Organic Village as an Environmental Education Model based Community for Early Childhood in Semarang City, Central Java, Indonesia

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1. Introduction

Environmental education is a process that aims to build the world's population conscious and have concern for the environment as a whole, as well as a variety of problems associated with it. Imparting knowledge, attitudes, skills, motivation, and commitment to work individually and together to find solutions to the problems that currently arise and prevent new problems. Despite this, the majority displayed relatively low levels of knowledge of key environmental concepts, and were involved in little environmental action-taking outside of household activities (Connell, et all. 2015:39). The correlations between expressed views about caring for the environment and environmentally friendly actions were surprising, however, as actions did not necessarily align with beliefs (Broom, 2017:34). Education in and about the environment is intended to develop the knowledge, awareness, attitude and skill objectives, while education for the environment has its focus on the values, ethics, problem solving and action objectives (Spork, 2015:147). Aspects of the emerging concept of "education for sustainable living" are used to analyse some widely-held assumptions about environmental education practice. In doing so the paper seeks to contribute to the process of identifying a vision and practice appropriate to environmental education for a new millennium (Fien, 2015:21). The introduction of the environment for early childhood aims to build awareness from an early age the importance of education to give more attention to the environment. Longitudinal studies now confirm the economic, academic, and social importance of high-quality early childhood education (Cooper, 2014:85). As children develop as learners and thinkers from birth through high school, it is their teachers (including parents) who help shape their understanding of the world directly around them and, by extension, the world as a whole (Crawford, et all. 2014:54). If it can be agreed that a sustainable environment is a necessary prerequisite to a sustainable socio-economic system, then it also should make sense that the actions we take to remove threats to and foster environmental sustainability should contribute to such a system (Jonh Morelli, 2011:4). Environmental Education has made numerous advances a number of fronts over the past decade (Hungerford, et all. 2010:42). Environmental educators must learn from the mistakes by conservation educators, or as Hobart state. If, then, a major goal of environment education is the production of an active and informed citizenry, environmental educators should know the kind of learning experiences which produce such person (Tanner, 2010:20).

Additionally, it will get closer to the natural environment so that the child more quickly interact menyadarai that nature is so essential for survival. Environmental management education should be imparted to children from an early age. Early age was the "golden age" for someone, does it mean when someone at that time got a proper education, he gained a good learning readiness and one of the main keys to the success of learning to the next level. Children are more easily internalized values and habits to preserve the environment than adults. It is expected that in future environmental destruction can be prevented through environmental awareness of future generations. To that end, the community as the environmental manager, should be able to instill the values of environmental education for children. The existence of community-based environmental education will be easier for

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children to know how to manage the environment properly. The scope chosen at the primary level, which is to give more recognition to the child about the environment and natural diversity. As well as the provision of knowledge-based environment that can be applied to the wider community. Children experience nature through exploration of the world around them but are limited by the opportunities provided to them by adults (Laird, et all. 2014:58). Thus, burgeoning interest in environmental education in early childhood has been a catalyst for sharing theories, concepts, and methods across the disciplines of early childhood education and environmental education (Zurek, et all. 2014:28). Understanding early childhood educators’ preferences and perceptions of outdoor settings is an important step toward bridging a potential gap between research and practice, helping guide professional development efforts by teacher educators and environmental educators to encourage selection and use of quality outdoor settings within early childhood education (Ernst, 2014:97). Children allowed to regularly play in natural environments have increased coordination, balance, and agility (Wood, 2013:42). Attaining a sustainable future environment requires a change in attitudes, beliefs and habits. This behavioural change and action can be achieved when there is adequate knowledge about the environment (Owusu, et all. 2016:416).

II. Method

Design and Methods Referring to the objectives to be achieved, the research program was designed with a “Research and Development”. Methods of R & D is used when the researcher intends to produce a particular product, and also test the effectiveness of the product (Sugiyono, 2012:407). To produce a prototype Kampung Organik as an Environment Education Models Based Community for Early Childhood, taken systematic steps in the form of the process of action, reflection, evaluation and innovation by applying qualitative research methods, descriptive, development, experimentation and evaluation. This study aims to gain in-depth overview of the Kampung Organik as an Environment Education Models Based Community for Early Childhood. To disseminate the development of Kampung Organik as an Environment Education Models Based Community for Early Childhood, a secondary source is the organizer of the program Kampung Organic As a Model For Community-Based Early Childhood. Therefore, as was common in scientific research steps taken by the researcher is doing exploratory (exploration) of the object being studied. In this connection, a qualitative method is a method of research that offers design exploratory research aiming. Unlike the design of experimental research for example on the design of qualitative research the researcher is not the starting point of a certain frame of mind, but let the natural setting of research / as they are and attempt to understand the phenomenon that is by putting yourself in the object being studied (empathy). Data collected from experienced background (natural setting) as the data source directly. Meanings of the data can only be done if the depth obtained on facts obtained. This approach is determined by observing the phenomena observed subjects conceptual world through the actions and thoughts in order to understand the meaning compiled by the subject around everyday events. This research program will be gradually carried out with the following activities:

