

Implementation of E-Book and Textbook Learning Media to Grow Conservation Character and Digital Literacy Ability on Science Subjects in Coastal Schools

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Submission : 13/07/2023

Revision : 21/10/2023

Accepted : 02/02/2024

ABSTRACT

This study aims to determine the application of the use of e-books and textbook learning media to students in two coastal schools. This research uses students in class VI SDN 04 Popayato as experimental class 1 with e-book learning and the application of the use of textbook learning media to students in class VI SDN 09 Popayato which is an experimental class 2 to foster the character of conservation and digital literacy skills in science subjects in coastal schools. This research method uses a quasi-experimental design, with a true experimental design in the form of a Posttest-Only Control Design. Data collection techniques include observation, questionnaires, and documentation. Data analysis used statistical analysis consisting of questionnaire percentages and independent t-tests. The results of the research on students in class VI SDN 04 Popayato which is an experimental class 1 showed an average percentage of the conservation character questionnaire of 86.82% and the digital literacy questionnaire 88.55%, while students in class VI SDN 09 Popayato which was an experimental class 2 showed an average percentage of conservation character assessed by questionnaire is 70.60% and the digital literacy questionnaire is 72.03%. T-test results of the conservation character questionnaire and the digital literacy questionnaire show $0.00 > 0.05$ indicating that there are differences in the development of conservation character and digital literacy skills in science subjects in coastal schools.

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Keywords: Conservation Character, Digital Literacy, E-Book, Textbook

Introduction

E-book comes from the English language and consists of two words "E" which means electronic and "Book" which means book. So, an E-book is a book packaged in digital form and is displayed through electronic media ([Shiratuddin et al., 2003](#)). Electronic books are multimedia-based learning media because they contain music, video, sound, film, animation, graphics, data, and text that are able to train students to use digital media ([Suparno, 2018](#)). The e-book presents a neatly arranged format, both the language displayed and the extent of the discussion ([Prabowo & Heriyanto, 2013](#)). E-books come in various formats, some of them are HTML which can be opened using a browser, some are in PDF form which can be opened manually on mobile phones and various other types ([Sarah, 2018](#)). Based on the opinions of several experts above, it can be concluded that E-books are interactive learning media in digital form that make it easier for educators or students to learn.

The form of e-book used in this research is a flipbook. Flipbooks are sheets of paper resembling albums or calendars measuring 21 x 28 cm. This Flip Book Maker software can include pdf files, images, videos (MP4) and animation files (SWF). The output produced by Flip Book Maker includes HTML, EXE, ZIP and APP extensions. So Flip Book Maker is a multimedia that contains text/numbers, pictures, animations and videos packaged and operated with a computer, and then can be used in the learning process ([Wulandari, 2020](#)). Flipbooks have many advantages such as being able to present learning materials in the form of interesting pictures, sounds, texts, and learning videos. Flipbook-learning media can also be taken anywhere because they are stored on students' cellphones, using learning media in the form of flipbooks can increase student learning activities. Another advantage of flipbooks is that they help improve students' acquisition of abstract things or events that can't be presented in class ([Rahmawati, et al, 2017](#)).

Textbooks are one of the learning resources and teaching materials that are widely used in learning by every teacher. Textbooks have a strong connection to the learning process ([Rosita et al., 2019](#)). Textbooks are books that are arranged systematically based on descriptions and material in a particular field of study. Textbooks for teachers are a source of information that can be used as a learning guide. Textbooks for students are learning resources that can improve their abilities so that the learning objectives that have been established can be achieved. Textbooks for the learning process play a role in the selection and delivery of learning materials, facilitate the learning process, improve classroom management, enable students to follow the description of learning materials, and can be used to train students' independence ([Supriyadi, 2018](#)). Based on the above opinion, it can be concluded that textbooks are one of the learning media that teachers and students can use to support the learning process in the classroom.

The functions of textbooks are: As reference material; for educators and students, textbooks function for teachers is to drive all their activities in the learning process as well as the substance of competencies that must be taught to students. The function of teaching materials for students is to become a guide in the learning process and is a substance of competence that should be learned. As an evaluation material; Textbooks also function as an evaluation tool for achieving learning outcomes. A good textbook at least includes study instructions, competencies to be achieved, lesson content, supporting information, exercises, work instructions, evaluations and responses to evaluation results. As a tool in implementing the curriculum; as we know textbooks are an inseparable part of the curriculum. Where textbooks are structured as a form of implementation contained in the curriculum. So that the contents of the textbook will always be in line with the objectives of the curriculum ([Rosita et al., 2019](#)).

