Strategy for Strengthening Digital Skill With Infographic Learning Media

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Abstract

The younger generation currently has social media, statistical data stated that 87% of Indonesian children aged 13 years have used social media. This triggers the young generation to become vulnerable to the spread of hoax news. Therefore, it is necessary to strengthen digital skills, one of which can be done in learning activities at school using infographic learning media. Making infographics requires basic knowledge of information search engines, and how to use and choose words that are indicators of digital skills. Data collection in qualitative research is by observation, questionnaires, and interviews. The results of this study indicate that infographic learning media as a strategy for strengthening digital skills is very effective, which is indicated by students' skills in using digital media in finding information, and how to use and select data in making infographic media. However, what needs to be emphasized is that this strategy is effective if the availability of school facilities and infrastructure supports digital learning activities.

Keywords: digital skill; infographic; learning media.

Introduction

The impact felt during the Covid 19 pandemic that we are aware of is the rapidpace of technological development, not only in Indonesia but also in the world. The existence of a social distancing policy makes us have to go to school or work from home as a form of avoiding and breaking the Covid 19 chain. With this policy, technological developments are very rapid in meeting human needs. This is evidenced by the existence of virtual meet applications such as zoom, google meet, and others. On the other hand, school activities in internet use during the Covid 19 pancemic, around 73,7% of the total population in Indonesia, which reached 272.682.600 (CNBC, Indonesia).

In the current new normal, people continue to use the internet as their main activity in their daily lives, whether for work, teaching and entertainment. There are many benefits to using the internet, but on the other hans, there are also many negative things that occur when using the internet, especially on the use of social media. As an article in (unpad.ac.id). Microsoft's annual report titled the digital civility index (DCI) states that Indonesia is most disrespectful country in Southeast Asia due to an increase in the percentage of bullying, hoaxes, fraud and hate speech. Furthermore, according to Prof. Dr. Ahmad M. Ramli encourages assistance for school-age children when accessing the internet. This means that school-age children need to be instilled in digital skills. Children who have digital skills will be able to understand.

Digital skills are grown in children thought collaborative learning activities in schools on certain subjects. In this study, the strategy for strengthening digital skills was carried out on civic education subjects using infographic media. According to Schrock (Kominfo, 2018) emphasizes that the use of infographics can develop students abilities in understanding, analyzing and providing reasoning ideas they have. The results of research conducted by Triana Rejekiningsih (2019) show that infographic media is quite stratefgic as a means of forming critical reasoning abilities of the younger generation in the area of digital technology. This research is further

strengthened by research conducted by Nathalie Jones, et al about infographics as an assignment to build digital skills in the social work. The research finds that social work students assigned an infographics project in there different universities say it improved their engagement and learning and offered opportunities for creativity and decision making. Therefore, it is important to do research to provide solutions to the decline in digital skills which can later prevent negative things from the internet. This study examines the digital strategy using infographics learning media.

Literature Review

Digital Skill

The pandemic that hit the world, human interaction is carried out using technology. So it is undeniable that everyone should have digital skills in order to keep up with changing times and not be nervous about technology. In addition, having these abilities can ultimately adapt well. Digital skills are basic knowledge of information search engines, how to use and choose words. Knowledge possessed, but also understand and have the ability to use technological tools. Furthermore, according to Kominfo (2021) digital skills are the individual's ability to know, understand and use information and communication technology hardware and software as well as digital operating system. This ability is important because it is not only communicating today using technology but also in learning activities also utilizing technology.

According to Siberkreasi and Deloitte, the competency indicators for someone with digital skills are as follows: (1) Basic knowledge of digital landscape including the internet and cyberspace, and (2) basic knowledge of information search engines, how to use and select data. In the first indicator, people need to know the type of hardware and software such as mouse, internet, applications and so on. In addition, it is also necessary to understand the use of hardware and software. Furthermore, in conducting information searches, first know the type of information search engine, how to use and select data. Then proceed with knowing how to access and sort

data in information search engines and also understand the types of information search engines and their uses.

Table 1. Sub indicators and statement of digital skill

Sub-indicators	Statement
Knowing the type of hardware	Students can turn the computer on and off properly
	Students can know and use the keyboard
	Students can identify and use the mouse
	Students can identify and use the monitor
Knowing the type of software	Students can know and use ms.word software
	Students can know and use the application
Know the types of information search engines, how to use and sort data	Students can find information search applications such as Google or Mozilla
	Students can find out how to choose valid data
Know how to access and sort data in information search engines	Students can use information search applications via the internet
	Students can search for keywords on the search page

Infographic Learning Media

The development of the times and the rapid pace of technology have an effect on the world of education. One of them is in learning activities, tachers are required to innovate so that teachers need is to use infographics learning media. According to Smiciklas (2012), infographics are a visualization of data or ideas that tries to convey complex information to an audience in a manner that can be quickly consumed and easily understood. To produce an ideal infographics, you can use the FIRED method (undip.ac.id). F for fresh, infographics must be made in a form that can provide fresh or updated information to submitted. I for Informative, the infographics contains informative potatoes that will be explained to the audience. Next, R for relevant, providing information must be relevant or between the title and the content mus be appropriate. While infographics must entertaining, the delivery of infographics mush have entertainment value or can attact attention such as creativity in colors, shaoes or images. Finally, D for different infographics work must have different value from other infographics works.

