Comparison of curriculum implementation between public and private schools based on *Adiwiyata*

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ABSTRACT Article Info Article history: The curriculum is the heart of education, whose job determines the life or death of a school. This study aimed to compare the implementation of Received Sep 4, 2021 Adiwiyata school curriculum between public and private school in junior Revised Nov 22, 2021 high schools, especially in Bantul Regency, Yogyakarta, Indonesia. Data Accepted Dec 1, 2021 collection techniques by means of literature studies. Data analysis techniques were carried out with qualitative comparative analysis. The results showed that: public and private schools in junior high schools in Bantul Regency, had Keywords: fulfilled the four main components of the Adiwiyata curriculum, in terms of objectives, content, methods, and evaluation. The implementation of Adiwiyata Adiwiyata curriculum in each public and private school varies according to Curriculum the characteristics and potential of each school. Private schools This is an open access article under the <u>CC BY-SA</u> license. Public schools School branding

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1. INTRODUCTION

In June 2005, the State Minister for the Environment entered into a joint agreement on Guiding and Developing the Living Environment with the Minister of National Education as outlined in the Decree Number: Kep.07/MENLH/06/2005 and Number: 05/VI/KB/2005 then updated in 2010 became No. 03/MENLH/02/2010 and Number: 01/II/KB/2010. Then the Director General of Primary and Secondary Education Management (Ministry of National Education) created a circular letter number 5555/C.C5/TU/05 which was intended for the Heads of District and City Education Offices throughout Indonesia regarding the application of environmental education in schools with integrating environmental material in intracurricular and extracurricular activities in order to create a school with environmental culture. Next, with the Regulation of the Minister of Environment No. 5 of 2013 [1] concerning the guidelines for the preparation of the Adiwiyata to strengthen the policies that have been established previously.

Adiwiyata is a good and ideal place where all knowledge and various norms and ethics can be obtained that can be the basis of humanity towards the creation of our welfare and towards the goals of sustainable development. The purpose of Adiwiyata is to realize school citizens who are responsible for efforts to protect and manage the environment through good school governance to support sustainable development. The implementation of Adiwiyata schools is educational, participatory, and sustainable. One of the main components in Adiwiyata school program is implementation of an environment-based curriculum [2], [3].

The advantages of schools participating in the *Adiwiyata* program include: i) Increasing efficiency in the implementation of school operational activities and the use of various resources; ii) Increase the saving of resources and energy; iii) Improve teaching and learning conditions that are more comfortable and

conducive for all school members; iv) Create conditions of togetherness for all school members; v) Increase efforts to avoid various risks of negative environmental impacts in the future; vi) Become appropriate for learning for the younger generation about the values of good and right environmental care and management; vii) Improve the formation of character, knowledge, attitudes and actions among students; viii) Get the *Adiwiyata* program [4]–[7].

The curriculum, as described in Law Number 20 of 2003 [8] concerning the National Education System, is a set of plans and arrangements regarding the objectives, contents, and learning materials as well as the methods used to guide learning to achieve certain educational goals. The curriculum is something that is planned as a bridge as well as a bridge to achieve educational goals [9]. The existence of this curriculum is very necessary as a guide to the implementation of learning activities in an educational institution. Likewise, schools that implement *Adiwiyata* programs use an environment-based curriculum. The development of this curriculum accommodates environmental education in intra-curricular and extracurricular activities to build school community awareness of environmental sustainability [4], [10].

In the implementation of Adiwivata curriculum, it applies to all schools in Indonesia, from elementary to high school, both public and private. So far, the implementation of Adiwiyata schools is the same as the result of research conducted by Maryani [11], that the implementation of the Adiwiyata school program at Ungaran I Elementary school, Yogyakarta is carried out well in terms of the high scores on the aspects of context, input, process, and product. Research by Iswari and Utomo [6], shows that schools that have implemented Adiwiyata program show the relationship between application of Adiwiyata with the formation of knowledge (48%) while those who have not applied Adiwiyata (33%), attitude formation (99%) while those who have not implemented Adiwiyata (99%), and the formation of student actions (79%) students have good actions towards the environment, while those who have not applied Adiwiyata (76%). Research by Aulia [12], the form of stakeholder participation in the implementation of Adiwiyata program at Adiwiyata State Junior High School 4 Bojonegoro can be demonstrated in aspects of planning, implementation, evaluation, and utilization of the results of participation continuously. Nihlawati's research [13] shows that the substance of environment-based curriculum policy in State Junior High School 2 Kebomas, Gersik, is relevant to two things: i) Relevant between curriculum with demands, needs, conditions and development of society, and ii) Relevance between curriculum components, that is the content according to the purpose; process according to content and purpose; and evaluation in accordance with the curriculum process, content and objectives.

