



The principal's role in environmental education for junior high school students

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Abstract

Environmental development programs in schools are vehicles for developing the nation's character from an environmental perspective. National character education is important in realizing citizens' awareness of the environment and knowing their rights and obligations. Currently, our environmental conditions are getting worse, and thus, environmental education for future generations is very urgent. This study aimed to identify and determine the role of school principals in environmental education programs and policies in schools, with a focus on gathering information about environmental management education programs in schools, and the implementation of Environmental Care with the Adiwiyata Program. This study used a qualitative approach. The instruments used were interviews, observations, and questionnaires. Principal, Deputy Principal for Curriculum, Deputy Principal for Students, Instructors, and Students were the participants of the study. The findings showed that the implementation of environmental education programs in schools, in general, is good, especially for school environmental policies, participatory-based environmental activities, and management of environmental supporting facilities, but in the future, it must be further developed.

Keywords: Environmental education; policy; school; students.

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1. INTRODUCTION

Environmental problems in Indonesia are increasingly worrying (Kurniawan & Managi, 2018), and have an impact on people's lives and other countries around them (Darling et al., 2019). Deforestation, homes, and industrial garbage are some of these environmental issues (Belinawati et al., 2018; Garg et al., 2018; Jiang et al., 2019; Austin et al., 2019; Petrenko et al., 2016; Tacconi et al., 2019). Urban air pollution, smoke and haze from forest and land fires, pesticides, soil pollution, and reduced soil fertility are some of the issues that are commonly discussed in the literature (Greenstone & Fan, 2019; Kusumaningtyas & Aldrian, 2016; Madsen, 2015; WHO, 2018). The 2007 report conducted by the Intergovernmental Panel on Climate Change (IPCC) provides evidence of the detrimental effects of industrialization. Eleven of the twelve hottest years since 1850 have occurred in the last twelve years, according to data cited by the State Ministry of the Environment. The report of the Intergovernmental Panel on Climate Change states that human activities have affected global warming since the mid-20th century and global warming will continue to increase with higher acceleration in the 21st century if there are no countermeasures.

Article 65, the fourth point of Law Number 32 Year 2009 concerning Environmental Protection and Management, states that everyone has the right and role in environmental management. In this case, it is also anticipated that educational establishments would be able to participate in environmental management. The instillation of moral principles to appreciate and take responsibility for nature is directly linked to environmental education. Murti Laksono et al. (2011) provide support for this viewpoint by defining Environmental Education as; *"Efforts to change behaviors and attitudes of individuals to improve their knowledge, skills, and awareness of environmental values, issues, and problems and to motivate people to participate in efforts to preserve the environment for this and future generation."*

Environmental problems arise from activities that alter the environment by depleting environmental resources through misuse or poor management (Asaju & Arome, 2015; Parviainen et al., 2018). Most environmental issues are caused by people who act irresponsibly (Sukarsono, 2018). With the expansion of environmental education in schools, particularly the growing number of schools implementing pro-environment initiatives, environmental problems should decline (Hoegh-Guldberg et al., 2018; Szczytko et al., 2019; Ulutas & Köksalan, 2017). Many schools in Indonesia have achieved the distinction of being designated as "green schools," or "Adiwiyata" (Djuwita & Benyamin, 2019; Haris & Afdaliah, 2016; Warju & Soenarto, 2017). Malang-East Java Province has 173 "Adiwiyata" schools at the city, provincial, national, and independent levels, making it the most numerous province in Indonesia. From grade 1 to grade 6 in elementary schools, from grade 7 to grade 9 in junior high schools, and from grade 10 to grade 12 in high schools, environmental care attitudes have been introduced and instilled.

Formal environmental education is one of the sensible options for introducing environmental education into the curriculum, according to Landriany (2014), Gunansyah et al. (2024), and Wang & Zhang (2021). To improve the school community's green space, environmental education related to the Adiwiyata program is crucial (Tompodung et al., 2018). According to Mendoza et al. (2024), environmental education is a crucial component of environmental management success and a vital tool for developing human resources capable of putting the sustainable development principle into practice.