The character of conservation or caring for the environment is a character that seeks to prevent damage to the natural surroundings and strives to preserve the natural surroundings ([Gunawan et al., 2019](#)). The character of conservation is the behaviour of humans who are

influenced by the environment in which they live, The environment in which they live and grow up and shape the good character of humans can be achieved in the world of "Education" because by attending school the development of good character will be formed. In addition, humans must pay attention to their surroundings, when they associate with good people, they will be good to themselves and vice versa ([Nuh M., et al., 2010](#); [Maryati, M., & Sianturi, R., 2020](#)).

Conservation character should be taught as early as possible ([Ashuri et al., 2021](#)). The character of caring for the environment in early childhood can be developed by instilling conservation values in an effort to overcome the problem of environmental damage, if the child's character has been formed since childhood starting from the social environment to elementary school, then the Indonesian generation will become human beings with character and able to become the successor of the nation in the pursuit of justice, truthful, and responsible society ([Fitriyannisa et al., 2021](#)).

Digital literacy is a person's ability to utilize, use, create information, and evaluate digital media and communication tools and everything related to digital. So, digital literacy is a person's ability to operate computer and network devices properly and wisely ([Sutisna & Gede, 2020](#)). Digital literacy is defined as the ability to analyze, understand, assess, comprehend, organize, and evaluate information using various types of digital media ([Pratiwi et al., 2017](#)). Based on the opinions of several experts above, it can be concluded that digital literacy is an individual's ability to use and utilize various digital media wisely. Science learning in this study focuses on the theme "Save Living Creatures." The material for saving living things is included in the first theme of learning in grade VI elementary school. The theme of saving living things is divided into three sub-themes, namely my best friend plants, my best friend animals, and let's save animals and plants ([Nusantari et al., 2021](#)).

In this study, focusing on conservation activities in terms of protection, teachers must be able to foster a conservation spirit in students, especially in terms of protecting biodiversity on the coast. Protection activities are activities that are appropriate for elementary school children because protection is the first step in conservation activities and can be carried out by students compared to activities for preserving and sustainably using natural resources which are difficult for elementary school students to do. Conservation is an effort made by individuals or groups to preserve nature. However, many people actually think that conservation is not important, so many problems arise due to a lack of human awareness ([Mittermeier et al., 2003](#)). Lack of awareness from humans causes destruction to nature, to make humans aware that they will no longer do things that can cause a decrease in environmental quality, and humans will stop doing things that damage nature and instead perform activities that can preserve nature. Several ways can be done such as counselling, guidance, and teaching about the importance of protecting nature from an early age starting from elementary school ([Manik, 2019](#)).

Based on a survey conducted by the author on science teachers at SDN 04 Popayato, learning media using e-books has never been implemented at SDN 04 Popayato schools. Apart from that, when the fish harvest time comes, class VI students do not attend school and choose to help their parents. For this reason, researchers use e-book media to make it easier for students to study from home. The author also discovered the fact that students at SDN 04 Popayato are not yet accustomed to using cell phones in everyday life, especially for purposes in the learning process, such as doing assignments with the help of the internet, while in the current era of modernization, (IT) is very necessary in various aspects including in the learning process, while class VI students at SDN 09 Popayato are used to using cellphones in everyday life, and know how to search for learning materials via the internet. SDN 04 Popayato school is also equipped with Wi-Fi facilities so that it really supports the application of e-book media in learning. The learning media in the form of e-books used is the result of development research carried out previously, for this reason, researchers continue to use e-book media in

the learning process in the classroom. Based on this explanation, the author found that in order to optimize learning activities in schools that become research locations, it is necessary to conduct a study on the use of learning media by students.

Methods

Research Design

The method in this study is quantitative, with the research design True Experimental Design, and the form of the research design used is Posttest-Only Control Design. According to [Muhajirin\(2017\)](#), this research design aims to investigate the possibility of cause and effect with a design in which there is a treatment group and a control group, and compare the results of the treatment with the control that was not subjected to the treatment condition. The research design as Table 1.

