left behind;

Fifth, the use of digital technology to publish works and information. Through social media, teachers can also take advantage of skills in using digital technology to disseminate information and the work of teachers and students; and *Sixth*, the use of digital technology for school promotion. School promotions can also be done online.

With digital literacy, teachers are given the skills to make information about school profiles and school activities online, so that they can introduce the school to the wider community.[6] Due to the importance of digital literacy for teachers, strengthening digital literacy through digital literacy training has significant benefits for teachers.[7]

2 Theories and Methods

2.1 Theories

Indonesian Digital Literacy Framework In general, what is meant by digital literacy is the ability to use information and communication technology (ICT), to find, evaluate,

utilize, create and communicate content/information, with cognitive and technical skills. There are many models of frameworks for digital literacy that can be found on the Internet, with various names and forms. Each model has its own uniqueness and advantages. To enrich the repertoire and discourse on digital literacy in Indonesia, ICT Watch released an alternative offer " Indonesian Digital Literacy Framework"[6]. This framework was designed based on ICT Watch's experience in carrying out the Internet Safety pillar "Healthy Internet" and continued with the pillars of Internet Rights and Internet Governance which have continued to this day. The framework offered is as follows: The framework consists of 3 (three) main parts, namely : 1). protection (safeguards), 2). rights, and 3). empowerment. Activities to strengthen the digital literacy index will improve teacher skills in organizing learning in the classroom [8].

Education on the global framework shifts from content and learning experiences towards future needs consisting of global citizenship skills, content that focuses on building awareness about the world, sustainability and an active role in the global community; innovation and creative skills are problem solving competencies, analytical thinking by following the analysis system; technology skills are the ability to program, digital and use of technology and have interpersonal social skills [9]. So that in this case learning experiences are needed that make students independent, independent and inclusive learning, project-based learning, problems and collaboration as well as student-centered and sustainable (lifelong). The existence of technology makes student involvement more intense, covers a wide (digitally) and diverse environment in cyber learning networks [4].

2.2 Methods

This research uses a qualitative approach.[10] Qualitative data were obtained from research subjects, namely the history of teachers at SMA in Surabaya. Data were collected through in-depth interviews using unstructured interview guidelines. Through the guidelines it makes it easier to do *probing*. Data is also extracted through learning observation. Observation aims to observe the emergence of the phenomenon of ideological hegemonic practices. Data is also collected through documentation, especially documents which are the orientation of ideological hegemonic practices. Qualitative data were analyzed using the Miles and Huberman analysis techniques. Through this analysis technique qualitative data from interviews, observations, and documentation are arranged systematically so that they can be easily understood , and the findings can be informed.

3 Result and Discussion

The independent curriculum has a slight difference from the previous curriculum which in some ways is a little confusing for teachers. Permendikbudristek no 7 of 2022 regarding content standards can be seen how history is intended to strengthen the identity and contribution of the Indonesian nation to the world through the study of

historical themes from pre-literacy to world developments in the 21st century. Meanwhile, Permendekbudristek No. 5 of 2022 concerning SKL focuses on knowledge to take further education by emphasizing the ability to analyze problems, complex ideas, literacy skills in the form of evaluating and reflecting on texts to produce complex inferences and numeracy skills. The two regulations were then revealed in learning outcomes as stated in BSKA Decree No. 8 of 2022 concerning CP in the Independent Curriculum where history subjects consist of two phases, namely phase E for class X with a focus on understanding concepts through primary and secondary sources.[11] Meanwhile, phase F is to develop basic historical concepts to study historical events based on primary and secondary sources through research. In the case of history subjects, the skills that must be mastered are historical concepts, historical thinking, historical awareness, historical research and practical history, in this case historiography. To achieve that all students need to be trained consistently and continuously.

This is contradictory, ideally schools as educational institutions actually have a strategic role in actualizing digital literacy for the younger generation. Referring to the Ministry of Education and Culture program in 2017, namely the school-based digital literacy movement is embedded in the National Literacy Movement (GLN). Digital literacy basically aims to provide the ability to understand, analyze, assess, organize, evaluate information using digital technology. Teachers as the spearhead of implementing education in schools should have digital literacy competencies in designing learning that will be given to students [12].