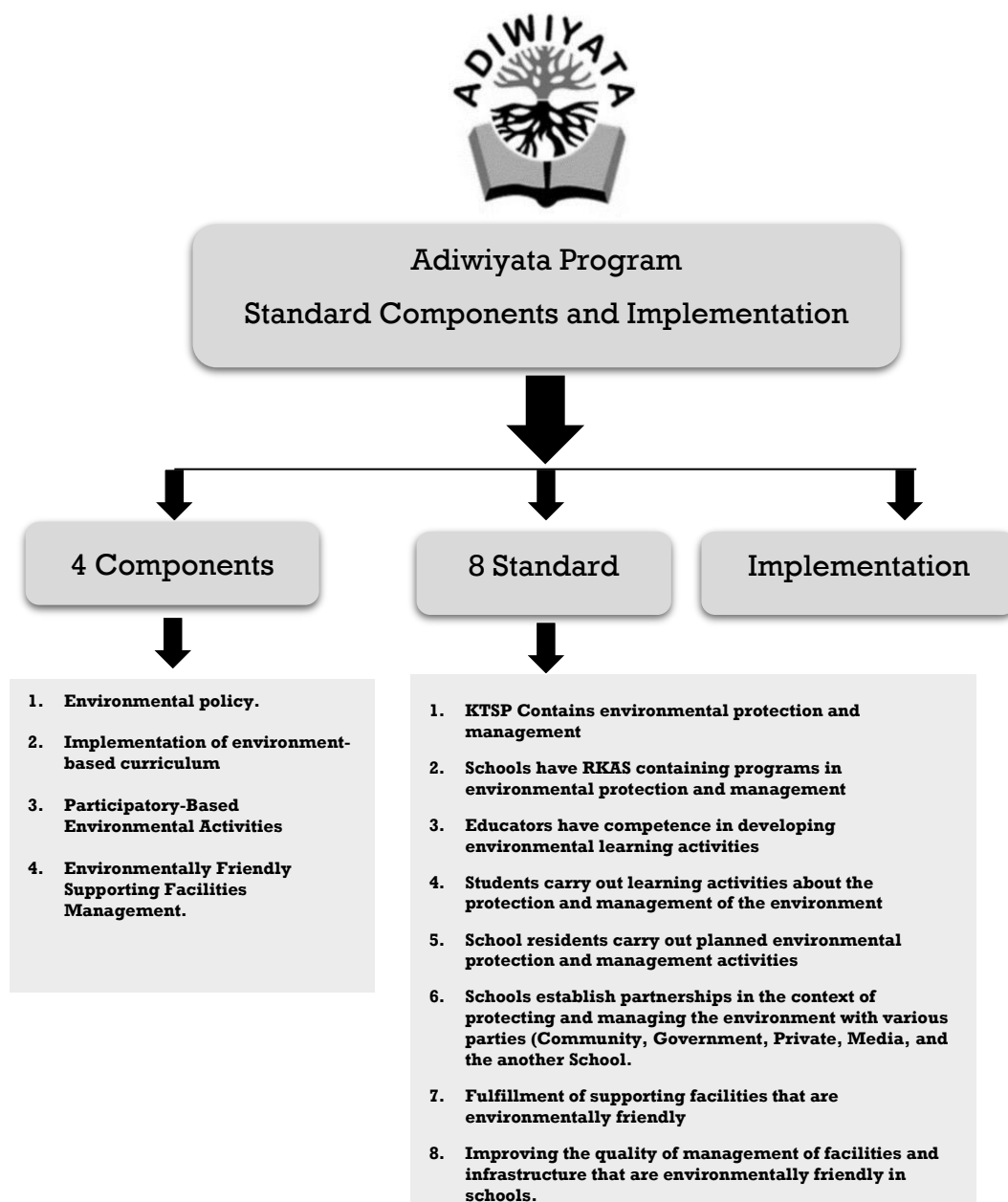
Environmental education is necessary and needs to be provided to children at a young age so that they understand the environment and do not harm the environment's ecosystem, according to Landriany (2014) and Silo et al. (2024). A useful technique that can help man break free from the consumerism cycle and regain control over his life is environmental education (Pinto & de Ouro Mamed, 2016). We can feel the results of education together today. The phenomenon of industrialization has entered most of the third world, including Indonesia, which has led to significant changes in various aspects of life. The rapid progress of the industry has no doubt guaranteed political, and economic stability and the transformation of scientific knowledge and technology. Alternatively, rapid industrial progress has harmed the environment.

Education in Indonesia is described to have a constructive impact and produce quality Human Resources (HR), as devised in RI Law No.20 of 2003 concerning SISDIKNAS or National Education System Chapter II article 3, with Law Number 20 of 2003 concerning the consistency of education delivery in the intelligence of national

life, they consistently provide empowering education. Empowering education is the process of humanizing children so that their potential is actual in the maturity and independence of their lives. At least with an education that empowers, every child will get basic needs and can know their rights and responsibilities as individuals, community members, and God's creatures. Empowering education should continue to be sought starting from early childhood education, elementary school, and secondary to university.

With the help of the Adiwiyata program, schools can become centers of learning and awareness for their staff, students, and other students. This will inspire efforts to protect the environment and promote sustainable development, which will ultimately lead to the realization of environmentally conscious schools with a culture centered around the values of justice, cooperation, openness, honesty, and respect for the environment and natural resources. To guarantee the Adiwiyata program's execution, the principal has identified four policy and rule components as well as eight operating system standards, which are depicted in Figure 1.

Figure 1
Adiwiyata School Team



1.1. Literature review

1.1.1. Policy implementation

The definition of implementation according to the Big Indonesian Dictionary means the application or implementation, meaning that which is applied or implemented is an activity planned. Policy implementation can also be defined as a way that is implemented so that a policy can achieve its objectives (Alwi, 2008). The function of implementation according to Yuniningsih et al., (2019), and de Andrade (2023) is to form an effort that allows the goals or targets of public policy can be realized because of government activities. Implementation involves the creativity of the policy implementer to design and find specific tools to achieve the goal. Therefore, because state policies, in general, are still in the form of general statements about the objectives, targets, and various kinds of facilities that still need to be translated into a more rational program which is then further elaborated in the project.

Wibawa (1994) defines implementation as an action taken by the government and the private sector both individually and in groups that is intended to achieve the objectives as devised in the policy. Policy implementation can also be defined as a way that is implemented so that a policy can achieve its objectives. The implementation itself according to Wibawa, (1994) began to occur at the stage of program preparation.

