



Journal of Educational Sciences

Journal homepage: <https://jes.ejournal.unri.ac.id/index.php/JES>



P-ISSN
2581-1657

E-ISSN
2581-2203

Environmental Education in Forming Attitudes of Environmental Care for Students

Istiqomah, Suwondo, L.N Firdaus

Magister of Biology Education, University of Riau, Pekanbaru, 28293, Indonesia

ARTICLE INFO

Article history:

Received: 25 June 2019

Revised: 12 Sept 2019

Accepted: 04 Jan 2020

Published online: 24 Jan 2020

Keywords:

Environmental Education

Monolithic

Integration

ABSTRACT

Current environmental problems have become a serious threat to human life. One way to reduce this threat is to change the paradigm of the younger generation through education. Environmental Education (PLH) is the right step to implement, especially in Adiwiyata schools. This study aims to analyze students environmental care attitudes by learning monolithic and integrated environmental education. This research was conducted in 4 adiwiyata high schools. The method used is a survey. The total sample was 307 students. The technique used through the questionnaire environmental attitudes of students. Data analysis was performed by t-test. The t-test results showed that there were differences in students' environmental care attitudes between monolithic learning and integration. Differences in attitudes to care for the environment are found in 3 indicators namely, attitudes towards energy, attitudes towards flora and fauna and attitudes towards the social and human environment. Analysis of environmental care attitudes category found that monolithic PLH learning was 1.24% in the excellent category, 98.76 in the good category. While PLH integration is 1.39% very good, 93.10% is good and 5.51% is low. It was concluded that students with monolithic PLH learning had environmental care attitudes that were better than students' attitudes with PLH integration learning.

© 2020 JES. All rights reserved.

1. Introduction

The environment has an important role to support human life in achieving a better quality of life. Along with the times, the function of the environment is increasingly threatened. Currently there is a global environmental crisis, among others, forest destruction, pollution (land, water, air), climate change, biodiversity

* Corresponding author. Tel./Fax.: +628
E-mail: istiqomah7827@grad.unri.ac.id

extinction, loss of energy resources and other environmental damage (Ministry of Environment, 2008). All the damage that occurs is largely due to human activities that utilize nature without calculation. Only by changing human attitudes and behavior can reduce these environmental problems (Norris & Juliet, 2016). One of the strategic and sustainable steps that can be taken to overcome environmental problems that occur is through education (Muhammad, 2013). Education is the most appropriate vehicle for internalizing values and transforming beliefs, knowledge and skills (Azhar et al., 2015).

Environmental education (PLH) is an effective way to understand environmental management, problems and protection (Pane & Rina, 2015). According to Adisenjaya (2008) some PLH objectives are: 1). Build awareness, which gives encouragement to each individual to gain awareness and sensitivity to the environment and the problem, 2). Increased knowledge, which is helping each individual to gain a variety of experiences and basic understanding of the environment and the problem, 3). Forming attitudes, namely helping each individual to obtain a set of values and abilities to get the right choices and develop feelings that are sensitive to the environment and provide motivation to participate actively in the improvement and protection of the environment, 4). Increase participation, which provides motivation for each individual to actively participate in solving environmental problems and 5). As an evaluation material that is encouraging individuals to have the ability to evaluate environmental knowledge in terms of ecological, social, economic and other educational factors.

The development of PLH learning through formal education has become the main strategy of the Adiwiyata program. The Adiwiyata Program is a caring and cultured school environment program aimed at realizing responsible school members through good school governance to support sustainable development (KLH, 2014). Through PLH learning at Adiwiyata School, it is hoped that it will increase the students' environmental awareness attitude (Iswari & Suyud, 2017).