Based on last year's training, history teachers from Unesa history education alumni who are members of the History Education Graduates Organization, have problems regarding the development of LKS based on historical literacy. Historical literacy is measured through the ability to integrate and generate conclusions through facts and causal relationships, representing literal meanings through selecting sources and formulating problems/problems to be solved, assessing quality and credibility through selected primary/secondary sources. The preparation of LKS also has not utilized digital technology optimally, this shows that the understanding and mastery of digital skills is still quite low. Based on this, the following problems were identified: (1) The teacher's understanding of the digital world is still simple; (2) There is a shift in style and pattern of communication using the media, resulting in a new habitat in social media; (3) There is an industrial revolution 5.0 which emphasizes the use of the internet of think; (4) Teachers' mastery of digital literacy is still low, so it needs to be measured before activities and after activities regarding the teacher literacy index; and (4) There is a curriculum change that demands more acceleration of digital technology in learning.

The transformation of education delivery, especially in learning activities, has developed so rapidly. Integrating information technology into the learning process has become a necessity that must be carried out in order to accommodate the demands of the curriculum and the dynamics of the times. Learning activities are no longer limited

to the classroom context as is the case in the implementation of conventional learning, even though it is still maintained and running, but in the digital era as it is today, learning activities can also be carried out virtually or online. The dynamics of the development of education delivery, of course, must be accompanied by the preparation of the competence of teaching staff in managing online-based learning .

Strengthening digital literacy for teachers can be done by explaining the use of information and communication technology in helping carry out their duties as teachers. First, the use of digital technology as an additional learning resource. Teachers can use the internet as an additional learning resource to support printed books used in learning.

With digital literacy, teachers are given the skills to make information about school profiles and school activities online, so that they can introduce the school to the wider community. Due to the importance of digital literacy for teachers, strengthening digital literacy through digital literacy training has significant benefits for teachers [13].

The experience of last year's community service activities (2022) shows that history teachers who incidentally are alumni who have received source tracing guidance during their college days, have not fully used digital historical sources as an alternative to the main history learning resource. The results of the questionnaire also show that the use of historical sources is still minimal as part of historical literacy in learning history. Meanwhile, the demands of the curriculum for the cognition abilities that high school students must possess are higher order thinking.

The transformation of education delivery in the digital era entering the 21st Century proves that now learning activities do not always take place in a rectangular room with chairs facing the blackboard and blocked by walls on each side where teachers and students are in the same room at one time. Now learning activities are not limited by space and time. The learning process can be carried out anytime and anywhere, teachers and students do not have to be in the same room, media and learning resources can vary, students can also access various learning resources and various sources.

Therefore, the ability to adapt to the dynamics of information technology development and integrate it in the implementation of learning is very important and is a necessity that must be done for teachers so that learning becomes interesting and fun. This research is important as information material and mapping of problems faced by teachers in order to adapt to the digital era and the development of information technology. The results of the research can become the basis for stakeholders in providing guidance to teaching staff so that they are familiar or 'literate' with digital literacy. The inability of teachers in digital literacy will have implications for the slow development of the transformation of education delivery in a more advanced direction. Stated that Indonesian people have a culture of technology and information literacy that is still low. This is proven and visible in everyday life, such as the low interest in reading and writing among the public.

People prefer to watch TV and listen to music, etc. stated that technological developments also had an impact on the education sector. Various digital teaching resources known as e-resources are abundantly available on the internet. The digital era provides a variety of information on the internet, both verified and unverified. Therefore, a strategy is needed in tracing sources of information so that the information obtained is information that meets the needs and is valid and can be accounted for. The problem is that teachers tend to use this information as a reference for developing learning resources or preparing learning tools . This is because teachers do not have information search techniques on the internet in the sense that they do not have adequate digital literacy, which is one of the competencies that teachers must have. From the problems above, it is very important for universities to be present in the form of PKM activities to help overcome the nation's problems, especially teachers in strengthening digital literacy.

4 Conclusion

Historical literacy is measured through the ability to integrate and produce conclusions through facts and causal relationships, representing literal meaning through choices sources and conclusions Required issues/questions solved, assessing quality and credibility through selected primary/secondary sources. The preparation of LKS also has not utilized digital technology optimally, this shows that the understanding and mastery of digital skills is still quite low

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Authors' Contributions

The author comprises one student and three supervisors who also contributed to writing the article. Article writing is separated into numerous stages of research and writing that are completed in 3 (three) months. the author investigates related themes based on observations made in the fields over many months. the writer offers the ideas in this scientific article based on observable data.

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