

Students Character Education on Environmental Awareness in “Adiwiyata Mandiri School“ of SMA N 1 Ajibarang, Banyumas Regency

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Abstract. An effort to reduce and stop environmental damage is to provide environmental education through Adiwiyata program. The Adiwiyata program is a program to develop character education through environmentally sound governance and school culture. This study aims to describe: (1) the determinants that make Ajibarang 1 Public High School succeed in achieving the title of Adiwiyata Mandiri School; and (2) the implementation of environmental awareness of character education for students in Ajibarang 1 Public high school, Banyumas Regency. The results showed that Ajibarang Public High School won the title as Adiwiyata Mandiri School because it had seven school cultures, the synergy of Adiwiyata program implementers, and the partnership that the school had. The implementation of character-awareness character education is carried out through three processes, namely planning process by compiling school curriculum and budgeting documents; the implementation process through four Adiwiyata pillars, namely environmentally sound policy pillars, environment-based curriculum, participatory based activities, and environmentally friendly infrastructure; and the process of monitoring and evaluation through a race of faith, security, order, cleanliness, beauty, longing, and kinship.

Keywords: Adiwiyata Mandiri School, Education, Environmental Caring Character.

1. Introduction

Environmental awareness of characters are needed to minimize environmental problems in Indonesia. Environmental problems include waste, floods, river pollution, global warming, air pollution, damage to marine ecosystems, difficult water supply, forest destruction, abrasion and soil pollution [1]. Awareness efforts to care about the environment can be started from schools as formal education institutions by providing environmental education. This is in line with the opinion of Pane and Patriana who said that "the environment is very important because of the acquisition of education, their awareness for the environment can grow and develop well so that change of attitude and mindset toward the better environment is expected to happen"[2]. The Adiwiyata program is a strategy for developing character-caring environmental education in schools through school culture and habituation. This strategy is considered effective as Berkowitz's thought that "effective character education is not adding a program or set of programs to a school. Rather, it is a culture and life of the school"[3].

The Adiwiyata Program is implemented based on the Republic of Indonesia Minister of Environmental Regulation Number 5 of 2013 concerning the Adiwiyata Program Implementation Guidelines and Joint Agreement between the State Minister of Environment and the Minister of National Education Number 03/MENLH/02/2010 and Number 01/11/KB/2010 concerning the Program Environmental Culture School. In implementing the

Adiwiyata program the government provides rewards for schools that consistently provide environmental education. These rewards or awards are tiered starting from Regency/City Adiwiyata, Provincial-level Adiwiyata, Adiwiyata Nasional, and Adiwiyata Mandiri. Ajibarang 1 Public High School is one of the schools in Banyumas Regency which obtained the title of National Adiwiyata School (2015) and was chosen as Adiwiyata Mandiri School (2018). The achievements obtained by Ajibarang 1 Public High School can not be separated from habituation, governance, and environment-based regulations (green school).

2. Literature Review

2.1 Character Education

Education is a conscious and planned effort to create a learning atmosphere and learning process so that active students develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble character, and skills needed by themselves, society and the state [4]. Ahmad D. Marimba formulated the definition of education as guidance or consciously educated by educators on the development of students, both physical and spiritual towards the main personality [5]. Whereas characters in English character, derived from Greek terms, a character from the word *charassein* which means making sharp or making in [6]. Berkowitz and Bier suggested that the character is the complex set of psychological characteristics that enable individuals to act as a moral agent [7]. Coherent characters emanate from the results of thought, heart, sports, and the feeling and will of a person or group of people [8].

Based on the understanding of education and character, Raharjo defines character education as a holistic education that connects the moral dimension and social domain in the lives of students as the foundation for the formation of qualified generations who can live independently and have the principle of an accountable truth [9]. This is in line with the understanding according to Thomas Lickona that character education is a deliberate effort to develop a good character based on core policies that are objectively both for individuals and society [10].

2.2 Environmental Character Awareness

According to the Big Dictionary of Indonesian, Awareness means to heed, pay attention, and ignore [11]. Character Counts developed in America interpret awareness that someone who treats others with kindness, gives help to others, is sensitive to the feelings of others, is not rude, thinks about actions taken, and always remembers every act based on awareness [3]. The environment itself is defined as a region or region [11]. Therefore, awareness for the environment according to the Ministry of National Education is an attitude and action that always strives to prevent damage to the natural environment and its surroundings, and develops efforts to improve natural damage that has occurred [12]. Besides that, environmental awareness is also often equated with respect for the environment which is defined by Scerenko, namely the behavior of respecting the natural environment with the obligation to preserve its function to make sustainability of life which is far from environmental pollution [3]. Based on the definition of environmental awareness, it can be concluded that environmental awareness is a character that has a characteristic of the awareness within each person to maintain and preserve the environment.