The attitude of caring for the environment is a feeling that a person has to improve and manage the environment properly and beneficially, so that it can be enjoyed continuously without damaging the situation, helping to preserve and preserve it so that there are sustainable benefits (Ministry of National Education, 2010). The attitude of high school students (high school / MA) is important to know, because high school / MA students are psychologically at the stage of adolescent development (Adolescent) where their opinions are important to study. Changes in attitudes and behavior in someone who is at the adolescent stage, is an important sign for long-term social change (Kuhlemeier et al., 1999; Cheung & Lee., 2010; Febrinawati & Achmad., 2016). The understanding given about the environment is expected to emerge awareness for responsible learning, and be positive about the environment. Furthermore, these teenagers will become leaders and make policies in maintaining and preserving the environment (Campbel et al., 1999; Lake et al., 2010).

The role of Environmental Management towards environmental care attitude has been carried out by Iswari and Suyud (2017), which states that Environmental

Management has formed 99% good environmental care attitude among students. Landriany (2014) states that if the environmental attitudes of students in Adiwiyata school are still low, it can be caused by an error in understanding the concept of protecting the environment properly. Meanwhile according to Esi (2015) the basic concept of forming an attitude of caring for the environment consists of institutional factors and school management, students' concept knowledge, environmental factors, and educational strategies. Iswari and Suyud (2017) concluded that good environmental care attitude is not always influenced by the level of knowledge.

The implementation of PLH in Adiwiyata schools can be done by thematic applications directly in the field (kokurikuler and ekstrurikuler), monolithically (Intrakurikuler), and integrated with other lessons (Redy, 2016). Some High School and Madrasah Aliyah Negeri (SMAN / MAN) schools in Pekanbaru have participated in the Adiwiyata program and implemented PLH learning both monolithically and integratedly. However, at present there has not been any study on how big is the role of PLH monolithic learning and integrative PLH towards environmental attitudes of students in the Adiwiyata Middle School in Pekanbaru. Therefore the purpose of this study is to analyze the students environmental care attitudes in the Adiwiyata Pekanbaru high school with monolithic and integrated PLH learning. The results of the study are expected to be an input for principals / madrasahs in Adiwiyata Middle School to be able to make policies on the implementation and development of PLH learning in schools.

2. Methodology

This research was a quantitative research with descriptive survey method. The study was conducted in September-November 2018. The population consisted of class XI MIA students, SMA / MAN Adiwiyata Pekanbaru, totaling 2496 students. Samples were taken from 2 Adiwiyata schools with monolithic PLH learning namely MAN 1 and SMAN 4 Pekanbaru and 2 Adiwiyata schools with integrative PLH learning namely SMUN 1 and SMUN 2 Pekanbaru. Determination of the number of samples based on the Isacc formula, totaling 307 people, consisted of 162 monolithic samples and 145 integrative samples. Meanwhile, the sampling technique was done by random sampling.

The measured parameter was the attitude of caring for the environment. Measurement using a questionnaire, observation, and interviews with teachers and students. The instrument for caring about the environment was compiled based on 5 indicators adapted from research results Febrinawati & Ahmad (2016). It consisted of 25 statements in the form of 14 positive items and 11 negative items. Indicators of environmental awareness are presented in Table 1.

Table 1. Indicators of Environmental Attitudes

NO	Indicators	Question Number
1	Waste management	4, 9, 14,17,21
2	Attitude towards energy	3,7,12,13,18,25
3	Attitudes toward water, air and soil	2,6,8,19,23,24
4	Attitudes towards flora and fauna	11,15,20,22
5	Attitudes towards humans and the social environment	1,5, 10,16

Environmental care attitude analysis techniques used a formula adapted from Campbell, 1999.

$$A = \frac{\sum S}{N} \times 100$$

Information :

A = Attitude to care about the environment (Attitude)

$\sum S$ = Total score of the respondent's answers

N = Maximum score

Interpretations of environmental attitudes are based on Table 2 (adapted from Campbell, 1999).

Table 2. Environmental Care Attitude Categories

NO	Category Attitudes to the environment	Range skor
1	Very good	≥ 94
2	Good	63,5-93,75
3	Weak	31,25-62,5
4	Apathetic / don't care	$< 31,25$

3. Results and Discussion

Environmental care attitude data that has been collected from the sample, then it has been carried out with analysis and measurement. The results of the measurement of differences in monolithic and integrative environmental care behaviors are presented in Table 3.

