Integrated Digital Learning Media with Socio Critical and Problem Oriented Approach for Elementary School Students

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Abstract. This research is motivated by the lack of learning media, especially Indonesian subjects for elementary school students. Many elementary schools do not have Indonesian learning kits or media, such as science/science learning media. Based on the needs analysis, only 18.5% of elementary school teachers have developed learning media, out of 124 teacher respondents in Kuningan Regency. This research method uses descriptive qualitative research. The integrated digital learning media socio critical and problem-oriented approach encourages students to be sensitive to the environment. This Socio-Critical and Problem Oriented *approach* involves students to actively express their opinions on social issues associated with Indonesian language learning because the characteristics of the Indonesian learning area focus on recentive and productive abilities. In line with the Indonesian learning outcomes, students have the language skills to communicate and reason in accordance with social goals and contexts. The conclusion of this study is that digital learning media is integrated with a socio critical and problem-oriented approach into an Indonesian learning medium that supports 21st century learning.

Keywords: digital media, elementary school students, learning media, socio critical and problem oriented approach.

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INTRODUCTION

Learning has a role in providing information in the development of the thinking process which is ultimately expected to provide positive changes in student behavior both in terms of cognitive, affective and psychomotor. The teaching and learning process, which is considered saturated, serious and monotonous, is influenced by teaching methods and learning styles. Students' learning styles develop over time. In recent times, many studies have emerged that highlight changes in students' learning styles. Gregoryk and Eighmy (2009), Robinson (2006, 2007), Eisner (2004), Arhin and Johnson-Mallard (2003), and Young (2002) in Nitkin (2011: 131) note that changes in learning styles have changed the traditional classroom form increasingly inadequate in meeting the learning needs of current students. Students need to be active learners who are able to define a problem, analyze and find solutions to existing problems (Walker, 2003). The thinking skills that students must have are certainly not only lower order thinking but also higher order thinking (Goodson & Rohani 1998; Singh et al. 2017).

Students in high-level thinking skills are not only required to remember or memorize, more than that students must be able to develop their thinking skills (Lu et al., 2021). Developing higher-level thinking skills is important to familiarize students with facing something difficult, giving birth to students who are superior and intelligent in solving problems (Chasanah et al., 2019; Polly & Ausband, 2009). 21st century learning focuses on students with the aim of providing students with thinking skills, including: (1) critical thinking, (2) problem-solving, (3) metacognition, (4) communication, (5) collaboration, (6) innovation and creativity, (7)

information literacy. The focus of 21st century learning is a demand that students must have as a level of thinking process developed as concepts, cognitive methods, and learning taxonomy (Gupta & Mishra, 2021). Mastery of 21st-century skills is characterized by the ability to use digital technology, use communication tools or networks as well as the ability to find, evaluate, use and create information (Shank, J. D., Bell, S., & Zabel, 2011). As a consequence, students must have digital literacy skills that refer to 21st century competencies.

The development of technology over the past two years has experienced a very rapid increase. The results of the *We Are Social Institute's* research on Internet and Social Media User Trend Data in Indonesia show that the total population of Indonesia is 274.9 million. Unique Mobile Users: 345.3 million (125.6% of the total population in Indonesia). Internet users: 202.6 million (73.7% of the total population in Indonesia). Active Social Media Users: 170 million (61.8% of the total population in Indonesia) (Riyanto, 2021). The rapid increase in the use of technology, especially among elementary school students, confirms that collaboration to ensure the maximum benefits of technology is becoming increasingly important. Data on internet and social media user trends from the *We Are Social Institute* shows that most of Indonesia's population, including elementary school students, has been actively using gadgets and the internet.

The conditions that have emerged indicate that most elementary school students already have access to gadget facilities. However, the existence of some students who have not received such access, especially due to limited permission from parents, indicates that there are challenges that need to be overcome. Although the majority of students belong to the digital native generation, further efforts are needed to overcome barriers to technological accessibility, so that all students can experience the positive benefits of technological developments in the learning process. Based on the needs analysis, of the 124 elementary school teacher respondents in Kuningan Regency, only 18.5% of elementary school teachers have developed learning media, while 81.5% of elementary school teacher respondents have not developed learning media in carrying out teaching activities in the classroom. This triggered to provide an alternative digital learning media that is integrated with a socio-critical and problem-oriented approach for elementary school students.