Because this government policy applies to all schools, both private and state, it is interesting to conduct a more in-depth review of the differences in the application of curriculum in state and private *Adiwiyata* schools. The purpose of this study was to find out the comparison of the implementation of the *Adiwiyata* curriculum in public and private schools at the secondary education level, especially in Bantul Regency. Differences are more assessed from the four aspects/components of the curriculum, namely aspects of goals, content/material, methods, and evaluation. This study aims to compare the implementation of *Adiwiyata* curriculum in public and private schools in secondary education in Sleman Regency, Yogyakarta, Indonesia. Private and public schools in junior high schools in Bantul Regency, Yogyakarta have fulfilled the four main components of the *Adiwiyata* curriculum, which are reviewed in terms of objectives, content, methods and evaluation.

2. RESEARCH METHOD

This research was a literature study by examining six research results about *Adiwiyata* schools in Bantul district, Yogyakarta, Indonesia [14], [15] including: State Junior High School 1 Piyungan (SMP N 1 Piyungan), State Junior High School 2 Bambanglipuro (SMP N 2 Bambanglipuro), State Junior High School 3 Pajangan (SMP Negeri 3 Pajangan), Junior High School Pangudiluhur Sedayu (SMP Pangudiluhur Sedayu), Junior High School Patria (SMP Patria), and Muhammadiyah Junior High School Banguntapan (SMP Muhammadiyah Banguntapan). The data collection technique was carried out by examining in depth the report of the research results. The data analysis technique was carried out qualitative with the Milles and Huberman interactive model with the flow of data collection, data reduction, data presentation, conclusion/verification [17]–[19].

3. RESULTS AND DISCUSSION

This study compares the results of the *Adiwiyata* curriculum document of public and private schools in terms of aspects: objectives, content/material, methods, and evaluation based on the results of Haryadi's research [14] and Mahmudah [19].

3.1. Objectives

Aspects of the objective include the school's vision, mission, and objectives. The characteristics of *Adiwiyata* schools, both public and private, have the vision, mission, and goals of the school which includes environmental protection and management policies. The policy is stated in the school's vision, for example the creation of a healthy environment as the vision in SMP Negeri 1 Piyungan, preserving pharmacies and living stalls like in SMP Negeri 2 Bambanglipuro, as well as caring for the environment as the vision in SMP Pangudiluhur Sedayu. As for school, each has the vision, mission, and goals of the school in accordance with the characteristics of each school as stated in Table 1.

Schools		Goals
		Public
SMP Negeri 1 Piyungan	Vision	"The creation of an outstanding school, based on Imtaq, Indonesian
		Personality, Science and Technology, Creation of a Healthy Environment".
	Mission	Carry out improvements in character that are characterized by Indonesia
		(Culture 3S: smile, regards, say hello)
	Goal	Grow and improve character that is characterized by Indonesia
SMP Negeri 2 Bambanglipuro	Vision	"Noble, Excellent in Achievement, Competitive and Cultivated Environment".
	Mission	Carry out environmental preservation (preservation of living pharmacies and living stalls)
	Goal	Realizing environmental conservation
SMP Negeri 3 Pajangan	Vision	"Noble, accomplished, cultured and environmentally minded"
	Mission	Optimizing the implementation of culture-based learning
	Goal	The implementation of culture-based learning, with indicators that
		participants can recognize, appreciate, and participate in the preservation of
		regional and national culture
		Private
SMP Pangudiluhur Sedayu	Vision	"Personal Faith, environmentally minded, cultured, and superior in quality".
	Mission	Grow the quality of education gradually and care for the environment
	Goal	The existence of parks, the maintenance of a beautiful school environment,
		managed waste, the presence of Yogyakarta-based cultural displays.
SMP Patria	Vision	"Achievement, noble character, knowledge and technology (science and
		technology), and environmentally sound".
	Mission	Realizing the value of character caring for the environment is: 1) Realize a
		clean, healthy, beautiful and comfortable school environment 2) Realizing
		schools that care about environmental protection and preservation efforts 3)
		Realizing schools that actively play a role in efforts to prevent environmental
		pollution.
	Goal	Achieve championships in the provincial non-academic level at least 3
		champions
SMP Muhammadiyah Banguntapan	Vision	"Smart, skilled, Islamic, and caring for the environment and culture".
	Mission	-Making schools care about the environment and culture
		-Organizing inter-class hygiene competitions
	Goal	The realization of skilled and independent graduates in the field of: Catering
		and fashion and caring for the environment and culture.