Table 3. T Test Results for Environmental Care

Aspect	N	Mean	Std error	Sd	Sig
Environmental knowledge					
Monolitik	162	60,79	1,09	13,9	0.00*
Integratif	145	55,20	1,05	12,68	0.00*

$\alpha < 0.05$ then significantly different

From the results of the t-test in Table 3, the value of $\alpha < 0.05$ is obtained, showing the difference between the average attitude of environmental care of monolithic students with integrated learning. The difference in the results of environmental

care attitudes between the two PLH learning patterns, can be seen from the achievements of the level of environmental care attitudes when consulted on the scale of attitude categories, presented in Table 4.

Table 4. Categories of Environmental Care Attitude Monolithic and Integrative

N0	Attitude category	Monolithic		Integrative	
		f	%	F	%
1	Very good	2	1,24	2	1.39
2	Well	160	98,76	135	93,10
3	Weak	0	0	8	5,51
4	Apathetic / don't care	0	0	0	0
Total		162	100	145	100

From Table 4, it can be explained that the percentage of students in the good category has a high enough percentage of 98.76% in monolithic PLH and 93.10% in integrative. These results give the meaning that in general students on monolithic and integrative learning already have good environmental care attitudes. Students already have a concern for waste, energy use, flora and fauna protection and environmental preservation. The difference in these 2 learning patterns is that there are still students who have a low caring attitude, which is 5.51% in the integrative PLH. From these results it can be said that the students in monolithic PLH have a better caring attitude towards the environment compared to students in integrative PLH

Meanwhile the t-test for 5 indicators of environmental attitudes of monolithic and integrative PLH learning students is presented in Table 5.

Table 5. T Test Results for Monolithic and Integrative Environmental Care Indicators

N0	Indicators of environmental care attitude	Rresult uji t
1	Sikap terhadap sampah	0,07
2	Sikap terhadap energy	0,00*
3	Sikap terhadap flora dan fauna	0,00*
4	Sikap terhadap udara, tanah dan air	0,06
5	Sikap terhadap lingkungan social dan manusia	0,00*

* $\alpha < 0.05$ then significantly different

In Table 5, it appears that there are 3 indicators of environmental care attitudes that show the difference between monolithic and integrative environmental education learning. These indicators are 1). Indicators of attitude to energy, 2). Indicators of attitude towards flora and fauna and 3). Indicators of attitude towards the social and human environment. The difference in the achievement of the 3 indicators score is seen from the average value of attitude, presented in Table 6.

Table 6. Average Scores of Different Indicator Attitudes.

NO	Indikator	Average score	
		Monolitik	Integratif
1	Sikap terhadap energy	3.97	3.82
2	Sikap terhadap flora dan fauna	3.70	3.30
3	Sikap terhadap lingkungan sosial dan manusia	4.10	3.96

In Table 6, it can be explained that, for the three indicators namely attitudes toward energy, attitudes towards flora and fauna, and attitudes towards the social and human environment, monolithic PLH students produce better scores compared to integrative PLH scores. But overall both of these patterns have resulted in students who have a concern in terms of saving energy use, wisely using electronic devices, and have a concern in innovating new energy sources.

A t-test was then performed to see differences in attitudes per statement item, monolithic and integrated PLH, which are presented in Table 7.

Table 7. Results of T Test Items on Environmental Attitudes.