METHODOLOGY

This research method uses descriptive qualitative research. Research that describes according to the circumstances or researches the condition of objects naturally (Sugiyono, 2018). As for integrated digital learning media, a socio-critical and problem-oriented approach is a digital learning media that uses the Canva application. This learning media is an alternative for students to like literacy and encourage students to be sensitive to the environment. The

respondents of this study were elementary school teachers in Kuningan district totaling 124 people.

RESULTS AND DISCUSSION

Technological advances that continue to take place today are expected to contribute positively to the world of education, especially in the implementation of the learning process in elementary schools. The learning process is carried out by utilizing assistive tools, for example teaching materials and learning media which contain a series of materials and media in the form of interesting features, such as images, sounds, animations, and others. However, in general, currently learning media is IT-based, namely mobile learning.

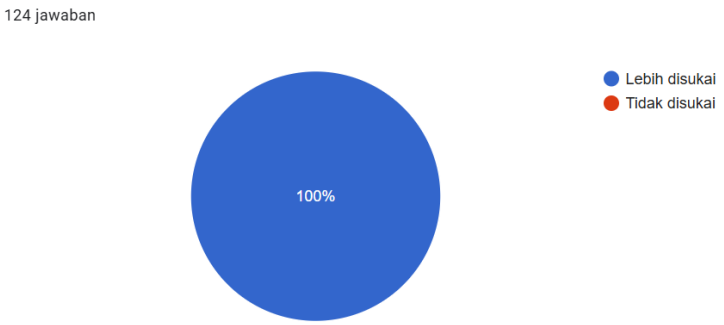

Figure 1. Tendency of students' interest in digital learning media

Figure 1 shows that according to elementary school teachers, students' interest in digital learning media in the classroom is 100%, which means that students' learning styles are dominated by audio visuals, because they are more interesting and fun.

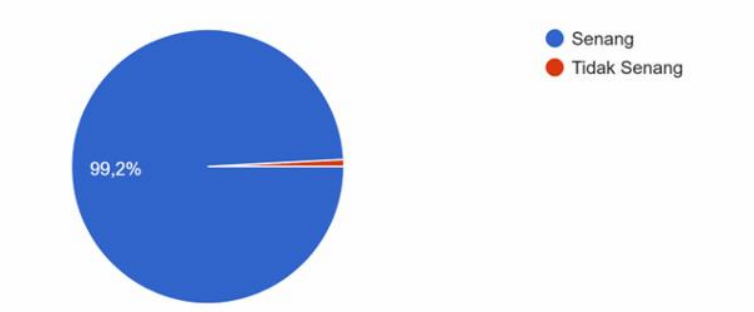

Figure 2. Student responses when the teacher uses the application to support learning

Figure 2 shows that ninety-nine point two percent of students are happy when learning is carried out using digital learning media developed by their class teacher. Learning media is an inseparable part of learning activities in schools (Musfiqi & Jailani, 2014). The use of media in the learning process is a creative effort to create effective learning (Jatmika, 2005).

As explained (Balandin et al., 2010) that learning media is a tool that functions and can be used as a message delivery in learning so that it can achieve teaching goals. With the help of learning media, the concept of learning will be more easily accepted by students so that learning goals will be achieved properly. In addition, the definition of learning media is also put forward by Korakakis et al., (2009) "*Thus the media learning can be defined as an intermediary (medium) conveying the message (message learning) learning from the source message (message resource) to the recipient of the message (message receive) so that the occurrence of a reciprocal interaction*". More specifically, the meaning of media in the learning process is interpreted as graphic, photographic, or electronic tools to capture, process, and reconstruct visual or verbal information.

Media is one of the components of communication, namely as a message carrier from the communicator to the communicant by Criticos (Hanafi & Nurhasanah, 2017). So that with the media, someone can easily convey information, media is also divided into several fields, for example information media, learning media, and others. Branch (2009) said that media when understood broadly is humans, materials, or events that build conditions that enable students to acquire knowledge, skills, or attitudes. In general, the meaning of media is anything that can be used in conveying educational information that can be delivered using electronic media or concrete media. Meanwhile, Oranç and Küntay (2019) argue that media is a human extension that allows it to influence others who do not have direct contact with it. In accordance with this opinion, teaching media can be used effectively in a planned teaching process that includes communication media, slides, photography, diagrams, real objects, teacher-made charts, and the environment.