Table 1. Posttest-Only Control Design

Class	Treatment	Final Test
R ₁	X ₁	O ₁
R ₂	X ₂	O ₂

Source: (Muhajirin, (2017)

Population and Samples

The population in this study were coastal elementary schools in Pohuwato district, especially Torosiaje Village, and with purposive sampling technique, the samples in this study were coastal schools specifically for class VI students at SDN 04 Popayato who were taught using e-book media, which was an experimental class 1 with a total of 17 students. and SDN 09 Popayato as an experimental class 2, which was taught using textbooks, with 22 students.

Instrument

The research instruments used in this study were the Learning Implementation Plan (RPP), Student Worksheets (LKPD), conservation character questionnaires, and digital literacy questionnaires. Questionnaires are used to ask questions to students, which will be answered later. This aims to see the level of conservation character and students' digital literacy abilities. Questionnaires were given to both experimental1 and experimental2 classes. After students fill out all of the questions, the questionnaire will be returned to the researcher for further processing. Based on the opinion expressed by Widoyoko in [Purnomo, \(2016\)](#) the questionnaire is categorized into a Likert scale, which uses four alternative scale options, as follows:

- SS : Strongly Agree
- S : Agree
- TS : Don't Agree
- STS : Totally Disagree

The questionnaires created consist of a conservation character questionnaire and a digital literacy questionnaire. Before being implemented in research, the questionnaires that have been created will first be validated so that the questionnaires used in research are truly valid. The following are the indicators and sub-indicators of conservation character and digital literacy, respectively, in Tables 2 and 3.

Table 2. Conservation Character Indicators and Sub-Indicators

Indicators	Sub Indicators
Students' caring attitude towards the environment and the reproduction of plants and animals in coastal areas	Have an awareness of maintaining environmental stability and the reproduction of plants and animals in coastal areas
	Have curiosity, be critical, and care in determining the benefits of the environment and plants and animals in coastal areas
	Examining the consequences that would occur if the environment and the reproduction of plants and animals in coastal areas were disturbed
	Expressing creative ideas through images in an effort to protect the environment and create phases for the reproduction of plants and animals in coastal areas
	Carrying out mangrove planting activities as a participatory-based biodiversity conservation effort

Table 3. Digital Literacy Indicators and Sub-Indicators

Indicators	Sub Indicators
Ability to search for information on the internet	<ol style="list-style-type: none"> 1. Ability to search information on the internet using search engines 2. Ability to carry out activities and fulfil information needs via the internet
Ability to use hypertext directional guides	<ol style="list-style-type: none"> 1. Have knowledge about hypertext and hyperlinks and how they work 2. Ability to differentiate between textbooks and the internet 3. Knowledge of how web browsers work, bandwidth, HTTP, HTML, and URL. 4. Ability to understand the characteristics of website pages
Ability to organize knowledge (knowledge construction)	<ol style="list-style-type: none"> 1. Ability to create personalized newsfeed notifications 2. Ability to analyze the information obtained 3. Ability to use various types of media to obtain valid information 4. Ability to compile knowledge from the information obtained.
Ability to evaluate information content (content evaluation)	<ol style="list-style-type: none"> 1. Ability to differentiate between display and information content 2. Ability to analyze website pages 3. Ability to analyze background

The researchers obtained documentation from related parties to find out the history of the school, the condition of the teachers and students as well as the existing facilities and infrastructure at the coastal school in Torosiaje Village.

Data Analysis Techniques

The research instrument was analyzed using Content Validity Ratio (CVR) according to Lawshe ([Mardin et al., 2022](#)) with the following formula:

$$CVR = \frac{ne - \frac{1}{2}N}{\frac{N}{2}}$$

Information:

CVR : Content Validity Ratio (RVI)

Ne : The number of validators agreeing on the validity of the media (considered agree if criterion value 3 or 4, if < 3 then it is considered not agreeing to the validity of the media)

N : Total number of validators

After getting the calculation results for each criterion using the Content Validity Ratio (CVR), calculate the overall average value using the CVR (Content Validity Index) formula as follows:

$$CVI = \frac{CVR}{\text{Number of Criteria}}$$

The values of CVR and CVI that have been obtained are then categorized as follows:

- $0 \leq 0,33$: Invalid
 $0,34 \leq 0,67$: Quite Valid
 $0,68 \leq 0,99$: Valid (Lawshe in [Mardin et al., 2022](#))

Questionnaire Presentation

The conservation character questionnaire and the digital literacy questionnaire that was given to experimental class-1 and experimental class-2 were calculated for the percentage of achievements from both classes. This aims to determine differences in the use of learning media in the two classes. The formula used is:

$$\frac{\text{Total Score}}{\text{Maximum Score}} \times 100\%$$

Source: ([Sugiyono, 2007](#)).

