EVALUATION OF THE IMPLEMENTATION OF THE ADIWIYATA PROGRAM AT THE JUNIOR HIGH SCHOOL LEVEL IN JAKARTA PROVINCE

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Abstract. This study aims to evaluate the implementation of the Adiwiyata Mandiri program in Junior High Schools (SMP) in DKI Jakarta Province. Environmental education is very important to be taught in the midst of increasingly complex environmental problems. The Adiwiyata program is one of the best ways to shape the character of environmental care by integrating it into learning activities and habituation activities at school. This research uses an evaluative method with the CIPP model (context, input, process, product). Data were collected through participatory observation, in-depth interviews, and documentation. The results showed (1) the context aspect, the implementation of the Adiwiyata program is in accordance with the foundation of program implementation, vision, and mission in accordance with the aspects being evaluated; (2) the input aspect, the implementation of the Adiwiyata school program has carried out its responsibilities; (3) the process aspect, implementation activities up to monitoring and evaluation are in accordance with the Adiwiyata program implementation activity plan; (4) the Product aspect, there is a significant increase in environmental care attitudes and environmental quality at school.

Keywords: Adiwiyata Program, CIPP Evaluation Model, Program Implementation

INTRODUCTION

Education has a value in shaping the quality of human life, where its success is influenced by various aspects such as teacher competence, technology growth, infrastructure facilities, quality of education, and the environment around the school. One of the key elements in supporting the learning process is a conducive school environment, which is healthy, green, clean, comfortable, safe and well organized. Some schools still face challenges, such as a lack of awareness of the importance of maintaining cleanliness and environmental sustainability. For example, the habit of littering, excessive use of single use plastics, and lack of active participation in greening activities are still common. This shows that the understanding and awareness of the importance of a healthy and sustainable environment has not been evenly distributed throughout the school community. This situation demands a more systematic and sustainable effort to increase environmental awareness in schools. A proven effective approach is the implementation of the Adiwiyata program. In line with the research of Casmana et al., (2023); Desfandi M. et al., (2019) that Adiwiyata is a good and ideal place to obtain various kinds of knowledge. noma, ethics as the ideals of sustainable development and development. In line with Brauer et al., (2021); Carling, (2021)that environmental issues fully realize the importance of environmental education. So that every school can become an agent of positive change in environmental conservation and sustainable development.

1.1. Adiwiyata Program

The Adiwiyata program is a national program launched by the Indonesian Ministry of Environment and Forestry in collaboration with the Ministry of Education and Culture, with the aim of shaping environmentally friendly character and culture by integrating environmental education into the national education system. In line with research by Aini et al., (2021); Heleri & Ismanto, (2021) that the Adiwiyata program was developed to establish and encourage schools in Indonesia to participate in government efforts towards environmental conservation and sustainable development for future generations. The Adiwiyata program was first launched by the Indonesian government in 2006 at the primary and secondary education levels. This program emphasizes the importance of the

participation of all school members in protecting and preserving the environment through learning, management, and empowerment based on awareness and responsibility for sustainable activities in protecting the surrounding environment. In line with Emilzoli et al., (2021); Olsson et al., (2019)that increasing knowledge and awareness of preserving the environment can create environmentally friendly behavior and develop environmental ethics. Thus, the commitment to improve the character of environmental care through education is very appropriate to encourage environmental care behavior in the school environment.

Data on Adiwiyata schools in Indonesia are as follows:

Table 1. Adiwiyata Schools in Indonesia

Year	School Adiwiyata	Adiwiyata Ward	
		Mandiri	National
2006 - 2024	28.990	1.321	5.055
2006 - 2023	28.270	1.113	4.543
2006 - 2022	27.169	1.019	4.126

Source: PGLHK Center for Development of Environmental and Forestry Generations

Data from the center for the development of environment and forestry generations, from 2006-2024 at the district, city, provincial, national and independent levels there are 28,990 Adiwiyata schools in Indonesia. Consisting of 1,321 independent Adiwiyata schools and 5,055 national Adiwiyata schools. If you look at the data in table 1, there is an increase in the number of Adiwiyata schools from the previous year, this shows that many schools in Indonesia want to be involved and play an active role in efforts to save the environment through the Caring and Environmental Culture movement program in Schools.