1. Literature study across disciplines and undertake critical analysis of the results of previous studies that are relevant to the research theme.
2. Designing and carrying out preliminary studies to produce a complete description of the development of the village Organic Environmental Education As Model For Community-Based Early Childhood.
3. Based on the educational development of the existing characters (which are applied in schools) and a number of relevant theory, are prepared (developed) a prototype Kampung Organik as an Environment Education Models Based Community for Early Childhood.
4. Conduct a workshop seminar with relevant experts and prakitsis about Kampung prototype Organic Environmental Education As Model For Community-Based Early Childhood. The target of this workshop seminar is drafting “Organic Village Books For Model-Based Environmental Education Society For Childhood”, who socialized at the urban / rural as a reference for the implementation of community-based environmental education for early childhood. To disseminate the development of Kampung Organik as an Environment Education Models Based Community for Early Childhood.
5. To test to determine the level of effectiveness of Kampung Organic Environmental Education As Model For Community-Based Early Childhood developed in the implementation of environmental education.
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8. To test to determine the level of effectiveness of Kampung Organic Environmental Education As Model For Community-Based Early Childhood. The target of this workshop seminar is drafting “Organic Village Books For Model-Based Environmental Education Society For Childhood”, who socialized at the urban / rural as a reference for the implementation of community-based environmental education for early childhood. To disseminate the development of Kampung Organik as an Environment Education Models Based Community for Early Childhood based on the test results as the final results of the research program conducted.
9. A secondary source is the organizer of the program Kampung Organic As a Model for Environmental Education Community Based For Early Childhood deemed supports primary data source, literature, photographs of activities, and other documents from the village organizers villages organic expected to provide information about the issue studied. Data collection techniques in this study are:
   a) non-participant observation conducted in a focused and carefully with a structured observation sheet instruments using a scale to obtain data relating to the learning process and learning tools that have been used in the environmental education program based society. Recording the results of
observations followed by recording learning through video and photo cameras.

b) In-depth interviews with open interview guide instrument made to capture data from key informants with a flexible structure so that the information obtained has sufficient depth. Interviews were conducted to educators, students and program organizers of Krobokan village.

c) Questionnaire with instruments to complete the enclosed questionnaire data can not be obtained through in-depth interviews of key informants.

d) Documentary study, conducted on problem documents relating to the investigation, including a review of the literature sources. Validity of the data in this study pursued by: (a) test of the credibility that include triangulation, perseverance observation, discussion with colleagues; (b) transferability test by presenting data that is easy to understand, a detailed report; (c) test of dependability by conducting an audit of the whole process of research; (d) confirmability test, the results of the research process.

9. Analysis of qualitative description, is used to analyze the data and information obtained from a preliminary study with a survey method, the process of design development models and modeling work of experts through Delphi technique. The use of descriptive qualitative analysis is intended to gain an overview of the organic village as a model of environmental education that has been done today, needs assessment learning model development. Descriptive analysis was also used to interpret the results of the analysis of quantitative data and gain an overview of the weaknesses of the model were validated and tested in the field, so the results can be used as a basis for revising and developing models.