Table 4. Questionnaire Indicator Criteria

No	Presentation (%)	Criteria
1	0-20	Very Less
2	21-40	Less
3	41-60	Enough
4	61-80	Good
5	81-100	Very Good

Source: ([Sugiyono, 2007](#)).

Normality Test

The normality test aims to see whether the sample data is normally distributed or not, because the amount of data is different. For the experimental class, there are 17 people, while the control class is 22 people, so the statistics for different amounts of data use the Shapiro-Wilk test as follows:

$$T2 = \frac{1}{D} (\sum_{i=1}^k a_i (X_{n-1+1} - X_i)^2)$$

$$D^2 = \sum_{i=1}^n (X_i - \bar{X})^2$$

Information:

- a_1 = Test Coefficient Shapiro-Wilk
 X_{n+1} = The n-1+1 number in the data
 X_1 = The 1st number in the data
 \bar{X} = Data Average (Sugiyono, 2007).

The decision rules with a significant level of 5% are as follows:

If the significant value is > 0.05 , the research data is normally distributed

If the significant value < 0.05 then the research data is not normally distributed ([Sugiyono, 2007](#)).

Homogeneity Test

This variance test aims to see whether the two data are homogeneous or not. The homogeneous test that will be used in this study is the F test, the formula is as follows:

$$f_{\text{Count}} = \frac{\text{The Greatest Variety}}{\text{The Smallest Variety}}$$

Source: [\(Sugiyono, 2007\)](#)

The decision rules with a significant level of 5% are as follows:

If the significant value is > 0.05 then the research data is homogeneous

If the significant value < 0.05 then the research data is not homogeneous (Sugiyono, 2007).

Hypothesis Test

After carrying out the normality and homogeneity tests, a hypothesis test will be carried out. hypothesis testing was carried out to measure the effect of conservation character and digital literacy skills after learning using E-Book media. As for statistical testing, the formula is as follows:

$$t = \frac{\overline{x1} - \overline{x2}}{\sqrt{\frac{S1^2}{n1} + \frac{S2^2}{n2}}}$$

Information:

t = Count Value

$\overline{x1}$ = The Average Value of The Experimental Class

$\overline{x2}$ = The Average Value of The Control Class

n_1 = Number of Experimental Class Respondents 1

n_2 = Number of Experimental Class Respondents 2

S = Baku Devi

Source: [\(Sugiyono, 2007\)](#).

The decision rules with a significant level of 5% are as follows:

If the value is significant > 0.05 then = H_0 is rejected, H_1 is accepted

If the significance value < 0.05 , then H_0 is accepted, and H_1 is rejected (Sugiyono, 2007).

Results and Discussion

After obtaining the CVR value, it is then averaged to get the CVI value, and the results at Table 5.

Table 5. CVI value from two validators

Research Instrument	CVI	Criteria
(LKPD)	1.6	Valid
(RPP)	1,2	Valid
Conservation Character Questionnaire	1.1	Valid
Digital Literacy Questionnaire	1.1	Valid

Questionnaire Presentation

The results of the calculation of the percentage of conservation character questionnaires in experimental class 1 and experimental class 2 are as Figure 1.