The implementation of the Adiwiyata program originated from the Minister of Environment No. 2 of 2009 which was later replaced by the Minister of Environment regulation No. 5 of 2013 and has now been and changed to the Minister of Environment regulation Number P.52/MENLHK/SETJEN/KUM.1/9/2019 concerning the criteria for implementing Adiwiyata schools which then became the basis for this study. The following are the components of the Adiwiyata program:

1. Planning for environmental care and culture movements in schools where schools must conduct school self-evaluations, identify environmental potential and problems, schools make plans for environmental care and culture movements in schools that are integrated in the KSP document.
2. Implementation of environmental care and culture movements in schools where schools carry out learning that integrates the application of environmentally friendly behavior in subjects, extracurricular activities and habits, campaigns, publications, cadres, actions in the community. This aims so that students not only gain knowledge about the environment but are also taught the values of care, responsibility, develop awareness and deep understanding of sustainability, in addition students play an active role and have the skills and willingness to be part of the solution
3. Monitoring and evaluation of the implementation of environmental care and culture movements in schools
4. Results of the Adiwiyata program implementation

Jakarta Province, as the center of government and economic center in Indonesia, faces serious environmental challenges. High population growth, massive infrastructure development, and high economic activity have had a significant impact on environmental quality in Jakarta. The Jakarta Provincial Government launched the Adiwiyata school program as a strategic step to build a culture of environmental care through educational institutions by creating awareness among students, teachers, and all school residents about the importance of maintaining cleanliness, beauty, and environmental sustainability. In line with research by Sangia *et al.*, (2022); Wibowo *et al.*, (2023) that schools have a strategic role in shaping students' environmental care character. The Adiwiyata

School Program in Jakarta is a collaborative effort between the government, schools, and communities in protecting the environment, by continuing to develop and strengthen this program, it is hoped that Jakarta can move towards a greener, cleaner, and more sustainable city.

Data on Junior High Schools that received independent and national Adiwiyata awards in Jakarta Province are as follows:

Tabel 2 . Adiwiyata Schools in Jakarta Province

Level	State school	Adiwiyata Mandiri	National Adiwiyata
SMP	293	8	9

Source: PGLHK Center for Development of Environmental and Forestry Generations & Dapodik Kemendikbud 2024

Table 2 explains the number of Adiwiyata schools at the junior high school level in Jakarta Province. Out of 293 public schools, there are 8 Adiwiyata Mandiri schools and 9 national Adiwiyata schools. This certainly shows that Adiwiyata schools in Jakarta Province still need socialization, motivation, guidance, and supervision both in implementation and sustainability. From the eight Adiwiyata Mandiri schools, researchers selected two schools that were considered the best based on the results of the grand tour conducted. The grand tour process involved in depth observations and interviews with the schools. Through this process, the researcher looked for schools that not only implemented the Adiwiyata program well but also showed a strong commitment to maintaining and developing sustainable environmental education and culture. The schools were SMPN 103 East Jakarta, SMPN 173 North Jakarta.

1.2. CIPP Evaluation Model

Program evaluation can provide insight into how schools in Jakarta contribute to environmental conservation and how schools improve or maintain the Adiwiyata program. In line with (Ambiyar, 2019; Faizin & Kusumaningrum, 2023; Mustafa, 2021; Sukardi & Hayati, 2015) a program that successfully achieves its objectives indicates that the program components have run perfectly according to their functions. In addition, program evaluation helps in measuring the performance and impact of the program that has been implemented, whether the program is effective and whether there is anything that needs to be fixed or improved. Program evaluation presents information as a basis for decision making and presents recommendations as decisions in supporting the Adiwiyata school program. Therefore, a comprehensive evaluation of the Adiwiyata school program in the Special Region of Jakarta Province is important to measure the extent to which the program's objectives have been achieved and to see the school's strategic efforts to implement the Adiwiyata program.

The purpose of this study is to look at the implementation of the Adiwiyata Mandiri program in Junior High Schools (SMP) in Jakarta Province. The evaluation model used is the CIPP (Context, Input, Process, Product) evaluation model developed by Daniel Stufflebeam (Stufflebeam & Coryn, 2014; Stufflebeam & Shinkfield, 2007; Stufflebeam & Zhang, 2017). According to Stufflebeam, the CIPP evaluation model is carried out systematically in which there is a process of describing, collecting, analyzing and presenting information for decision making based on criteria. This model was chosen as a reference in evaluating the Adiwiyata Mandiri school program. This evaluation will help identify the strengths and weaknesses of the program, schools can also ensure that the Adiwiyata program is evaluated comprehensively from various aspects, including the long-term impact of the program and provide recommendations for improvement that can be used as a reference by other schools who want to implement similar programs and become role models. Explanation of each component in the research related to the evaluation of the implementation of the Adiwiyata school program as follows:

1. Context Context component tries to evaluate the program as a whole, starting from looking at school self evaluation, identifying potential and environmental problems in schools, identifying deficiencies, strengths, diagnosing problems, and providing solutions, testing whether the goals and priorities are adjusted to the needs to be implemented.
2. Input component is determining how the program objectives are achieved, including human resources assessing the competence of the teachers and staff involved in the program whether they receive training on the program, and the availability of infrastructure.
3. Process component is the way the program is implemented, including the strategies used, the activities carried out, and the interaction between all school members in supporting the Adiwiyata program.
4. Product component is an assessment carried out to measure success in achieving the goals that have been set and whether the results achieved are as expected, such as increasing knowledge or skills of Adiwiyata program participants, observing changes in the behavior of student in maintaining the cleanliness of the school environment, and evaluating environmental projects produced by students.

