The Effectiveness Of Adiwiyata Program For Students Inman 1 Banda Aceh

Fatma Afrillya^{1*}, Safrida², Muhibbuddin³

¹Student of Biology Education Department of Syiah Kuala University, Banda Aceh, Indonesia ^{2,3}Lecturer in Biology Education Department at Syiah Kuala University, Banda Aceh,Indonesia

Abstract

This study aims to determine the effectiveness of the implementation of the Adiwiyata program in building the character of caring for the environment. Data collection was carried out from October to November 2019. The method used in this study was a survey (explanatory survey). The population in this study amounted to 775 people with respondents consisting of the head/deputy principal of the school, the Adiwiyata coordinator, teaching staff, administrative staff, and students. then the sample of students was taken by Proportionate Stratified Random Sampling using the slovin formula so that it became 250 students. The research instrument is in the form of interviews to measure the effectiveness of the Adiwiyata program. Questionnaires to measure the effectiveness of the Adiwiyata program for students which are interrelated with environmental education, and a documentation study for the effectiveness of the Adiwiyata program for students. The effectiveness of the Adiwiyata program is in the appropriatecategory with a percentage of 50.6%. It can be concluded that the effectiveness of the implementation of the Adiwiyata program has been running effectively, and the Adiwiyata program has been carried out well by residents of MAN 1 Banda Aceh.

Keywords: Effectiveness, Adiwiyata Program, Environmental

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I. INTRODUCTION

The amount of waste generated in Indonesia as a whole reaches 175,000 tons per day or 0.7 kg per person per day, according to dr. Aslinar (Chairman of the PW Aisyiyah Aceh Environmental and Disaster Management Institute) stated that in Banda Aceh, waste production reaches 230 tons every day. This does not include waste that is disposed of carelessly and other locations other than landfills (Bakri, 2019). The lack of education level in a society also has an impact on environmental conditions. Schools are obliged to raise sensitivity and awareness of the environment in the younger generation, broaden their horizons, and educate students to interact and behave responsibly, especially towards the environment. Formal environmental education can influence cognitive, effective, and psychomotor aspects.

The Ministry of Environment in collaboration with the Ministry of Education and Culture designed a program called Adiwiyata through Regulation number 5 of 2013. This program aims to create school citizens, especially students who care and have a culture of protecting the environment. The adiwiyata program has four program components which form a unified whole in achieving an adiwiyata school, namely environmentally sound policies, implementation of an environment-based curriculum, participatory-based environmental activities, and environmentally friendly supporting facilities.

Several studies regarding the influence of Adiwiyata schools on students have been carried out, including a case study at SMK Negeri 2 Semarang showing that the implementation of the four aspects of the Adiwiyata Program plays a role in creating situations and conditions that support the development of environmentally caring characters (Rakhmawati, 2016). Research conducted by Febriyanti states that there is a significant comparison of environmental care attitudes between Adiwiyata high school students and non-Adiwiyata high school students in Medan, Indonesia.

MAN1 Banda Aceh is the onlySenior High School in Banda Aceh that has participated in the Adiwiyata program of the Ministry of Religion since 2013. MAN 1 Banda Aceh in 2016 won 2nd place at the City of Banda Aceh level (Education Office, 2016). Before joining the Adiwiyata school program, the environmental management conditions were not organized, there was no waste segregation, the conditions were not beautiful and untidy. However, after running the adiwiyata program, conditions became better than before.

Based on the results of interviews conducted by researchers with Mrs. Suraiya Harun as PPLH(environmental research center) coach and as the implementing coordinator of the Adiwiyata program, it was stated that students' concern for the school environment was still lacking. This can be seen from the fact that

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there are still many students who throw plastic waste out of place, park carelessly, students who scribble on desks, chairs, walls using pen, do not carry out class picket assignments, and often find trash in the their drawer.

