Ecolife Media Effect on Students’ Eco Intelligence Ability in Social Studies Learning

Eldi Mulyana¹(T), Tetep², Slamet Nopharipaldi Rohman², Triani Widyanti², Asep Supriyatna², Indra Cahya Uno², Lili Diahna², Alni Dahlena², Andre Zaenal Mutaqin², and Saddam²

¹ Program Doctoral Social Science Education, Universitas Pendidikan Indonesia and Social Science Education Study Program, Institut Pendidikan Indonesia Garut, Garut, Indonesia
² Social Science Education Study Program, Institut Pendidikan Indonesia Garut, Garut, Indonesia

Abstract. Problems about the environment are still mostly given to the cognitive domain, so it is not surprising that what happens is that knowledge about the environment is memorized. Along with the development of technology and lifestyle, containers and packaging of natural food are starting to be abandoned by the community, including students and are identified with rundown, unhygienic, impractical. The purpose of this study is to analyze the effect of using ecolife applications as social studies learning media in growing students’ ecological intelligence. The research method used is descriptive quantitative, with the student population at SMPN 1 Garut and the sample being class VIII students. His data collection techniques with questionnaires, observations and interviews. The data analysis technique is a simple linearity test and hypothesis testing and the coefficient of determination. The results of this study indicate that there is a significant effect when the application of ecolife media on students’ eco intelligence. So that students understand about nature as social beings who have a relationship with the environment. Thus, ecological intelligence in students can be done by bringing students’ experiences into the classroom and these experiences are packaged and integrated into social studies learning materials.

Keywords: Media Eco Life · Eco Intelligence · Social Studies Learning

1 Introduction

The phenomenon of the development of technology, information, and communication greatly affects the development of learning media. As a tool that supports the learning process to achieve a learning goal, a learning media is required to quickly adapt to the times. One of the media that is widely used in conditions as it is now is the e-learning application, by utilizing media or the help of electronic devices, it is expected to increase the effectiveness and efficiency of learning activities. In the era of the Industrial Revolution 4.0, education is required to be more creative, innovative, effective, independent

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and more intelligent. If education no could adapt on era this, then school graduates are no longer relevant to be someone who is useful to Public. Besides that, Industrial Revolution 4.0 has made society more easier to do activities with more effective and efficient time. In this Era technology information has Becomes base in life man including in in the field of education in Indonesia, even in the world that is currently entering the era of revolution social industry 5.0 [1].

Basically social studies learning as this subject can be integrated with any subject, it makes social studies subjects a requirement for values that make it a subject that is rich in value. One of them is the value of environmental education. This value is also integrated in social studies subjects. Environmental Education was originally a stand-alone subject, but because of its urgency in studying the environment in which humans live, this subject was merged or integrated into other subjects, in which this subject should be taught from the elementary level. lowest to high school because these subjects are directly related to the activities we do every day. As the name implies, this subject is related to the environment or the environment in which humans live (Biosphere) [2].

The development of interesting and effective social studies learning media to cultivate students’ ecological intelligence in accordance with the times and technology.

Based on the development of human activities every day leads to waste, including waste from packaging for consumption products. The packaging of consumer products is still considered to be just food and beverage packaging which tends to be considered a “protector”, which after being consumed, the contents are then thrown away and most of them become pollutants for the environment [3]. Before technology and industry moved fast enough, the history of packaging for consumer products could not be separated from materials sourced from nature. Especially leaves such as banana leaves, corn leaves, to containers woven from bamboo. Along with the development of technology and lifestyle, these natural food containers and wrappers have begun to be abandoned by the community, including students and are identified with slums, unhygienic, and impractical.

