

Environmental Literacy for Elementary Students Based on Sundanese Local Wisdom

L Nugraha¹, Rahman², Syaefudin³, K Wachidah⁴, Septiningrum⁵, Y Gumala⁶, Opik⁷
{¹lukmanmifdha82@gmail.com, ²rahmanprofupi@upi.edu, ³usaud@upi.edu,
⁴kemilwachidah@umsida.ac.id, ⁵ningrumseptina@gmail.com, ⁶yosigumala@student.upi.edu,
⁷gerimisculamega@yahoo.co.id}

¹STAI Miftahul Huda Subang, Indonesia

^{2,3}Universitas Pendidikan Indonesia Bandung, Indonesia

⁴Universitas Muhammadiyah Sidoarjo, Indonesia

⁵IAIN Tulungagung, Indonesia

⁶Universitas Bhayangkara Jakarta Raya, Indonesia

⁷SDN 2 Cikuya Culamega, Indonesia

Abstract. Environmental education aims at making students to have environmental literacy. Student with environmental literacy will be able to behave respectfully and be environmentally responsible. This study examines comprehensively about environmental literacy in the classroom learning based on Sundanese Local Wisdom through literature method. This research resulted in a basic paradigmatic view of the local wisdom of Sundanese people drawn from the concept of life of the Kanekes community. The basic ideology of the Kanekes community connects the environment with human life. "Natural balance" becomes the main pioneer in the survival of the Kanekes community. Customary local wisdom, a social and cultural condition in which the repertoire of cultural values is contained which respects and is adaptive to the surrounding environment, and is arranged in a strict order of the customs of a society. Although often considered ancient, the values they teach are still the best way to preserve the environment in post-modern times.

Keywords: *Environmental, Literacy, Local Wisdom, Sundanese, Elementary*

1. INTRODUCTION

The global community initiated environmental education through UNESCO in 1977 at a conference that discussed the environment. The conference was attended by 265 delegates and 65 observers from various countries, and issued the Tbilisi Declaration, which one of its mandates was environmental education for all circles and all levels of education, both formal and non-formal. Since then, environmental education has begun to be integrated into school curricula. The conceptualization of environmental education is currently rooted in the movements of the late 19th and early 20th centuries relating to nature, conservation and contextual education [1].

The target of environmental education is developing human awareness and concern for the environment and its problems, developing knowledge of the human environment, skills,

attitudes, motivations, and commitment to work both individually and collectively as a solution to prevention efforts. Environmental education also aims to create human beings with environmental literacy skills who know what is good for the environment and know how to treat it [2]. These literacy skills are characterized by four important things, such as high comprehension ability, critical thinking skills, the ability to collaborate and communicate, and critical thinking skills [3].

The concept of literacy dynamically encounters many numerous developments and changes. Literacy was used limitedly in the areas of communication and language skills such as reading, writing, listening and speaking. Currently, although reading and writing are as basic literacy that must be mastered, but also the other types of literacy need to be considered is cultural literacy [3]. One significant importance indicator of cultural literacy is children's understanding of environmental literacy.

The concept of literacy Since 1990, a number of environmental literacy frameworks have been published, which is the main objective of UNESCO in dealing with environmental literacy concerning awareness, knowledge. Cognitive skills, attitudes and behavior of a person towards the environment [3]. Since then, instruments have been developed as a tool for assessing environmental literacy. In addition, the North American Environmental Education Association (NAAEE) publishes Guidelines for improving Environmental Education.

Referring to the UNESCO literacy framework, the Minister of Environment and the Minister of Education issued a joint decree No. Kep.07 / MenLH / 06/2005 and No. 05 / VI / KB / 2005 concerning guidance and development of environmental education in schools. This decree underlines that environmental education is carried out in an integrated manner with existing subjects, as a follow-up to the program of "beautiful environmental schools". The aim is to build the foundation of environmental education earlier, equip young people with an understanding of the environment and educate students to behave caring about the environment.