II. MATERIALS AND METHODS

This study examines the effectiveness of a program, namely the Adiwiyata Program. The research method used in this research is a survey (explanatory survey), which is to explain the causal relationship and test the hypothesis. Survey research according to Darmadi (2013) is actually more accurately described as a type of descriptive research. In this regard, Neuman (2013) argues that "most surveys ask many questions at once, thus measuring many variables. This allows us to collect descriptive information in a single survey." Surveys are basically a careful examination of facts or phenomena regarding social and behavioral aspects of a large number of subjects (Ali, 2011).

The population in this study were all components in MAN 1 Banda Aceh, namely as many as 775 people including the Principal, Deputy Curriculum, Head of Adiwiyata, Cleaning Officers, Teachers, and students.

To get a sample that can represent and describe all students, the Slovin formula was used to determine the sample in this study:

$$n = \frac{N}{1 + N e^2}$$

Information:

n = sample size

N = population size

e = percentage of inaccuracy due to sampling errors that can still be tolerated

Based on the total number of students with a degree of leeway an inaccuracy of 5%, then by using the Slovin formula above, a sample size of:

$$n = \frac{671}{1 + 671(0.05)^2} = 250,6$$
 Studens

The method used for sample selection is Proportionate Stratified Random Sampling, which is a method used when the population has characteristics that are not homogeneous or proportionally stratified. The number of students for each class level in one school is not the same or varies, so the number of samples taken must cover all grade levels that are proportionally selected randomly, all have the same opportunity to be selected.

Data on the effectiveness of the Adiwiyata program were obtained using several instruments:

- a. Interviews for all residents at MAN 1 Banda Aceh. The statements in the interview sheet totaled 15 questions. The interview sheet was obtained by directly asking all residents at MAN 1 Banda Aceh about the effectiveness of the Adiwiyata program. After the results of the questions are obtained, the results are analyzed by means of a description.
- b. Documentation sheets were analyzed using 2 options, namely yes/no. If "yes" then the value is 1, and if "no" then the value is 0. Then it is analyzed using the percentage formula, namely:

$$P = \frac{\sum f}{N} \times 100 \%$$
(Sugiyono, 2014)

Information:

P = percentage sought

 \sum f = frequency that is being searched for the percentage

100% = fixed number

N = Number of cases (the total number of frequencies)

c. Questionnaires were analyzed with a multilevel scale model in the form of a checklist asapears in Table 1.

Criteria	Score
very appropriate	4
appropriate	3
inappropriate	2
Very inappropriate	1

Table.1 Assessment of the Effectiveness of the Adiwiyata Program Likert Scale.

After the questionnaire values are obtained, they are analyzed using percentages (Sugiyono, 2014) as follows:

$$P = \frac{\sum f}{N} \times 100 \%$$

Information:

P = percentage sought

 \sum f = frequency that is being searched for the percentage

100% = fixed number

N = Number of cases (the total number of frequencies)

III. RESULTS AND DISCUSSION

The effectiveness of the Adiwiyata program includes: 1) Effectiveness of environmentally sound school policies, 2) Effectiveness of an environment-based curriculum, 3) Effectiveness of environmentally friendly school culture, and 4) Effectiveness of managing environmentally friendly infrastructure. The effectiveness of the Adiwiyata program is given to the principal, vice principal, and Adiwiyata Trustees. The effectiveness of the Adiwiyata program can be seen in Figure 1.

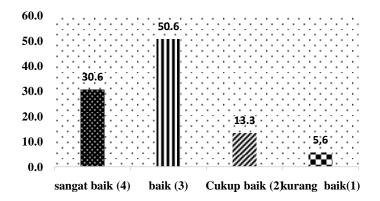


Figure 1. The Effectiveness of the Adiwiyata Program at MAN 1 Banda Aceh

Figure.1 shows that the effectiveness of implementing the four aspects of the Adiwiyata program is in good criteria at 50.6%. The Principal has played the role of educator, manager, administrator, supervisor, leader, innovator and motivator. Then the role of educators or teachers as educators, learning models, mentors, communicators, and teachers as administrative workers.

