Implementation of the adiwiyata program on transforming environmentally-aware behavior in junior high school students in North Gorontalo Regency

Cening Kasim[1], Ramli Utina[2], Sukirman Rahim[1],*

[1] *Department Environmental Science, Postgraduate Program, Gorontalo State University, Gorontalo, Gorontalo Province, 96128, Indonesia;*

[2] *Department of Biology, Faculty of Mathematics and Natural Sciences, Gorontalo State University, Gorontalo, Gorontalo Province, 96128, Indonesia.*

*Correspondence: sukirmanrahim@ung.ac.id

ABSTRACT

Background: The research aimed to: (1) describe implementation of Adiwiyata program in transforming environmentally-aware behavior of junior high school students in North Gorontalo Regency, (2) describe waste management practices at SMP Negeri 2 Kwandang, North Gorontalo Regency, (3) provide recommendations to strengthen Adiwiyata program at SMP Negeri 2 Kwandang. The study was conducted at SMP Negeri 2 Kwandang, North Gorontalo Regency. **Methods:** The study used qualitative approach with descriptive research type and descriptive analytical research procedures. The research subjects were students at SMP Negeri 2 Kwandang. **Findings:** The findings revealed that: The implementation of Adiwiyata program in daily behavior has almost been comprehensive among students in SMPN 2 Kwandang. The students have begun to independently manifest awareness and concerns towards environmental cleanliness in their daily behavior at school. Environmental improvements that are often carried out at school have begun to be followed by improvements in students' character from ignorant to be concerned about the environment. Administratively, the Adiwiyata program in schools have been implemented quite well, but the application of environmentally-aware character requires strengthening by the Principal, teachers and consistent assistance from the Environmental Service and the North Gorontalo Education Service. **Conclusion:** Waste management has started in accordance with the 3R system, visible waste has decreased but periodic reinforcement is needed to strengthen Adiwiyata program across all grade levels. As a National Adiwiyata school, SMP Negeri 2 Kwandang should cooperate with related agencies, especially North Gorontalo Education Service, North Gorontalo Environmental Service, and Gorontalo Provincial Environmental and Forestry Office for the sustainability of the Adiwiyata program in schools with periodic assistance to schools. **Novelty/Originality of this article:** Therefore, the Adiwiyata program is not only encouraged during the assessment, but will remain and continue so that concern for environment continues to be maintained, both for students who will graduate and students who have just entered school.

KEYWORDS: adiwiyata program; environmentally-aware character; waste management.

1. Introduction

Education is periodically needed for human progress as education is one of the means used by humans to increase their potential (Sari, 2019). According to Widyaningrum

(2016), humans are living creatures who can be responsible by experiencing, implementing and recognizing moral values. Education helps shapes personality, dignity, and talent by instilling an understanding of the principles of education. The next generation of the nation must have educational principles and goals. The educational goals are manifested through the education process and the most basic education is from elementary school (Riyanti et al., 2019).

Education is still believed to be one of the most powerful media in building human intelligence and personality to be better in which education is directed at the learning process and the formation of a responsible personality (Habibi, 2019). Therefore, schools as institutions are expected to be able to contribute to the implementation of environmental education to students so that they will foster concerns for the environment.

Environmental education is an important element in reducing damage to the environment. Environmental education is carried out as an effort to increase public understanding and concern in finding solutions and preventing environmental problems. According to Sumardi (Adam, 2014), environmental education will not change the situation and conditions of the damaged environment in a short time, but rather requires time, process, and resources. On that basis, environmental education needs to be attempted as early as possible in order to minimize environmental damage.

Developing an environmentally-aware character in a person is not easy. Environmentally-aware character is an attitude and action that always seeks to prevent damage to the surrounding natural environment and develops efforts to repair natural damage that has occurred (Rokhmah, 2019). Environmentally-aware behavior should be reflected in the indicators of environmental character values possessed by students, including throwing garbage in its place, being able to sort organic and inorganic waste, helping to maintain the cleanliness of school buildings and yards, using school facilities appropriately and maintaining the gardens in the school environment.