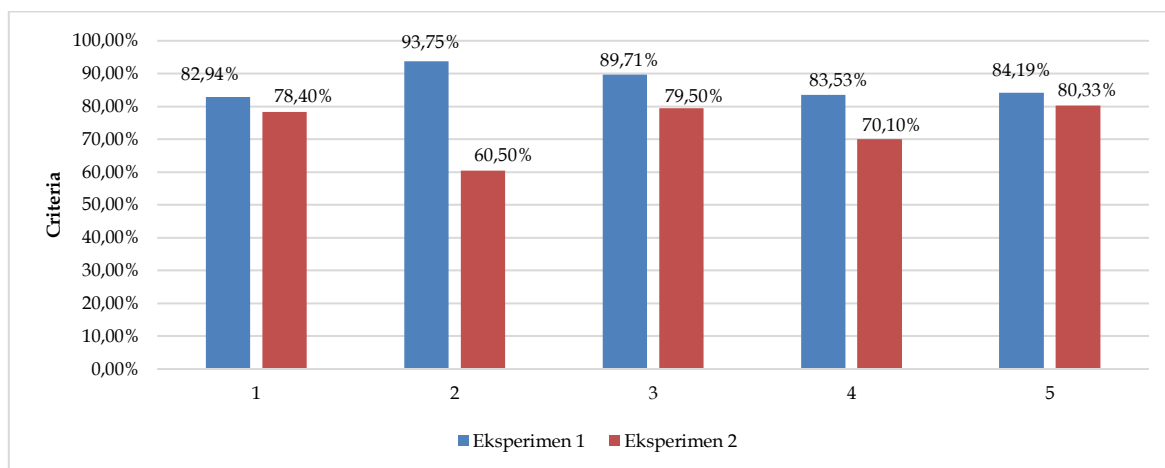


Figure 1. Percentage of Conservation Character Questionnaire

Based on the picture above, the percentage calculation is based on the indicator items in the questionnaire, the conservation character indicators are five indicators that are analyzed for each indicator, to find the percentage of the questionnaire with the help of Microsoft Excel. In indicator 1, namely having an awareness of maintaining environmental stability and breeding plants and animals in coastal areas, the experimental class 1 got a percentage of 82.94% while the experimental class 2 got a percentage of 78.40%. In the second indicator, namely having curiosity, being critical and caring in determining the benefits of the environment as well as plants and animals in coastal areas, the experimental class 1 gets a percentage of 93.75% while the experimental class 2 gets a percentage out of 60.50%. In the second indicator, examining the consequences of disrupting the environment (including the breeding of plants and animals) in coastal areas, the experimental class 1 gets a percentage of 89.71% while the experimental class 2 gets a percentage of 79.50%. In the fourth indicator, pouring creative ideas through pictures in an effort to protect the environment and making phases of plant and animal breeding in coastal areas, the experimental class got a percentage of 83.53% while the experimental class got a percentage of 70.10%. In indicator 5, namely carrying out mangrove planting activities as participatory-based efforts to conserve biodiversity, the experimental class 1 received a percentage of 84.19% while the experimental class 2 received a percentage of 80.33%.

The results of calculating the percentage of digital literacy questionnaires in experimental class 1 and experimental class 2 can be seen in Figure 2.

