

The Effectiveness of Adiwiyata Program in Creating Ecoliteration

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ABSTRACT

The purpose of this research is to create ecoliteracy through schools that care about the environment in the Adiwiyata program, as support for sustainable development goals. This program seeks to change behavior and attitudes, as well as increase students' knowledge, awareness and skills related to environmental values and issues. There are four components in adiwiyata to support the creation of an environmentally cultured school, so as to produce an ecoliterate generation, both in terms of knowledge, attitude and behavior. This mixed method research was conducted in adiwiyata and non-adiwiyata schools, then compared based on the same instrument. The results showed that the average score of students' knowledge, attitudes and behavior in Adiwiyata schools was better than in non-adiwiyata schools. These results are very influential in increasing student ecoliteracy. The highest scores are in the aspects of knowledge and attitudes, while the lowest scores are in the aspects of behavior in the school environment. That is, students' environmentally friendly behavior in the school environment is better than outside the school environment. These results indicate that the implementation of the adiwiyata program has proven effective in building students' ecoliteracy in schools. However, it needs to be developed so that environmentally friendly behavior outside of school can be improved so that students' ecoliteracy becomes better, as an effort to support behavior change towards the environment that is promoted by sustainable development goals.

Keywords: Adiwiyata, Effectiveness, Ecoliteracy, Sustainable Development Goals.

1. INTRODUCTION

The environment is an important element for human survival [1]. environment and humans can influence each other [2]. If the environment is damaged, human activities will be disrupted. Therefore, humans must protect, maintain and preserve the environment [3]. the index of behavior of people's indifference to the environment (IPKLH) is still relatively high [4]. The highest indexes are found in waste management and use of private transportation, namely 0.72 and 0.71. Therefore the government is trying to make various ways and innovations to overcome this through education for sustainable development for the future [5].

Environmental education is an important step to change the paradigm and behavior of the global community towards sustainable development [6]. The values inherent in sustainable development are directly integrated through learning aspects [7], so that humans are more responsible for sustainability in the future.

However, environmental education alone turns out to be ineffective because it will only increase knowledge, it has not touched the attitudes and behavior of students in efforts to protect and manage the environment in schools [8].

Based on Indonesian government regulations (PERMENLHK) Number P.52/MENLHK/SETJEN/KUM.1/9/2019 explained that [9], environmental education is an effort to increase knowledge, skills, attitudes and caring actions of individuals, communities, organizations and various parties to environmental problems, which combines learning and action, educating students to partner with nature, through the Caring and Cultured Environment Movement Life at School (*Gerakan PBLHS*), so as to give birth to a generation that is coliterate, both from the aspect of knowledge, attitude or behavior that is environmentally friendly, so that it has a positive impact not only on the school environment, but also on the family environment and the surrounding community [9].

An environmental case was found in the south coast area. Of the 15 existing districts, District IV Jurai is one of the sub-districts that contributes to increasing pollution, especially from waste generation. Most of the waste generated comes from schools consisting of food waste, paper, plastic and cans. The second problem is that the highest amount of yard waste comes from offices and followed by housing. If waste management is not carried out properly, it will become a threat to the environment in the future. There are 530 schools in Pesisir Selatan district, 92 of which are schools with an environmental culture through the Adiwiyata Awards, both District, Provincial, National and Independent Adiwiyata [10].

Some research results conclude that schools with an adiwiyata predicate are considered to have succeeded in forming the character of caring for the environment. However, there is no clear monitoring and evaluation mechanism for the adiwiyata program that supports this theory, so its effectiveness cannot be tested. Therefore, the problem is how far the effectiveness of the adiwiyata program is in building students' ecoliteracy, both from the aspects of knowledge, attitudes and responsible behavior towards the environment.

2. RESEARCH METHODS

2.1. Types of research

This research is a mixed method research which aims to reveal comprehensive natural objective conditions (qualitative and quantitative).

2.2. Population

The population of this study were school principals, Adiwiyata Team, teachers and students of MTsN I Pesisir Selatan (adiwiyata school) and SMP Negeri 3 Painan (non-adiwiyata school).

2.3. Sampel

This research is a population study, namely the entire population is used as a sample.

2.4. Instrument

The research instrument is divided into two; first using the observation sheet and the second using a questionnaire. The two instruments refer to four (4) indicators of the success of the Adiwiyata program, namely the first is an environmentally sound policy, the second is the implementation of an environment-based curriculum, the third is participatory-based environmental activities and the fourth is environmentally friendly supporting infrastructure. In this study, four indicators were used to evaluate the effectiveness of ecoliteracy, namely knowledge, attitude, behavior in school, and behavior outside of school.