Wibawa (1994) provides an overview of several steps to develop the program, that is: a) Identifying problems that should be intervened; b) confirming the objectives to be achieved; and c) designing the structure of the implementation process. According to Wibawa (1994), the success of policy implementation is influenced by the policy's content and how it is implemented. The content of the policy includes things like (1) how much the policy takes into account the interests of the target group, (2) the kinds of benefits that the group will generate or receive, (3) the desired rate of change of a policy, (4) the program's location or decision-maker is appropriate, (5) who implements the program and whether the policy has determined the implementer in detail, and (6) adequate resources are mobilized to support the program.

Implementation of policies, in general, is more difficult than devising them. The emergence of problems in policy, because the policy formulation process requires an understanding of various aspects that result in not all policies, can be implemented perfectly. "Implementation involves real conditions that change and are difficult to predict." Furthermore, Abidin believes that the policy is more difficult to implement because, in its formulation process, there are assumptions, generalizations, and simulations that are difficult to implement so there is an implementation gap or gap between those devised and those that can be implemented. Although within certain limits, these gaps can still be tolerated or even left. However, monitoring still is identified so that pleasant can improve their deficiencies.

1.1.2. Environmental education

Environmental Education: What Is It? People can study environmental issues, solve problems, and take action to protect the environment through the process of environmental education. People get the knowledge and abilities to make wise judgments as a result, and they gain a deeper comprehension of environmental challenges. Environmental education is defined as the process of aiming to create a global population with the knowledge, attitudes, motivations, commitment, and abilities to work both individually and collectively toward solving existing problems and preventing the emergence of new ones (Tbilisi Declaration, 1977).

The public is taught through environmental education how natural settings work and, in particular, how humans may control their behavior and ecology (Osuntuyi & Lean 2022). In addition to meeting the demands of the business sector, Akinci et al. (2018) recognized that meeting the expectations of the educational community is essential to guaranteeing the sustainability of education in light of the findings.

Infusion methods, integrative methods, and monolithic block methods are the two types of technological concepts that can be used to incorporate conservation, environmental, and natural disaster mitigation materials into the curriculum, according to Murtalaksono et al. (2011). The process of incorporating information on nature conservation and mitigating natural disasters into the relevant curriculum is done

through the infusion method, which is also referred to as the integration approach method. These elements have typically been mixed with resources from the fields of history, social science, and pure natural science.

Since the integrated approach does not call for additional time at school, it is appropriate for formal education at the primary through secondary levels. This allows for a more efficient implementation of environmental education because students are not burdened with extra work. Nonetheless, the integration strategy requires instructors to learn more about the material world in the region that they will be teaching. A learning process plan is created and assembled by taking into account several sources (CSP).

The teacher analyzes and gathers material that is suitable to be developed into learning materials including materials related to nature, humans, and the social environment. Materials related to environmental management such as information on environmental policies, conservation, space management, and pollution and assignments that impact the environment. Books, research reports, journals, the Internet, multimedia sources, and the environmental, social, cultural, and economic environments are all sources of information for teaching and learning materials.

On the other hand, the block method treats natural disasters, conservation, and environmental mitigation as independent topics. This methodology takes a monolithic approach, assuming that every subject has independent objectives. There are two methods to put this strategy into practice: creating educational packages for chemistry and physics courses or creating scientific disciplines like environmental mitigation education, which is comparable to other subjects in the Second Curriculum. Local content formats are used to incorporate environmental materials into the curriculum of schools. The Adiwiyata program, for instance, can be used to build environment-based education (Murtilaksono et al., 2011). Law number 32 of 2009 about Environmental Protection and Management and the follow-up to Minister of Environment Regulation number 05 of 2013 concerning the Implementation Guidelines Adiwiyata Program mandate the Adiwiyata program's implementation.

According to instructions released by the Ministry of Environment (KLH), one of the initiatives run by the Ministry of Environment to promote environmental conservation efforts among school residents is the Adiwiyata program. With the help of this program, it is intended that all students will participate in school-wide initiatives that promote environmental health and mitigate harmful effects on the environment. It is anticipated that the program will be able to invite school personnel to educate and learn about environmental topics as well as take part in maintaining and safeguarding the environment within the school and its environs. Two Sanskrit words make up the word Adiwiyata: "Adi" and "Wiyata." Adi means "great," "good," "ideal," or "perfect." Wiyata is a resource for information on social norms, ethics, and practices. All knowledge, as well as a variety of standards and ethics, can be found in Adiwiyata, which can be, to put it succinctly, a meaningful and perfect place where mankind can build upon its well-being and the principles of sustainable development. To prepare future school participants to assume responsibility for rescue operations and the living environment, the Adiwiyata Program establishes favorable conditions for schools to serve as places of learning and awareness.

Several benefits can be gained by implementing an environmental education policy through the Adiwiyata program, including a) increased efficiency in the execution of school operational activities and the use of various resources; b) increased savings in funding sources through reducing the consumption of various resources and energy; c) improved conditions for teaching and learning that are more comfortable and conducive for all school residents; d) created conditions of togetherness for all school residents; e) increased efforts to avoid various risks of negative environmental impacts in the future; f) became a place where young people learn about the new and correct values of environmental care and management; g) received the Adiwiyata award.