2.3 Adiwiyata Mandiri School

Silahaban describes that the word Adiwiyata comes from 2 (two) Sanskrit words namely "Adi" and "Wiyata". "Adi" has great meaning, great, good, ideal, and perfect. While "Wiyata" has the meaning of a place where a person gets knowledge, norms, and ethics in social life [14]. So that Adiwiyata has an understanding of the ideal place in obtaining knowledge, norms, and ethics that are the basis of humanity towards the welfare of life towards sustainable development. The Adiwiyata program implemented in schools aims to realize caring and cultured schools carried out in stages from the district/city, provincial, national, and even independent levels [15]. Adiwiyata Program according to Minister of Environment Regulation No. 5 of 2013 carried out with the principles of educative, participatory, and sustainable at the level of: (1) Regency/City Adiwiyata; (2) Provincial Adiwiyata; (3) National Adiwiyata; and (4) Adiwiyata Mandiri awards specifically for schools that have at least 10 target schools provided by the President. Becoming an Adiwiyata school including Adiwiyata mandiri, a school must fulfill four components of the Adiwiyata program which include aspects of environmentally sound school policies, aspects of an environment-based school curriculum, participatory school-based aspects of activities, and environmentally friendly management aspects of supporting school facilities.

3. Methods

This study used qualitative research method [16]. The background of the study was the Mandiri Adiwiyata School of the 1 Public High School Ajibarang which is located on Pancurendang Ajibarang Highway, Ajibarang District, Banyumas Regency. The research focus was the determinant that makes Ajibarang 1 Public High School succeed in achieving the title of Adiwiyata Mandiri School and the environmental awareness of character education conducted by Ajibarang 1 Public High School as Adiwiyata Mandiri School starting from the planning, implementation and evaluation process. The data source consists of primary data and secondary data. Data collection techniques used were interviews, documentation, and observation. Test the validity of the data using source triangulation which is achieved by: (1) comparing data from observations or observations with interview data; (2) comparing what people say in public with what is said personally both with the informant (headmaster, vice principal, and teacher) and respondent (student); 3) comparing what people say about the research situation to what is said all the time; (4) comparing the situation and perspective of a person with various opinions and views of people who have different backgrounds (perspective of the principal, Adiwiyata chairman, coordinator of four Adiwiyata pillars, students, and the Pendikar Guard); and (5) comparing the results of interviews with the contents of documents related to character education efforts to aware of the environment in the Adiwiyata Mandiri School in SMA Negeri 1 Ajibarang. Data analysis used an interactive model that is done by collecting data, reducing data, presenting data, and drawing conclusions or verifying data [16].

4. Result and Discussion

4.1 The determinants that make Ajibarang 1 Public High School succeed in achieving the title of Adiwiyata Mandiri School

4.1.1 Seven cultures of Ajibarang 1 Public High School

Ajibarang 1 Public High School has seven cultures that were built to realize the school's vision and mission and support the school in achieving the Adiwiyata Mandiri title. School culture according to Daryanto and Darmiatun is a context behind the school screen that shows beliefs, values, norms, and habits that have been built for a long time by all citizens in cooperation in school [17]. The following are seven cultures owned by Ajibarang 1 Public High School.

First, the effectiveness of learning by conducting learning media innovations. Innovations are carried out in the form of online learning media such as ELENA (Ajibarang 1 Public High School E-Learning). The purpose of using online learning media is to realize the school's vision that excels in science and technology and reduce paper use. *Second*, the school environment is clean, neat, safe, beautiful, green and comfortable. This is done through the Green School program. The effort to create a Green School is done through structuring and managing the environment such as making a class park, gazebo, greenhouse, and so on. The school arrangement is an effort to realize the vision of an environmentally sound school (Adiwiyata). *Third*, upholding local cultural values through the extracurricular activities of the Karawitan Kencana Aji Laras Group. This is done by schools because extracurricular activities are one of the micro character education facilities [3]. Therefore, SMA Negeri 1 Ajibarang utilizes this karawitan group as an effort to uphold local culture while being designed to convey messages to the audience through performances to aware of the environment. *Fourth*, being always updated. This culture is realized by the school through the fulfillment of computer laboratory facilities, multimedia laboratories, and hotspot areas. This is done to realize the vision of excellence in science and technology, in addition to be always updated by conducting school organizations to disseminate information or photos of school activities, one of them is an activity that is concerned with the environment. *Fifth*, a high sense of social and family. This was done by Ajibarang 1 Public High School through various environmental awareness activities in schools and in the community. The examples of awareness activities in the environment are the maintenance of plots, maintenance of toilets, processing of waste and so on. Whereas in the community environment is carried out through tree planting and river cleaning activities in environmental days. *Sixth*, be competitive in getting achievements. This culture is formed through the event classing to explore students' talents. *Seventh*, conducting 30 minutes with SMANA. This activity is carried out by utilizing 30 minutes to read the Qur'an, literacy (reading books), and singing Indonesian Raya songs. The seven cultures are carried out continuously by Ajibarang 1 Public High School to form habits in students which ultimately encourage schools to excel in both academic and non-academic fields as achieved by the Adiwiyata Mandiri title.

