



Evaluation of Digital Scrapbook Usage among Junior High School Students

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ABSTRACT	ARTICLE INFO
<p>Digital scrapbook learning media is a learning media that is one of the alternatives that can be used as educational media, in addition to increasing the motivation and interest in learning of junior high school students, optimizing the division of labor in groups, this media was developed to avoid abstract thinking, a negative impression that is allowed to occur since they are young, which in the end until adulthood the negative impression is boring and makes students bored. Studies related to the development of instruments to measure the use of digital scrapbooks as educational media in higher education are still limited. The purpose of this research is to provide interesting education to junior high school students in science subjects, especially environmental pollution material. Researchers used the borg and gall model research and development method.</p> <p>© 2023 EduLib</p>	<p>Article History: <i>Submitted/Received 05 Jan, 2023</i> <i>First Revised 19 Jan, 2023</i> <i>Accepted 19 Feb, 2023</i> <i>First Available online 07 Mar 2023</i> <i>Publication Date 31 May, 2023</i></p> <hr/> <p>Keyword: <i>Digital scrapbook,</i> <i>Environmental pollution,</i> <i>Learning.</i></p>

1. INTRODUCTION

Many people are misinformed about the scientific facts underlying these issues. In response, science educators have called for improvements in public Environmental literacy, but it is unclear which components of science literacy will help individuals identify misinformation (Sharon, 2020). Today, issues related to environmental conservation are gaining importance (Dias, 2021). Environmental action without protection desires and skills will be futile. Then in research Petkou (2021) explained that the lack of educators' knowledge and proper training on environmental topics resulted in difficulties in implementing environmental education programs. In research Boyd (2022) also states that children, and adults responsible for their education, show an increasing lack of understanding and knowledge about the environment.

The results of research by Petkou (2021) entitled "The impact of training environmental educators: Environmental perceptions and attitudes of pre-primary and primary school teachers in Greece" explains that the lack of educators' knowledge and proper training on environmental topics results in difficulties in implementing environmental education programs. However, environmental literacy is expected to lead to the realization of pro-environmental behavior. Therefore, the researcher examined the impact of environmental training on pre-primary and primary school educators, and its effect on shaping their environmental perceptions and attitudes.

Researchers by Wajdi (2022) with the title "The effectiveness of problem-based learning with environmental-based comic in enhancing students environmental literacy" explained that environmental literacy is an attitude and behavior that must be possessed by a student in protecting the environment. Therefore, it is necessary to carry out a plan and action to empower environmental literacy through education. Therefore, researchers aim to determine the effect of a problem-based learning approach with an environment-based comic model (PBLEC) in empowering students' environmental literacy in Indonesia.

Learning design is an important part of implementing the learning process to improve students' understanding of a concept (Siti Ramdiah, 2018). The development of science and technology requires sensitivity in analyzing problems in everyday life. Important Urgency in the development of this media (Wusqo, 2021) explains that digital science scrapbooks are designed to teach junior high school students, and instruments are designed to measure the level of science literacy before and after treatment. The application of scrapbooks in schools is targeted to trigger students' science literacy (R E Yuniar, 2020).

In recent years, science education researchers have increasingly studied the ways in which students "understand" science (Odden, 2019). Motivated learners can learn almost anything (Leitão, 2022). The Internet has made online learning possible, and many educators and researchers are interested in online learning courses to enhance and improve student learning outcomes while overcoming the shortage of resources, facilities, and equipment particularly in higher education institutions (Castro, 2021).

Based on this description, it is necessary to design Alternative Learning Media to develop the ability of creativity and environmental literacy of Learners with digital scrapbooks, so as to produce a real contribution to support the learning of natural sustainability literacy.