To achieve the Adiwiyata curriculum schools aim to meet four (4) indicators:

1.1.3. Development of a school of care and environmental culture

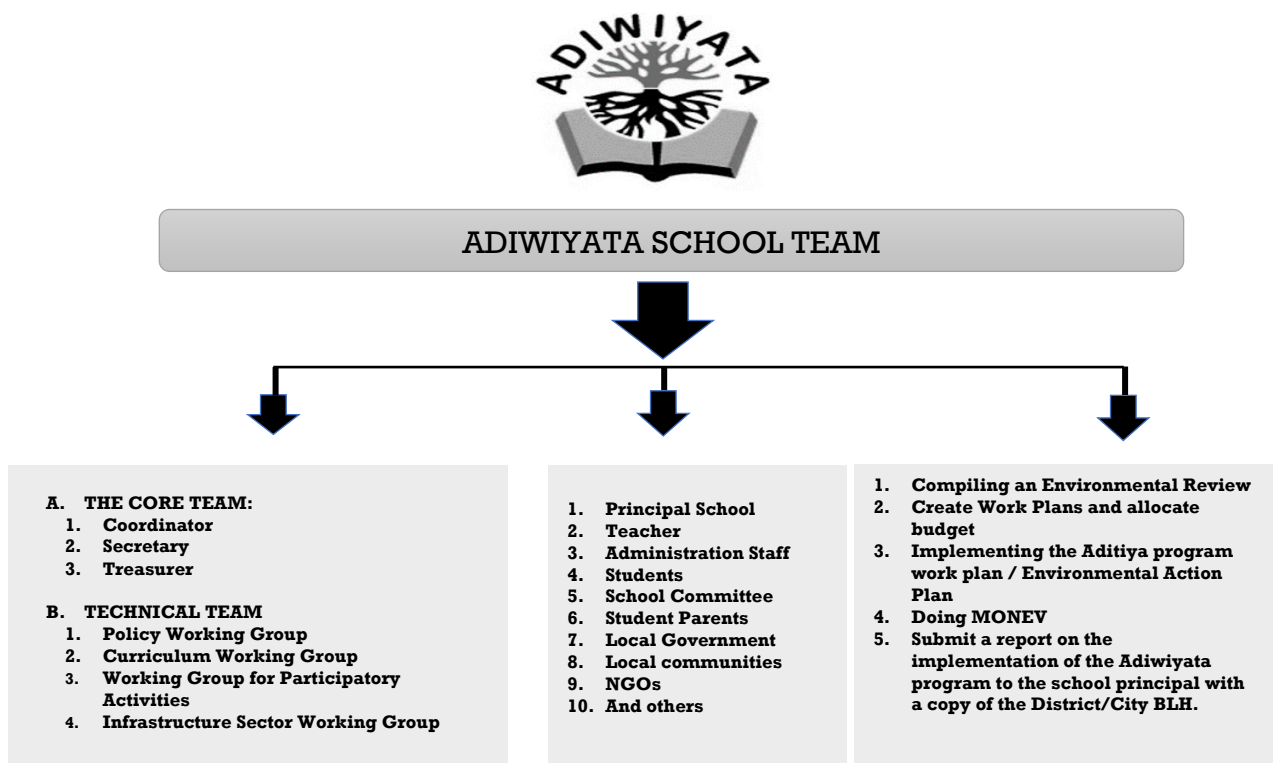
The first indicator contains six (6) criteria that be continuously pursued to be fulfilled, namely, the development of vision and mission contained in the KTSP document reflecting the existence of environmental

protection and management efforts vision and mission will be further stated in the program and plan of school activities which will be disseminated to all communities in the school environment. The second criterion is the existence of a policy regarding the development of environmental education learning materials contained in the KTSP document besides that the school also conducts routine activities with a supportive environment learning environment at least once a month. The third criterion is the existence of a program or policy to increase the capacity of human resources in the environmental field through activities such as seminars, workshops/workshops, totaling at least 50% of the total number of educators and non-educators, both for school initiative and other parties for 4 years. HR capacity building can also be done through comparative study activities, training, and tiered education for at least 20% of the total number of educators and non-educators, both at the initiative of schools and other parties for 4 years.

The fourth is the existence of school policies on the efficiency of the use of water, electricity, office, and plastics, including technical instructions and their implementation supported by the committee and involving all school members, as well as routine monitoring activities. The fifth criterion is the existence of policies, regulations, and school regulations governing the cleanliness and health of the school environment, such as the management of canteens, garbage, toilets, classrooms, and school areas that are environmentally sound through the availability of green open spaces. Additionally, these rules or regulations are socialized through meetings, ceremonies, seminars, and the distribution of documents, banners, and booklets to all school members.

Finally, the policy for allocating routine school funds in the RAPBS for environmental education management and learning activities, for example through improving the physical quality of the environment, improving the quality of Human Resources, and developing teaching materials, at least 10% of the total budget. Self-fundraising policies for environmental management, for example, fundraising from the sale of compost produced by school residents, sale of scarce plants maintained by schools, or fundraising that comes from cooperation with sponsors who care about the environment. To implement the Adiyata program in the school, the main team and a technical team have been formed as shown in Figure 2.