RESEARCH METHOD

This research is a qualitative study with an evaluation method that aims to identify the strengths and weaknesses of the program, ensure that all important elements have been considered and improved, measure the extent to which program objectives have been achieved, and assist decision makers in making necessary changes so that the program can function more effectively and sustainably. The evaluation model used is Context, Input, Process and Product (CIPP).

The study was conducted in four stages:
1. Planning which discusses the foundation of the Adiwiyata program, the involvement of all school residents and the alignment of the vision and mission to the objectives of the Adiwiyata program.
2. Preparation which discusses the integration of the Adiwiyata program into the curriculum of educational units, learning implementation plans, extracurricular activities and habits in schools.
3. Implementation of how the Adiwiyata program is implemented in schools in accordance with the standards, objectives and school plans and identify obstacles and challenges faced by schools by monitoring and evaluating.
4. Outcomes to see the results of the program related to changes in enviromental care attitudes and behaviors, school environmental conditions.

The program evaluation was conducted in 2024-2025 at SMP Negeri 103 Jakarta, SMP Negeri 173 Jakarta. Information was collected through observation, documentation and interviews. The informants in this study were 2 principals, 10 teachers and 12 students. Data were analyzed through the steps of data collection, data reduction, presentation and verification. To ensure the validity of the research data so that the data analysis and results can be trusted, the researchers used data triangulation techniques.

RESULT AND ANALYSIS

SMP Negei 103 East Jakarta has been part of the Adiwiyata school program since 2011. The school's commitment to protecting the environment continues to be shown through various school activities, until in 2019 it won the Adiwiyata Mandiri award and in 2024 the school is again committed to continuing its efforts by renewing as an Adiwiyata Mandiri school, this shows consistent dedication in making environmental awareness a school culture. To maintain the sustainability of the Adiwiyata program, SMPN 103 has implemented various innovative strategies. One of the flagship strategies is the environmental demo, which is conducted by the school's Adiwiyata ambassadors every Wednesday. This activity aims to increase environmental awareness among the school community. In addition, all students are divided into environmental working groups, each accompanied by a

coordinator. These working groups include a greening group, medicinal plant group, composting group, waste sorting group, health group and canteen cleanliness. SMP Negeri 103 has strong internal policies in support of environmental conservation. These policies include a ban on the use of single-use plastics, saving electricity and water, developing hydroponic activities, nursery and planting of family medicinal plants, production of aloe vera syrup and telang leaf tea by students, composting, and waste sorting. All of these activities not only aim to preserve the environment, but also provide practical learning that can increase students' creativity and love for the environment. In addition to internal activities, SMP Negeri 103 also actively involves students in activities outside the school. These include environmental campaigns around the school, making environmental education posters, and distributing fertilizer produced by students to the surrounding community. With a strong strategy and commitment, SMPN 103 has become an inspiring example in implementing the Adiwiyata program and developing a culture of environmental care at the school level.

SMP Negeri 173 North Jakarta has been part of the Adiwiyata program since 2013. With a high commitment to environmental conservation, the school has consistently followed the various stages of the Adiwiyata program until it won the Adiwiyata Mandiri award in 2018. This recognition further strengthens the school's position as one of the leading models for implementing environment-based education. In 2024, the school also extended its Adiwiyata Mandiri status as a form of sustainability in integrating environmental values in every aspect of education. SMP Negerń 173 North Jakarta has integrated environmental issues into various subjects. This integration provides a strong foundation for students to understand the importance of environmental conservation, both theoretically and practically. In addition, the school has developed a flagship program called Sekolah Tanpa Sampah. The school's commitment to environmental sustainability is also reflected through various supporting activities. Some of these include green campaigns, environmental-themed essay writing competitions, and routine activities to clean the environment around the school and Adiwiyata activities once a month on Fridays. These activities not only increase the awareness of the participants on the importance of protecting the environment, but also build a culture of environmental care among the school community and the surrounding community. With various initiatives and excellent programs, SMPN 173 North Jakarta is a clear example of how the Adiwiyata program can be implemented to create a generation that cares and is responsible for environmental conservation.