In general, the meaning of media is anything that can be used to convey educational information that can be delivered using electronic media or concrete media. So it can be concluded that media is a teaching and learning process aid that can be used to stimulate thoughts, feelings, attention and learning skills so that it can encourage the learning process of students. Media is a tool to convey knowledge to students so that learning is easier to understand and more enjoyable. Media is the maximum utilization of all components of the system and learning resources to achieve certain learning goals (Luthfi et al., 2020). In learning, concepts are the main thing; mastery of topics/concepts is the basis and prerequisite for understanding other ideas (Rohaeti, Bernard, & Primandhika, 2019). Learning media is a

means of delivering learning materials that are more straightforward and interesting so that there is a reciprocal relationship between teachers and students (Meidyanti et al., 2021). According to Kasih (2017), the use of media is the use of learning resources systematically.

The implications of digitalization in everyday life are very significant for the world of education. Seeing the development of digital device technology and educational software today, especially schools and educators need to make special interventions on how to integrate technology into the curriculum and prepare students for their (digital) future (Pangrazio, 2020). In line with this, education observers, in this case policy makers, believe that it is necessary to embed digital literacy in the education curriculum as a key concept to make it easier for educators, researchers, and education bureaucrats to understand the demands of competition in schools and students in a digital society (Liu et al., 2021). This condition is reinforced by the opinion of Wang & Chen (2020) who state that every citizen must have basic digital literacy in order to adapt to today's community life, so it is necessary to pay attention to effective ways to develop digital literacy for students in compulsory education in order to maintain the nation's competitiveness (Wang & Chen, 2020).

The decision to try or use learning resources must consider the characteristics of students and learning objectives. The use of media and technology by teachers is an additional support during teacher-centered teaching. The use of technology and media by students can utilize a series of ways to improve learning, guidance to achieve certain goals. Utilizing student-centered activities, teachers can use student time to check and fix student problems, consult with others individually and teach one by one in small groups (Sitorus & Matsum, n.d.).

Digital literacy is also used as a benchmark for mastering 21st-century skills, which include skills in using digital technology, using communication tools or networks, and skills in finding, evaluating, using, and creating information (Hui et al., 2021). Furthermore, Ciampa & Gallagher (2021) explained that the development of digital literacy education for students of all ages includes several aspects, including: building early literacy skills through a balanced approach that combines basic understanding and language teaching; increasing equity and opportunities for all students; providing access to a variety of high-quality books and content; determining effective instructional strategies for struggling readers; evaluation; and increasing learning opportunities and professional development for practicing educators (Ciampa & Gallagher, 2021). The American Library Association defines digital literacy as "the ability to use information and communication technologies to find, evaluate, create, and communicate information, which requires cognitive and technical skills" (Techataweewan & Prasertsin, 2018).

The Socio Critical and Problem Oriented Learning Approach is a learning approach that can relate scientific concepts to problems or issues that are developing in society (Marks & Eilks, 2009). This kind of issue is known as a socio-scientific issue. Learning with this approach, discussing a problem or issue that is given in depth is seen from two controversial sides such as the benefits and risks of a product. The theory underlying Socio Critical and Problem Oriented learning is constructivism theory, students will construct their knowledge and experience and connect with previous knowledge to form a new knowledge such as solving a problem (Coll & Taylor, 2001). According to Taber (2011) in constructivist learning, teachers act as facilitators in shaping meaningful knowledge and the formation of new skills.

This is in accordance with Socio Critical and Problem Oriented learning, namely learning that is associated with daily life will help students learn holistically (Christenson et al., 2014). According to Eilks et al. (2008) there are the main objectives of the Socio Critical and Problem Oriented approach in chemistry learning as follows: a) Increase students' interest in science and technology and to show the relevance of science in community discussions so that they can make decisions. b) Develop students' competence in critical information reasoning, as well as in their reflection on why, when and how scientific information related to social issues can be used for disadvantaged groups or for the public interest. c) Improving science learning, students are encouraged to be active in problems with relevant social issues. Based on the three main objectives of the Socio Critical and Problem Oriented approach above, it shows that this approach can relate social issues to chemistry learning that is adapted to learning that is closer to the environment (Eilks, 2002; Marks and Eilks, 2008; Feierabend and Eilks, 2011).