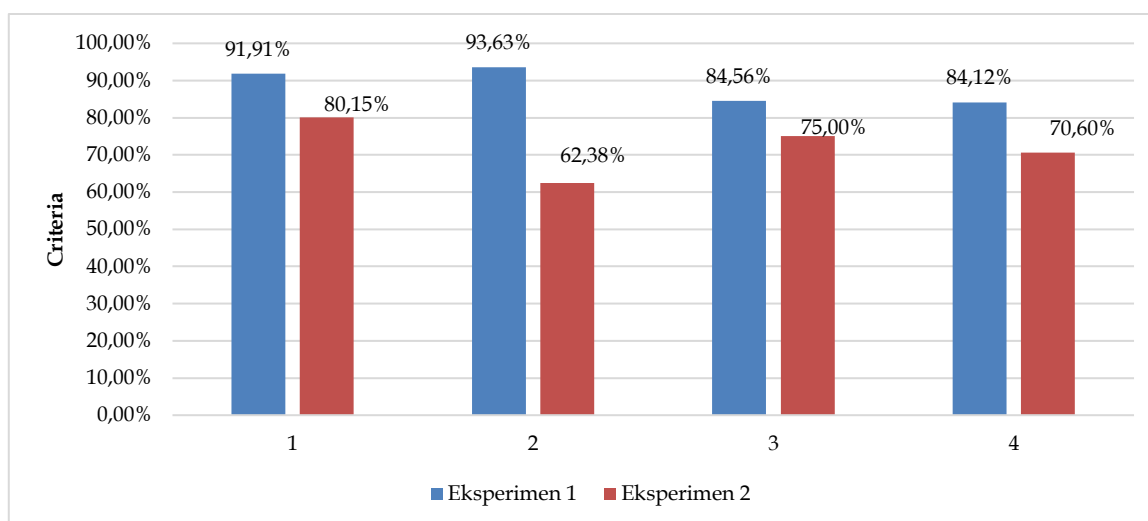


Figure 2. Percentage of Digital Literacy Questionnaire

Based on the picture above, the percentage calculation is based on the indicator items in the digital literacy questionnaire, totaling four indicators, which are analyzed for each indicator, to find the percentage of the questionnaire with the help of Microsoft Excel. In indicator 1, namely the ability to search information on the internet, the class for experimental class 1 gets a percentage of 91.91% while experimental class 2 gets a percentage of 80.15%. In indicator 2, namely the ability to use hypertext guides, the experimental class 1 gets a percentage of 93.63% while the experimental class 2 gets a percentage of 62.38%. In the third indicator, namely the ability to compile knowledge (knowledge assembly), experimental class 1 gets a percentage of 84.56% while experimental class 2 gets a percentage of 75.00%. In the fourth indicator, namely the ability to evaluate information content (content evaluation), the experimental class 1 got a percentage of 84.12%, while the experimental class 2 got a percentage of 70.60%.

Normality Test Result

The value of the results of completing the questionnaire that has been done by students, then a normality test is carried out, which aims to see whether the sample is normally distributed or not. The research was conducted in two different schools with different numbers of samples. For this reason, the normality test for different numbers of samples uses the Shapiro-Wilk test. To make it easier for the authors to analyze the data, the authors used SPSS version 26. Tables 6 and 7 show the results of the normality test.

Table 6. Conservation Character Questionnaire Normality Test

		Tests of Normality					
		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Control Class and Experiment	Statistic	df	Sig.	Statistic	df	Sig.
Conservation Character Questionnaire	Experiment 1	.182	22	.057	.912	22	.055
	Experiment 2	.171	17	.199	.929	17	.213

Table 7. Digital Literacy Questionnaire Normality Test

		Tests of Normality					
		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Control Class and experiment	Statistic	df	Sig.	Statistic	df	Sig.
Digital literacy questionnaire	Experiment 1	.195	22	.029	.954	22	.376
	Experiment 2	.146	17	.200*	.938	17	.298

Homogeneity Test Result

After the data is declared normal, proceed with homogeneity testing. The homogeneity test aims to see whether the two datasets are homogeneous or not. The homogeneity test was carried out by means of the ANOVA test to make it easier for the writer to analyze the data; the writer used the help of SPSS version 26. Tables 8 and 9 show the results of the homogeneity test.

Table 8. Conservation Character Questionnaire Homogeneity Test

		Test of Homogeneity of Variances			
		Levene Statistic	df1	df2	Sig.
Digital Literacy Questionnaire	Based on the Mean	1.316	1	37	.259
	Based on the Median	.896	1	37	.350
	Based on Median and with adjusted df	.896	1	34.243	.350
	Based on trimmed mean	1.178	1	37	.285

Table 9. Digital Literacy Questionnaire Homogeneity Test

		Test of Homogeneity of Variances			
		Levene Statistic	df1	df2	Sig.
Karakter konservasi	Based on Mean	.024	1	37	.878
	Based on the Median	.094	1	37	.761
	Based on Median and with adjusted df	.094	1	36.997	.761
	Based on the trimmed mean	.043	1	37	.838

Based on the results of the normality test from the conservation character questionnaire and digital literacy questionnaire using SPSS type 26, a significant value of > 0.05 is obtained, meaning that the data is homogeneous

After the data is declared to be normally distributed and homogeneous, then it is continued with hypothesis testing, in testing the hypothesis using the t-test, to facilitate data analysis, the authors use SPSS version 26. The results of the t-test are in Tables 10 and 11.

Table 10. Test the Conservation Character Questionnaire Hypothesis

		Independent Samples Test								
		Levene's Test for Equality of Variances				t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
Conservation Character Questionnaire	Equal variances assumed	.024	.878	-34.953	37	.000	-29.471	.843	-31.179	-27.762
	Equal variances not assumed			-35.211	35.435	.000	-29.471	.837	-31.169	-27.772

Table 9. Digital Literacy Questionnaire Hypothesis Test

		Independent Samples Test								
		Levene's Test for Equality of Variances				t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
Digital Literacy	Equal variances assumed	1.316	.259	-30.500	37	.000	-28.107	.922	-29.974	-26.240
	Equal variances not assumed			-29.779	29.569	.000	-28.107	.951	-30.049	-26.165