1.3. Context Components

In the context component, an evaluation is carried out related to the planning of the environmental care and culture movement in schools with aspects of evaluating the foundation of the Adiwiyata program, the involvement of all school members and the alignment of the vision, mission and objectives of the Adiwiyata program.

Tabe l 3. Evaluation Analysis of the Implementation of the Adiwiyata Program on the Context Components

Context Components	Evaluation Aspects	Research Data Analysis	
		SMP Negeri 103	SMP Negeri 173
Planning	The Foundation of the Adiwiyata Program	As a program foundation, SMP Negeri 103 Jakarta has implemented School Self-Evaluation (EDS) and Identification of Environmental Opportunities and Problems (IPMLH) and used the results as the basis for program planning.	As a program foundation, SMP Negeri 107 Jakarta has implemented School Self-Evaluation (EDS) and Identification of Environmental Opportunities and Problems (IPMLH) and

			used the results as the basis for program planning.
	Adiwiyata program targets	All school residents, principals, teachers, students and education staff are actively involved in every stage of the program.	The entire school community is involved, teachers, students and education staff.
	Alignment of vision, mission with program objectives	Vision: to create a young generation that is tough, noble, achieves, has a noble character, masters science and technology, is based on IMTAK and loves the environment. Mission: to increase the sense of love and concern for the environment.	Vision: to realize students who excel in achievement, have a global perspective, love the environment and have Pancasila character. Mission: to create a healthy, green, clean, safe and comfortable school climate.

Based on table 3, the legal basis for the Adiwiyata program is the Regulation of the Minister of Environment Number P.52/MENLHK/SETJEN/KUM 19/2019 concerning criteria for implementing Adiwiyata schools, one of the requirements for implementing the Adiwiyata program is that schools are required to conduct School Self Evaluation (EDS) and Identification of Environmental Opportunities and Problems (IPMLH). This evaluation aims to identify the condition of the school environment, including aspects of cleanliness, health, greenery, comfort, as well as opportunities and challenges faced in environmental conservation efforts. This process becomes a strategic foundation for schools to design programs that are relevant and have a direct impact on achieving the goals of the Adiwiyata program.

The results of the resealrch alnallysis show thalt two ALdiwiyaltal Malndiri schools in DKI Jalkalrtal Province, nalmely SMPN 103 Jalkalrtal alnd SMPN 173 Jalkalrtal, halve implemented EDS alnd IPMLH systemalticallly. Through the implementaltion of these two processes, schools alre alble to alnallyze the needs of the school environment in depth. This alnallysis includes malpping the potentiall alnd problems, such als walste malnalgement, greening needs, als well als walter alnd energy resource malnalgement. In alddition, the results of EDS alnd IPMLH become the balsis for schools to design programlm implementaltion straltegies thalt not only focus on malnalging the physicall environment, but allso building the chalralcter of school members to be more concerned alnd responsible for environmentall conservaltion.

The involvement of alll school members is the key to the success of Malndii in both schools. The principall, tealchers, students, alnd educaltion personnel of the ALdiwiyaltal programlm plaly aln alctive role in every stalge of the programlm, from plalnning to evallualtion. This alctive palrticipaltion shows thalt the ALdiwiyaltal programlm is not only the responsibility of certalin individualls, but hals become al collective culture in the school environment. Mealnwhile, when viewed from the vision alnd mission of the school, SMPN 103 Jalkalrtal alnd SMPN 173 Jalkalrtal halve shown consistency in alligning the vision alnd mission. The vision of SMPN 103 Jalkalrtal is to crealte al strong, virtuous, outstalnding young generaltion, with noble chalralcter, malstering science alnd technology, balsed on IMTALK alnd loving the environment. This vision illustraltes the school's commitment to produce al generaltion thalt is not only alcaldemicallly superior alnd virtuous, but allso hals al high concern for the environment. SMPN 173 Jalkalrtal hals al vision of reallizing students who excel in alchievement, halve al globall outlook, love the environment, alnd halve Palncalsilal chalralcter. This vision emphalsizes the importalnce of building al young generaltion thalt is globallly competitive, but still hals al love for the environment alnd upholds the vallues of Palncalsilal als al morall foundaltion. The vision of the two schools SMPN 103 Jalkalrtal hals al mission to increalse al sense of love alnd concern for the environment alnd, SMPN 173 Jalkalrtal mission to reallize al heallthy, green, clealn, salfe, alnd comfortalble school climalte. The conformity of the vision alnd mission of these two schools shows al reall effort to foster environmentall alwalreness alnd calre in alll school members, including principalls, tealchers, students, alnd educaltion stalff.

