IMPLEMENTATION OF ECOLETERACY LEARNING DESIGN AT ADIWIYATA SCHOOL AS AN EFFORT FORMATION SOCIETY IN ALAM INSAN MULIA SCHOOL OF SURABAYA

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Abstract

Purpose of Study: The research was to know the implementation of ecoliteracy learning design at Adiwiyata School as an effort formation society in Alam Insan Mulia School of Surabaya.

Methodology: This research used a descriptive quantitative approach with 30 respondents. The data was achieved through observation, interview, and students' questionnaire with relevant questions. Then, the data that was achieved analyze descriptively used percentage and trick with frequency divide to respondent amount times 100%.

Results:Based on the result of analysis, it can identified significantly, so the result contemplation from all that design ecoleteracy learning was valid, it can be proofed in SAIM School, which the process was doing in the society school and in the general environment with the learning process with the society has a base environment with habituate students care to society in SAIMS, with the 25 frequencies in the amount of 75.0%, and contemplation from the average that was achieved in the amount of 3.53 with good category. After that, the implementation of ecoleteracy learning influence to students' compassion well in SAIM School, and it can be seen from students' questionnaire that showed 25 frequencies in the amount of 75.0%, contemplation from the average that was achieved in the amount of 3.01, so it was good frequency.

Implications/Applications: The implementation of ecoleteracy learning design in Adiwiyata School was good enough category in SAIMS.

Keywords: Design Ecoleteracy Learning, Adiwiyata School, and Environmental Education

INTRODUCTION

One of the shapes into which was consideration development of nation influenced arrangement development. But sometimes kinds of existence were not in accordance with education value that has built all this time. Finally, the right purpose of education was not channeled well. (Matandare, 2018)

In this modern era, the environmental damage becomes serious discussion in the education kingdom, because explicitly it was a bad impact of flaw that will be fallen by almost all people. So, the problem of environmental like deforestation, water pollution, air pollution, and soil pollution can be addressed personally but the most fundamental must be through reorienting values, ethics and living norms which is done through the action of cooperation with groups, agencies, and others. (Creswell, 2016 ;Brunner, José Joaquín, and Francisco Ganga-Contreras.2018)

The emergence of an educational paradigm in *ecoleteracy* learning design was to create learners understanding of the importance of awareness of preserving the environment, thus shaping the value of balance between man and nature. Therefore, it can be considered empirically that the effort to include environmental agenda or *ecoleteracy* learning was still not so much in school learning. (Green, Place, 2012)

The introduction of environmental education from an early age was one of the important goals of Alam Insan Mulia School of Surabaya. The school is located on Jl. Medokan Semampir Indah with the school concept Adiwiyata based environment. As expressed by the Principal of SAIMS has the main concept been to make the learning process in accordance with the world of students and in accordance with the process of stages of students (Iravani, M. R., & ShekarchiZade, 2014).

Further development, SAIMS currently provided 2 hectares of land in Prigen area, which was used as a vehicle for outdoor activities of students in the exploration of their concern for nature. The potential that was not less important in terms of environmental management at SAIMS was human resources. SAIMS regularly conduct outdoor learning to various places both within and outside the city in accordance with the target learning, such as to Brondong or PPLH Seloliman. It was still many places which were needed to visit as students learning resources. (Spellman, 2015)

RESEARCH METHOD

The context of this research types used descriptive qualitative that means explain social situation holistically and intensify, found system and explain the concept. (Barakhsanova, Savvinov, Prokopyev, Vlasova, & Gosudarev, 2016) This research was to get a description from an informant with the implementation of *ecoleteracy* learning design as a formation society in SAIMS.

Qualitative research is interpretive study, in which the researcher engaged directly, ongoing, on the ground experience with a number of participants or informant. (Jumadil dkk. 2015)

Regarding the data source of this research data took informant data source by considering data from people who were studied. So, in this context, the researcher will enter the social situation, doing an observation, interview and documentation for people who were seen to know about the social situation in the object of research (Aliyati, P. D & Yoenanto, 2014). The subjects of this journal were: principal, class teacher, Adiwiyata School Coordinator Team and Student (closed questionnaire).

The researcher used the technique in collecting data conducted on natural conditions: a) Observation, b) Interview, c) Documentation, d) Audio-visual.

Data analysis in this research was: processing and preparing the data, encode for processing all data, analyzing more detail with coding data.

Testing the validity of data compiled starting from the most frequent and easy to use to the difficult to do according to Arifinl (Jenaabadi, & Shad, 2013) was: 1) Mentriangulasi, 2) Applying member checking, 3) Classify bias, 4) Make the use of relative time allocation, and 5) Conduct peer examination through discussion.