Figure 2
Adiwiyata school team



1.1.4. Development of an environment-based curriculum

The second indicator can be developed by developing integrated environmental education in subjects and Monolithic as separate subjects or local content by compiling Education Unit-Level Curriculum, a monolithic and integrated environmental education syllabus. This has been proven by a large number of educators in the field of environmental education, both monolithic and integrated by providing environmental education under the material load being taught. The development of a curriculum with an environmental theme is also marked by the availability of teaching materials/literature/references of at least 10 titles that are relevant to environmental issues. What is no less important is documenting the learning outcomes of each student's environmental education.

Identifying local environmental issues that can support the implementation of local legislation, strategic plans, other policies on environmental protection, and the administration of local governments is another hallmark of the development of an environment-based curriculum. Once local difficulties have been identified, the Education Unit-Level Curriculum document's environmental challenges in the community can be explored to facilitate learning about environmental education. The support and involvement of the school committee in the determination of environmental education materials will support the availability of teaching materials contextual to the potential environmental problems in the surrounding community.

The creation of teaching strategies based on the surroundings and culture that are defined by provocative actions that encourage the creation of environmental and cultured character, environmental education is conducted proportionally between theory and practice, and varied application of learning methods that focus on students according to the needs of other FGD (Focus Group Discussion), assignments, observations, project work. The use of resource persons includes community leaders, environmental experts, parents of students, and related subjects, the use of local wisdom and cultural values in the learning environment, and the use of the surrounding environment in developing both biotic and abiotic learning methods.

The creation of curriculum activities to broaden students' understanding and consciousness of the environment is the final criterion, which is marked by the implementation of environmental education protection and management activities related to curriculum implementation, and the results of their activities that support increased knowledge and awareness about environmental education under 50% from the number of integrated and monolithic subjects, implementing the results of environmental education learning openly for the community through exhibitions, seminars or workshops at least two (2) activities per year.

1.1.5. Participatory-based development activities

The development of participatory-based activities is marked by creating various extra-curricular activities in learning environmental issues for school residents at least 1 routine environmental activity in each extra-curricular / co-curricular program and the implementation of community involvement in participatory-based environmental activities that schools begin, out of a total of four (four) annual events. The second is to join in more than four (four) environmental action activities that outsiders started as extracurricular activities for students to follow the environmental action acts that they do. The final requirement is to create partnerships or start environmental education initiatives by carrying out more than five (five) partnership activities, starting different environmental action initiatives, and creating a long-term, sustainable collaboration for the development of environmental programs without expecting environmental programs with different parties.

1.1.6. Development and or management of school support facilities

There are at least five (five) school buildings and infrastructure that can be used as a medium for environmental learning. The school offers the development of current school support functions for environmental education. By properly providing and maintaining: a) room lighting; b) natural air ventilation; c) maintenance and regulation of shade or greening trees, usage of infiltration wells and bio pores; and d) management and maintenance of school sanitation facilities, schools can improve the quality of environmental management both inside and outside the school area.

For three (three) years, schools have demonstrated their success in using water, power, office supplies, plastics, and other resources efficiently. Another criterion is an increase in the quality of healthy food services marked by a) The location of the canteen that meets the cleanliness and environmentally friendly requirements; b) periodic examiners at least 1 time a year on canteen food quality; c) routine monitoring of the type, food packaging and cleaning of the canteen at least once a month; d) use of environmentally friendly packaging; e) providing regular counseling to traders at least 1 (one) time a year; f) canteen teacher or manager/provider of healthy food.

The school develops waste management and is responsible for improving the quality of waste management by a) the practice of sorting waste; b) qualified waste management by providing separate bins of at least two types of organic and inorganic, conducting 3R activities, and composting, providing sufficient cleaning personnel, the mechanism of involvement of students and teachers; c) changes in the behavior of school residents in treating waste.

1.1.7. Character building

Three elements of excellent character, moral knowledge, or information about morals; moral feelings, or feelings about morality; and moral action, or moral actions are important in character education, and is required for students to comprehend, experience, and simultaneously work on the values of virtue (Lickona, 1992). Teaching moral knowledge has six objectives: 1) moral awareness; 2) moral values understanding; 3) perspective taking; 4) moral reasoning; 5) decision making; and 6) self-knowledge; Moral actions. A person must be able to feel six different types of emotions to develop into a human being: conscience, self-worth, empathy, loving the good, self-control, and humility. These moral actions/actions are the outcome (outcome) of two other character components. To understand what drives a person is a good act (act morally), three other aspects of character be seen, namely: 1) competence, 2) will, and 3) habit. These deeds of morality are the result of two other aspects of character. Three more facets of character must be considered to comprehend what motivates someone to act morally; competence, will, and habit.

When it comes to handling issues brought on by the natural order (earthquakes, volcanic eruptions) as well as losses or harm resulting from the actions of living things, including people, environmental education can promote the integration of wisdom attitudes and behaviors. The Malang 17 Public Middle School Principal attempted to do this by putting in place an environmentally friendly school policy.