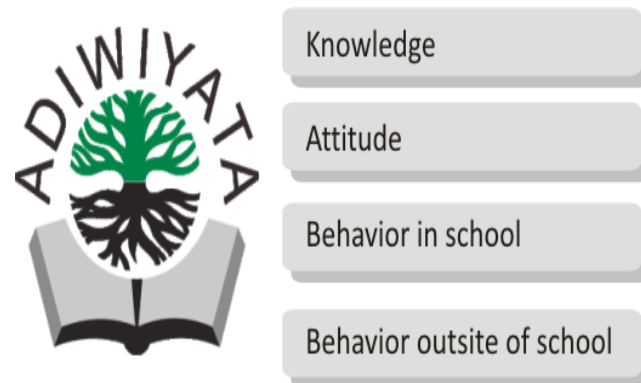


Figure 1. Ecoliteracy indicators are assessed from three competency domains

2.5. Primary research data is done through observation and questionnaires

Secondary research data were obtained through publications and documentation issued by official institutions or official documents issued by the school.

2.6. Data analysis technique

The data analysis technique used is a credibility test which is triangulation, which is a technique for checking and establishing validity by analyzing from various sources in various ways and at various times. The process goes through the stages of data reduction, data presentation, and drawing conclusions.

3. RESULTS

Based on the results of the study using four indicators of the success of Adiwiyata at Madrasah Tsanawiyah Negeri I Pesisir Selatan, the following data were obtained.

Based on the results of observations in table 1, it was found that the Madrasah Tsanawiyah Negeri I Pesisir Selatan had implemented the adiwiyata indicator or component in the school. This result is certainly very related to school policies that are committed to implementing schools that care about the environment.

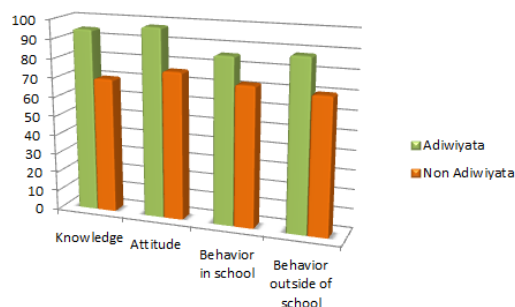
Next, data was collected using a questionnaire for Madrasah Tsanawiyah Negeri I Pesisir Selatan (Adiwiyata) and SMP Negeri 3 Painan (non-Adiwiyata) schools.

Table 1. Adiwiyata components

Indicator	Observation results
environmentally sound policies	Madrasah Tsanawiyah Negeri I Pesisir Selatan has implemented the Adiwiyata policy, judging from the achievements and various adiwiyata awards they have received
implementing an environment-based curriculum	The achievement of Adiwiyata school goals has been well implemented through the implementation of the four Adiwiyata components, especially in implementing an environment-based curriculum.
participatory-based environmental activities	implementing participatory-based environmental activities to strengthen the creation of caring and environmentally friendly schools
environmentally friendly supporting infrastructure	Madrasah Tsanawiyah Negeri I Pesisir Selatan has provided supporting facilities and infrastructure that are environmentally friendly

Table 2. Ecoliteracy indicators are assessed from three competency domains

Indicator	Adiwiyata (%)	Non Adiwiyata (%)
Knowledge	94,8	70,0
Attitude	97,8	76,3
Behavior in school	86,0	72,3
Behavior outside of school	88,3	70,3

**Figure 2.** The ecoliteracy score is assessed from three competency domains.

Source: Research Data

The results of the identification of these four (4) indicators are as follows, first knowledge, based on the 10 questions asked, 94.8% of respondents at Adiwiyata schools answered with the answer options 'Know' and 'Know very well' and 70.0% at non-formal schools. adiwiyata. Second, the identification of caring attitudes towards the environment in Adiwiyata schools is better than in non-Adiwiyata schools. Of the 10 position statements submitted, 97.8% of adiwiyata school respondents answered "Strongly Agree" and "Agree".

While the answers of respondents in non-adiwiyata schools, there were 76.3% who answered "Agree" and "Strongly Agree. Third, the identification of environmentally friendly behavior in an Adiwiyata school environment is better than in non-Adiwiyata schools, this can be seen from the respondents' answers, namely 86.0% answered "Always Doing (SLM), "Often Doing" (SM) and "Sometimes Doing" (KM). In non-adiwiyata schools, 72.3% answered SLM, SM and KM. Fourth, the fourth indicator regarding behavior outside the school environment which is always, often and sometimes done by students is 88.3%. Whereas in non-adiwiyata schools, the behavior that is always, often and sometimes done is 70.3%.