The majority of Indonesian people has lack of concern for the environment, not caring about the consequences that arise in the future. School environment is where the education and learning process is carried out systematically, programmed and planned from the basic level to the higher education level, so that the results will be maximized, both for educators and for students. A conducive school environment is needed to create a good quality learning process. The lack of students' awareness to dispose garbage in trash cans that have been provided makes the school environment shabby in addition to the lack of tree plants. Thus, making the school atmosphere barren and shabby.

To estabish schools that act as a place for good character-building in students, focusing on the environmentally-aware character, the Ministry of Environment created an environmental education program at the elementary and secondary education levels through the Adiwiyata program, schools with environmental culture. By implementing the Adiwiyata program, it will make school members, especially students to have environmental culture and awareness, and create human resources that took pride towards economic, social and environmental progress in achieving sustainable development in the region (Suryani, et al., 2022). The Adiwiyata program is a form of government commitment to environmental management and protection through education. The issue of global warming and the depletion of the ozone layer due to the lack of plants on the earth's surface, has made many people across the globe take actions to stop them from happening. Another triggering factor is the lack of public concern for the environment in which they live.

The influences of the school environment, both directly and indirectly, greatly affect the learning process and the results of learning/achievement. Providing knowledge and building awareness about clean and healthy lifestyles is considered very effective when carried out onstudents since elementary school. It is expected that when they are outside the school environment, they will be able to apply clean and healthy lifestyles like at their school. Developing a community that has environmentally-aware character may be effective through environmental education in schools (Desfandi, 2015). One of the

programs that can be implemented to protect the environment is the Adiwiyata school program.

Adiwiyata is applied in education environment because through education it is easier to learn and raise all knowledge and various norms and ethics in order to achieve sustainable development goals (Rahmah et al., 2014). School institutions have a great social responsibility in creating students that have awareness for the environment. Therefore, schools need extra attention from the principal so that students have awareness, insight, norms, ethics, and real actions in building a comfortable, creative and sustainable school environment as the next generation the nation (Wulandari, 2019).

The Adiwiyata program is not implemented only through classroom learning, but also with participatory-based environmental activities. Participatory involves students to be emotionally, physically and mentally provide initiatives in carrying out environmental-based activities at school (Subianto & Ramadan, 2021).

Dalam To create school culture that cares about the environment, it must be encouraged collectively by the school system and management. This means that it must be built through a school program that is agreed upon by all school members. As an educator, teachers are expected to not only convey the subject matter, but also convey environmental education that is able to foster a sense of concern for the environment. School leaders must motivate teachers, employees, and students to care for the environment through various programs and activities. In that context, the researcher was interested in conducting research at SMP Negeri 2 Kwandang with a number of academic considerations. First, SMP Negeri 2 Kwandang is the first school in North Gorontalo administratively received a Provincial award and be recognized as an official Adiwiyata school since 2015. Second, the implementation of the Adiwiyata program there has been running quite well, involving all stakeholders until it received the National Adiwiyata award in 2016. Third, SMP Negeri 2 Kwandang has been re-submitted twice to the national level as an Independent Adiwiyata school but has not met the assessment criteria.

Several studies have been conducted regarding the implementation of the Adiwiyata program in transforming students' environmental awareness behavior. Research by Rahma et al. (2022) stated that government policies on environmental protection and management through education can be well implemented and lead to the achievement of the Adiwiyata award. However, in the case of SDN Manukan Kulon III/540, the implementation faced obstacles such as a lack of unity among teachers in carrying out environmental management and protection activities. Additionally, the renovation process at the school damaged some of the outcomes of these environmental efforts.

Meanwhile, research by Hatika et al. (2019) found that the implementation of the Adiwiyata School program could stimulate SMA N 2 Rambah Hilir in developing an environmentally-oriented school by up to 80%. The success of this program was evident from the enthusiasm of stakeholders in developing the Adiwiyata school, including building greenhouses, preserving TOGA, promoting environmental slogans, and providing seeds and trash cans.