RESULTS OF RESEARCH AND DISCUSSION

The next result of research can be explained as follows:

Ecoleteracy Learning Design at Adiwiyata School as an Effort Formation Society in SAIMS

SAIMS as Ecoleteracy learning reference consists of six competencies, such as numerical competence (related to mathematics), verbal competence (related to Indonesia, Arabic and English languages), competence of belief and morals (related to Islamic religion), motorist competence (related to sport and art), science competence (related to nature and environment) and social competence (related to interaction with society), by Coordinator of Adiwiyata, he stated that:

> "Actually from the government program if it viewed from K-13, it has entered in environmental activities and it is not separate"(KA. 08-02-2016).

So, actually the form of ecoleteracy learning design create a fun learning situation and take students' position as the center of students and teacher as a facilitator and then in SAIMS there was not subject teachers but there were classroom teachers, so just as it was delivered by the homeroom teacher, that is:

> "There were not subject teachers, but there was a classroom teacher and indeed when it's in the class, it really needs a friends who are more dive able in their respective fields, so that when entered in class 4 was indeed incorporated from math, science, etc." (WK.18-02-2016).

So, ecoteleracy in SAIMS was really conditioned, integrated on the substance interconnected between the materials with each other, although in the school was not forming teachers of the field of study but existing teachers were collaborating classes. Then, the media of learning was the outdoors as it was delivered by headmaster:

> "Nature is not only as of the environment but also the environment as well as a very meaningful of learning media. The word "nature" here means there are 3, which are the natural age means adjusted to the age of the children, life-skill education and the natural surroundings" (KS. 07-03-2016).

So, from the three informants/respondents describing that substantially ecoleteracy learning design that was from the very beginning of the establishment of SAIMS has been based on nature. Was proven successfully as explained by Adiwiyata Coordinator about the activities that are:

> "About Adiwiyata program, with the product of SAIMS with the rubbish, explain the process of production, demonstration about the environment related to Adiwiyata program" (KA. 08-02/--2016).

Adiwiyata School is programmed in SAIMS as an assumption to construct the students' habit to love the environment.

Implementation of Ecoleteracy Learning Design in Adiwiyata School as an Effort Formation Society in SAIMS

Which became the reference of the learning design of SAIMS referred to the five basic competencies such as competence of belief and morals i.e Islamic religious values; The numerical competence of applied mathematics, verbal competence consists of

Arabic, Indonesian and English; Social competence namely civic education, motor competence that consist of motoric rough (physical) and smooth motoric (art). Then learning classically listed in the table below:

Table 1: Synthetic Results of Observation Ecoleteracy Learning in Alam Insan Mulia School of Surabaya

Phase	Steps	Teacher Activity
1	The orientation of learners on environmental issues	The teacher explained the purpose of learning, explained the logistics required, proposed phenomena or demonstrations or stories to raise environmental concerns, motivated students to involve in problem-solving which is chosen, related to the abundance of natural resources.
2	Organizing students to learn	The teacher helped students to define and organize assignments related to environmental concern, and the teacher gave an observation sheet.
3	Leading observation individually and groups	The teacher encouraged students to collect clear information, carry out observations to obtain explanations related to the surrounding environment, both abiotic and biotic while carrying student' worksheet.
4	Developing and presenting the results of observations made	The teacher helped students in planned and prepared appropriate works such as observation reports, as well as helping them to share tasks with their friends.
5	Analyzing and evaluating the process of problem-solving	The teacher helped students for doing reflection or evaluation of their investigations and the processes they use. The teacher asked them to collect the results of the observation task that had been they done.

Data Source: SAIMS 18/02/2016

From the result of observations along with the implementation of the design of learning that was the uniqueness of learning was reinforced by the result of interviews by Headmaster as follows:

"The third is a natural process that is closely related because if the academic of SAIMS is the most important is the attitude, behavior, and communication so that learning should be set in such a good starting from the environment based ecoleteracy, religion, etc" (KS. 07-03-2016).

Statement of Headmaster reinforced by homeroom teacher that SAIMS in the process of ecoleteracy learning was indeed emphasized on attitude learners that impact on the growth of students' environmental awareness that is:

"Learning in SAIMS is designed to learning that appropriate to the age of children contextually because children are their world playing" (WK. 01-02-2016).

Then, the explanation that spoken by Headmaster and homeroom teacher were also reinforced by Adiwiyata coordinator of SAIMS related to the sincerity of nature as a learning media of SAIMS with gave explanation related to activity, that was:

"SAIMS as a product was trash because in the school environment indeed full of plants and tall tree, so that leaves were scattered around, it was the condition namely nature school" (KA. 08-02-2016).