4.1.2 Sinergy of Adiwiyata Program Implementers in Ajibarang 1 Public High School

Ajibarang 1 Public High School as an Adiwiyata Mandiri School has a synergistic program implementing Adiwiyata program. This can be seen from the leading sector or the implementers of the four Adiwiyata pillars which are attached to the task of the Deputy

Principal. The pillar of environmentally sound policy which is the leading sector is the deputy head of the public relations field. The pillar of the leading sector environment-based curriculum is the deputy head of the curriculum field. The pillar of its leading sector participatory activities is the vice principal of the student field. While the pillars of facilities and infrastructure that are environmentally friendly leading sector are the deputy principals in the field of facilities and infrastructure. Besides, Ajibarang 1 Public High School also has the Chairman Adiwiyata who is in charge of coordinating the implementation of the Adiwiyata program with the principal and the four Adiwiyata pillars. At the student level, Ajibarang 1 Public High School has a Character Education Guard (Pendikar Guard) consisting of Bala Pelangi. Bala Pelangi has seven teams, namely: 1) blue team (cadre of increasing faith and piety); (2) yellow team (energy and water saving cadres); (3) green team (greening cadre); (4) orange team (cadre of organic waste management); (5) purple team (cadre of inorganic waste management); (6) Indigo team (environmental literacy cadres); and (7) red team (youth health cadres). This shows that there is a synergy between the components of the teacher and the student component in conducting the Adiwiyata program.

4.1.3 The Partnership that Supports the Adiwiyata Program at Ajibarang 1 Public High School

Ajibarang 1 Public High School as a school with the Adiwiyata Mandiri title carries out environmental care character education by involving partners. Partners usually become facilitation donors and/or resource donors for environmental activities carried out by the school. Cooperation with good partners is needed to achieve the goal of being an environmentally sound school especially in shaping the character of environmental care. This is by following with Wibowo's opinion that school communities should not struggle alone in providing character education, but schools should cooperate with communities outside of educational institutions [18]. Ajibarang 1 Public High School has established a partnership with PT Sinar Tambang Arthalestari (Semen Bima); UNSOED Faculty of Medicine; Faculty of Pharmacy UMP; UPT Conservation UNNES; Cipta Karya Office of Banyumas Regency; Plastic Waste Management of Banyumas Regency; Department of Energy and Mineral Resources (ESDM Office) of Banyumas Regency; Ajibarang Health Center; Agriculture Office of Banyumas Regency; BNI 46; Panin Bank; Banyumas Regency Environmental Office, and RRI Purwokerto.

4.2 Implementation of Environmental Care Character Education for Adiwiyata Mandiri School Students in Ajibarang 1 Public High School

4.1.2 Environmental Care Character Planning through KTSP and RAKS Document Preparation

When Ajibarang 1 Public High School decide to become an Adiwiyata school or environmentally sound school the first step taken was to harmonize the vision, mission, and goals of the school. The vision of Ajibarang 1 Public Senior High School is "to realize healthy students, excel in science and technology, strong in global competition and environmentally friendly". While the mission and objectives of the school at least contain three things, namely: (1) preserving the environment, (2) preventing the occurrence of damage, and (3) preventing the occurrence of pollution. Furthermore, the vision, mission, and objectives of the school are described in the Education Unit Level Curriculum document (KTSP). Besides, the Lesson

Plan (RPP) is also prepared about the school's environmentally sound objectives. As an Adiwiyata school, SMA 1 Ajibarang also prepares School Activity and Budget Plans (RKAS) which focus on 20% for activities or needs in implementing environmental awareness activities. This shows that in providing character education, the awareness of the school environment requires careful planning and should be stated in KTSP and RKAS documents.

4.1.3 Implementation of Environmental Awareness of Character Education through Four Adiwiyata Pillars

The implementation of environmental awareness of character education focuses on four Adiwiyata pillars.