In another study, Rokhmah (2019) stated that the formation of students' environmentally-aware character at MIN Tegalasri Wlingi Blitar was based on four components of the Adiwiyata program: environmentally-aware policies, the implementation of an environmentally-based curriculum, participatory environmental activities, and the management of environmentally-friendly supporting facilities and infrastructure. However, several obstacles were encountered in its implementation, such as limited funding, since the madrasah was not allowed to collect monetary donations from students' parents. To address this issue, the madrasah sought financial assistance from relevant parties. Additionally, the school did not have an enterprise selling stationery, leading some students to purchase supplies outside the school. To overcome this, the madrasah implemented the 3R (Reduce, Reuse, Recycle) initiative, collaborated with scavengers, and imposed sanctions on students who brought plastic waste to the school.

Research by Suryani (2022) found that the Adiwiyata program at SDN 65 Pekanbaru was considered successful. The process involved socialization efforts directed at the principal, class teachers, and the Adiwiyata team leader. This success was reflected in the smooth cooperation between the school and its students, as well as between the school and external institutions.

Lastly, research by Putri (2019) emphasized that the Adiwiyata Program contributes to creating schools with a strong character. This is evident in the development of an education system that balances cognitive intelligence, psychomotor skills, and affective attitudes and values, ensuring a holistic approach to environmental awareness in schools.

2. Methods

There were three data collection techniques in this research: observation, interviews, and documentation. According to Sugiyono (2018), in qualitative research, the primary data collection techniques are participant observation, in-depth interviews and documentation studies. The sources of data collection in this study were students' interview sheets, questionnaires and cameras for documentation. The interview technique in this study was an open, free interview and not in formal situations and if necessary, re-interviews could be conducted with the same informant.

Interviews were conducted using an in-depth direct interview method using voice recordings in addition to notes during the interview. Interviews were conducted in an unstructured but systematic manner that covered all the variables studied, so that the subjects would not be confused in answering questions. The preparation stages before conducting an interview were carried out, especially regarding the permission and willingness of the subjects to be studied. Prior to this, a personal and group approach were done in explaining the goals and objectives so that there would be no concern and anxiety from the subjects that could interfere with the interview and observation process.

Observation is a technique for collecting data by conducting direct observations in the field or in the research environment. In this study, the researcher directly observed the school environment and the behavior of students when dealing with scattered or piled up garbage in a participatory manner where the researcher placed himself as part of the observed subject. On one hand, the researcher participated in doing what the subject of the study did and on the other hand, the researcher fully observed separately so that the subject did not feel like they were being observed.

Interviews are a tool for re-checking or proving information or statements previously obtained. The interview technique used in this qualitative research was in-depth interviews. In-depth interviews are the process of obtaining information for research purposes by means of questions and answers while face to face between the interviewer and the informant or person being interviewed, with or without using an interview guide, where the interviewer and informant are involved in a relatively long social life. In this interview, the researcher used an interview questionnaire distributed to a sample of 27 students with each sample was three representative students from each class

Documentation was carried out to obtain information whether the implementation of the Adiwiyata program in school was really implemented properly and sustainably. Through documentation, researchers found information about what indicators of the Adiwiyata program still being implemented, the waste management at school, whether each class has a separate trash can, whether there are sanctions applied to school members if they throw garbage out of place and how concerned the school members are about environmental cleanliness.

2.1 Data analysis techniques

Data analysis is the process of systematically searching for and compiling data obtained from interviews, field notes, and documentation by organizing data into categories, describing them into units, synthesizing, compiling them into patterns,

choosing which ones are important and which ones will be studied, and making conclusions so that they are easily understood by oneself and others (Sugiyono, 2018). Miles and Huberman (Sugiyono, 2018) stated that data analysis activities include data collection, data reduction, data presentation, and conclusions or verification. The variables in this study were the implementation of the Adiwiyata program in managing the school environment, the behavior of school member in school environmental management activities and students' environmental knowledge. This is because in its implementation, researchers seek as much data as possible, then calculate the score. The data that has been obtained was then described as clearly as possible.