No	Penyataan	t test
1	Kualitas kesehatan para ibu hamil perlu ditingkatkan	0,46
2	Saya tidak pernah cemas dengan pemenuhan kebutuhan air saya, karena bumi kita terdiri dari 97% air	0,00*
3	Saya tidak perlu menghemat energi, karena energi di alam berjumlah tidak terbatas (sumber energi utamanya adalah matahari)	0,08
4	Lupa membuang botol bekas minuman pada tempat sampah, merupakan suatu perbuatan yang dapat dimaafkan, lagi pula nantinya akan dibersihkan oleh petugas kebersihan	0,98
5	Kita harus mengurangi angka kematian balita	0,30
6	Saya rasa, membangun <i>septictank</i> dengan jarak 3 meter dari sumber air (sumur) tidak masalah dengan pertimbangan lahan tempat tinggal yang sempit	0,09
7	Saya terbiasa mematikan lampu dan alat penerang lainnya jika tidak dibutuhkan	0,08
8	Menurut saya membajak sawah dengan mesin pembajak (traktor) dapat merusak struktur tanah	0,09
9	Saya biasa menggunakan kertas bekas yang sisi belakangnya masih kosong sebagai kertas coretan misalnya untuk perhitungan dalam matematika	0,17
10	Menurut saya, atmosfer kita yang luas mampu menetralsir gas buangan dari kegiatan manusia di litosfer bumi	0,00*
11	Bakteri dan jamur harus dimusnahkan demi menjaga kesehatan manusia	0,02*
12	Bersepeda ke sekolah bukan sesuatu yang berat bagi saya karena bersepeda dapat mengurangi polusi udara	0,25
13	Saya akan memacu kendaraan bermotor saya di atas 60km/jam agar cepat sampai dan tidak terlambat masuk kelas	0,00*
14	Saya terbiasa memisahkan sampah organik dan non organik sebelum dibuang	0,04*
15	Saya bisa memesan beberapa menu makanan andalan sebuah restoran/kedai meskipun nantinya makanan tersebut tidak habis saya makan. Bagi saya tidak masalah makanan itu tidak habis, karena saya telah membayarnya.	0,07
16	Saat berada di luar ruangan, saya akan menggunakan lotion yang mengandung pelindung dari UV A yaitu lotion yang mengandung SPF	0,94

17	Saya menolak diberi plastik pembungkus belanjaan jika saya hanya membeli satu botol air minum ukuran sedang	0,37
18	Cara saya menghemat BBM salah satunya dengan memakai bus umum saat pergi jalan-jalan	0,44
19	Menurut saya, kegiatan mengurangi penggunaan alat yang mengandung CFC tidak perlu dilakukan, sebab klorin dari CFC yang terdahulu sudah terlanjur banyak di atmosfer dan sampai sekarang masih terus merusak ozon	0,10
20	Lebih praktis menggunakan pestisida dibandingkan dengan mencari predator alami untuk membasmi hama	0,00*
21	Membakar sampah organik merupakan salah satu cara yang tidak tepat	0,04*
22	Kegiatan konservasi terhadap gajah, harimau, maupun hewan langka lainnya tidak memberikan manfaat apapun bagi kehidupan saya	0,00*
23	Saya yakin bahwa tanaman dapat menahan air dalam tanah	0,76
24	Bagi saya pribadi, menghemat air adalah hal yang sangat mudah dilakukan	0,01*
25	Menjadikan kotoran sapi menjadi energi alternatif tidak sulit dilakukan	0,67

* Sig to tailed <0.05 then significantly different / significance

A total number of 25 items of environmental care attitudes, there are 9 items that show significant differences between monolithic and integrative PLH learning. These items are numbers 2, 10, 11, 13, 14, 20, 21, 22, and 24. The results of the analysis of 9 different items are presented in Table 8.

Table 8. Average Scores of Significantly Different Attitudes

N0	Indicator	Item	Average score	
			Monolithic	Integrative
1	Attitude toward garbage	14	4,04	3,71
		21	3,82	3,56
2	Attitude toward energy	13	3,43	2,86
3	Attitude toward water, soil and air	2	3,59	3,10
		24	4,16	4,39
4	Attitude toward flora dan fauna	11	2,97	2,62
		20	3,75	3,07
		22	3,88	3,50
5	Attitude toward human and social environment	10	3,53	3,06
Total		9	3,68	3,31