Early environmental education of elementary school students can be implemented non-formally, starting with habituation in their families. Formal access to environmental education is constructed by integrating it into learning at school. Integration of environmental education in thematic learning corresponds to the basic paradigm of the 2013 curriculum. In elementary school student learning, thematic is an ideal concept to make learning meaningful, linear with cognitive development in elementary school children, which is in the concrete operational stage. In addition, the essence of integrated thematic learning learns various kinds of learning material that are united in one theme so that they are able to integrate and touch their cognitive, affective and psychomotor dimensions [5]. At that stage, elementary school students learn to connect what he / she sees, reads, and feels comprehensively, so that environmental education is not just a discourse, but internalized into students, which is called environmental literacy.

Environmental literacy can simply be interpreted as environmental literate, a person who has knowledge, attitudes, skills, and behaviors that support the environment [4]. In addition, Holweg stated that the knowledge component includes one's knowledge of: 1) physical and ecological systems, 2) social, cultural and political systems, 3) environmental problems, 4) solutions to environmental problems, and 4) community participation in developing action plans solving environmental problems. For this meaning, elementary school children are taught about environmental literacy from an early age associated with the local ecology of each region, so learning becomes meaningful [1].

According to Hartoyo [5], the knowledge of local ecology consists of: (1) practical knowledge about nature faced by local communities; and (2) supernatural knowledge concerning subjective cultural and world values which often influence values people against something. This can be observed from the knowledge of explanations, for example explanations

relating to ecological processes, and from depicting knowledge, for example a description of the various components of the ecosystem, what they are, how their number and distribution. While supernatural knowledge can be observed by paying attention to the basic forms of rules, norms, values produced by culture, religion and morals. The existence of sociocultural values is important because this greatly influences the decisions of local communities to take part in natural resource management and environmental sustainability.

Anthropologically, since its inception, humans developed and were able to adapt to the surrounding natural environment because they have a system of reason and a system of instincts or instincts that are able to capture natural phenomena and react adaptively so as to create "culture" as a "system of adaptation" that they create in relation maintain the existence of relations with the surrounding nature [6]. The concept that humans are closely related to and culture is known as the relation of cultural triangulation. Humans create their culture to cope with situations that occur in their natural environment, or vice versa, nature shapes the culture of humans who live in that natural environment [7].

Culture or ethnicity is a national asset that must be preserved because it balances the development of the times so that people do not let go of their ethnic culture and national identity [9]. There is no exception of the Sundanese community, which includes ethnic or Sundanese people, is a part of other ethnic communities living in Nusantara. Harsojo, as quoted by Koentjaraningrat [8], said that, in terms of cultural anthropology, Sundanese people are people who have used Sundanese languages and dialects as their mother tongue and dialect in everyday conversation. These groups are people who live in Tanah Pasundan or Tatar Sunda (now known as West Java and Banten). According to Koesoemadinata, Sundanese people are people who love mountains. This is evidenced by more life in the mountains and management of mountainous areas as agricultural and livestock land. Based on the contours of the mountains or mountains, the livelihoods of the Sundanese people in the past were known as "farming" communities, both those who settled permanently and shifted cultivators. The existence of these farming communities is still often found in several "indigenous communities" that live in various mountainous areas in West Java and Banten, such as the indigenous Baduy community in Kanekes or the Kampung Naga indigenous people in Tasikmalaya.

Based on the description mentioned, this can be formulated that the purpose of this paper is to describe comprehensively the environmental literacy of elementary school students associated with the local wisdom of Sundanese people taken from the perspective of the life of the old Sundanese people. The emphasis on the context of "Sundanese local wisdom" in this article is focused on indigenous local wisdom, which is a social and cultural condition that contains a repertoire of cultural values that respect and adapt to the environment, and are constantly arranged in a customary order a community (Sundanese indigenous people). Although this article talks about "customs", this does not always have to be associated with indigenous people, because definitively, "customs" are habits that have been established in people's lives so that they become a "social culture" that applies in a community.

