

Environmental Learning in Mangunan Experimental Primary School in Responding to the Covid-19 Pandemic in Indonesia

Carolus Borromeus Mulyatno

Universitas Sanata Dharma, Yogyakarta, Indonesia

Email: carlomul@gmail.com

Academic Editor: Nguyen Ngoc Anh

Copyright © 2022 Carolus Borromeus Mulyatno. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Abstract. This article is a result of qualitative research. The investigation was conducted in the Experimental Elementary School of Mangunan, Yogyakarta, Indonesia, before and during the covid-19 pandemic by literature study, observation, and interview methods. The research focuses on exploring Y. B. Mangunwijaya's educational perspective concerning John Dewey's thought on environmental learning. Furthermore, observations and interviews focused on tracing how the environmental learning process was carried out before and during the pandemic. Three main findings could be identified. First, the School conducted environment learning before the covid-19 pandemic twice a week. During the pandemic, environmental learning activities were carried out in each student's home. Second, ecological learning becomes a project that brings together faith communication, language, natural sciences, social sciences, and mathematics. Third, learning becomes an effective means of intensive communication between teachers, students, and parents during the covid-19 pandemic. This research provides alternative ideas and its implementation of learning with an ecological vision in Indonesian society during the pandemic.

Keywords: Environmental Learning, Explorative-Creative Process, Ecological Experience, Integrated Person.

A. INTRODUCTION

Experimental Mangunan Elementary School has been intended to do experiments on explorative-creative and integral education since 1994. In 2020, the School will have 299 students and 15 teachers. The vision and mission of the School is the realization of an explorative, creative, and integral learning community that is imbued with brotherly love in pluralism and true independence. Educating children from low-income families is the primary concern of this School. In addition, the School pays attention to environmental preservation when dealing with the ecological crisis hitting the global community and Indonesia. The School's learning process promotes the students to be highly skilled-person in going through today's complicated life.

The motivation of this research is the concern about the practice of primary education in Indonesia, which is mainly carried out in classrooms to receive information from teachers. In general, students do not have the opportunity to interact with the community and the surrounding environment. Mangunan Experimental Primary School is one of the schools that implement environmental learning. This learning provides space for children to do activities outside the classroom and interact with peers and the environment. Furthermore, this study aims to find the contribution of environmental learning to cope with learning problems during a pandemic.

By doing so, it is expected that students can become integrated people. In these activities, the children become aware of themselves as a part of the natural environment, as creatures of God. Furthermore, their skill to look after the natural environment will be



enhanced. On top of that, the Habit is in harmony as biological beings. The thought of Y. B. Mangunwijaya (1929-1999) creative and necessary exploratory learning process and John Dewey's idea of experiential learning are foundations of environmental learning in Experimental Mangunan Primary School.

Three basic questions are the focus of this research. First, how is the vital idea of Y. B. Mangunwijaya and John Dewey underlie the environmental learning in this School? Second, how is environmental knowledge organized concerning other learning subjects pre and middle of a pandemic? Third, what fundamental problems have been resolved through environmental studies during this pandemic?.

B. METHOD

This qualitative research uses methods of literature study, observation, and interview. The literature study focuses on tracing the foundation of environmental learning based on Y. B. Mangunwijaya's and John Dewey's thoughts. The data are used to determine the main questions for observation and interviews. The interview results answer whether environmental learning solves learning problems during a pandemic.

Essential points about environmental learning, as thought by Y. B. Mangunwijaya and John Dewey, were the components to compile the interview questions. This is what was extracted from the literature study method. In addition to the literature study method, this research involved observation and in-depth interviews to collect data on environmental learning in Experimental Mangunan Elementary School. Officially, the researcher did this observation from January to the end of March 2020. For the observation and interview, both used the primary point of Y. B. Mangunwijaya, and John Dewey thought for collecting the data. The third method, the in-depth interviews were conducted with three teachers of Experimental Mangunan Elementary School. The data covered three crucial matters. Those are the main problems relating to the learning process during the pandemic, how the environment learning is conducted, and the contribution of the environmental knowledge to solve the problem. The data were gathered from July to December 2020.