Table 8 explains that indicators of attitudes towards waste items no.14 and 21, learners with monolithic learning get better results. This implies that monolithic PLH students have included trash according to their type, and did not burn the resulting garbage. This is supported by the survey conducted by the author, in which there are several types of trash cans that when the writer opens it looks like the garbage inside the barrel is in accordance with its designation. The monolithic school also has a final garbage container and a waste treatment plant for recycling. Indicator of attitude towards energy, statement number 13 students with monolithic learning also have a better attitude in terms of saving energy use. This is proven, with the existence of students who use bicycles to school. This bicycle is given free of charge by the school for students whose distance from home to

school is 1-2 kilometers. Indicators of attitude towards water, land and air, statements number 2 and 24, monolithic and integrative environmental management have made savings in water use. Indicators of attitude towards flora and fauna, for the three different items, it is seen that students in monolithic PLH have a better attitude towards environmental care in terms of maintaining biodiversity, using natural pesticides to eradicate pests, and students have helped support flora conservation activities and fauna, one of which is by commemorating environmental day activities and making posters or invitations to take care of rare and endemic flora and fauna posted around the school environment. Indicators of attitude toward humans and the social environment, the attitude item no. 10 students with monolithic PLH learning also get better scores. But overall, from the results of the analysis of attainment scores, both PLH learning patterns have shown good attitudes in the environment. Figure 1 shows activities at school with monolithic PLH learning.



Figure 1. Clean the school environment in monolithic EE

The formation of attitudes is basically the result of socialization and interaction with one's environment which is an embodiment of one's thoughts, feelings and assessments of objects based on knowledge, understanding, opinions, beliefs so as to produce a tendency to act (Suharyat, 2014). According to Soekarjo and Ukim (2009) if you want to change student behavior, then the teacher must try to change his beliefs or views first. Students' views are closely related to attitudes as understood by the attitude expressed by Notoadmodjo in Azhar (2015) that attitudes are actions or responses that are still closed from someone to stimulus or object.

Overall, a better attitude on learning monolithic PLH according to researchers can be influenced by higher levels of environmental knowledge and skills possessed by students so that it is stated in the form of attitude. This is in line with the characteristics of attitude according to Suharyat (2014), that attitudes are grown and studied throughout the development of students in relation to certain objects. Suarman et al., (2018), said that to increase the level of knowledge that will influence attitudes, teaching materials from teacher retention can be supplemented with illustrations in the form of pictures or schemes; and equipped with concrete examples according to contextual situations. According to Diarni et al., (2018), attitude or soft skills are influenced by learning motivation and achievement motivation. That is, the higher the achievement motivation, the soft skills will also

be higher. Then, the higher the soft skills, learning achievement will also increase. Monolithic PLH learning provides broader opportunities for students to have knowledge and skills due to their own allocation of learning time. This is important because the information on environmental knowledge obtained from learning will be processed diotak through a series of analysis, synthesis and evaluation activities so as to produce the value contained in the form of attitude (Suharyat, 2014). According to Campbell et al., (1999) in addition to life experience, socioeconomic status, and culture, attitude is largely determined by what the teacher teaches in class.

At the monolithic PLH the teacher can freely develop the material contained in the syllabus while at the same time having enough time to practice directly in the school environment. Meanwhile in integrative PLH learning if teachers do not have extensive knowledge and insight, high creativity, good methodological skills, are not able to develop materials that relate to the environment, then the message conveyed will be difficult to reach students. According to Aini & Zanutan (2018), careful and systematic planning must be carried out to ensure that the teacher selected is most suitable for certain subjects. In this case including the selection of environmental education teachers. Time limitations will also complicate the application of the knowledge gained. Another advantage of monolithic PLH learning is that teaching preparation by teachers is easier so that the achievement of competencies can be clearly measured. In this case the teacher can act as a modeling and instill habituation. This is supported by the opinion of Suharyat (2014) that in order to foster attitudes, the teacher must become a model, namely creating situations and conditions that allow students to be concerned about the environment, make habituation and reinforcement must be developed especially in the learning process. Tri research (2014) shows that modeling can be done by teachers by simple means such as erasing the blackboard after learning is finished, picking up trash scattered with students and participating in community service activities.