2. RESEARCH METHOD

This research uses a systematic literature review method presented by Nightingale, a systematic literature review often abbreviated as SLR that identifies, evaluates, and interprets all findings on a research topic. In general, the stages of conducting an SLR consist of 3 major parts: Planning, Conducting and Reporting. The details of each step are as shown below.

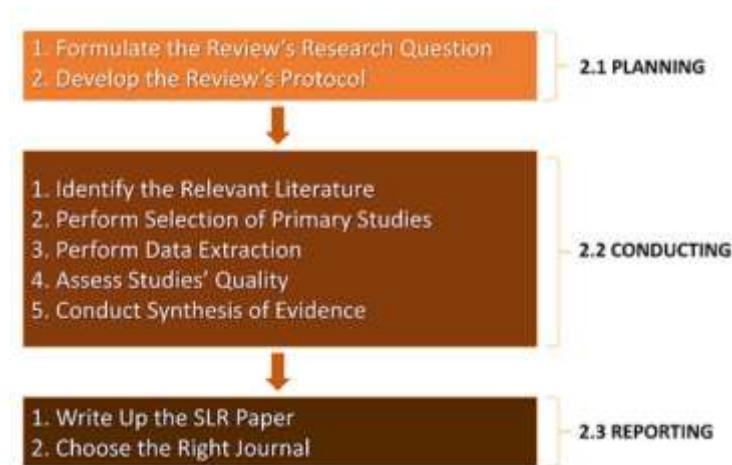


Figure 1. Steps of Research Method

3. RESULTS AND DISCUSSION

3.1 Environmental Literacy

Environmental literacy can simply be interpreted as environmental literate, that is having knowledge, attitudes, skills, and behaviors that support the environment [1]. Hollweg et al. [1] states that the components of knowledge include one's knowledge of: 1) physical and ecological systems, 2) social, cultural and political systems, 3) environmental problems, 4) solutions to environmental problems, and 5) community participation in compiling environmental problem solving action plans . The second sub-component indicates that the concept of environmental literacy has basically accommodated the socio-cultural system adopted by the community. This is logical because the environmentally literate society is able to explore the role of culture, social systems, and politics in managing the environment for quality and sustainable life (Cortese, 1990). In addition, Hollweg et al., [1] explained that the attitude component describes a person's sensitivity and response to environmental problems. Components of skills describe a person's ability to take action against environmental problems, while the behavioral component shows involvement and habits as individuals or groups to try to solve current environmental problems and prevent the rise of new problems.

There are 3 levels of environmental literacy, they are nominally environmentally literate, functionally environmentally literate, and operationally environmental literate [4]. Nominally environmentally literate indicates that someone is only able to recognize the basics of terms in communicating about the environment. People at this stage are developing their concern and sensitivity to the environment. In addition, they also still have very simple knowledge about natural system work and the influence and interaction between natural systems and social systems. Functionally environmentally literate indicates a person has a broader knowledge and understanding between social systems and natural systems. The people at this stage care about the negative interactions between the two systems and have begun to develop skills to analyze, synthesize, and evaluate information from primary and secondary sources. Operationally environmental literate indicates someone who has exceeded the previous level in knowledge and understanding of the environment. People at this stage have been able to play an active and responsible role in efforts to preserve the environment. In addition, Roth [4] states that in

developing the operationally environmental literate stage, a strong and transdisciplinary collaboration between families, social communities, media, religious organizations, and educational institutions is absolutely necessary.

In education, environmental literacy can be formulated in soft skills and hard skills. The UK National Curriculum Council (NCC) states the formulation includes:

- a) knowledge, which is the basis of information for building awareness and environmental preservation including knowledge and understanding;
- b) skills, which are related to communication skills, problem solving, seeking information about matters relating to the environment;
- c) attitude, including the ability to appreciate, openness and tolerance with matters relating to the environment.