2. METHODS

2.1 Respondents

Respondents in this study consisted of 52 respondents from various study programs. Students who were selected as respondents in this study were students who were active in the odd semester 2021/2022. One of the criteria for selecting students in this study is the use of internet facilities. Respondent demographic information is presented in Table 1 below

Table 1. Respondent Demographic Information

Variable	Category	Frequency	Percentage
Residentanl Area	Village	11	21.1
	City	22	42.3
	Regency	13	25.0
	Subdistrict	6	11.5
Gender	Male	10	19.2
	Female	42	80.7
Ethnic	Melayu	15	28.9
	Minang	16	30.7
	Jawa	9	17.3
	Batak	5	9.6
	Others	7	13.4
Age	19-25 Old	45	86.5
	26-30 Old	4	7.7
	> 30 Old	3	5.8
Profession	Student	42	80.7
	Lecturer	3	5.8
	Teacher	7	13.4
Certification Status	Already Certified	6	11.5
	Not Yet Certified	46	88.4

2.2 Instrument

This study used an online questionnaire as a measurement tool. The questionnaire was asked to measure students' evaluation of the use of Digital Scrapbook in certain aspects such as material, presentation, implementation opportunities of Digital Scrapbook, and Implementability. The questionnaire in this study consisted of 13 items with a Likert scale provided, where 1 - strongly disagree, 2 - disagree, 3 - agree, and 4 - strongly agree. The reliability index of this questionnaire analyzed using Cronbach's alpha was 0.980, and was interpreted as high and qualified for use in real research_(Pallant, 2002).

Table 2. Distribution of Questionnaires on the Use of Digital Scrapbooks

Konstruk	Total Item
Materi	4
Penyajian	5
Peluang Implementasi Digital Scrapbook	2
Keterlaksanaan	2

2.3 Data Collection Procedure

This study is a survey-research conducted using questionnaires given to students from various study programs. Respondents were informed that their answers were considered very important for use in the research and they were asked to answer the questions honestly. As an introduction, the researcher gave a brief overview of the Digital Scrapbook and its usefulness in the learning process. We clarified the Digital Scrapbook as an instructional design to integrate technology in lecture classes. The Digital Scrapbook is uploaded through an html link. Students are asked to open the link to evaluate or give their views on the Digital Scrapbook by answering the Questionnaire. Finding the Digital Scrapbook developed by the researcher on the link allows researchers to get data easily without having to come to the research location. All data collection procedures were carried out by utilizing internet and email facilities.

3. RESULTS AND DISCUSSION

Digital Scrapbook was evaluated by students as respondents by assessing four aspects, namely material, presentation, Digital Scrapbook Implementation Opportunities, and implementation. Detailed information about the average score for each aspect is presented in Table 3.

Table 3. Distribution of Questionnaires on the Use of Digital Scrapbooks

Online Comic	Mean	Std. Deviation
Material	4.09	.588
Presentation	4.40	.617
Digital Scrapbook Implementation Opportunities	4.24	.740
Implementation	4.38	.635

From above, it can be seen to what extent the use of digital scrapbooks according to students at a good stage, namely material (4.09); presentation (4.40); Digital Scrapbook Implementation Opportunities (4.24); and Implementation (4.38). Thus, it can be concluded that it has an average perception of 4.28 with a good category.

Digital scrapbook as a learning media can reduce boredom in learning because so far, learning has been done only by delivering material and theory and the method used is only the lecture method which makes students bored with the material being taught. The use of digital scrapbooks in some schools has even been proven to increase the average test results. The results showed that each aspect assessed in the use of digital scrapbooks was responded well by students.

4. CONCLUSION

Based on the results of research and discussion, it can be concluded that the evaluation of the use of digital scrapbooks among students as an educational event is in the good category. This is seen from four components, namely material (4.09); presentation (4.40); Digital Scrapbook Implementation Opportunities (4.24); and Implementation (4.38). Thus, it can be concluded that the students are students who have an average perception of 4.28 with a good category. Students as agents of change in education should be open-minded to changes and alternatives offered by technology to improve the quality of learning. They should utilize the Digital Scrapbook provided on the internet or create their own Digital Scrapbook to be applied in their teaching and learning process. However, the skill of finding meaningful information to serve as resources in the Digital Scrapbook is needed. The selection of links as information resources should meet the needs of students to get meaningful learning. We suggest that an initial study can be conducted to determine the effectiveness of using Digital Scrapbook in the learning process. In addition, a study can also be conducted on students to find out their perceptions of the Digital Scrapbook.

5. AUTHOR'S NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. The authors confirmed that the paper was free of plagiarism.

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