III. Results

Research result In managing the environment, Krobokan Village has become a Krobokan for other village in Semarang City. This was mainly driven by a Headman of Village Krobokan who had a hobby of growing crops. Starting from his hobby, he grows a variety of organic herbs and rare plants. His yard was transformed into gardens and medicinal plants so it looks green and lush. Although there amid the region Krobokan Villages, but the atmosphere is beautiful and green felt. This is what makes the Krobokan Village is known as the hometown of organic village. The head of village encourage all citizens to love to plant so they can get the benefits. The minimum requirement will be met from the vegetable crops they had planted on their home page. Although most citizens only have a narrow field and some even have no land at all, but this does not make the headman bored to encourage citizens to plant organic crops. Every citizen who wants to plant crops, they are educated on how to plant and maintain good plant. For people who want to grow plants but does not own the land, they are educated on how to plant and grow plants hydroponically in vertical land. Preferred crops are planted plants that have a direct benefit for example vegetables, chilies, fruits, plants for mosquito repellent, etc. This is done so that citizens can directly benefit from plants crops, especially when the price of chili expensive, people very helpful because they live picking chili they had planted. For mosquito repellent plants, deliberately the headman promoting so that people can avoid dengue fever. Plants such as lavender, basil, citronella and aloe vera is some kind of useful plants that repel mosquitoes. Thus, what Krobokan village residents support the government's program on the prevention of dengue fever in a way of protecting the environment. How to prevent mosquito causing dengue fever through the planting of mosquito repellent plants, more effective and healthy. Another benefit is that they cost less, so healthy and beautiful environment. Currently, almost all the people planting plants that look beautiful and beautiful environment, not even in the middle of arid urban areas. Krobokan village so often participate in competitions on the environment. To clean the race village, the village Krobokan won 1 provincial level. In addition to planting organic crops, pack headman also encourages citizens to manage waste. Garbage is a problem faced by almost all masyarakat in Indonesia and the world. Average daily big cities in Indonesia resulted in tens of tons of trash. The rubbish was

Transported by special trucks and dumped or stacked away in a place that has been provided without left unharmed again. From day to day it continues to accumulate trash and garbage hill there as we often see. Garbage is piling up, it certainly will disturb the surrounding population. In addition to the unpleasant smell, trash often flies. And it can also bring disease. Although it proved to be detrimental to the trash, but there is a side benefit. This is because in addition can be catastrophic for the people, the trash also can be converted into useful goods. The usefulness of this waste is inseparable from the use of science and technology in handling it. Organic garbage is an item that is considered obsolete and is removed by the owner / user before, but can still be used if managed with the correct procedure. Organic is a process that is robust and relatively fast, then mark what we have to declare that the basic ingredients of life. Organic waste is waste that can undergo weathering (decomposition) and break down into smaller materials and odorless (often referred to as compost). Compost is the result of weathering of organic materials such as leaves, straw, weeds, trash, grass, and other materials similar process of weathering accelerated by human assistance. Waste originating from settlements generally very diverse, but
generally at least 75% consisting of organic and inorganic rest. Krobokan urban village itself has begun promoting the recycling of garbage, especially organic waste that leaves of trees that have fallen. The leaves are processed into compost, but before it becomes compost. These leaves, crushed in advance by using a grinding machine garbage. It is intended to order the leaves into small pieces, so that when inserted into the barrel composer of the leaf pieces faster into fertilizer. The finished compost directly used to fertilize plants that live in stalls in the village Krobokan. For structuring the environment, so that the cleanliness and beauty of the environment awake, the Headman implemented regulations for open environments that are used for reforestation.In addition, at the roadside given the plants grown in pots. In addition, the administration and management of sewers and drains is done regularly. For the management given to each household to maintain the cleanliness of the environment is the responsibility together. Thus, it is expected no dirty and clogged gutters are made of mosquito breeding and the source of the disease. Public awareness of the importance of keeping the environment clean and healthy so that always been very high. So it is not wrong if the village Krobokan confirmed as organic village and village to village pilot in urban areas.

1. Environmental Education for Early Childhood Pre-school phase is the phase that will be experienced every child after breastfeeding. In this phase of the exploration period for children who experience rapid development in speaking, want to always moving, always want to have something selfish. Phase of the school are aged between 3 to 6 years and is part of the early childhood are at the age range of birth to 6 years. At this age terminology is referred to as pre-school age children. To find out how the implementation of environmental education in early childhood, research conducted research in three different schools, namely:

a. TK Negeri Pembina Semarang, as a pilot project character education school, the school trustees strive to always be the leader in instilling good character for students. Planting character patriotism one of which is to maintain the environment. There are a few things done is to teach children to protect the environment, dispose of waste in place, maintain personal hygiene and encourage children to make props / educational media from the bins. The children were given a cloth that has been given the name of each. On handwashing, the children taught to queue so not overcrowded. Limitations of land did not dampen the school to teach the importance of planting crops in order to keep the environment sustainable. One is to use old plastic cups of mineral water as a growing medium. Besides the children know how to grow crops, they also understand that plastic waste can be used as a place to sow the seed. One by one the children were given beans and plastic cups that have been filled with soil and a hole so it's great to be used as a growing medium. After several days of sowing seeds grow into plants. After that, the new plant was moved to land that had been prepared as a planting medium. Vacant land owned by the State Trustees kindergarten is very limited, however, the school tried to use it optimally for greening.