It can be concluded that, basically, the main competency or component of an environmental literate elementary student include three context, they are knowledge, skills, and attitude in accordance to their level of education.

3.2 Environmental Literacy Based on Sundanese Local Wisdom

The Kanekes, like other Sundanese, have the view that the natural environment is not something to be subdued, but must be respected, preserved, and maintained. The point is that the attitude of the Sundanese people in relation to nature is more adaptive to nature. This can be seen in terms of their farming methods which are limited by traditional belief traditions in the form of offerings, sacrifice of animals, or objects used to overcome life problems that are considered or trusted because of the aspect of relations with nature [9]. The attachment of humans or Sundanese people to the natural environment positions humans "as if they are submissive" to nature, but that is not the concept that actually exists. The fact is that Sundanese people, who are generally farmers, must adapt to nature so that indirectly nature also shapes the mentality of Sundanese people (ancient Sundanese farmers). This was said by Koentjaraningrat [10], that Indonesian peasant communities live in harmony with nature as a conception that is prevalent in the mentality of Indonesian farmers.

The sacred forest area of the Baduy community in Kanekes Village, South Banten, is the most sacred and protected area by the Baduy people. This is inseparable from the animist belief system adopted by the Baduy community, Sunda Wiwitan. The essence of the trust is indicated by the absolute customary provisions which are also called pikukuh (customary rules) with the concept of not having any slight changes or without any changes that sound the bridge is cut, the cottage holds a connection, which means that the length should not be cut, short may be connected. Literally, the meaning of pikukuh is "not changing something" or "accepting what is given".

Customs, culture, and traditions still color the lives of the Baduy people. There are three main things that color their daily lives, they are a simple attitude of life, friendly to nature, and a spirit of independence. Simplicity and simplicity is a point of charm that is attached to the Baduy community. Until now, the Baduy community is still trying to survive in its simplicity amid the strong modernization in all aspects. For them, simplicity is not a deficiency or inability because in general, they already have the concept and practice of nature conservation. For example, they are very concerned about forest safety. This they did because they were well aware that maintaining the forest would preserve the sustainability of their fields.

Despite always having a positive impact, interactions between humans and their environment sometimes cause negative impacts, such as disasters, catastrophes, and other losses. In such conditions, local wisdom owned by the community can minimize the negative

impacts that exist. This happened to the Baduy community. Their customs to follow, carry out, and believe that the ancestors of ancestors carried out for generations, consciously or unconsciously, directly or indirectly, have a major role in environmental preservation, thereby minimizing the potential for disasters.

Alignment of Sundanese people or Sundanese people with the surrounding environment, either directly or indirectly, forms a mentality or character that is "in accordance" with nature and the surrounding environment. This is contained in stories of folklore, proverbs or parables that are full of life guidance and the names of people who take names and terms of nature. In other words, nature for Sundanese people is not only viewed from the "economic" side to fulfill their life and life needs, but in terms of literature, nature is often described as a symbol of human life, ethics and aesthetics. Nature is used as a place of presupposition, formulation for human nature and behavior, through expressions in comparative languages, chirps or metaphors. Through this form of language we can find out the richness of the flora and fauna of the natural environment of the Sundanese people.

The position and self-awareness of Sundanese people in interpreting Nature, begins with the awareness that in humans there are natural elements in the form of water, wind, fire, earth and light which are actually the same as natural elements that exist in nature. The existence of trust and awareness in harmonizing with nature is at least a form of attitude and character in which Sundanese humans will not make nature as an exploitation material. Efforts to maintain a balance between "jagat alit" (human self) with "jagat ageung" (nature and its contents) on one side is also a manifestation of religiosity of Sundanese people as "Holy beings" or beings originating from the "kahiyangan" chastity. As Sundanese (Sunda means clean, holy, beautiful, good), they have the task of "managing and perfecting" nature and its contents of course in relation to dealing with other humans of different cultures.