C. RESULTS AND DISCUSSION

1. Literature Study

Y. B. Mangunwijaya asserts that the experimental learning process is based on the needs of each student to develop themselves as an integrated person covering their intellectual, social, spiritual, and moral capacities (Mangunwijaya, 2020). If children were to be explorative, automatically, they would be more creative. The notion of creativity that Mangunwijaya intended is that children do not remain in conventional ways. Instead of that, children could find new ways of solution (Mangunwijaya, 2020). In this perspective, being creative could be defined as dynamic and striving forward despite appearing dead-end. Even though children come across the dead-end, their creativity helps them get a new alternative way. Put it simply, being creative means energy that leads the children to find an alternative method and to avoid being desperate. This attitude is essential for poor children to pursue their dream of a better future.

For Mangunwijaya, creativity is a fundamental form of exploration because exploration and creativity are like two sides of a coin. In the learning process, the research and creativity of the children must be oriented to the integrity of children's development. Mangunwijaya argues that integrity means the aspects of children's development grow fully in an organic manner (Mangunwijaya, 2020). In other words, the children can think and behave out of the box (nggiwar).



To reinforce the children in developing explorative-creative and integral characters, Mangunwijaya introduces Interfaith Communication (Komunikasi Iman) learning. His idea is a form of religious education held in the inductive method. It means that knowledge starts with children's experience to enhance their integrated spiritual experiences. In this subject matter, the children are helped to be aware that their lives are interconnected to the natural environment, other human beings, and God as the Creator. The primary purpose of Interfaith Communication is to help the children develop good character and good relationships with themselves, other people, nature, equipment, and God, the Creator (Mangunwijaya et al., 2005). Consequently, they are responsible for maintaining living together.

Environmental learning and Interfaith Communication learning are intended to explore an active learning process that involves the children exploring their ideas and creative skills. In both learning processes, teachers play facilitators to support and guide the children in exploring themselves through their collaborative and creative activities.

The idea of Mangunwijaya to develop explorative-creative and integrated school activities is in line with the thought of John Dewey regarding active learning or learning by doing. Dewey explains that educative experience is identical to a process of experiencing or "learning by doing" (Dewey, 1966). Authentic learning in the process of educational experience means sharing and doing. Doing is a part of learning that only happens when it is directed by ideas in which these ideas become the criteria of the doing activities. In Mangunwijaya's point of view, the concept of environmental learning and interfaith communication are the guidelines of the educative process. Both John Dewey and Mangunwijaya emphasize the importance of active and explorative-creative learning based on the life context of the students.

Furthermore, John Dewey states that the educational program is grounded in the conviction that there should be an integration of activities within the School with the events going on in the broader community outside the School's wall. The environmental learning process is an integration of classroom activities and outdoor classrooms. What the children learn in School is the continuity of family life. Therefore, the school "should take up and continue the activities the child is already familiar with at home" (Dewey, 1972).

The idea of learning by doing is a form of critique to a learning process which is only from textbook and teacher to acquisition of isolated skills and techniques by drill, to prepare for a distant future with statistic aims and materials (Handlin, 1956). Learning by doing is an educational method that must be developed if education maintains its value and role in transforming social life.

John Dewey explains that life is "an organic whole, intellectually, socially, and morally, as well as physically" (Dewey, 1959). The perspective mentioned previously aligns with Mangunwijaya's point of view on the integrated person as the unity of multiple aspects. Consequently, education should be concerned with "developing new attitudes towards, and new interests in, experience" (Dewey, 1972).

Understanding formal education as a process of learning by doing for a better living brings characteristics of education as a transformative-moral life in a social environment. He states that "schools, remain, of course, the typical instance of environment framed with express reference to influencing the mental and moral disposition of their members" (Dewey, 1966). In his research, Xiangdong Liu underlines the position of John Dewey on moral education as the integration of the dynamic process of thinking, judgment, and action in a particular situation (Liu, 2014). The School has honest characters that show good practices in a natural social environment and are responsible for embracing the consequence of the activities.