1.4. Input Components

In the input component, an evaluation is carried out related to the preparation of environmental care and culture movements in schools with aspects of evaluating the integration of the education unit curriculum (KSP) and the Learning Implementation Plan (RPP), human resources, facilities and infrastructure and program financing.

Tabe l 4. Evaluation Analysis of the Implementation of the Adiwiyata Program on the Input Components

Input Components	Evaluation Components	Research Data Analysis	
		SMP Negeri 103	SMP Negeri 173
Preparation	Integration of educational unit curriculum (KSP), learning implementation plan (RPP)	Integrated the curriculum documents of educational units and 100% of teachers in schools have created integrated lesson plans.	Integrating KSP and RPP documents into the Adiwiyata program. Teachers are required to prepare RPP or teaching modules that contain environmental education aspects.
	Human Resources	Teacher competency related to the Adiwiyata program is quite good. Teachers, together with Adiwiyata ambassadors, actively provide assistance to schools that want to participate in the program. School efforts to improve competency by sending teachers to participate in training and then disseminating the knowledge gained to all fellow teachers.	Teacher competence related to the Adiwiyata program is quite good. Teachers, also as coordinators of working groups, motivate them to continue to improve their competence. In addition, the school's efforts to improve the competence of sending teachers to attend training or inviting resource persons to schools
	facilities and infrastructures	The facilities and infrastructure available at the independent Adiwiyata school have met the established standards and function well. Facilities such as sorted trash bins, toilets that are always clean, hand washing facilities installed in front of each class, and a canteen that provides healthy food.	The facilities and infrastructure available at the independent Adiwiyata school have met the established standards and function well. Facilities such as sorted trash bins, toilets that are always clean, hand washing facilities installed in front of each class, and a canteen that provides healthy food.
	Financing	Funds BO, there are no special funds for the Adiwiyata program	Funds BO, there are no special funds for the Adiwiyata program

Based on table 4, the results show that the implementation of the Adiwiyata program in Adiwiyata Mandiri schools, SMPN 103 Jakarta and SMPN 173 Jakarta, has integrated environmental education in the Education Unit Curriculum (KSP) document and the Learning Implementation Plan (RPP). 100% of teachers in the school have developed lesson plans that are integrated with aspects of environmental education. This lesson plan document not only includes the basic competencies that must be achieved by students, but also contains elements of environmental education, such as waste management, conservation of natural resources, with this approach, learning does not only focus on cognitive aspects, but also on building the character of students who care about the environment. For example, schools integrate topics on waste management and water resource conservation in Natural Science (IPA) subjects, as well as incorporating the theme of environmental sustainability

into Pancasila and Civic Education (PPKn) lessons. This systematic approach not only helps schools meet the Adiwiyata program indicators, but also creates synergies between academic learning and environmental sustainability practices. With all teachers actively participating in developing lesson plans and teaching modules based on the environment, the Adiwiyata program at SMPN 103 Jakarta and SMPN 173 Jakarta is able to build collective awareness of the importance of environmental sustainability.

The results showed that teacher competence related to the Adiwiyata program at SMPN 103 Jakarta and SMPN 173 Jakarta, was in the good enough category. Teachers not only act as teachers, but also as the main driving force in the implementation of various environmental activities at school. One concrete evidence of this competence is the active involvement of teachers in assisting other schools that want to join the Adiwiyata program. Teachers, together with Adiwiyata ambassadors or genes, provide guidance and share experiences on best practices in program implementation, such as waste management, greening, and habituation of environmentally friendly behavior. This mentoring role shows that teachers have a good understanding of the concept, objectives, and implementation of the Adiwiyata program, so they can be a source of inspiration for other schools.

The school's efforts to improve teacher competence actively send teachers to attend various trainings relevant to the Adiwiyata program. These trainings include environmental management, integration of environmental values in learning, and facilitation techniques. After attending the training, teachers who are assigned to transfer their knowledge and skills to their peers not only improve their individual competencies, but also strengthen collaboration and synergy among teachers in supporting the implementation of the Adiwiyata program. Teachers also act as working group coordinators, contributing greatly to the sustainability of the program. As leaders, they not only motivate group members to continuously improve their competencies, but also ensure that any planned environmental activities can be implemented effectively. Good competence and strategic support from the school, teachers are able to carry out their roles optimally in the Adiwiyata program. in accordance with Khasana *et al., (*2023) that the strategy and competence of educators play an active role in developing the character of environmental care This shows that improving teacher competence is an important element in the success of the program, both to achieve program goals at the school level and to extend the positive impact of the program to other educational communities.