The next is related to the meaning of trust in "uga" in the relationship of human existence to the natural environment. As an agrarian society that is very familiar with nature or its environment, Sundanese agrarian societies recognize "Uga" as a symbolic relationship between humans and their nature. "Uga", for Sundanese people, is one form of disclosure of anticipatory predictions from the generation of karuhun to be guided by future events [11]. The phrase is revealed in words that show the connection with the surrounding natural environment both with water, land, trees, forests, mountains and various names of places or other landscapes around it.

Some example of "uga" in Sundanese customs related to the prediction of human existence with nature is shown as follows:

Uga Bandung : *"Sunda nanjung, lamun nu pundung ti Bandung ka Cikapundung geus balik deui"*.

Uga Galunggung : *"Sunda nanjung lamun pulung turun ti Galunggung"*

Uga Kawasen : *"Urang kudu peperangan, dina keur nyieun jalan tengah di Gunung Kendeng, maung ngembang dadap di cai buhaya ngembang kaso. Dina kuer peperangan kade kudu bareng jeung kolot urang ulah hareup teuing bisi kaleyek, ulah tukang teuing bisi katinggaleun"*

Some of the "uga" expressions above mention a number of regional names (for example, Bandung) and landscape names (eg, Mount Galunggung). This indicates that the Sundanese people interpret the area, land or territory of a landscape not as a means of production or a place of residence, but is something or a place that is sacred or sanctified. This also shows that there is an attachment between humans and nature, which in turn is often carried out in respect of

nature and its contents in the form of ceremonial traditions, as a manifestation of cultured human expression (means; a man of noble character).

3.3 Literacy Implementation in Sundanese Local Wisdom Environment for Elementary School

However, there are still many people living in unhealthy and polluted environment as well as land dispute. Community for Environment of West Java states that this largest province on population in Indonesia has 12 environmental cases consisting of environmental damage and pollution, conflict of land dispute, natural disaster, and large scale infrastructure development. Those cases must be handled as soon as possible. According to Disaster Management Agency of West Java, in 2018 there were 1,399 environmental disasters consisting of 425 landslides, 416 forest fires, 260 tornados, 123 floods, 141 forest and plantation fires, 5 tidal waves, and 2 earthquakes. This is terrible as Sundanese are well known for their harmony to the nature. That is why literacy of environment needs to be developed as early as possible; one way to be used is School Literacy Campaign.

School Literacy Campaign which was launched since 2015 by The Indonesia's Ministry of Education and Culture developed based on nine priority purpose (*nawacita*) about the responsibility of The Ministry of Education and Culture [15]. The priority goals related to education are Goals number 5, 6, 8, and 9. It is stated; (5) developing the quality of the Indonesian Society; (6) increasing human productivity and competitiveness globally so that Indonesia can rise as other countries in Asia (8) Developing the nation's Character Revolution; (9) strengthening unity and social restoration of Indonesia. The environment literacy campaign in Elementary School should be developed in three phases, such as; habituation, development and learning [16].

Habituation of environment literacy is the earliest phase, where the emphasis is on the reading culture as habit. The core is habituation of school literacy ecosystem so that the students can become long life learner [16]. The implementation is by providing learning sources about how to conserve environment suitable with the local wisdom of Sundanese, providing environment enriched with literacy for example, school library, classroom reading corner, book zone, school activity unit, and school farm with the theme of environment conservation relevant to local wisdom of Sundanese.

Environment literacy through development of environmental education which is the key to prepare students with knowledge, skill, value and affection of caring environmental so that they can participate actively in solving environmental problems [17]. School, as learning site, can be utilized as media of character development of caring environment effectively. The role of the school as place for playing and learning can help students to understand the impact of human behavior on earth and become place of human living sustainably. Ironically, various environmental problems cannot be solved showed that education of living environment does not effectively build human character to conserve the environment. Therefore, alternative solutions are needed to solve those problems.