There is an identical point of view between Mangunwijaya and Dewey about doing good practices or making good habits as an essential moral element of active learning or learning by doing. In Dewey's thought, Habit means "an ability to use natural conditions as a means to end. It is active control of the environment through control of the organs of action" (Dewey, 1966). In other words, Habit is a continuous activity to modify surroundings.

It is needed Interest in maintaining a good habit. Dewey expresses the meaning of "interests" a form of self-expressive activity – that is, of growth that comes through acting upon nascent tendencies" (Dewey, 1976). Interest is a concern in which "self and world are engaged with each other in a developing situation" (Dewey, 1966). The environmental educative process should consider Interest and Habit as essential elements.

As John Dewey, Mangunwijaya underlines that the core of education is a dynamic process of active, explorative-creative, and integral interaction of the children in a social environment for getting a more qualified living together. The living experience of children is an essential part of education (Waterson and Moffa, 2015). In other words, education is a process of reconstructing experience. Knowledge consists of both the process and the content of the interaction of a human organism with the environment (Dewey, 1958). Dewey convinces that "every experience should do something to prepare a person for later experiences of a deeper and more high quality. That is the very meaning of growth, continuity, reconstruction of experience" (Dewey, 1963).

This research analyzes the practice of environmental learning in the Experimental Elementary School of Mangunan as integrated learning. It focuses on six elements: the integration of classroom and outdoor activities, of formal, informal, and non-formal approaches, of teacher's information and children activities, of intellective-collaborative and skill formations, and self-awareness information and social skills, and the integration of I-other people, nature, equipment and God, the Creator in the process of sharing experience. In other words, there are six questions for an interview. Firstly, Does it unite classroom and outdoor classroom activities? Secondly, is there a learning design that matches formal, informal, and informal approaches? Thirdly, is there an integration of the teacher's information and explorative-creative activities of the children? Fourthly, is there an integration of self-awareness information and social skills? Six, is there any integration in the self-awareness formation and social expertise related to the correlation between I - you - God and environment? The six questions above are the focus of observation and interviews.

2. Observation

The observation was conducted before the pandemic. The researcher would like to explain the School as a research-based context briefly. Experimental Mangunan Elementary School is a formal elementary school. The location of the School is at Jl. Solo km.11.5, Mangunan village, Berbah district, Sleman Regency, Yogyakarta, Indonesia. This School takes the proper education form. Students who study in Experimental Mangunan Elementary School have various backgrounds, which can be seen from their religion, ethnics, economic and social context.

Students with special needs such as autism, dyslexia, slow learners, and handicapped. The School holds the same program for all students. For helping the unique needs of students, there is "Cura personal," i.e., a personal companion of each student for getting the objectives of the lesson.

The School uses the National Curriculum and additional subjects such as Interfaith Communication (*Komunikasi Iman*), Box of Questions (*Kotak Pertanyaan*), Reading Good Books (*Membaca Buku Bagus*), Table Magazine (*Majalah Meja*), Music of Education (*Musik*



Pendidikan), and Environmental Learning. These subjects are selected to help students become more explorative, creative, and integral.

The Experimental Elementary School of Mangunan builds its environment using native instruments such as wood, bamboo, and traditional houses. This design aims to unify formal, informal, and non-formal education and give the students a comfortable situation in which the students feel at home.

Based on observation, the researcher gets some essential data. The environmental learning is held on Wednesday and Saturday for all classes. On Wednesday, all categories look after the classroom and the garden near the classroom. On Saturday, all members of the School take care of the environment of the village close to the School. Nevertheless, each class has 20 minutes of environmental activity for planting, taking responsibility, and harvesting every day. They plant vegetables, spices, and flowers so that the ecological learning process unites classroom activities and outdoor activities. Classroom activities provide guidelines for outdoor activities. For the last three years, there has been a design of environmental learning. What makes the difference between the activities each year is the theme created. For example, the subject of the academic year of 2019-2020 is to love the earth (*Mencintai Bumi*). The practice of environmental learning helps the students to be explorative-creative and integral people. In John Dewey's point of view, this is a basic form of education by doing or reconstruction of experience.