In analyzing qualitative research data, the researchers used the Miles and Huberman model (Sugiyono, 2018) through 3 (three) stages, such as first reducing data means summarizing, selecting the crucial info, focusing on important things, looking for themes and patterns and discarding unnecessary ones. Data that has been reduced will provide a clearer picture and make it easier for researchers to collect further data. Data reduction is a sensitive thinking process that requires intelligence and breadth and depth of insight. At this stage, researchers summarized, selected and recorded basic and important data about the implementation of the PLHBS program obtained from SMP Negeri 2 Kwandang. The data obtained came from the results of interviews and documentation conducted by researchers with the Principal, those responsible for environmental programs, teachers, students and all parties needed in data collection regarding the focus of the research. Second, the next step after reducing data was presenting data. According to Miles & Huberman, data presentation is as structured information that allows for drawing conclusions on taking action. Data presentation is used to further improve understanding of the case and as a reference in taking action based on understanding and analysis of data presentation. The most frequently used in qualitative research to present data is with narrative text supported by a network matrix. At this stage, the researcher presented data from the results of interviews that have been reduced in the form of narrative text. The data was presented in the data description and research findings on the implementation of the Adiwiyata program at SMP Negeri 2 Kwandang. And the last, qualitative data analysis is an ongoing, repetitive and continuous effort. The conclusions put forward at the beginning are still temporary, and will change if no strong evidence is found to support the next data collection stage. The conclusion was presented in the form of a descriptive research object guided by the research study. At this stage, the researcher drew conclusions from the data that has been reduced and presented in the data description and research results.

2.2 Checking data validity

Data validity is carried out to prove whether the research conducted is truly a scientific research as well as to test the data obtained. To ensure the validity of the data to be collected in this study, researchers use data triangulation by exploring the truth of certain information using various data sources such as documentation, interview results and observation results. According to Sugiyono (2018), data triangulation is used as a technique for collecting data as well as to test the credibility of data through various data collection techniques and various data sources. The data triangulation used in this study was source triangulation, which is collecting similar data from several different sources. There were several data validity checks carried out, such as: (1) Data triangulation, data triangulation by exploring the truth of certain information using various data sources such as documents, archives, interview results and observation results. According to Sugiyono (2018), data triangulation is used as a technique for collecting data as well as to test the credibility of data through various data collection techniques and various data sources; (2) Data credibility, data credibility is intended to prove what the researcher experiences in accordance with what exists in the real world by using the technique of (a) persistent observation, namely conducting continuous observations, (b) conducting triangulation as stated above; (3) Dependability, conducting data validity testing through dependability is

intended to overcome errors in contextualizing with various parties in order to review the research process.

3. Results and Discussion

3.1 Research findings

Based on the research data, several findings emerged regarding the implementation of the Adiwiyata program among students at SMP Negeri 2 Kwandang. The program significantly transformed students' character, fostering a greater sense of environmental awareness. This transformation was supported by the school community, particularly in waste management efforts. Many school members, especially students, were already familiar with and understood the school's vision and mission related to environmental awareness.

Furthermore, the integration of environmental education and discussions on environmental issues influenced students' lifestyles, encouraging them to adopt environmentally-conscious behaviors. The school frequently conducted socialization efforts regarding regulations on littering violations, reinforcing the importance of maintaining cleanliness. Additionally, the school's attitude and behavioral example played a crucial role in shaping students' environmentally-aware character.

However, several challenges remained in the program's implementation. There was a lack of adequate facilities to support effective waste management within the school. Participatory-based extracurricular activities aimed at fostering environmental awareness were also insufficient. Some students continued to dispose of waste without sorting it properly, and a portion of them had yet to develop an understanding that environmental cleanliness is a personal responsibility, requiring independent action. Although cleaning activities were still largely dependent on teachers' instructions, a significant number of students had begun to take the initiative independently. Additionally, the practice of 3R (Reduce, Reuse, Recycle) waste management had not yet become ingrained in the school's culture due to limited knowledge and inadequate facilities.