One of the implementation forms of environmental living-based education can be implemented and programmed at school is Eco School. Eco School program is an international program objected to improve the students' environmental literacy. The appearance of Eco School started from the people consciousness to increase the environmental quality. Eco School can adapt the program to fulfill students' priority in case of local area [18]. It is clear that, Eco School can be integrated with the development of environmental education through the program

planning of *adhiwiyata*. Through this program, all school society are expected to be involved in school activities toward healthy environment and to prevent negative environment.

There are five benefits joining *Adhiwiyata*, such as; 1) promoting the acceleration achievement of 8 national standards of education as written in President's Decree Number 19 in 2006 on National Standard of Education, 2) increasing the efficiency of the school operational spending through economization and reduction of consuming various energy sources, 3) creating togetherness among the school society and the teaching-learning condition which is more comfortable and conducive, 4) becoming learning site about values of conserving and managing well living environment for school society and all people around the school, 5) improving the effort of environmental conservation and management of through activities related to the control of pollution and damage as well as the conservation of school function [19]. Schools succeeding to implement Eco School will be awarded "Adhiwiyata School" from The Ministry of Environment.

Literacy learning of environment implemented should be a process of organizing values and make the concept clearer on developing knowledge, skill, and behavior of environment conservation. Things must be emphasized are about (1) knowledge of what caused damage and pollution, (2) knowledge of the impact, and (3) knowledge on the strategy to transform when facing environment problems [16]. Various ways done to implement this environmental literacy, for example as done by Elementary School of Bestari Utami in Garut Regency by including local wisdom of Sundanese in the school curriculum [20]. Therefore, there will be harmony between the acceptance of foreign culture as the impact of digital era and the commitment to conserve local culture in case of local wisdom of Sundanese. This thing is important that the development of population and the behavior in the future as well as conservation of the local culture and environment of Sundanese. Knowledge on local wisdom of Sundanese is a part of the orientation of environment conservation through culture. The implementation of Sundanese culture in curriculum of SD Bestari Utari is part of environmental literacy but not all participants are educated to realize it. In this activity, students are taught at school to respect their Sundanese culture.

The realization of the program implementation is the material of Sundanese inserted in the learning sources. Example, making assignments about the importance of environmental conservation, putting information into Sundanese in form of art work. Then, they also complete learning project done in group. One example is playing traditional music instrument such as Angklung. Farming vegetable is one of Sundanese local wisdoms where the students can realize the importance of environmental conservation.

4. CONCLUSIONS

Either directly or indirectly, in fact nature is the "earth of residence as well as the book of life" for the Sundanese people. In its development, the local wisdom became 'custom and culture in the Sundanese community. This, of course, ultimately formed Sundanese culture that grew and developed in the Sundanese community (including the traditional Sundanese order that developed among the Sundanese indigenous people or Sundanese communities who are still bound by *tatali paranti karuhun*) as having a role in maintaining sustainability and balance nature in relation to the life of the Sundanese people. In its culture, Sundanese does not only recognize the name or command of nature but also has the ability to "live the character of each element of nature" as a lesson which is then used as a presupposition to look at ourselves and other human beings.

Environmental literacy implementation in education aspect can be done through habituation, development and learning. Habituation with literacy learning culture where the materials are Sundanese local wisdom, development and Eco School to be Adiwiyata School. Learning the theme of Sundanese local wisdom to conserve environment through curriculum and instruction in Elementary School.