According to Feierabend and Eilks (2011), the structure of the implementation of Socio Critical and Problem Oriented learning includes five stages of learning, namely as follows: 1) Textual approach and problem analysis At this stage, the teacher provides videos or 3 articles from various media sources. After that, students understand and analyze the problem in the video or article first. 2) Resuming the socio-scientific dimension The next step is to summarize

the socio-scientific dimension. At this stage, students are given the opportunity to understand videos or articles on social issues and look for other sources to corroborate their opinions. 3) Discussing and evaluating different points of view The third stage is discussion and evaluation from different points of view. At this stage, students discuss and evaluate from different points of view (groups of pros and cons). 4) Clarification of problem with laboratory experiment (clarification of problems through practicum) The fourth stage is the clarification of problems through practicum. At this stage, students clarify social issues through practicum activities that prove the concepts and theories that have been learned. 5) Metareflection The last stage is metareflection. At this stage, the student's metareflection builds on the overall experience and is associated with the issue being discussed scientifically. In addition, students are asked to draw conclusions or solutions from the issues discussed.

This Socio-Critical and Problem Oriented approach involves students to actively express opinions (debates) on social issues related to Indonesian learning because the characteristics of the Indonesian learning area focus on recentive and productive skills. In line with the Indonesian learning outcomes, students have the language skills to communicate and reason in accordance with social goals and contexts. The current social issue that is developing is strengthening literacy to support the profile of Pancasila students in driving schools. The Socio Critical and Problem Oriented approaches are basically a combination of Indonesian learning outcomes with social issues so that they become a unit presented in the learning process. The purpose of the Socio Critical and Problem Oriented approach is that students are able to relate and analyze phenomena/problems that occur in the environment so that they can think critically to solve these problems. Learning with the New Paradigm is an effort to cultivate lifelong learners in accordance with the Pancasila Student Profile. The learning process with a new paradigm is carried out through the Independent Curriculum which contains three main things, namely, (1) Intracurricular programs, (2) Extracurricular programs, and (3) Pancasila Student Profile Strengthening Project.

The Indonesian subject is designed in such a way that it determines the right and appropriate method or approach so that students' language skills can develop optimally and students are motivated to be enthusiastic about learning Indonesian subjects. Therefore, the Socio Critical and Problem Oriented approach is very suitable for Indonesian subjects because it discusses social issues that exist in the environment around students. This approach provides an overview of authentic and controversial social issues in the surrounding community/environment, it can be said that this approach can be applied in Indonesia to balance soft skills and hard skills in the Merdeka curriculum.

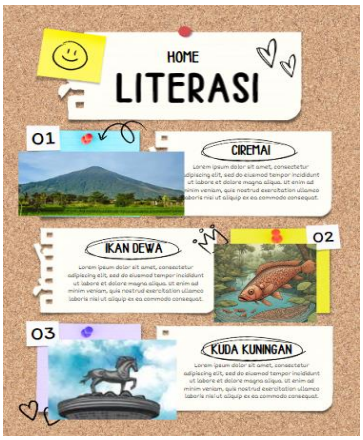

Figure 3. Learning Media

Figure 4. Learning Media

Figures 3 and 4 are examples of digital learning media that integrate the socio critical and problem oriented approach. The learning media contains readings with local content from Kuningan Regency, such as Dewa Fish, Mount Ciremai, Semrani Horse, Sticky Rice Tape, and Kuningan Batik. In addition to containing information and the origin of the mainstay tourist attractions from Kuningan Regency, the learning media persuasively invites students to love the surrounding environment and be proud of culinary and tourist attractions in the local area. This learning media that integrates the Socio-Critical and Problem Oriented approach involves students to actively express opinions (debates) about social issues associated with Indonesian learning because the characteristics of the Indonesian learning area focus on receptive and productive skills. In line with the Indonesian learning outcomes, students have the language skills to communicate and reason in accordance with social goals and contexts. The current social issue that is developing as a strengthening of literacy to support the profile of Pancasila students in driving schools.

CONCLUSION

The learning media with the Socio-Critical and Problem Oriented approach involves students to actively express their opinions on social issues related to learning Indonesian because the characteristics of learning Indonesian emphasize receptive and productive skills. In line with the achievements of learning Indonesian, students have language skills to communicate and reason according to social goals and contexts. The conclusion of this study is that digital learning media integrated with the socio-critical and problem oriented approach into Indonesian language learning media supports critical and communicative 21st century learning that follows the development of the times and technological advances accompanied by a sensitive attitude to the natural environment in general and the environment around students in particular.

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