Table 1. Table of Triangulation from Interviews regarding the implementation of the adiwiyata program in transforming student behavior

Indicators	Interview Results	Data validity through data triangulation
Efforts to maintain cleanliness, sanitation, and school drainage functions	Routine activities such as "Clean Friday" and community service to clean the school environment have already been carried out by some students independently, without being prompted by teachers	Data are ensured to be valid through source triangulation by conducting field observations, re-interviewing informants, and collecting documentation in the
School members participating in tree planting, maintenance and nursery activities	All teacher and students participates in tree planting and maintenance activities by watering the plants every morning and replacing dead plants	Data are ensured to be valid through source triangulation by conducting field observations, re-interviewing informants, and collecting documentation in the
Water conservation	Students have implemented water conservation efforts by using water in adequate, turning off faucets after use, and collecting rainwater to	Data are ensured to be valid through source triangulation by conducting field observations, re-interviewing informants, and collecting

	water the plants	documentation in the
Energy conservation	Students have made energy conservation efforts. One example is turning off the fans in the classroom after lessons or during dismissal	Data are ensured to be valid through source triangulation by conducting field observations, re-interviewing informants, and collecting documentation in the.
Waste-sorting and management in the school environment	Most students have not yet sorted and managed waste in the school environment	Data are ensured to be valid through source triangulation by conducting field observations, re-interviewing informants, and collecting documentation in the

Table 2. Table of triangulation from questionnaires regarding the implementation of the adiwiyata program in transforming student behavior

Indicators	Questionnaires Results	Data validity through data triangulation
Proper waste disposal	60% of students dispose of waste in designated bins	Data are ensured to be valid through source triangulation by conducting field observations, reviewing informant questionnaires, and analyzing field documentation.
Maintaining school environment cleanliness	70% of students actively maintain and care for the cleanliness of the school environment	Data are ensured to be valid through source triangulation by conducting field observations, reviewing informant questionnaires, and analyzing field documentation
Implementing water and energy conservation	95% of students implemented water and energy conservation practices	Data are ensured to be valid through source triangulation by conducting field observations, reviewing informant questionnaires, and analyzing field documentation
Planting and maintaining trees and other plants	90% of students plant and maintain trees and other plants	Data are ensured to be valid through source triangulation by conducting field observations, reviewing informant questionnaires, and analyzing field documentation
Managing waste with the 3R principle	Most students have not yet understood how to manage waste using the 3R principle	Data are ensured to be valid through source triangulation by conducting field observations, reviewing informant questionnaires, and analyzing field documentation. Cannot be measured.
Independent waste awareness	Half of the students already demonstrated independent concern for waste	Data are ensured to be valid through source triangulation by conducting field

	observations, reviewing informant questionnaires, and analyzing field documentation
management.	

3.2 Discussion

Lismanita (2020) stated that implementation focuses on activities, actions or the existence of a system mechanism. Implementation is not only an activity but also means a planned activity to achieve the objectives of the activity. Implementation is part of the public policy process, starting from agenda setting, formulation, adaptation and the next stage is assessment (Suparno, 2017). It can be concluded that implementation is applying rules that are systematically and sustainably regulated into a character in everyday behavior. Efforts made in implementing the Adiwiyata Program or the PBLHS movement to increase students' awareness for the environment were carried out by teachers by giving direct examples with environmental care actions to teach students to have concern for the environment and reminding them both during classroom lessons or outside of learning that is conveyed indirectly or with direct invitations and carried out consistently so that the custom of caring for the environment will become a character trait in students.

The implementation of the Adiwiyata program in shaping environmentally-conscious behavior in students of SMP Negeri 2 Kwandang culminated in how the school's vision and mission were socialized to the school community, especially students. The application of the school's mission, vision and goals led to environmentally-aware policies, which is school regulations related to the environment as an effort to form environmentally conscious characters in students. Regulations made in the form of documents were then socialized to the school members on an ongoing basis to form environmentally conscious characters in students. Another form of environmental awareness effort was slogans that are posted outside and inside the classroom. They need to be increased and maintained well so the written warnings and invitations can be read by students every day.

In relation to the elaboration of the school's vision, mission and goals based on the environment, SMP Negeri 2 Kwandang created a curriculum policy in the form of integrating environmental education into every subjects. The 2013 curriculum that uses the PAIKEM learning model (active, innovative, creative, effective and enjoyable learning) requires that learning on the Environmental Education (PLH) indicator to be carried out not only in the classroom but also outside the classroom so students can be in direct contact with nature and prevent students' boredom (Ministry of Education and Culture, 2012). Subjects that are integrated with Environmental Education are Religion, Civics, English, Indonesian, Mathematics, Integrated Natural Sciences (IPA), Integrated Social Sciences (IPS), Arts and Culture, and Crafts. The integration of environmental education was not only limited to curricular activities but also integrated into mandatory extracurricular activities, namely scouting activities by including environmental themes in every activity carried out. In its implementation in class, the lesson plans (RPP) containing environmental indicators had not been consistently taught in subjects other than integrated science subjects. Therefore, the custom of caring for the environment did not influence the behavior of students.