- a. Pillar Environmental Policy, it is conducted by SMA Negeri 1 Ajibarang by creating internal policies and external policies of the school. Internal school policies are contained in school rules, school principal decrees, and facilitation. The examples of the internal policy of the school are to require students to contribute to the race 7K, prohibit students smoke, and encourage students to bring water bottles for school to facilitates drinkable water. While external policies are made relating to partnership relationships. For example, cooperation to provide environmental awareness activities, partners to assist in the form of funds and sources.
- b. Environmental Based Curriculum Pillars, carried out by compiling environmental-based learning tools. This is done by drafting an RPP that is integrated with environmental care character education. Teachers of SMA Negeri 1 Ajibarang also in learning raised local issues and global issues related to the environment. The examples of learning materials made are about Protecting Clean Water Sources, Preventing Soil Pollution and Water from Inorganic Waste, and Protecting the Earth from Ozone Leakage.
- c. Pillars of Participatory Based Activities. Participatory-based activities in the internal 1 SMA Ajibarang were conducted through the Guard of Character Education (Guard Pendarar) and Bala Pelangi, 7 Cadre Routine Activity Activities (7 K), Kapling Care Working Groups and Bathroom Care Working Groups, and Commemorating Environmental Days with Environmental Care Actions, and Friday Activities and Healthy Fridays. Whereas participatory based activities at external schools are carried out through activities with impact schools (schools that benefit from independent Adiwiyata schools), activities with partners, and activities with the community.
- d. Pillars of Environmentally Friendly Facilities and Infrastructures. Based on the criteria for facilities and infrastructure that must be owned by Adiwiyata schools, then SMA 1 Ajibarang as Adiwiyata Mandiri School has already had: (1) clean water facilities taken from ground water and managed in special machines to be ready for drinking; (2) the garbage bins owned by Ajibarang 1 Public High School are quite adequate because in almost the front of the class and the corner of the school are provided disaggregated bins (leaves, plastic, and paper); (3) drainage owned by Ajibarang 1 Public High School, which is through sewers and water catchment areas. Besides, schools also use ablutions for fish ponds and for watering plants; (4) green open space in this school is adequate because many school environments are planted with fruit trees such as cocoa and mangosteen; (5) composting facilities are managed by schools through cadres of organic waste management. This cadre routinely processes organic waste to make fertilizer; (6) Biopori holes in SMA Negeri 1 Ajibarang spread evenly in front of the class. Regular students to enter and harvest leaves that are inserted into the bio pore hole; (7) making and utilizing biogas which is the result of processed food scraps in biodigester devices

and used for fuel stoves (alternative energy); (8) ventilation light settings in each class are adequate; (9) paving blocks and grasses in Ajibarang 1 Public High School are balanced. So that it does not cause puddles when it rains; (10) a list of rules and pickets already exists at Ajibarang 1 Public High School and is carried out through plot maintenance working groups, toilet maintenance workshops, and 7K competitions; (11) saving energy resources carried out by schools through energy-saving campaigns by attaching banners and also by innovating fluorescent lamps; and (12) healthy canteens have already been implemented in Ajibarang 1 Public High School. Through a healthy canteen program, schools began to reduce the use of plastic to pack food and replace it with banana leaves and reduce unhealthy snacks and make bags go green.

4.1.4 Evaluation of the Implementation of Environmental Care Character Education through the 7K Competition

SMA Negeri 1 Ajibarang conducts monitoring and evaluation in implementing environmental awareness of character education through the 7K competition and the Working Group (Working Group) of the District Care and Toilet Care Working Group. The 7K race is followed by all classes at Ajibarang 1 Public High School and announced every Monday during the Flag Ceremony. There are two categories in the 7K Contest namely "Cleanest Class" and "Dirtiest Class". The results of the 7K Competition became a school facility for evaluating the implementation of environmental awareness of character education. Besides, the working group accompanied by the organization is also one of the way for schools to monitor the implementation of environmental awareness activities, while Waka students and teachers carry out monitoring and evaluation by viewing daily journals filled by students in the awareness of plots, toilets or class pickets. Monitoring and evaluation activities are carried out routinely by Ajibarang 1 Public High School to find out the success of the implementation of environmental awareness of character education planned by the school.

5. Conclusions and Suggestions

Ajibarang 1 Public High School has won the title of Adiwiyata Mandiri School in 2018 because it has several determinants including having seven school cultures, the synergy of Adiwiyata program implementers, and partnerships owned by schools. Whereas in the implementation of environmental awareness of character education, SMA Negeri 1 Ajibarang was carried out through three processes, namely the planning, implementation, and evaluation stages. The planning phase is carried out by the preparation of the Education Unit Level Curriculum document (KTSP) implemented in the Lesson Plan (RPP) integrated with the character of environmental care and preparation of the School Activity and Budget Plan (RKAS). The implementation phase is carried out through environmentally sound policy pillars, environment-based curriculum pillars, participatory pillar-based activities, and environmentally friendly facilities and infrastructure management pillars. While the evaluation phase was carried out with 7K Competition activities and monitoring carried out by the teacher and Student Staff. With the achievement and consistency of Ajibarang 1 Public High School in providing the awareness character for the environment, the writer suggests that SMA N 1 Ajibarang should be able to become a role model for other schools in developing character education especially the character of environmental awareness as an educational effort to raise awareness of the importance of protecting the environment.

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