If about activity program of Adiwiyata that become SAIMS program had become the sample of another school with the trademark characteristics of learning media is nature, because in essence nature was very strategic serve as a learning media. As explained by the coordinator Adiwiyata namely:

"Adiwiyata activity is the canal of the activity built, ie there is election trash, watering if there is drought such as dry season, classes of unused papers, bottles, small and large baskets" (KA. 08-02-2016).

So, from the explanation above Adiwiyata school that was programmed by SAIMS as an assumption to construct the students' habit as effort love environment.

Table2: Perspective The process of Implementing the Design of Ecoleteracy Learning at Adiwiyata School

Problem Item	Score Options				Average
	1 (STS)	2 (TS)	3 (S)	4 (SS)	
Ecoleteracy learning is given mutually related material with each other.	0 0.0%	1 3.3%	14 46.6%	15 45.5%	3.46
Ecoleteracy learning is very fun and not bored.	0 0.0%	1 3.3%	8 26.6%	21 70.0%	3.66
The knowledge of Ecoleteracy environmental learning helpful to my daily.	0 0,0%	1 3.3%	7 23.3%	22 73.3%	3.77
pembelajaran memelihara lingkungan hidup merupakan kebutuhan saya Learning to care for the environment is my need	0 0,0%	1 3.3%	4 13.3%	25 83.3%	3.88
Learning to work together in maintaining the cleanliness and greening of schools is my responsibility.	0 0,0%	5 16.6%	9 30.0%	16 53.3%	3.36
I am learning to maintain greening crops in the school area well.	0 0,0%	6 20.0%	16 53.3%	8 26.6%	3.06
Average					3.53

Data Source: SAIMS Class 4 29/02/2016

It can be seen in the table above, the biggest frequency located on the fourth score of four score options, and learners' perspective is on the learner's awareness items in relation to the environmental aspects of learning given interconnected material to each other lies in the fourth score with frequency and percent of 15 (45.5%) averaging of 3.46. With regard to aspects of environmental learning (ecoleterasy) is very fun and not boring lies in the fourth score with frequency and percent of 21 (45.5%) averaging of 3.66.

Aspects of environmental learning knowledge (ecoleterasy) useful in my daily life lie in the fourth score with frequency and percent 22 (73.3%) averaging of3.77. Then learning to maintain the environment is my need lies in the fourth score of the frequency and percent of 25 (75.0%) averaging of 3.88. Aspects of learning to work together in maintaining hygiene and greening schools are my responsibility lies in the fourth score with frequency and percent of 16 (53.3%) averaging of 3.36. Then the aspects concerning me learning the maintenance of greening plants in the school area well lie in the third score with frequency and percent of16 (53.3%) averaging of 3.06. The largest frequency and percent on item with respect to the study of maintaining the environment is my requirement of 25 (75.0%)with the highest average score is 3.88. Viewed from the overall average, the average is 3.53.

Implementation of Environment Concern of Learners after Implementation of Learning Design of Ecoleteracy at SAIMS

When viewed from the observative observation of ecoleteracy learning was indeed the learners strived to be young observers in order to observe the environment with various phenomena. Because learning by SAIMS is integrated with one lesson that is related to other lessons, such as explained by Headmaster that was:

"Automatically I say truly that it influenced to student's caring attitude to the environment. When explaining the importance of clean air comes from where then automatically the children interstimulus that clean air comes from the tree then let's take care of the trees that are around" (KS. 07-03-2016).

So the process ecoleteracy of learning design was also delivered by the guardian of SAIMS class as the principal argument amplifier, with the orientation of learning has an impact on students' environmental awareness that is:

"If indeed people see learning in SAIMS was only outside, see it only once, twice, then "actually he will not feel what the core of learning in SAIMS" (WK. 18-02-2016)".

As a reinforcement of the statement, one of the greatest agenda of ecoleterasy learning design has an impact on continuous student environmental awareness as described by Adiwiyata coordinator that is:

"Trees around the school a lot so the leaves that fall abundantly, then one of them for fertilizer, with the process itself is directly used alone to cultivate plants with the process of learning to plant, there are vegetables and grains and there is also grete and kinds of activity that associated with learning activity of science, math, all entered in the learning activities and enter the portofolio" (KA. 08-02-2016).

It can be interpreted that the process of implementation of ecoleterasy learning design at Adiwiyata school is very giving space of existence of learners in mak ing nature as the center of science.