Extracurricular activities are very dominant in influencing the implementation of the Adiwiyata program in the formation of environmentally conscious behavior of students in schools because almost all student activities lead to extracurricular activities in schools based on environmental education. One of the school extracurricular activities that was often programmed every month was the scout extracurricular, with each extracurricular activity very close to social service activities and environmental actions carried out both in and outside of school. Therefore, SMP Negeri 2 Kwandang focused more on participatory-based extracurricular programs in order to create a clean and environmentally friendly environment for the common good. The formation of environmentally conscious character in students cannot be carried out individually in educational institutions, collaborative efforts are needed from all school members starting from the participation of teachers,

students, school policies that support the instillation of environmentally-conscious character, and facilities and infrastructure that support the formation of environmentally friendly schools. The facilities and infrastructure available at SMP Negeri 2 Kwandang that support environmental conscious efforts include greenhouses, biopores, absorption wells, school gardens, and green open space parks (RTH). In its implementation, these facilities had not been used optimally to support environmental education because the facilities were not maintained properly.

In Character Education, there are 18 character values formulated by the Ministry of National Education (Ministry of National Education, 2011). These character values include the character of caring for the environment. The character value of caring for the environment is an attitude and action that always strives to protect and preserve the environment (Oktaviana, 2019). Character education of caring for the environment needs to be presented in schools, because it is from school that everyone can learn to protect the environment. According to Professor Wanagari Maatai in Oktaviana (2019): there are three forms of caring for the environment called 3R, namely; Reduce, Reuse and Recycle (reduce, reuse, recycle). Reduce is reducing materials that can damage the environment or reducing the presence of waste. Reuse is reusing waste that can still be reused for the same function or for other functions. Recycle is recycling waste or reprocessing waste into other useful products. The implementation of 3R at SMP Negeri 2 Kwandang is still not optimal. Some teachers and students reduced waste by bringing reuseable drink bottles and some still use single-use bottled water. Some teachers and students reused single-use drink bottles to be refilled with tap water to water plants or used them as a planting medium. Others who still used single-use bottled drinks threw the waste where they sit or passed by. Another example found by researchers was the use of used printing paper to make envelopes for letters or other functions. However, the implementation of recycling activities was almost invisible in waste processing activities due to the lack of student knowledge about waste recycling processing.

Something that had not been done routinely was disposing waste separately. Sometimes the school, in this case the teacher, provided an understanding to the school members, especially students, to always dispose waste separately, but the students still lack awareness to carry out the teacher's instructions. Several times, students were often found chatting in the school yard or in front of the study room with scattered plastic and paper waste around them. This was due to their own activities of throwing garbage anywhere and not caring about the garbage until a teacher comes and asks them to clean it up, even the teacher ended up having to clean up the garbage. The situation got worse with the supporting infrastructure that did not functioned properly, the unavailability of a waste processing place, an ineffective waste sorting place, and inactive school waste bank management.

According to Nuzulia & Purnomo (2019) instilling character education requires time and a continuous habituation process supported by culture that can be provided by the family, school, community and mass media environments. The implementation of caring attitude towards the environment has to be gradual and consistent so that it becomes a culture for students to love the environment. SMP Negeri 2 Kwandang was the first and the only school in North Gorontalo Regency that received the title of Adiwiyata School. In the process of achieving this award, multiple actions have been done to meet the Adiwiyata School criteria and to achieve the National Adiwiyata School award. This award is not only limited to certificates and trophies that are displayed on the walls also reflected the character and values that are attached to the behavior of school members, especially teachers and students. Next, the Independent National Adiwiyata Program has been a challenge for SMP Negeri 2 Kwandang to be able to achieve the criteria set by the Ministry of Environment. After receiving the National Adiwiyata award, in later years the school faced some failures to qualify the criteria. This was not caused by the lack of efforts, but beacuse environmental-aware character have not yet become part of the students and there were still several waste management facilities that were not sustainable and managed properly. Other causes were new freshmen students who did not have proper

knowledge about Adiwiyata schools, the environmental-aware character education that had not been done sustainably, and the environmentally-friendly infrastructure were no longer maintained sustainably.