(Sources: Haryadi [14], [20] and Mahmudah [19])

3.2. Content/Material

Content/material is the structure of the curriculum. The curriculum structure contains compulsory subjects, local content, self-development related to environmental protection and management policies. The number of subjects for each school varies according to the policies of each school in determining the number of local content subjects. Compulsory subjects (group A) both public and private schools have the same curriculum content which consists of Religion Education and Manner Education subject (REME), *Pancasila* and Civic Education (*PPKN*), Indonesian, Mathematics, Natural Sciences (Natural Sciences), Social Sciences (*IPS*) and English. Local content subjects (group B) each school has different policies related to subjects offered, such as Cultural Arts, Physical Education (Physical and Physical Education), Javanese Literary and Cultural Languages, Local subject/Javanese Languages, as well as Crafts.

In the last group, subjects are integrated into environmental management. In public schools all subjects have been integrated into environmental management, especially science and social studies, while in private schools it varies. There are schools that almost all of the subjects have integrated the environment for example, in SMP Patria, as well as only a few subjects like what happened at SMP Muhammadiyah Banguntapan. The reason is that not all basic competencies can be inserted into environmental indicators, but only certain basic competencies. In line with Nurhayati [21], that the environment-based curriculum can be integrated in all subjects, but only limited to certain material.

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In the aspect of self-development (extracurricular), each school organizes various activities. There are schools that classify these extracurricular activities as being academic and non-academic, as happened in SMP Negeri 1 Piyungan. Development of academic potential consists of mathematics, physics, biology, social science olympiad and Youth Scientific Club (*KIR*), while the development of non-academic potential consists of dance, wall magazines, recycle, and Al-Qur'an reading art. In addition, there are also schools that classify extracurricular activities into programmed activities which include scouting and the Youth Scientific Club, and habituation activities such as routine, spontaneous and exemplary habituation. Such classification occurs in SMP Negeri 3 Pajangan. Other extracurricular activities in private schools that can be summarized include OSIS (intra-student organization), scouting, counseling services, sports activities, cultural arts, sacred sites (martial arts), and journalistic activities. Different terms in Muhammadiyah private schools, scout activities are known as *Hisbul Wathan* (HW). This extracurricular activity is typical in Muhammadiyah schools.

3.3. Methods

In terms of the implementation of learning, educators in private and public schools use varied learning methods and models such as scientific methods, problem-based learning (PBL), project-based learning (PjBL). The approaches used are also varied such as teacher centre approach, student centre, inquiry, trans-disciplinarity, which is carried out cooperatively, as well as collaboratively. The examples provided by educators are also contextual so that they are easy to understand by students.

As a characteristic of *Adiwiyata* schools, both public and private schools develop local and/or global issues as environment-based learning material. However, each school has variations in integrating these issues, some are integrated in all subjects, or integrated in certain extracurricular activities such as batik, dance, computer, or the internet.

3.4. Evaluation

Judging from the evaluation of learning, a form of assessment of learning the environment in public schools shows an assessment of cognitive, affective, and psychomotor competence. While in private schools, assessment aspects vary, there are three aspects, cognitive and psychomotor aspects, as well as only psychomotor aspects. Affective assessment is done through observation, self-assessment, peer assessment, and journal. Cognitive assessment is done through daily tests, midterm replications, and end of semester tests. The psychomotor competency assessment is carried out through performance appraisal, project appraisal, product assessment and portfolio assessment.

At the end of learning, students also have real work related to the environment. Real work developed for example, scrapbook about adolescent development; poster about health, *Adiwiyata*, or respiratory organs; key chain of shells; flower vases from newspapers; bone health pamphlet; and comics.

Based on the assessment standards set by the Environmental Agency [22], in the implementation of the *Adiwiyata* school curriculum, the school's vision, mission, and objectives contained in the curriculum that apply at the school must contain policies on environmental protection and management. The curriculum structure must also contain compulsory subjects, local content, self-development related to environmental protection and management policies. In addition, compulsory subjects and local content (*mulok*) related to environmental management must also be equipped with minimal learning completeness. Recall that the concept of assessment is more meaningful for the procedures used to obtain information to determine the level of knowledge, skills, or attitudes of students before, during, and after being involved in the learning process. The concept of success as well as program efficiency [23], [24].