The results show that the facilities and infrastructure in Adiwiyata Mandiri schools have met the standards set and function optimally in supporting the creation of a clean, healthy and comfortable school environment. Facilities such as segregated trash bins, clean toilets, hand washing stations in front of each class, and canteens that provide healthy food are important elements in creating a culture of environmental care. Although the physical facilities are adequate, funding for the Adiwiyata program from the BOS Fund does not have a specific allocation. This requires school creativity in optimizing existing resources to maintain and develop environmental programs in a sustainable manner, demonstrating the commitment of Adiwiyata Mandiri schools in prioritizing program sustainability.

1.5. Process Components

In the process component, an evaluation is carried out related to the implementation of the environmental care and culture movement in schools with the evaluation aspects being implementation, monitoring and evaluation.

Tabel 5. Evaluation Analysis of the Implementation of the Adiwiyata Program on the Process Components

Process Components	Evaluation Components	Research Data Analysis	
		SMP Negeri 103	SMP Negeri 173
Implementation	Program implementation	➢ Environmentally friendly behavior has been integrated into subjects. ➢ The school implements environmental theme projects. ➢ Extracurricular activities are carried out through a habituation approach. ➢ Adiwiyata Program activities at SMPN 103 are carried out regularly once a week. ➢ Sanitation and drainage in the school are up to standard and functioning well. ➢ SMPN 103 independent Adiwiyata school has implemented a zero waste program. During break time, students are required to eat in the canteen area. Waste management starts with waste segregation. Organic waste is processed into compost, while non-organic waste is utilized for student crafts. ➢ Planting and maintaining plants in the school environment is done collaboratively by teachers as greening coordinators and students who are members of the greening working group. ➢ Water and energy conservation is more focused on saving efforts in the use of water and energy. The implementation of energy conservation is strengthened by the policy of prohibiting students from using cell phones in the school environment.	➢ Environmentally friendly behavior has been integrated into subjects. ➢ The school implements projects with environmental themes. ➢ Integration in extracurricular activities is carried out through a habituation approach, namely ant operations before and after activities. ➢ Sanitation and drainage in the school are up to standard and functioning well. ➢ SMPN 173 Adiwiyata Program activities are conducted once a month. ➢ The sanitation and drainage conditions in the school are good, with facilities available and functioning well ➢ SMPN 103 independent Adiwiyata school has implemented a zero waste program. Students are required to bring their own tumblers and containers to reduce waste. Waste management starts with waste segregation. Organic waste is processed into compost, while non-organic waste is collected and deposited into the village waste bank. ➢ Planting and maintaining plants in the school environment is done collaboratively by teachers as greening coordinators, and students who are members of the greening working group. ➢ Water and energy conservation is more

Process Components	Evaluation Components	Research Data Analysis	
		SMP Negeri 103	SMP Negeri 173
			focused on saving efforts in the use of water and energy.
	Monitoring and Evaluation	SMPN 103 Monitoring is carried out by Adiwiyata ambassadors once a week. The school makes a monitoring sheet. Evaluation is conducted regularly on Wednesdays by the principal and program coordinator, to assess the achievement of each program activity, identify things that have gone well, and find aspects that still need to be improved.	Monitoring is carried out by the Adiwiyata gene every day. The school makes a list of monitoring tables related to each work program. The results of the monitoring carried out by gen Adiwiyata will be the basis for an evaluation conducted once a month by the program coordinator and the principal.

Based on Table 5, the implementation of environmentally friendly behavior in SMPN 103 Jakarta and SMPN 173 Jakarta has shown good integration in various aspects of school activities. First, environmentally friendly behavior has been integrated into subjects as an effort to build environmental awareness early on in students. The strengthening of these values is also supported by the implementation of environmentally themed projects, which give learners hands-on experience in understanding and managing environmental issues around them. Extracurricular activities at SMPN 103 and SMPN 173 Jakarta are carried out through a habituation approach where before and after activities students must perform ant operations, which aim to instill positive habits in a sustainable manner. One of the school's flagship programs is that at SMPN 103 Jakarta, Adiwiyata program activities are carried out regularly once a week, while at SMPN 173 Jakarta Adiwiyata program activities are carried out once a month. These routine activities are carried out to encourage the participation of all school members in creating a sustainable environmental culture. In terms of facilities, school sanitation and drainage have met the standards and are functioning well, supporting a healthy and comfortable learning environment. Furthermore, as Adiwiyata Mandiri Schools, SMPN 103 Jakarta and SMPN 173 Jakarta have implemented a zero waste program, where in its implementation, students are required to bring tumblers and eating places, students during breaks are required to eat in the canteen area this aims to reduce waste scattered in the school environment. Waste management is carried out systematically through sorting between organic and non-organic waste. Organic waste is processed into compost, while non-organic waste at SMPN 103 Jakarta is utilized into creative crafts by students, which also provides economic and aesthetic value, while SMPN 173 Jakarta waste is collected and deposited in a waste bank. In addition, greening activities are carried out collaboratively between teachers as coordinators and students who are members of greening working groups. This effort reflects the spirit of mutual cooperation in maintaining and beautifying the school environment. Not only that, the school also focuses on water and energy conservation by emphasizing the efficient use of these resources. One of the supporting policies is the prohibition of cell phone use in the school environment, which indirectly also contributes to the reduction of energy consumption. Overall, the implementation of environmental programs at SMPN 103 Jakarta shows a high commitment to creating a sustainable environmental culture. Collaboration among school community members and supportive policies make this school an exemplary example in environmental conservation efforts.