Every school policy related to environmental education should be more programmed properly and implemented consistently. Moreover, it needs to receive full financial support from the school. Several obstacles such as the lack of concern of some school members in environmental education programs requires more attention and needs to be evaluated by the Principal. Therefore, it will lead to joint solutions and provide appropriate support for environmental-based activities. Supporting facilities for environmental education need more attention to be maintained according to their function in forming environmentally-aware behavior and character in students at SMP Negeri 2 Kwandang.

4. Conclusions

The implementation of the Adiwiyata program at SMPN 2 Kwandang in students' daily behavior has been almost comprehensive. Awareness and concern for environmental cleanliness began to manifest independently in the students' daily behavior at school. Environmental improvements that were often carried out at school have begun to be followed by improvements in student character from ignorant to be concerned about the environment. Administratively, the Adiwiyata program at school have been implemented well. But the implementation environmentally-aware character still requires strengthening by the Principal, teachers, as well as consistent assistance from the Environmental Service and the North Gorontalo Education Service.

Waste management at SMP Negeri 2 Kwandang have been in accordance with the 3R system. However, waste management needs greater attention, as, despite visible improvements, scattered litter is still found among plants upon closer observation. This was due to inadequate waste management facilities and a portion of students who did not understand how to dispose separately and how to manage waste according to 3R principle. Many students still continued to discard waste improperly due to the lack of information and understanding regarding the Adiwiyata program. New students require intensive education on environmental care by teachers because influencing their character will require patience and time.

As a National Adiwiyata school, SMP Negeri 2 Kwandang needs to cooperate with related agencies, especially North Gorontalo Education Service, North Gorontalo Environmental Service, and Gorontalo Provincial Environmental and Forestry Office for the sustainability of the Adiwiyata program in schools with periodic assistance to schools. Therefore, the Adiwiyata program is not only encouraged during the assessment, but will remain and continue so that concern for environment continues to be maintained, both for students who will graduate and students who have just entered school.

Author Contribution
Study's conception and design, C.K., R.U. and S.R; Methodology, C.K., R.U. and S.R; Software, C.K., R.U. and S.R; Validation, R.U. and S.R; Formal Analysis, C.K., R.U. and S.R; Investigation, C.K., R.U. and S.R; Resources, C.K., R.U. and S.R; Data Curation, C.K., R.U. and S.R; Writing - Initial Draft Preparation, C.K.; Writing - Review & Editing, R.U. and S.R; Visualization, S.R.; Supervision, R.U.; Project Administration, S.U.; and Funding Acquisition, C.K., R.U. and S.R,".

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Conflicts of Interest

No conflict of interest occurred in this study.

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Biographies of Authors

Cening Kasim, Department Environmental Science, Postgraduate Program, Gorontalo State University, Gorontalo, Gorontalo Province, 96128, Indonesia.
- Email: N/A
- ORCID: N/A
- Web of Science ResearcherID: N/A
- Scopus Author ID: N/A
- Homepage: N/A

Ramli Utina, Department of Biology, Faculty of Mathematics and Natural Sciences, Gorontalo State University, Gorontalo, Gorontalo Province, 96128, Indonesia.
- Email: ramli.utina.@ung.ac.id
- ORCID: 0000-0003-0500-1603
- Web of Science ResearcherID: F-3962-2017
- Scopus Author ID: 57193729361
- Homepage: https://ung.ac.id/formasi/people/195504081981111001

Sukirman Rahim, Department Environmental Science, Postgraduate Program, Gorontalo State University, Gorontalo, Gorontalo Province, 96128, Indonesia.
- Email: sukirmanrahim@ung.ac.id
- ORCID: 0000-0001-5756-9896
- Web of Science ResearcherID: N/A
- Scopus Author ID: 57208315172
- Homepage: https://ung.ac.id/formasi/people/197607292006041001