The role of education staff as human resources in schools who are not directly involved in learning activities but strongly supports their success in administrative activities at school. The role of students according to RI Law no. 20 of 2003 mentions two obligations of students, namely maintaining educational norms to ensure the continuity of the process and the success of education is good. This is in line with research conducted by Yusnidar, Takarina, Dewi Liesnoor and Eva Banowati (2015) stating that the implementation of the Adiwiyata program received a positive response from the school community. Implementation of Adiwiyata at MAN 1 from a curriculum perspective has included efforts to preserve environmental functions or prevent environmental pollution or damage integrated into subjects such as biology, geography, aqeedah morals, English, mathematics, economics, Indonesian, physics, Arabic and arts and culture. This is based on interviews with teachers and PPLH coaches.

MAN 1 carries out activities that show actions that always try to prevent damage to the natural environment are 1) saving energy (turning off the lights when not in use, turning off the water faucet when finished using them, saving stationery), and 2) A SIMUTHAN (ayo Sepuluh Menit untuk Tanaman dan Lingkungan)let's Ten Minutes for Plants and the Environment, such as pickets (sweeping, wiping tables, tidying up tables and chairs); garden maintenance (planting, watering plants, removing yellow or dry leaves and pulling weeds); Collect waste for recycling.

The effectiveness of the Adiwiyata program is also given to teachers which includes an environment-based curriculum, and the effectiveness of an environmentally friendly culture. The two effectiveness can be seen in Figure 2.

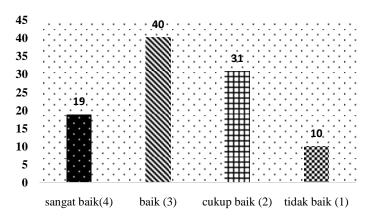
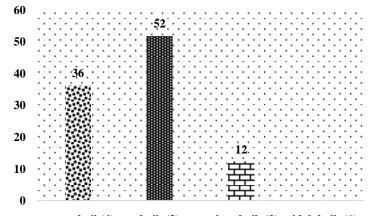


Figure 2. Effectiveness of Environment-Based Curriculum and Effectiveness of Environmentally Friendly School Culture

Adiwiyata program indicators get a good criterion that is equal to 40%. Even with these criteria the implementation has not been running perfectly. there are students who still do not fully maintain the cleanliness of the school such as still throwing garbage out of place, even though a place to dispose of garbage as one of the infrastructure facilities has been provided by the school. This also still needs more special attention because it is good even though the school has carried out the Adiwiyata program which is improved both in terms of infrastructure. The school still gives warnings and calls for sanctions not to be given so that it can have a deterrent effect.

Students are also involved in the Adiwiyata program which includes the following indicators: 1) caring and cultured environmental school policies, 2) implementation of an environment-based curriculum, 3) participatory-based environmental activities, 4) management of environmentally friendly supporting facilities, student involvement in the Adiwiyata program can seen in Figure. 3.



sangat baik(4) baik (3) cukun baik (2) tidak baik (1) Figure 3. Indicators of Student Adiwiyata Program at MAN 1 Banda Aceh

All aspects of the adiwiyata program are in good criteria 52%. The Adiwiyata program implemented is useful for realizing school members who are responsible for protecting and managing the environment through good school governance to support sustainable development. Activities carried out include waste management, scouting, flood prevention, canteens and healthy schools and so on (Santa, 2014).

Through the Adiwiyata program, it is hoped that every school member will be involved in school activities towards a healthy environment and avoid negative environmental impacts. The Adiwiyata program was developed based on norms in life, including: togetherness, openness, equality, honesty, fairness, and the preservation of environmental functions and natural resources (Ellen, 2014).

MAN 1 Banda Aceh has received awards from the province twice for the Adiwiyata program. Thus other schools can also imitate this school in supporting environmental education, and can become agents of change for the community in the environment around the school. Schools must be a model in creating a healthy and comfortable environment and a model in realizing school members who care and are environmentally cultured. The next school community is expected to be an example and transmit the character of caring for the environment to the community (Desfandi, 2015).

IV. CONCLUSION

The effectiveness of the Adiwiyata program in MAN 1 is in the appropriate attegory with a percentage of 50.6%. It can be concluded that the effectiveness of the implementation of the Adiwiyata program has been running effectively, the Adiwiyata program has been carried out well by residents of MAN 1 Banda Aceh.

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