3. Resume of the interview Pre Pandemic

The environmental learning program is a bridge between practice and theory. The theory is held in the classroom; meanwhile, the method is in the outdoor class. The process of learning unites idea and training and concept and activity. This mentioned statement above is in line with the result of Kurt Xyst's research using the method of John Dewey for examining the unity of concept and practice in the experiential learning process (Xyst, 2016). As the first respondent explains: "It is necessary to express that environmental learning process in Experimental Elementary School of Mangunan helps students to have real experience of relation with the natural surrounding or world life".

There is a design of environmental learning. The teachers assign the students to look after the garden and school environment. The assignment is done in groups. Some teachers say that "students develop their skill to recognize various plants. They know how to cultivate them. Students also develop their skill to collaborate with others". Moreover, all respondents agree that the environmental learning process connects students to community life. At the same time, it is a form of experiential learning involving teaching and learning strategies to develop a habit of community service.

The theme of environmental learning becomes an umbrella for all the academic activities during a year. Therefore, environmental education is integrated into the learning process in Experimental Mangunan Elementary School. As the second respondent states: "Besides holding continuous and dynamic process of growth, experiential learning process leads students exploring their intellectual, social, and moral abilities for improving their awareness and responsibility to take care of surrounding life."

It is the actualization of ideas of Mangunwijaya dan John Dewey about the holistic and integral model of the learning process combining knowledge and practicing. The learning process becomes an actualization of mutual respect, acceptance, love, and a sense of responsibility and caring for others. This is the core of religiosity. In Indonesia, the essence of every religious teaching reflects the values of Pancasila as the basis and philosophy of the national life of the Indonesian people. Through environmental learning, students live up to the religious importance of Pancasila, namely respecting cultural, religious, ethnic, and racial



differences. An attitude of inclusiveness and respect for diversity is essential for Indonesians and other nations who live in variety.

Environmental learning is designed to develop the students' intellectual, collaborative, and skill capacities. By doing the learning process, the students have a habit of respecting the natural environment and being responsible for it. The activities of experimental learning cover creating posters and captions for first grade to third grade and events of looking after the background for the fourth grade to sixth grade. Moreover, they do their activities both in the classroom and outdoors. The learning process is a learning model of active, collaborative, and explorative-creative learning. The principal teacher is the child or each student themselves during the learning process.

In comparison, the teacher outside the student is a child animator and facilitator who helps students recognize their talents. The teacher acts as a guide for the development of students under their abilities. The teacher facilitates students to ask questions, seek answers, do adventures, be critical, creative, and rich in imagination. The teacher is the students' motivator in finding the pleasure of learning. The child becomes a lifelong learner, a more independent learner, develops more fully, and cares for others and the environment. Teachers are learning individuals who love children and are passionate about compassion and caring.

Through environmental learning, the teachers develop a habit to build interrelationship among the students in a positive and creative collaboration for taking of natural environment. It is essential to underline that schools live the spirit of competition with ranking systems in the globalization context, prioritizing formalistic administration and ignoring personal approaches to children. The measurement of educational achievement is the improvement of human quality, which appears in the characters of brotherhood, solidarity, caring for others and nature, and being independent for lifelong learning. Therefore, the environmental learning process develops teachers and students to think critically, cooperate, and work creatively to solve the problems of living together.