The role of monitoring and evaluation is an important component in ensuring the sustainability and success of the program. The two schools, SMPN 103 Jakarta and SMPN 173 Jakarta, have different approaches to monitoring and evaluating the Adiwiyata program, although the ultimate goal is the same, namely to improve the effectiveness of program implementation. At SMPN 103 Jakarta, monitoring is conducted regularly by Adiwiyata ambassadors once a week. This monitoring process is supported by a monitoring sheet designed by the school as a documentation tool. Evaluation is

conducted regularly every Wednesday by the principal and program coordinator. This evaluation aims to assess the achievement of each activity, identify the strengths of the program, and find aspects that need to be improved. SMPN 103 Jakarta's approach shows consistent scheduling and involving school leaders in the evaluation process, which can provide strategic direction for program improvement. Meanwhile, at SMPN 173 Jakarta, monitoring is conducted more intensively, every day by the Adiwiyata genes. To support this process, the school has compiled a monitoring table that covers each work program. The monitoring data became the main material in the evaluation process conducted monthly by the program coordinator and the principal. This approach shows a more regular involvement of the Adiwiyata genes, which has the potential to provide more detailed and actual information related to program implementation. Monthly evaluations provide an opportunity for schools to analyze data in greater depth and conduct ongoing planning based on field findings. Both approaches reflect strategies that are tailored to the conditions of each school. SMPN 103 Jakarta emphasizes the consistency of the weekly schedule while SMPN 173 Jakarta emphasizes the intensity of daily monitoring. The combination of regular monitoring and structured evaluation in both schools illustrates good practices in implementing the Adiwiyata program, which can serve as a model for other schools to adapt as needed. It is important to note that the process is ongoing in both schools. Adjustments to the dynamics of the field, available resources, and input from various parties can strengthen the successful implementation of the Adiwiyata program in the future.

1.6. Product Components

In the product component, an evaluation is carried out related to the achievements of the care movement and environmental culture in schools with aspects of evaluating environmental care behavior and improving environmental quality.

Tabel 6. Evaluation Analysis of the Implementation of the Adiwiyata Program on the Product Components

Product Components	Components Evaluation	Research Data Analysis	
		SMP Negeri 103	SMP Negeri 173
Capaian	Environmental care behavior	SMPN 103 Jakarta before the implementation of the Adiwiyata program, environmental awareness in the school was still lacking. Many students were carelessly throwing garbage, and after recess, garbage was scattered in various places. However, after participating in the Adiwiyata program, there was a significant increase in students' environmental awareness. They are now able to sort waste properly and care more about environmental cleanliness. Learners dispose of waste according to its type, which shows positive changes in hygiene behavior and awareness of the importance of protecting the environment.	SMPN 173 Jakarta before the implementation of the Adiwiyata program, the school environment was hot with very few plants, a lot of plastic waste, many students threw garbage out of place. But after participating in the Adiwiyata program continuously, they are now able to sort waste properly and care more about environmental cleanliness. Students dispose of garbage according to its type, which shows positive changes in the behavior of maintaining cleanliness and awareness of the importance of protecting the environment.

Product Components	Components Evaluation	Research Data Analysis	
		SMP Negeri 103	SMP Negeri 173
	Improving environmental quality	Before the implementation of the Adiwiyata program, the condition of the school environment was not as clean as it is now, there were few plants, very much waste production, there was still a lot of garbage scattered outside the trash cans, especially in the canteen area. But implementing the Adiwiyata program has significantly changed the school environment. The school became greener with many plants planted, waste production decreased by 80%, and the canteen no longer uses plastic packaging.	Before the implementation of the Adiwiyata program, the condition of the school environment was not as clean as it is now, there were few plants, very much waste production, there was still a lot of garbage scattered outside the trash cans, especially in the canteen area. But after a cleaner, more organized atmosphere implemented the Adiwiyata program, the school environment is much tidier, healthier, greener, safer and more comfortable for all school members. A well-maintained environment not only supports the sustainability of the Adiwiyata program, but also creates an ideal space for conducive learning.