Dagiliute and Andrius (2014) state that changes in attitude can be influenced by various factors such as age, gender, culture, motivation, existing infrastructure and social pressure. Making the environment a part of one's life can also increase caring attitudes. Sayyidah & Zanutan (2017), states that learning about environmental sustainability can be done through advice and moral values. This strategy is the easiest effort a teacher can make in implementing elements of Monotheism in education. Tony Loughland et al., (2003) found that some teenagers make environmental problems only as separate objects and are outside their lives and assume something that is not important, so that their attitudes towards the environment are also not passed well. Only a few people think that the environment is an important part that influences life and shows concern.

According to Wan Roswita (2016), the program that Adiwiyata schools can do to foster environmental attitudes in addition to learning monolithic PLH, also needs to ad include PLH in all subjects, manage environmentally friendly facilities, carry out eclectic curricular activities, and commemorate the days great environment. In addition, the provision of punishment in the form of cleaning up

the school environment, such as making slogans protecting the environment must be applied to students who violate the rules, to foster habituation.

4. Conclusion

There are differences in the attitudes of students caring about the environment in learning monolithic and integrative PLH, where the attitudes of monolithic learners show better results. There are differences in attitudes to care for the environment on 3 indicators namely, indicators of attitudes towards energy, indicators of attitudes towards flora and fauna and indicators of attitudes towards the social and human environment. From the results of this study it is recommended for schools that have implemented the Adiwiyata program so that policy makers can allocate special learning hours and include them in the curriculum structure as local content in their education units. For educators at Adiwiyata School to be able to use attractive learning models so that the concept of caring for the environment can be better understood by students. Besides the need to provide students with role models in every school activity so as to create a habituation of environmental care attitudes.

Acknowledgement

Thank you to the Principal of Madarasah for providing facilities in the collection of research data and to students of class XI Mia SMAN 1, SMAN 2, SMAN 4, MAN-1 Pekanbaru who have assisted in the implementation of collecting the required data.

References

- Adisendjaja, Y. (2008). Pembelajaran pendidikan lingkungan hidup, belajar dari alam dan Pengalaman. http://file.upi.edu/Direktori/FPMIPA/JUR._PEND._BIOLOGI/195512191980021-P.pdf. [Accessed 15 January 2019].
- Aini, H. A., & Zanaton, H. I. (2018). Lesson Study: An approach to increase the competency of out-of-field mathematics teacher in building the students conceptual understanding in learning mathematics. *Journal of Educational Sciences*, 2 (2), 1-13.
- Azhar, Djahir, B., & Alfitri. (2015). Hubungan pengetahuan dan etika lingkungan dengan sikap dan perilaku menjaga kelestarian lingkungan. *Jurnal Ilmu Lingkungan Undip*, 13 (2), 36-41.
- Campbel, J. W., Waliczek, T. M., & Zajicek. (1999). Relationship between environmental knowledge and environmental attitude of high school students. *Journal of Environmental Education*, 30 (3), 17-21.
-