The teachers unite the environmental learning by sharing the experience of faith, applying the inductive method through sharing daily experience. The students know their relationship with others, nature, equipment, and God, the Creator. Faith is about living together and having a good relationship with themselves, others, nature, equipment, and God. The environmental learning process in Experimental Mangunan Elementary School becomes a field of students' faith or interfaith communication. Interfaith Communication is a foundation of Character Education. Interfaith Communication involves God in the process, God, The Creator of all beings. Character education talks about the horizontal relationship between individuals, while Interfaith Communication talks about vertical relationships between individuals and the Creator based on the students' experiences. School is a space and a shared house that helps students experience themselves as part of others and nature. Students recognize diversity and equality as God's creation through the learning process. School becomes a learning space for students to recognize uniqueness, differences, and the art of communicating and collaborating to solve problems they face in their lives.

4. Resume of the Interview during Pandemic

The three respondents agreed that the main fundamental problem was communication between teachers, parents, and students during the pandemic. Communication is complex because Most parents are busy with their activities, especially earning their lives. However, during the pandemic, everything is changed. The teachers only could give their educational services with parents' involvement.

The first respondent stated that environmental learning could not be done in schools during this pandemic. The challenge is that teachers must be more creative in designing



contextual lessons at home. It takes a change in perspective that the primary objectives of learning activity are more important than just providing activities or learning activities. During the pandemic, parents are getting to know their children and are more open to collaborating with teachers in assisting children. Thus, there is a new awareness that learning is necessary for teachers, parents, and children. This is under the School's vision to realize an explorative, creative, and integral learning community. Respondent #2 agreed that teachers, parents, and children need to dialogue and learn to find suitable methods to develop learning. The three respondents agreed that a severe problem during a pandemic is building intensive communication between teacher-parents and students. The third respondent stated that learning the environment in each student's home became an intensive means of communication.

Based on the experience of all respondents, environmental learning is enjoyable for the students' projects. This project is a means for teachers to build intensive communication with parents. The teacher prepares the steps for learning the environment and explains to the parents, the parents accompany their children according to the teacher's instructions in carrying out the assigned task. The tasks that must be done are preparing vegetable plant seeds, planting media, fertilizers, and planting activities. Children carry out environmental learning with the assistance of their parents. Then the children explain what they have done, and the parents record it in a voice or video accompanied by the children's work. The teacher gives feedback in appreciation and motivation to keep the vegetable plants and record their progress every time the students send their work. After that, the teacher designs activities that connect environmental learning with lessons in language, social science, natural sciences, mathematics, and faith communication.

According to the three respondents, environmental learning has improved teacher-parent-student communication during a pandemic. The first respondent added that environmental knowledge helps parents use gadgets for learning. The third respondent stated that environmental knowledge allows parents and children to get closer to the natural surroundings to take a short distance from dependence on playing gadgets. The social media used for environmental learning are zoom, WhatsApp, Instagram, YouTube, and telegram. The zoom application is used to convey wisdom and assignments by the teacher, WhatsApp is used by 100% of the students' parents, Instagram 85%, YouTube 70%, telegram 40%.

Table 1. The Usage of Social Media for Learning Activity

Application	User	Usage	Percentage
Zoom Meeting	Teacher and students	For teaching	100 %
WhatsApp	Teacher, students,	For submitting the	
	and Parents	assignment and	100 %
		giving feedback	
Instagram	Teacher, students,	For submitting the	85 %
	and Parents	assignment	0.5 70
You Tube	Teacher, students,	For submitting the	70 %
	and Parents	assignment	70 70
Telegram	Teacher, students,	For submitting the	40 %
	and Parents	assignment	40 70

Another important thing that was found by the three respondents related to environmental learning during a pandemic was the realization of ecological education that involved families and was designed together. This is under the spirit of the Laudato Si encyclic, which underlines the importance of environmental education in families and schools to build habits of awareness and responsibility since children are in elementary school age.



Based on observations and interviews, there are several exciting things to explain. The practice of environmental learning convincingly unites both informative-intellectual and skill formations. Then, the students have an authentic experience of living together in harmony in this process. Environmental learning helps students to develop themselves. Learning is not always synonymous with problem-solving in children or problem solving as understood by most teachers and researchers (Dick, 2007). Environmental learning is designed based on the teacher's belief in children's potential or positive talents who need to grow in relationships and activities in the natural environment. Environmental learning is an answer to the needs of mentoring and learning so that children develop their talents optimally. This experimental learning process affirms the unique appreciation of child development in togetherness and unity in diversity in the spirit of solidarity as a nation.