The context of the application (ecolife) as a learning medium for Social Science subjects in fostering ecological intelligence in students. So that it grows students’ ecological intelligence in social studies learning, so that it becomes input for formal and non-formal institutions in using digital-based learning media that can grow students’ ecological intelligence [4]. Learning media for the application of eco life is the behavior of consumers who choose, use and buy both products and services carefully by paying attention to their impact on the environment. Eco Intelligence, the implementation of students’ environmental intelligence will be realized in life both in educational institutions and in society. When students have applied intelligence social, start from management rubbish so by direct will capable utilise Thing which no beneficial Becomes beneficial and could reduce accumulation of garbage in the environment and students will begin to realize the importance of guard environment [5]. Because environment clean will give convenience on every creature life and reduce pollution. In an effort to save the earth from all the damage that exists, there are many things humans can do to save it. One simple effort that can be done starting from small things is to apply the Eco-Friendly Traditional House concept through the Ecolife Application. Thus, most of the problems regarding the environment are still only given to the cognitive domain, so it is not surprising that
what happens is that knowledge about the environment is memorized, dwelling only on definitions from student text books, until student evaluation sheets are very rare which measure from the affective and psychomotor aspects involved related to environmental problems [6]. This is where ecoliteracy becomes urgent, to be applied in learning. The learning process to improve ecoliteracy requires approaches, media and learning resources that invite students to be actively involved directly, the learning process must provide opportunities for all students so that students can develop their potential [7].

The learning process that will direct students to be active by involving all senses, both physically and intellectually with the student’s own experience, as part of the reality of student life, especially in social studies subjects which are closely related to humans and the environment.

2 Research Methods

The research uses a quantitative approach with descriptive type in order to describe and provide a description of the research subject based on data from the variables studied [8]. Data processing using SPSS version 25. The population in the study was 250 students at SMPN 1 Garut while the sample is 34.

Respondents who were selected randomly using simple random sampling technique where this technique provides equal opportunities for every member in the population. The students who were sampled were class VIII. The variables measured were eco life, and eco intelligence which were then statistically tested to see the magnitude of the correlation and partial effect.

3 Results and Discussion

Based on the research results that Ecolife which contains the concept of Eco-Friendly Traditional House is here to provide solutions to environmental problems. The application of the concept of an environmentally friendly house can be applied in everyday life. This is in line with the sustainable development goals or known as the Sustainable Development Goals (SDGs) which is a global action plan agreed by world leaders including Indonesia, in order to end poverty, reduce inequality and protect the natural environment which can assist the community in applying the Eco-Friendly Traditional House concept [9]. Based on the results of the research that through the data analysis test includes:

3.1 Normality Test

Normality test is useful to find out the data from the research results are normally distributed or not. The following are the results of the normality test for the X and Y variables as shown in Table 1.

Based on the results of the normality test of the questionnaire data using the One Sample Kolmogorov-Smirnov Test, the significance value of the X and Y variables is 0.965 with of 0.05, so that because 0.965 > 0.05 it can be concluded that the data distribution is normally distributed.
The use of linearity test is to determine the relationship between the independent variable and the dependent variable is linear or not significantly. This test was carried out with the help of SPSS 25.0 with the following criteria:

If the significance value is > 0.05, then the variables X and Y have a linear relationship.

If the significance value is < 0.05, then the variables X and Y do not have a linear relationship (Table 2).

Based on the linearity test that has been carried out, it can be seen that the significance value is 0.624 > 0.05, so it can be concluded that there is a linear relationship between the X variable “eco life” and the Y variable “eco intelligence”.

### Table 1. Normality Test Results

<table>
<thead>
<tr>
<th>One-Sample Kolmogorov-Smirnov Test</th>
<th>Unstandardized Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>20</td>
</tr>
<tr>
<td>Normal parameters a</td>
<td></td>
</tr>
<tr>
<td>Parame- mean</td>
<td>.0000000</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>6.24631324</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
<td></td>
</tr>
<tr>
<td>Absolute</td>
<td>.112</td>
</tr>
<tr>
<td>Positive</td>
<td>.112</td>
</tr>
<tr>
<td>negative</td>
<td>-.092</td>
</tr>
<tr>
<td>Kolmogorov-Smirnov Z</td>
<td>.499</td>
</tr>
<tr>
<td>asympt. Sig. (2-tailed)</td>
<td>.965</td>
</tr>
</tbody>
</table>

a. Test distribution is Normal.