Judging from educators must have competence in developing environmental learning activities. As according to Nurhayati [21], the form of competency of educators is the active role of teachers in developing integrated learning with the environment. In addition, in the Environmental agency assessment standard it has also been explained that educators must apply learning approaches, strategies, methods, and techniques that actively involve students in learning. Educators can apply the method of demonstration, discussion (Forum Group Discussion), simulation (role playing), field experience, brainstorming, symposium debate, laboratory learning, refining, observation, project-based learning, and others. Educators must develop local issues and global issues as environmental learning material in accordance with the level of education; develop indicators and assessment instruments for environmental learning; compile a complete learning design, both for activities in the classroom, laboratory, and outside the classroom; involving parents of students and the community in environmental learning programs; communicate the results of environmental learning innovations. The results of environmental learning innovations can be communicated through magazines, wall magazines, school bulletins, exhibitions, websites, radio, TV, newspapers, journals, and others. Finally,

educators must link conceptual and procedural knowledge in solving environmental problems, as well as their application in daily life.

Judging from the students as for activities that must be carried out include obtaining learning about environmental protection and management; produce real work related to the preservation of environmental functions, prevent pollution and environmental damage; apply the environmental knowledge gained to solve environmental problems in everyday life; and communicating the results of environmental learning in various ways and media. According to Susilawati, *et al.* [3] that such educational innovations are important to anticipate environmental damage, social crises, and cultural crises that are getting worse.

In its implementation, schools that implement secondary level *Adiwiyata* programs in Bantul Regency have implemented the assessment standards that have been determined by Environmental agency. Between private and public schools in general, the implementation has no significant difference. However, there are variations in each school in determining local content subjects, strategies and selection of learning methods by each teacher, or extracurricular activities, which are the peculiarities of each school. All schools that implement the *Adiwiyata* program are guided by the regulations of the designated Environmental Agency, so the difference is limited to its implementation as is the characteristic of each school. Thus, the implementation of the curriculum must always be improved and sustainable to answer the needs of schools in a changing world [25].

The key to the success of this *Adiwiyata* program, both public and private schools lies in the cohesiveness and cooperation of all academics, committees, stakeholders, and the surrounding community in maintaining and preserving the environment; concern of the Environment Agency to support the maximum number of schools in the implementation of *Adiwiyata* programs [26]; good cooperation by the school community in school management ranging from planning, implementing and evaluating programs according to their respective responsibilities and roles; all activities must be planned, continued, and comprehensive [22], [27]. Thus, the expected goals will be achieved, including producing students who are more caring and love the environment as a form of strengthening humanistic education [28], [29]; creating closeness and togetherness of school citizens; creating more comfortable and conducive teaching and learning conditions [2], [22]; and as a form of creating good habits such as energy savings and environmental preservation [30].

The implementation of *Adiwiyata* program is considered capable of providing benefits and as a solution to problems faced by schools and the surrounding community. As happened in Muhammadiyah 3 Junior High School Yogyakarta, Adabiah 2 Padang High School, State Madrasah Aliyah 1 Padangadanya, and also Brenggong State Elementary School that the implementation of *Adiwiyata* policy can support the growth of values of caring and caring for the environment [3], [6], [31], [32]. Other benefits include overcoming and preventing the problem of microplastics and ocean pollution [33]; to support environmental conservation and as a means to create environmentally sound behavior [34]; it becomes valuable for students to love the environment by reducing waste, reuse (reusing unused waste), recycle (processing craft waste) [35]–[37]. Schools become more developed and create school characteristics and sustainable patterns of environmental maintenance (latency) [38]. In addition, in terms of environmental learning outcomes between *Adiwiyata* and non-*Adiwiyata* schools, there are also significant differences [39]. This shows that the benefits of *Adiwiyata* program continuously so that the benefits received are maximized.

4. CONCLUSION

Based on the results of the study, the development of the *Adiwiyata* curriculum in private and public schools at the junior high school level in Bantul Regency has fulfilled the four main components of the *Adiwiyata* curriculum, in terms of objectives, content, methods, and evaluation aspects. The objective aspect has described environmental care, the content aspect is all related to environmental protection and management policies which are contained in mandatory content, local content, and self-development (extracurricular). The method aspect already uses scientific/scientific methods, problem-based learning (PBL), project-based learning (PjBL).

The approaches used also vary, such as teacher center, student center, inquiry, trans-disciplinarity approaches, which are carried out cooperatively and collaboratively; and evaluation aspects are assessed in the cognitive, affective and psychomotor domains of environmental learning. Cognitive assessment is carried out through daily tests, mid-semester tests, and end-of-semester tests. Affective assessment is done through observation, self-assessment, peer assessment, and journals. Psychomotor assessment is carried out through performance assessment, project assessment, product assessment and portfolio assessment. The process of implementing the *Adiwiyata* curriculum in private and public schools varies according to the characteristics and potential of each school.

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