Based on the results of testing the hypothesis using the t-test of the conservation character questionnaire and digital literacy questionnaire using SPSS type 26, a significant value of > 0.05 was obtained so that "H0 is rejected and H1 = accepted". Learning using e-book media and using textbooks was carried out in the classroom for 3 meetings and 1 meeting was held outside the classroom, namely by planting mangrove trees and cleaning up trash around

the school. Learning from the two classes got different percentage values, in experimental class-1 taught using e-book media, obtained a percentage of the conservation character questionnaire with an average of 86.82% while experimental class-2, which was taught using textbooks, obtained an average percentage of 73.76%. Digital literacy questionnaire The experimental class 1, namely the class taught using e-book media, obtained an average percentage of 88.55% while the experimental class 2 which was taught using textbooks obtained an average percentage of 72.03%.

Conservation character and digital literacy abilities in both classes were then analyzed using SPSS type 26 based on the results of hypothesis testing obtained that a significant value of $0.000 < 0.05$ on the digital literacy questionnaire so it was concluded that H_0 was rejected and H_1 was accepted meaning that there is a significant difference to the conservation character of students in the experimental class1 as the class that taught using e-book media and the experimental class2, which was taught using textbooks in coastal schools.

Discussion

Learning through e-book media is able to provide motivation for high interest in learning while encouraging class VI students to more easily master the material taught using e-books independently ([Khikmawati et al., 2021](#)). Apart from that, e-books are very easy for students to access, by simply clicking on the link that has been shared so that the e-book can open automatically on the students' cellphones. E-books also make it easier for students to carry out assignments given by the teacher, e-books are also equipped with learning videos that will help students understand the learning material. The mangrove planting activity carried out by both classes was able to foster conservation character in students. Reconstructing science learning will foster good character in students ([Khusniati, 2014](#)). If students are able to understand science well, it will have an effect on improving their good morals. Science learning helps improve students' conservation character and students will be more able to appreciate the environment. Students in the learning process should not only use books as a learning resource but students also be directed by the teacher to explore the environment as a learning resource ([Katili, 2018](#)). Learning using e-book media is able to increase students' digital literacy which consists of: Tool literacy is competence in using software and hardware (1). Source literacy is defined as an understanding of learning resources via the internet (2). Structural social literacy is an understanding of how to search for information/material via the internet (3). Research literacy is the use of information technology for knowledge (4) ([Hadayani et al., 2020](#)). The concept of digital literacy actually cannot be separated from two points of view. First, computer literacy is a person's technical ability to use computer devices. Meanwhile, the second, information literacy, is a person's ability to find, use, package, evaluate and disseminate digital information correctly ([Safitri et al., 2020](#)). By utilizing mobile phones and available Android application facilities, it is possible to optimize digital literacy when it is related to learning, so it is very possible to improve the quality of education in elementary schools ([Masitoh, 2018](#)).

Learning to train digital literacy skills has received very good appreciation from the school because it is able to support the school's mission, such as to improve children's achievements in the field of technology, in line with the research the school will also try activities outside of learning hours (extracurricular) for students to carry out training. use of cellphones in learning, As stated by Yulisnawati et al, (2021) strengthening digital literacy in elementary schools is linked to strengthening extracurricular activities, digital literacy implemented in elementary schools (SD) is closely related to the implementation of the launch of School Literacy Movement (GLS) which has already been implemented by the government.

Conclusion

The use of e-book media to foster a conservation character in students at SDN 04 Popayato obtains a high average, meaning that e-book learning media is proven to be able to foster a conservation character and digital literacy skills in science subjects at coastal schools. The use of textbooks for students at SDN 09 Popayato to foster a conservation character obtained a good average percentage, while digital literacy skills were trained indirectly by filling out the LKPD provided by the teacher, so learning using textbooks was not fully able to train students' digital literacy skills.

Schools should create activities that are able to influence the character of conservation, for example, conduct mangrove planting activities to commemorate Environmental Day. Schools are also expected to be able to influence students' digital literacy skills by holding extracurricular activities such as training on the use of computers or cell phones in learning. Teachers are expected to be able to create enjoyable learning, not only learning in the classroom but activities outside the classroom are also needed, such as mangrove planting activities.

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