4. DISCUSSION

It is undeniable that schools contribute to the increase in waste such as food, plastic and paper waste [1][10]. The bad news is that there is still a lot of waste that is not managed properly, even though as an educational institution, schools should provide education and special attention so that it has a good impact on the environment [10]. The commitment of school leaders is also very influential in the formation of environmentally friendly cultured characters and schools, because these conditions can be created through the provision of values, perceptions, habits, educational policies, and the behavior of the people who are in them, and are directly integrated with nature and environment. If students have the ability and understand the importance of protecting the environment and all its contents, then these students can be said to have good ecoliteracy, because ecoliteracy is not only about increasing knowledge of environmental issues, but also has an understanding of the importance of global ecological awareness in order to create balance between the needs of society and the ability of the earth to support it. So that the purpose of Law number 20 of 2003 concerning the national education system can be realized, namely to shape the character and develop the potential of students in order to give birth to a generation that is knowledgeable, moral, creative, independent and responsible [11].

Madrasah Tsanawiyah Negeri I Pesisir Selatan as an Adiwiyata School has been carried out in accordance with applicable regulations. The achievement of Adiwiyata school goals has been well implemented through the implementation of the four Adiwiyata components, especially in implementing an environment-based curriculum and implementing participatory-based environmental activities to strengthen the creation of caring and environmentally friendly schools.

The implementation of the adiwiyata program in schools has succeeded in increasing students' knowledge, attitudes and environmentally friendly behavior. This can be seen from the identification of the knowledge, attitudes and behavior of the students produced. The

scores produced by adiwiyata schools are better than those of non-adiwiyata schools. The difference in the highest score is in the aspect of knowledge and attitude, while the difference in the lowest score is in the aspect of behavior in the school environment. That is, students' environmentally friendly behavior in the school environment is better than behavior outside the school environment. This shows that the implementation of the adiwiyata program at Madrasah Tsanawiyah Negeri I Pesisir Selatan has proven effective in building student ecoliteracy, both from the aspects of knowledge, attitudes and responsible behavior towards the environment, so that this program can have a positive influence on the progress of education at MTsN I Pesisir south. These results are consistent with previous research which states that adiwiyata is able to effectively encourage students' knowledge, attitudes and behavior to increase [8].

The results of the identification of environmentally friendly knowledge, attitudes and behavior show that the implementation of the adiwiyata program has proven effective in increasing the ecoliteracy of students. This effectiveness can be seen from the achievement of the stated goals, namely to create school members who care and have an environmentally friendly culture and have responsibility for protecting and managing the environment, so that it is hoped that this will change the mindset of the younger generation about the importance of environmental balance, which will eventually be realized. in attitude and behavior in everyday life.

Effectiveness testing was carried out by comparing the ecoliteracy of Adiwiyata school students with the ecoliteration of non-adiwiyata school students, both from the aspects of knowledge, attitudes and behavior, using the same variables as shown in Figure 1, which shows that schools with an Adiwiyata predicate have succeeded in increasing knowledge, attitudes and behavior of students compared to non-adiwiyata schools.

These results indicate that schools that implement adiwiyata have a positive impact on efforts to preserve the environment [12][13][14]. This really supports the world's sustainable development efforts through the sustainable development goals program [5][15]. These results will be used as evaluation material for all schools to implement adiwiyata as a form of participation in creating students and communities who care about the environment in a real way [5][16].

5. CONCLUSION

The Adiwiyata program in schools has proven to be effective in increasing ecoliteracy in students compared to schools that do not implement Adiwiyata as a program in schools. based on aspects of knowledge about the environment, attitude towards the environment, behavior in school, and behavior outside of school, all of them have better scores than non-adiwiyata schools. The

results of this study contribute to increasing real concern from schools for the environment and preserving the environment, in accordance with the sustainable development goals program. These results can also be used as a reference by the education sector to determine policies for implementing the adiwiyata program in their schools.

AUTHORS CONTRIBUTIONS

Nurhasan Syah as the head of the researcher who compiled the research concept. Syaiful Haq and Jonni Mardizal as a research member who developed the instrument. Faisal Ashar and Yusfiandrita as research members who focus on technical research and data collection.

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