In this study, digital skill can be seen from how student can use the internet, find information and select the data that has been obtained while compiling the information obtained in the from interesting infographics.

Method

Setting and Participant

This research was conducted at MTs Muhammadiyah Surakarta, Indonesia with the object of research being the eight grade students of special program. The special program class was chosen because there are computer subjects while there is no regular class. The eight grade special program consists of 20 student.

Data Collection

The method is a way to achieve the goals and results to be achieved. On the other hand, research is an activity in finding a fact or truth. This study used descriptive qualitative method. According to Unhar (2018), qualitative research is a research procedure that produces descriptive datain the form of written or spoken words from people whose behavior is observed. Furthermore, descriptive research is a research activity to describe the occurrence of educational activities, learning at various types of levels (Sukmadinata, 2005). Qualitative research is carried out with four stages of research, 1) data collection ia a method use to obtain research data, 2) data reduction and categories are data filtering based on relevant data results to support research, 3) data display, is the design of data to be processed in research, and in the last stage, 4)/ drawing conclusions, the results of data processing are concluded to be important information on the results of the research that has been done. Data collection in this study was carried out by observation, interviews and questionnaires. Observasion conducted to review learning using infographics learning media in strengthening students digital skill. To support digital skill and infographics learning media, interviews are needed to find the truth of the research.

Result and Discussion

This research was conducted in the eight grade civic education special program at MTs Muhammadiyah Surakarta. The material for civic education is Sumpah Pemuda and sub material is ithe spirit of youth oath of today. The learning method used by teacher is problem based learning. The teacher gives an introductory material about the youth oath which students then have to show problems with the spirit of the youth oath at this time, especially in the younger generation. Furthermore, students are given the freedom to analyze the problems that occur in the younger generation and find solutions to the problem raised. Based on the results of observations showed that 7 students used the theme of unemployment, 3 students chose the theme of drugs, 4 student took the theme of corruption and the remaining 6 students chose the theme of gadget addiction. Students conduct an analysis by looking for more information about the chosen theme through the internet. In this core activity, students can demonstrate their digital skill. Based on the results of this study indicate that in digital skill students show.

Basic Knowledge of Digital Landscape

Student can use computers in the computer laboratory room to search for information that is relevant to the material discussed. As many as 85% of students have basic knowledge of the digital landscape. Starting from turning the computer on and off properly, knowing and using other hardware such as a mouse, mouse and to type letters using the keyboard. Futhermore, students also know the basics of software such as those owned by Microsoft office, namely Microsoft word. In addition, using a search application using Google Chome, Mozilla or Opera which is available on each students computer. The interview results also show that.

Basic Knowledge of Information Search Engines, How to Use and Select Data

Based on observations and the result of the results of the questiobbaire, 80% of students showed that they could find information according to the chosen theme by using the available applications. Students also type keywords according to the material taken, such as unemployment, drugs, gadget addiction or corruption. When the information has been listed, students can choose credible data and according to the desired theme. More depth was found during the observation that there were still students who used non credible websites such as blogger, wordpress and Wikipedia.
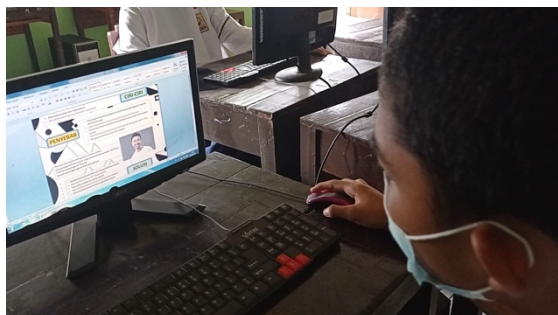
Figure 1. Student make infographic with Microsoft Word

So overall, students already have digital skills in the good category. The results of the infographic observations produced by some student are already very good because they use websides such as Canva and Pict Art which have lots of infographic references. While others only use Microsoft Word to create infographic. The overall results of the infographic also strengthen the digital skills possessed by students. To get more in depth data, interviews were conducted. The results showed that students who knew about Canva webside and Pict Art were students who participated in extracurricular journalism activities. While student who use Microsoft Word only use software that is taught when computer subjects.

Figure 2. Infographic made with Canva

Conclusion

The results of this study indicate that infographic learning media as a strategy for strengthening digital skills is very effective, which is indicated by students skills in using digital media in finding information, how to use and select data in making infographic media. However, what needs to be emphasized is tat this strategy is effective if the availability of school facilities and infrastructure supports digital learning activities.

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