Table 6 shows that the implementation of the Adiwiyata Program at SMPN 103 Jakarta and SMPN 173 Jakarta has had a positive impact on the environmental care behavior of school members, especially students. Before the implementation of the program at SMPN 103 Jakarta, many students littered, especially after recess, so that garbage was often scattered in various corners of the school. While at SMPN 173 Jakarta, the problem of waste, especially plastic waste, is not well managed, besides that the school environment tends to lack greenery. But after participating in the Adiwiyata program continuously, both schools experienced a very significant increase in environmental care behavior at SMPN 103 Jakarta, students began to understand the importance of sorting waste and disposing of it according to type, showing increased awareness in maintaining the cleanliness of the school environment, this positive habit is also reflected in the behavior of students who are more proactive in maintaining cleanliness in the school area and contributing to school greening. The same thing happened at SMPN 173 Jakarta, where significant changes were seen in waste management and greening. Students are not only able to sort waste properly, but also show concern for environmental sustainability by keeping the school area clean, which previously had a lot of plastic waste. This change is reinforced by the implementation of a policy to bring their own tumblers and food containers to reduce plastic waste in the school environment. This increase in environmental awareness shows the success of the Adiwiyata program in building a sustainable environmental culture. Through education and habituation, students in both schools not only understand the importance of protecting the environment, but integrate it into their daily habits, therefore proving that the Adiwiyata program is effective in changing the behavior of school members to become more concerned about the environment.

In alddition, the implementaltion of the ALdiwiyaltal programlm hals hald al significalnt impalct on the quallity of the school environment. Before the implementaltion of the programlm, both schools falced the challlenges of al poorly malintalined environment, high walste production, especiallly the use of disposalble plalstic walste, alnd lalck of greenery. ALfter the implementaltion of the ALdiwiyaltal Programlm, both schools succeeded in crealting al much greener, clealner, heallthier, salfer alnd more comfortalble environment for alll school members. ALt SMPN 103 Jalkalrtal, significalnt chalnges caln be seen from the reduction of walste volume by 80%, greening through plalnting malny plalnts, alnd implementing al no plalstic palckalging policy in the calnteen. This policy not only reduces the walste scalttered but allso instills al culture of environmentall calre to

alll school members. Mealnwhile, alt SMPN 173 Jalkalrtal, the programlm implementaltion succeeded in crealting al nealter, heallthier, alnd more orgalnized environment. This school hals not only succeeded in increalsing greening, but allso building al comfortalble environment for lealrning alnd alctivities, al calnteen alreal thalt is free of plalstic palckalging, this is alll evidence of the success of the programlm in crealting aln environmentallly friendly culture.

Overalll, the results of programlm implementaltion in the product component in both schools halve shown thalt the ALdiwiyaltal Programlm not only functions als aln effort to malnalge the physicall environment, but allso builds the chalralcter of school citizens who calre albout environmentall sustalinalbility. In line with ((ALmbiyalr, 2019; Falizin & Kusumalningrum, 2023; Mustalfal, 2021; Sukalrdi & Halyalti, 2015) programlms thalt successfully alchieve their goalls indicalte thalt the programlm components halve run perfectly in alccordalnce with their functions. The improvement in the quallity of the school environment alchieved not only supports the objectives of the ALdiwiyaltal programlm, but allso crealtes aln ideall spalce als al conducive plalce to lealrn. This success caln serve als al model alnd inspiraltion for other schools to aldopt similalr programlms to crealte al better environment.

CONCLUSION

The Context aspect shows that the Adiwiyata program has been running well and is in accordance with the legal basis, as well as the vision and mission of the school that supports environmental conservation. The commitment of all school members is reflected in relevant policies and the collective culture formed in the school.

The Input aspect of the program has fulfilled the school's responsibilities, including the integration of environmental education into curriculum documents and teaching modules. Teachers' competencies are in the good category, supported by training and synergy among school members, and facilities are adequate despite challenges in dedicated funding.

Process aspects ranging from learning, environmental-themed projects, to monitoring and evaluation, have been implemented as planned. The different monitoring and evaluation strategies in the two schools show an adaptive approach to the needs of each school, with effective results.

The product aspect of the program has been achieved, marked by a significant improvement in the quality of the school environment, an 80% reduction in waste volume, and the creation of a sustainable culture of environmental care. Both schools became examples of successful implementation of the Adiwiyata Mandiri Program.

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