1.1.8. Principal as manager

As a manager, the principal has four main competencies and skills in managerial organization, namely, planning skills, organizing resources, skills in conducting activities, and controlling and evaluating skills. Four principals' managerial skills will be discussed in detail in the following. First, planning skills. The planning process is one of the most important skills because good planning makes up half of a job's success. Good planning refers to the question "What is done (what), who does (who) when it is done (when), where it is done (where), and how something is done (how)." The details of this planning will be the key to the success of the work. The principal can conduct the planning process, both short- and medium-term planning and long-term planning. Short-term planning is planning made for short-term interests, for example for one month to one school year. Medium-term planning is planning for work that takes two to five years, while long-term planning includes planning for five to ten years.

Second, aptitude for organization. Educational institutions possess a wealth of resources, ranging from financial resources to physical resources like buildings, infrastructure, and staff to human resources like teachers, staff, and students. Limited resources are one issue facing educational institutions. The principal can employ the resources at hand to their fullest potential. Their resources, albeit few, serve as start-up capital for their labor. Because of this, resource management expertise becomes a managerial ability that cannot be neglected.

Thirdly, the capacity to carry out tasks following a preconceived plan. This stage suggests that the headmaster develops operational protocols for educational establishments, such as how to operate, fosters

collaboration and motivation, and works in tandem with diverse educational components. Effective planning is useless if it is not carried out with professionalism and seriousness.

Fourth, the principal is capable of managing and supervising others. Teaching supervision and management supervision are both included in the category of supervision. While supervision of teaching involves monitoring and controlling tasks and the competence of educators to instruct, supervision of management entails supervising the development of administrative and institutional abilities and competencies. Therefore, to effectively supervise his subordinates, the principal has both the competence and professional abilities of a teacher.

1.2. Purpose of study

This study aimed to identify and determine the role of school principals in environmental education programs and policies in schools, with a focus on gathering information about environmental management education programs in schools, and the implementation of Environmental Care with the Adiwiyata Program.

2. METHOD AND MATERIALS

2.1. Participants and context

In Malang City, the study was carried out at 17 public middle schools in the academic years 2018–19 and 2020–2021. In Malang City, East Java, Indonesia, 17 State Junior Schools were chosen as the study's research site. The source of Data (Key Informants) included the Principal, Deputy Principal for Curriculum, Deputy Principal for Students, Instructors, and Students.

2.2. Data collection tool

For this investigation, both primary and secondary data types are required. Methods for gathering data: a). thorough interviews to learn more about the country's environmental education-based character education program, b). Observation is a method of gathering data in the field that involves close observation, allowing researchers to witness the research activities they are interested in firsthand (Moleong, 2019). It follows that observation is a method of collecting data that involves concentrating all of one's attention and using all of one's senses on a research subject.

2.3. Analysis

The process of examining and confirming the veracity of the facts gathered through analysis is known as conclusion or verification. After all of the data was evaluated, and verified, and conclusions were made, the study's focus was able to identify a pattern.

3. RESULT

Through an analysis of diverse study findings and data exposure, coupled with a discourse on research findings pertaining to "The Role of School Principals in the Implementation of environmentally friendly School programs," the following explanation can be provided: 1. Adiwiyata School/School program implementation from an environmental perspective; 2. Adiwiyata School/School program implementation from an environmental perspective supporting and impeding elements.

3.1. Adiwiyata School Program Implementation/School with an Environmental Perspective

Disseminating District/City Government Policies in the Adiwiyata Program; The School Principal socializes the program from the Regional Government to the school community to run the Adiwiyata program. Not only that, but the principal also supports and keeps an eye on how the Adiwiyata program is being implemented at the school and gives prizes to those who have run and participated in it. After all, rewarding students with prizes can inspire other students to receive prizes as well. It is intended that by implementing the Adiwiyata Program in schools, the nation's youth will develop cultural awareness and environmental consciousness.

1) The principal cultivates the school community's excitement for the Adiwiyata program. The school community must be very willing and enthusiastic for the program to be implemented successfully. The principal raises funds or the budget for the Adiwiyata program and supervises the program.

2) The school principal motivates the school community to be able to run the Adiwiyata Program and will give an award to the community that has succeeded in running the program so that the community that is rewarded will be more enthusiastic and motivate other residents to get awards as well. So that school residents compete to carry out activities in the Adiwiyata Program.

3) The principal forms a teacher task force that deals specifically with the Adiwiyata Program. Things that should be done for teachers who specifically handle the Adiwiyata Program to implement the Adiwiyata program include: Creating a school team that is crucial to the implementation of environmental management in classrooms. This team should focus on how to include all members of the school community, including the active participation of all students. Student involvement is a crucial component. To succeed in a cultured and environmentally friendly school, a team whose members should be formed includes Principals, Teachers, Students, Parents, School Residents (janitors, administrative officers, canteen managers), Local Governments (Head of Subdistrict and District, and others), the community around the school.

4) The core team consists of the principal, teachers parents, and the surrounding community. These essential members get together frequently. Next, this team member delegated daily assignments to his workgroup of subordinates. Students may be a part of this small group.

3.2. Environmental assessment

An overview of the school's state is intended to be provided by the environmental research conducted in environmentally conscious and culturally sensitive schools. The Action Plan's recommendations will be based on the findings of the environmental research. Environmental assessments will also assist schools in identifying necessary, urgent, and unnecessary modifications. This will make setting realistic objectives and gauging success easier. The school team's environmental assessment addresses several school-related environmental concerns, including waste, water, energy, food and the school canteen, biodiversity, and energy.