Table 3: Perspective Environmental Awareness of Learners after the Implementation of Ecoleteracy Learning Design

Item matter	Score Options				Average
	1 (STS)	2 (TS)	3 (S)	4 (SS)	
Greening, Planting, and Cleanliness at SAIMS area is my moral responsibility.	0 0,0%	4 13.3%	15 45.5%	11 36.6%	3.23
I am not ashamed to remain friends in maintaining my school cleanliness and personal hygiene.	0 0,0%	5 16.6%	14 46.6%	11 36.6%	3.22
Taking out the trash after eating and drinking in the basket is my habit in the school.	1 3.3%	0 0,0%	4 13.3%	25 83.3%	3.76
Separating organic and inorganic waste is my habit in school.	1 3.3%	4 13.3%	9 30.0%	6 20.0%	2.00
Clearing garbage in the classroom before lesson starts is my responbility.	0 0,0%	5 16.6%	16 53.3%	9 30.0%	3.13
Picking up garbage if I saw rubbish strewn in the school and dumped it into organic or inorganic trash.	0 0,0%	8 26.6%	21 70.0%	1 3.3%	2.76
Average					3.01

Data Source: SAIMS Class 4 29/02/2016

And the learners' perspective on the conscious items with respect to reforestation, crop maintenance, and cleanliness in the SAIMS area is my moral responsibility lies in the third score of the frequency and percent of 15 (45.5%) averaging of 3.23. And with the aspect, I am not ashamed to remind friends in maintaining the cleanliness of the school and my own personal hygiene lies in the third score of the frequency and percent of 14 (46.6%) averaging of 3.22.

The aspect of taking out the trash after eating and drinking in the basket is my habit in the school at the fourth with a frequency and percent of 25 (75.0%) on average of 3.76. On the aspect of separating organic and inorganic waste is my habit in school lies on the third with a frequency and percent of 9 (30.0%) on average by 2.00. The aspect of clearing garbage in the classroom before the lesson starts is my responsibility lies in the third tail with the frequency and percent of 16 (53.3%) averaging of 3.13. On the aspect, I picked up garbage if I saw rubbish strewn in school and dumped it into organic / an-organic trash lies on a third with a frequency and a percent of 21 (70.0%). So the frequency and the largest percentage of items regarding the waste disposal aspect after eating and drinking in place is my 25 school habit (75.0%) with the average score. Viewed from the overall average obtained an average of 3.01.

Figure 1. Teacher explains the learner procedure of ecoleterasy learning design at SAIM

DISCUSSION

This study certainly contributes to the very logical idea that the design of learning through integrated ecoleterasy learning design approach gives a lasting impression. In reality, it can be different from other schools, that the learning ecoleterasy in SAIM conceptual interconnected between the material with each other. The design process of ecoleterasy learning provides the habitual space for learners with love for the environment and the learning process as it is so much fun. (Creswell, J. W. 2016)

The results are reviewed from the context of environmental awareness of learners by Ecoleteracy learning that integrated with the characteristics of SAIM as School based on nature. Based on the data which were obtained from informant descriptively, it is known that paying attention to the environment is very important. (Arifin, 2008;Muthmainnah, Menggugah Partisipasi & Membangun Sinergi,2007)

In accordance with the reality of the findings of researchers how the importance of realizing ecoleterasy learning as an effort to care for students' environment. So strictly according to natural perspective SD SAIM learning adjusted on 3 aspects of the natural age by teaching according to the age of the children, the nature of life (life-skill education) and living nature. .(Mawardi, dkk. 2016; Aziz, 2014)

CONCLUSION

From the research that got related to the implementation of ecoleteracy learning design at Adiwiyata school as an effort to create environmental awareness at Alam Insan Mulia School of Surabaya can conclude as follows:

1. The design of ecoleterasy learning is integrated learning based on the environment defined by school policy as an enjoyable learning effort. The design of ecoleteracy learning in SAIM raced on three natural categories namely as natural age that is adjusted to the age of children, life-skill education and environmental living.

2. Implementation of ecoleteracy learning design is learning done both in the school environment and in the environment in general. Then integrated learning consists of verbal competencies (Indonesian, English, and Arabic), Numerical Competence, belief and morals Competence, Competence of Science, Competent Social and Competent motoric.

3. Environmental awareness of learners after the implementation of ecoliteracy learning design clearly visible impact of the habits which is done through the learning process of ecoliteracy with efforts to shape environmental awareness of learners. Because the continuous learning of ecoletarary is done as an effort to form the awareness of student environment must be embedded significantly.

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