(Source: Data Normality Test, SPSS 25.0, 2022)
Hypothesis testing aims to test the level of significance so that it can determine the significance of the degree between variables X and Y. For this reason, in this study, it is revealed that the hypothesis used is as follows:

Ha: There is an influence of eco life media on the eco intelligence of students at SMPN 1 Garut

Ho: There is no effect of eco life media on the eco intelligence of students at SMPN 1 Garut (Table 3).

Based on the table, it is obtained that data $t_{hitung} = 5.952$ can be concluded that $t_{table} = 2.101$ if $t_{hitung} > t_{table}$, the hypothesis which states that there is a relationship between eco life and eco intelligence, in other words, Ha is accepted.

Based on the table above, it can be concluded that the magnitude of the value obtained by the coefficient of determination (R Square) is 0.663, which means that the effect of variable X on variable Y is 66.3%. For the remaining 33.7% influenced by other variables not examined in this study. Based on this, the reason students have to start preferring eco life is because of the convenience provided to consumers in meeting their needs [10].

### Table 3. Hypothesis Test Results

<table>
<thead>
<tr>
<th>Model</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Constant)</td>
<td>-.185</td>
<td>.855</td>
</tr>
<tr>
<td>Eco life and eco intelligence</td>
<td>5.952</td>
<td>.000</td>
</tr>
</tbody>
</table>

(Source: t-test against t-table, SPSS 25.0, 2022)
Based on eco life media that provides *Eco Tips features, Traditional Village House Philosophy, Eco Materials, and Eco Home Design*. The first feature, namely *Eco Tips*, contains information about tips on protecting the environment and interesting tips in realizing an environmentally friendly home [11]. This feature Then the second feature, namely the *Traditional Village House Philosophy*, contains information related to the values of local wisdom from several Traditional Village houses in Indonesia. This is based on the fact that the traditional village house has its own philosophy which is of course related to environmental sustainability, disaster mitigation, and the social life of the community [12]. Furthermore, the third feature, namely *Eco Material*, contains information on materials and materials that are environmentally friendly and in accordance with the principles of environmental sustainability to be used as building materials in the manufacture of environmentally friendly homes, and the fourth feature, namely *Eco Home Design*, contains information about home designs. Modern which is of course environmentally friendly and has a sustainable aspect because it is inspired by traditional village houses in Indonesia.

Based on the picture, eco life media can teach Green Consumer behavior, which is rational consumer behavior who is able to refuse to share the offer of global capitalists and free market economic systems, through packaging of information technology and advertisements in sharing media [13]. Then so that people who have a willingness to pay higher for environmentally friendly products create greater opportunities for companies and governments to produce environmentally friendly products [14]. So that in social studies learning, ecological intelligence is also integrated because it is based on intellectual, social, emotional and naturalistic intelligence and places empathy for living things as a positive attitude towards environmental conservation [15]. It studies the relationship between humans and the environment. And to grow ecological intelligence in students, it
can be done by bringing students’ experiences into the classroom and these experiences are packaged and integrated into social studies learning materials (Fig. 1).

The application of media, learning can also be more meaningful, namely learning can not only increase aspects of knowledge about adding information in the form of data and facts but also improve aspects of attitudes and skills [16]. Through the use of learning media is expected to equalize the perception of each student, so that each student has the same view of the information conveyed by educators. Based on the opinions of the experts above, it can be concluded that the purpose of learning media is used to facilitate and assist students in the learning process so that learning objectives can be achieved.

4 Conclusion

Based on the results of research that has been carried out at SMPN 1 Garut, it is related to the existence of eco-life-based learning media on students’ eco-intelligence, especially in social studies learning, especially in studying the relationship between humans and the environment. And to grow ecological intelligence in students, it can be done by bringing students’ experiences into the classroom and these experiences are packaged and integrated into social studies learning materials. So that students will be realized in life both in educational institutions and in society. When students have applied intelligence social, start from management rubbish so by direct will capable utilise Thing which no beneficial Becomes beneficial and could reduce accumulation of garbage in the environment and students will begin to realize the importance of guard environment.

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References


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