Throughout the environmental evaluation that is carried out with the checklist instrument, each of these issues has to be noted. There are several "yes or no" responses on the checklist. On the other hand, there are also commenting sections where you may add details to help create a school action plan that is both culturally and environmentally conscious. Every school carries out environmental research in the most efficient manner possible given the constraints of the institution. Engage pupils as much as you can. Environmental studies are carried out regularly, such as every year or every two years, depending on the needs. This is done to track and assess the performance improvement of the school team.

3.3. Action plan

The action plan is the foundation of the environmentally conscious and culturally sensitive school curriculum. This planning consists of a timetable of tasks and objectives. Because of the environmental studies that were done, this plan will also be used as evaluation material for environmental improvement. Students must participate in the creation of the School Action Plan, as they must in every step of the process of creating a culturally and environmentally responsible school.

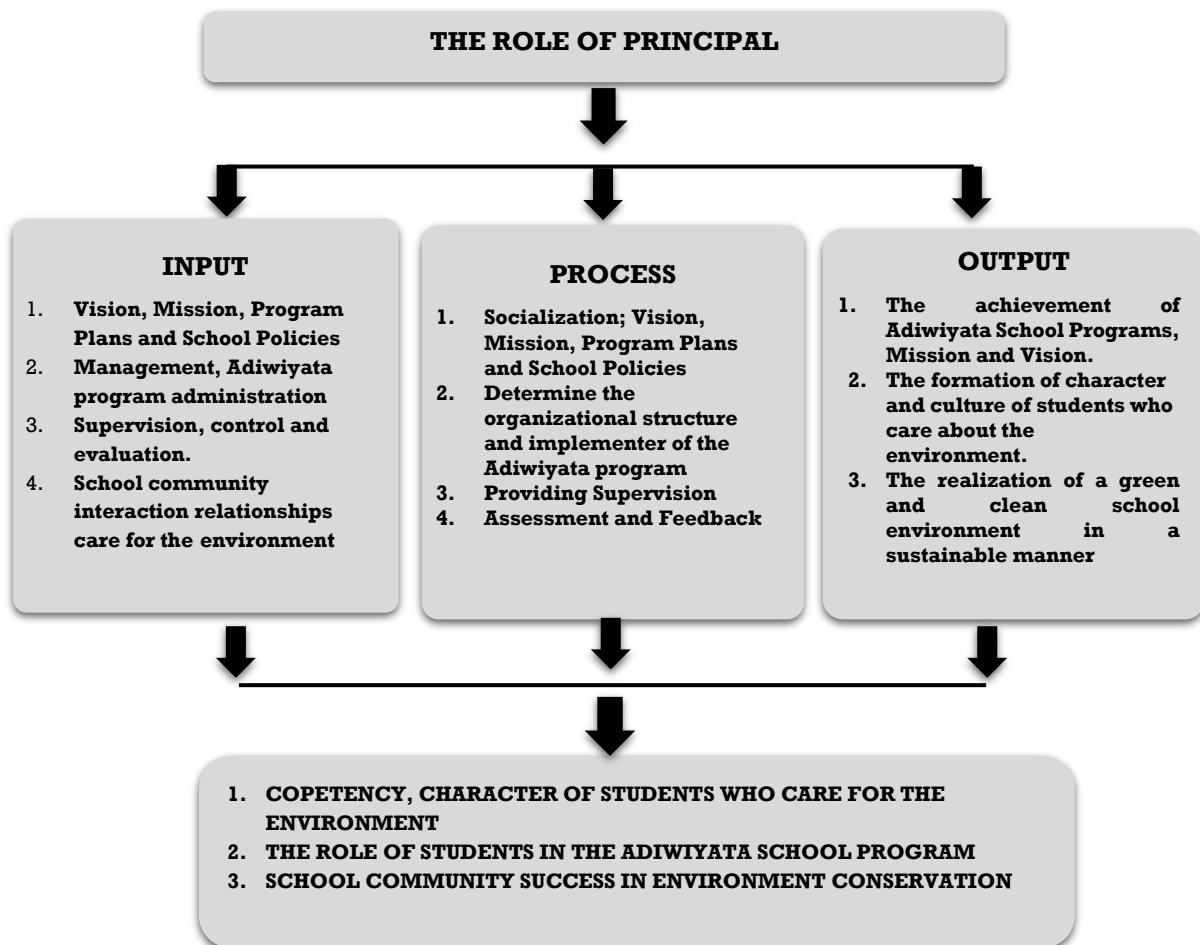
Based on the findings of earlier environmental studies, action plans are created. Clear deadlines, objectives, and the person in control of each activity are all clearly marked in the arrangement of the activities. This was carried out for every phase of the task that needed to be done. As part of the learning process, it's also crucial to carry out a variety of activities that include students whenever possible and are connected to the curriculum. Making sure the goals are achievable given the available resources and potential is another crucial aspect of creating an action plan.