-
- Cheung, Y., & Lee, T.Y. (2010). Improving social competence through character education. *Journal Evaluation and Program Planning*, 33 (3), 255-263.
- Diarni, J., Suarman., & Sri, K. (2018). Accomplishment motivation and soft skill related to learning achievement. *Journal of Educational Sciences*, 2 (2), 83-89.
- Dagiliute, R., & Andrius, N. (2014). Changes of students' environmental perceptions after the environmental science and biology courses. *Journal Procedia-Social and Behavioral Sciences*, 14(1), 325-330.
- Eşi, M. C. (2015). Didactic options for the environmental education. The 6th International Conference Edu World 2014 "Education Facing Contemporary World Issues". *Journal Procedia-Social and Behavioral Sciences*, (180):1380–1385.
- Febrianawaty, Y., & Ahmad, M. (2016). Pengembangan instrumen penilaian sikap terhadap lingkungan yang valid dan reliabel bagi siswa SMA. *Prosiding seminar Nasional XII Pendidikan Biologi FKIP UNS*, 292-296.
- Iswari, D., & Suyud, U. (2017). Evaluasi penerapan program adiwiyata untuk membentuk perilaku peduli lingkungan di kalangan siswa. *Jurnal Ilmu Lingkungan*, 15 (1), 35-41.
- Kementerian Lingkungan Hidup. (2008). *Panduan Materi Lingkungan Hidup*. KLH.
- Kementerian Lingkungan Hidup. (2014). *Panduan Hari Lingkungan Hidup sedunia*. KLH Republik Indonesia. Jakarta.
- Kuhlemeier, H., Hubb, B., & Lagerweijg, N. (1999). Environmental knowledge, attitudes, and behavior in Dutch secondary education. *The journal of Environmental Education*, 30 (2), 4-14.
- Lake. (2010). Examining trends in adolescent environmental attitude, beliefs and behaviors across 3 decades. *Journal Environmental Behavior*, 42 (1), 61-85.
- Landriany, E. (2014). Implementasi kebijakan adiwiyata dalam upaya mewujudkan pendidikan lingkungan hidup di SMA Kota Malang. *Jurnal Kebijakan dan Pengembangan Pendidikan*, 2 (1): 82-88.
- Ministry of National Education. (2010). *Kurikulum dan Pembelajaran*. Kementerian Pendidikan Nasional.
- Muhammad, A. D. (2013). *Pengelolaan lingkungan harus terintegrasi*. Media Komunikasi lingkungan, Majalah Serasi Edisi 2/2013. KLH.
- Norris, I. E., & Juliet, U. D. (2016). Impact of environmental education on the knowledge and attitude of students towards the environment. *International Journal Of Environmnetal & Science Education*, 11 (12), 5367-5375.
- Pane, M. M., & Rina, P. (2015). The significance of environmental contents in character education for quality of life. *Journal Procedia Social and Behavioral Sciences*, (222) 244–252.
-

-
- Redy, H. (2016). Evaluasi penerapan kurikulum berwawasan lingkungan hidup di jenjang sekolah menengah pertama. Tesis Ilmu Lingkungan, Universitas Lampung.
- Sayyidah, N. S., & Zanaton, H. (2017). Integration of tauhid (Faith) element in biology education. *Journal of Educational Sciences, 1 (1)*, 11-23.
- Suarman., Hendripides., & Nurul Hikmah. (2018). Development of innovative teaching materials through scientific approach. *Journal of Educational Sciences, 2 (2)*, 14-22.
- Suharyat, Y. (2014). Hubungan antara sikap, minat dan perilaku Manusia. *Jurnal region Universitas Islam 45 Bekasi, 1(3)*, 1-19.
- Soekarjo, M., & Ukim, K. (2009). *Landasan kependidikan konsep dan aplikasinya*. Bumi aksara. Jakarta.
- Tri, V. (2014). Pendidikan lingkungan hidup dalam membentuk sikap peduli lingkungan siswa di SMPN 4 Jombang. *Jurnal Kajian Moral dan Kewarganegaraan, 3 (4)*, 1153-1167.
- Tony, L., Anna., Kim, W., & Peter, P. (2003). Factors influencing young people's Conceptions of Environment. *Journal Environmental Education Research, 9 (1)*, 147-156.
- Wan, R. (2016). Keterlibatan warga sekolah dalam pengelolaan lingkungan hidup di sekolah adiwiyata tingkat propinsi. *Prosiding Seminar Nasional Pelestarian Lingkungan dan Mitigasi Bencana, Program Pasca Sarjana Universitas Riau, 334-342*.

How to cite this article:

Istiqomah, Suwondo, & L.N Firdaus (2020). Environmental Education in Forming Attitudes of Environmental Care for Students in Adiwiyata Middle School, Pekanbaru City. *Journal of Educational Sciences, 4(1)*, 200-211.