REFERENCES

- [1] K. Hollweg, J. Taylor, R. Bybee, T. Marcinkowski, W. McBeth, and P. Zoido.:Developing a framework for assessing environmental literacy,” *North Am. Assoc. Environ. Educ.*, (2011)
- [2] Naaee.:*Excellence in Environmental Education: Guidelines for Learning (K-12)*.(2010)
- [3] Rahman.: *Kecakapan Literasi Sekolah Dasar*. pp.1-2. UPI Bandung, Indonesia (2018)
- [4] H. R. Hungerford and T. L. Volk.:Changing learner behavior through environmental education,” *J. Environ. Educ.*, (1990)
- [5] Ryan Dwi Puspita & Rahman.: Meningkatkan Kemampuan Membaca Pemahaman Berbantuan Pembelajaran Tematik Terpadu Bernuansa Model *Interactive-Compensatory*. Pendas: Jurna Ilmiah Pendidikan Dasar, Vo. II No.2. pp.202 (2017)
- [6] G. Roth, D., & Sedana.:The Asia Pacific Journal of Reframing Tri Hita Karana : From ‘Balinese Culture’ to Politics. Pp. 37–41 (2015)
- [7] A. Hartoyo.:Eksplorasi Etnomatematika pada Budaya Masyarakat Dayak Perbatasan Indonesia-Malaysia Kabupaten Sanggau Kalbar,” *J. Penelit. Pendidik.* (2012)
- [8] H. . Daeng.:*Manusia, Kebudayaan dan Lingkungan Tinjauan Antropologis*. Pustaka Pelajar (2008)
- [9] Rahman, et.al.: Elementary Education Literacy in the Era of Industrial Revolution 4.0. *Advances in Social, Education and Humanities Research*, Volume 257. UPI 2nd International Conference on Language, Literature, Culture and Education (ICOLLITE). pp. 1- 4 (2018)
- [10] M. Bruce.:*Pengelolaan Sumberdaya dan Lingkungan*. Yogyakarta: Gadjah Mada University Press (2007)
- [11] Koentjaraningrat.:*Pengantar Ilmu Antropologi* (2009)
- [12] Suyaatmana, E.dkk.: *Paririmbun Sunda (Jawa Barat)*. Bandung: Departemen Pendidikan dan Kebudayaan., (1993)
- [13] Koentjaraningrat.:*Manusia dan Kebudayaan Di Indonesia* (2007)
- [14] N. Rusnandar.: Uga Sebagai Memory Kolektif Masyarakat Sunda (Uga Sunda Community As A Collective Memory),” *Metasastra J. Penelit. Sastra* (2017)
- [15] Fauziah, Dewi Utami, dkk.: *Panduan Gerakan Literasi Sekolah di Sekolah Dasar*. Jakarta; Direktorat Jendral Pendidikan Dasar dan Menengah Kemendikbud RI (2016)
- [16] Indah Wijaya Antasari.: Implementasi Gerakan Literasi Sekolah Tahap Pembiasaan di MI Muhammadiyah Gandatapa Sumbang Banyumas.*Jurnal LIBRIA*, Vol.9 No.1 (2017)
- [17] Onzoy, Sibel., dkk.: Can Eco School Improve Elementary School Students' Environmental Literacy Level?. *Jurnal: Asia-Pasific Forum on Science Learning and Teaching*, Vol 13 Issue 2 (2012)
- [18] Mirza Desfani.: Mewujudkan Masyarakat Berkarakter Peduli Lingkungan Melalui Program Adiwiyata. *Jurnal SOSIO DIDAKTIKA* Vo. 2 No . 1 (2017)
- [19] Sungkowo.: *Konsep Pendidikan Lingkungan Hidup Pada Jalur Pendidikan Dasar dan Menengah*. Jakarta: Dikdasmen(2005)
- [20] Santi Susanti dan Rangga S.: pembelajaran Literasi Budaya Sunda Pada Peserta Didik SD Bestari Utami Kabupaten Garut Jawa Barat. *Jurnal Aplikasi Iptek dan Masyarakat*. Vol. 6 No.2 (2017).

- [21] K. Saddhono and M. Rohmadi, "A Sociolinguistics Study on the Use of the Javanese Language in the Learning Process in Primary Schools in Surakarta, Central Java, Indonesia." *Int. Edu. Stu.*, vol. 7 no.6 pp 25-30, 2014