b. TK Labschool Semarang Almost the same as kindergarten Pembina State Semarang, cultivation of character patriotism one of which is to maintain the environment. This is in line with the Semarang State University as a college conservation. There are a few things done is to teach children to protect the environment, dispose of waste in place, maintain personal hygiene and the environment, crops and encourage children to make props / educational media from the bins. These activities involve the parents so that there is great synergy in the relationship of children and parents. For planting the character of protecting the environment, the teacher as a role model will set an example by taking garbage scattered and then thrown into the trash, throw garbage into the appropriate bins. Eg plastic waste will be dumped into the trash that is drawing the plastic. Maintain personal hygiene by washing hands. The children were given a cloth that has been given the name of each. On hand washing, the children taught to queue so not overcrowded. L and large enough to be one advantage for greening schools. Even in kindergarten Lab school available green house that is very useful to provide the planting of educational values to students about the importance of maintaining a sustainable environment in order to continue with the planting of trees. However, the biggest obstacle faced by the school is the limited cleaning service personnel. This makes the school trouble clearing dry leaves in the roofs of schools. Of course this does not deter the school to develop a live shop to be created in a corner of the school. Incidentally cleaning service that is really like to plant a tree.

c. TK An Nur Semarang managed to become the best in Central Java, with 1 ECD achievement won in 2013. With this title does not mean lulled into self pride. Precisely mandate entrusted Yag increasingly heavy, to maintain the quality, develop professionalism and consistency in efforts to
improve the quality of education. TK An-Nur, which is located at Jl Raya No. 41 Tugurejo Site, Semarang City, received the champion trophy 1, ECD Achievement of Central Java in 2013, precisely on 26 August. In the past year, has also won 1 Java levels for category school health brilliant achievement at the same level. In 2012, TK An Nur get a championship level I Central Java as the best champion in the category of School Health Unit in Central Java Champion. An-Nur is the only schools that implement environmentally friendly concept is with its minizoo (a small zoo) with a wide variety of animals. It also has a wide area with diverse medicinal plants and fruit. As a means of learning support, TK An Nur provide facilities among others minizoo, area / vegetable and fruit plantations, large yard and garden traffic education. With these facilities the students TK An Nur will gain direct experience by exploring their environment. Of education applied at TK An Nur is expected to give birth to generations of pious-sholehah, creative, love of culture and environment. After won the Healthy Schools Competition from the District Level, Level City, level of residency, and the Provincial Level, Monday June 18, 2012 TK An Nur become ambassadors of Central Java province to follow the Healthy School Competition National Level in 2012. In the process of learning environment for children, is one form of matter patriotism. Habituation clean and healthy lifestyle from an early age is the foundation for the growth of cultured generation and healthy behavior and clean school anyway. The creation of healthy school, comfortable and beautiful is the result of the synergy of the various relevant elements from Team Coach School Health from district level up to the provincial level, Foundation Board An Nur, public school, school committees, parents or guardians, Agency Self-Supporting Communities Tugurejo, Environment Agency Semarang City, the Department of Agriculture, Department of Hygiene Semarang City. The result in Competition Healthy School National Level kindergarten An Nur get the 1st place national level. Each class has a handwashing alone that is located in front of the classroom. This is because children are taught to wash their hands in order to keep it clean. In addition, children are taught to dispose of waste by sorting rubbish before inserting it into the trash. There are three bins that are red, yellow and green. According to the color, green bins for organic waste, plastic and clear to red for glass and trash in the trash cans where affixed whatever garbage they can put in the dumpster. Children are taught to sort the waste to be dumped into the trash according to its type. Every day the trash is collected to be processed. Organic waste such as leaves processed into compost in a way through the processing of composting, waste plastic to be used to create educational media. Composting processing carried out with the involvement of school students so that they can understand the usefulness of compost. Same also for the processing of plastic waste into props. The school also involves the parents. Where those who deliver and care for their children schools, invited the school to process waste, especially plastic waste to be props. The compost produced from the composting is used to fertilize crops that have been planted by the students. The land area of the school is very possible to be utilized as a stall life. Of course this makes the neighborhood kindergarten An Nur into a beautiful, leafy and green so that each year becomes the champion of healthy schools and even to the national level. Based on empirical studies of the Kampung Organic For Model-Based Environmental Education Society For Childhood In Semarang, the design of the initial model is structured as follows. Feed Back
IV. CONCLUSIONS AND RECOMMENDATIONS

**Conclusion:** Village Krobokan an organic village which could be used as a model of environmental education for the community-based early childhood. - Environmental education for young children over the habituation and role model.

**Suggestion:** There is need for the development of environmental education model for community-based early childhood. - Keep the support of stakeholders in the implementation of environmental education for the community-based early childhood.

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