Avoid becoming overly ambitious to the point where achieving the goal becomes challenging, as this may lead to a decrease in motivation. Don't try to tackle every problem at once if the environmental study's findings

force the school to set a lot of targets that need to be met. Making a priority activity scale is preferable. Targets can be broken down into short-, medium-, and long-term plans to help prioritize tasks. When creating action plans in schools, the following factors should be taken into account: The results of environmental studies carried out by the school environment team are not followed in the creation of action plans.

Choose a topic that suits the priority needs of the school by considering the capabilities and deadlines they have. For example, schools want to overcome the problem of waste as the main activity. Then, all resources owned by the school are directed to overcome these problems. Additionally, if there are parts that cannot be completed by the school, then it is necessary to find ways how the school to work together with other parties to overcome them. For example, in collaboration with the cleaning service in transporting waste to landfills; establish how to measure the level of success in achieving goals. Prepare instruments that can measure each program achievement determined. For example, if you want to overcome energy consumption, measurements can be done by observing electricity bills every month; and discussing the period for each activity. Will the activity be achieved in the short, medium, or long term; determine who will be responsible for each activity. As much as possible activities involve students; monitoring the allocation of funds spent for each activity undertaken. The principal has made a comprehensive program plan, including the vision, mission, and work operation standards as well as the fulfillment of the targets created in; 1). Competency, Character of students who care for the environment 2). The role of students in the Adiwiyata school program 3). school community success in the environment is shown in figure 3 below.

Figure 3
The principal's role



3.4. Monitoring and evaluation

The school team's progress will be tracked and measured to ascertain whether or not the goals outlined in the Action Plan have been accomplished. Ensuring that this activity continues will be facilitated by a constant monitoring approach. The objectives and measurement standards established in the Action Plan for each issue will determine the monitoring strategy that is employed. There will occasionally be simple and precise measures to gauge success, such as weighing the trash that is collected for recycling or measuring the meter and energy bills to track improvements in energy-saving practices. This measurement was done to see the extent of the influence of waste management activities; document every stage of the activity before, during, and after photos to compare changes in the school; make a list of species (if possible) before and after the activity to see the effects to show the impact of the activity on biodiversity around the school; use questionnaires and surveys to collect data on the progress of activities involving students; the school team also ensure that Monitoring results are announced to school members, for example in graphical form, Progress activities are announced on the School notice board.

3.5. Participation of school residents

Setting up regular activities and important days (action days) is one of the finest strategies to involve school personnel. The Day of Action offers everyone who attends the school students, instructors, and other staff as well as community stakeholders, the chance to work together to accomplish some of the goals outlined in the Action Plan at specific times. It is necessary to organize Action Day, both in terms of assigning roles and making sure that everyone is aware of them. While action days are vital, regular activities should not be overlooked. Recyclables and water and energy savers are only effective when everyone participates.

It is advantageous for Adiwiyata School to involve the larger community. Parents of students, the local business community, the local government, and the neighboring towns can all be sources of information, training, and financial support for various activities. Involving the general public and the media to increase the transmission of information, for instance by producing newsletters and sending press releases to regional media.

a) The school head looks for funding to carry out the Adiwiyata program. The Adiwiyata Program money must be made available by the government for it to be implemented, as it needs a sizable amount of funding to operate. The Adiwiyata Program cannot function without government support or funding infusion.

b) The surrounding community's involvement in the Adiwiyata program's implementation. Adiwiyata Program implementation requires community participation, which is essential to the program's operation. If everyone participates, initiatives like recycling and water and energy conservation will be successful. For the benefit of both the current and future generations, the neighborhood surrounding the school serves as an indirect driver of environmental preservation and safety initiatives.

3.6 Supporting and Inhibiting Factors of the Environmental Inspection School Program

a) Supporting Factors: there is the support of the School Committee, Office of the Malang City Environment Agency, and Malang Waste Bank (BSM);

b) Supporting Factors 2: Teachers and students are concerned about making schools more environmentally friendly. Pupils are highly conscious of bringing fruit and flower seeds from home, planting backyards in front of their schools, and organizing pickets to maintain the park;

c) Inhibiting factors are the limited budget from the government in realizing an environmentally colored school or Adiwiyata School and the low socioeconomic status of students' parents.

d) The inhibiting factor 2: there are a small number of students who lack fantasies about implementing environmentally friendly school programs or Adi Wiyata schools.

4. CONCLUSION

Environmental education in schools is very important and needed for future generations so that from an early age, students can have awareness and concern and know their rights and obligations as citizens of the environment. In Indonesia the development of environmental education programs at the primary and secondary education levels has been developed in 2016, through the Adiwiyata program. This program encourages school residents to be aware and have character, especially caring for the environment by preserving the environment. Students are trained to care about the surrounding environment through their real attitudes and actions. Thus, the natural damage that occurs can be minimized.

School institutions are required to be able to provide students with environmental knowledge from an early age so that it will provide a good opportunity for the formation of the next student's environmental care character. The concept of environmental education in elementary schools is interpreted as integrated into learning, meaning that it is taught according to the competencies of certain subjects. Therefore, the teacher must understand the purpose of each subject, so that the integration of environmental education does not deviate from the material to be taught.

In educational institutions, one of the principal's functions is as a manager. Principals are required to have four main competencies and skills in managerial organizations, namely planning skills, organizing resources, skills in carrying out activities, and controlling and evaluating skills.

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