With the idea that the School is a learning community, environmental learning is a must for implementing collaborative, active, and creative learning processes that depart from the experience and context of children's lives (Young et al., 2010). Collaborative, dynamic, and innovative learning that is carried out continuously helps teachers and children to strengthen their participation in the School. Children's involvement in learning will increase their independence and responsibility in learning. At the same time, in same time, it is a fun learning process that enables them to help one another (Hong and Lawrence, 2011).

For Mangunwijya, it is very urgent to foster a sense of curiosity and the ability to ask. Furthermore, he underlines the importance of every child in contact with nature to stimulate Interest and the urge to ask questions. The environmental learning process provides an authentic experience for each student to directly contact heart. In such learning processes, children have ample opportunity to explore their talents creatively and integrally in collaboration, sharing, and inclusive living capacities. Teachers play an essential role in learning in an inclusive living together (Leafler, 2020). Every teacher is a fundamental factor in designing an inclusive and collaborative learning environment and learning process.

It is essential to underline that environmental learning is a bridge that unites some learning subjects in the learning process during the pandemic. Moreover, ecological learning helps parents communicate with parents, teachers, and students. Last but not least, the environmental learning process help teacher, parents, and students to use the technology optimally for learning activities.

The integration of the environmental learning process with the whole school program is designed in Experimental Mangunan Elementary School before and during the pandemic. The integration is also to put into practice of learning process. Nevertheless, this School needs to develop a combination of the environmental learning process with other subjects.

The respondents state that the environmental learning process does not directly answer the ecological crises in Indonesia and the world. The most important to do in this School is to educate the students in having a habit and responsibility of taking care of environmental surroundings. Therefore, they are aware of their lives as part of the ecological surroundings and concrete and collaborative experience in looking after the natural environment.

After doing this research, the researcher finds three points to be discussed. Firstly, human beings start and develop their lives in the natural environment. In this sense, naturally, the identity and character of human beings are influenced by geographic and social situations. Mangunwijaya convinces biological and social context is knowledge, personality, and character-building sources. The tension is that the current government curriculum gives a little space to hold the learning process connecting to nature. Secondly, a qualitative evaluation is needed during the process and the end of the program. In learning activities that emphasize qualitative assessment based on the development of each student, each teacher



needs to recognize each student's talents and situations. In reality, teachers are already busy taking care of administrative work, so personal accompaniment is minimal. Recognizing each person's talents is crucial to carrying out personal assistance for each student. Exploring the experiences of each student partner and their life background is very important in the learning process that is centered on the needs of each student partner to expand. (McDonough, 2012). In simple terms, what is meant by experimentation is a learning process that starts from the introduction of the potential of each student and is oriented towards the development of the student as a whole. Thirdly, it is not easy to observe and detect the students' religious experience through the environmental learning process. An interdisciplinary approach is required. Therefore, it is needed for the participation of various experts. Most elementary schools in Indonesia have not involved experts yet in recognizing and accompanying the students.

In the last decade, many schools in Indonesia held environmental learning activities. The crucial point is to ensure that schools know that ecological learning results from developing students integrally and contextually. Therefore, teachers need to design learning that helps children recognize the potential of the surrounding environment and be responsible for preserving their environment. It is also important to emphasize that the learning process of the environment should be integrated into other objects because the domain provides a prosperous source of learning.

Students are the owners of education who must be helped to be self-sufficient and have a spirit of solidarity, brotherhood, and independence in lifelong learning. Education should play an active role in liberating the nation's students and improving the quality of life skills. In other words, Mangunwijaya highlights the role of education in developing the students' internal characters so that they are ready to be active and creative actors in transforming society. This idea is in line with the position of John Dewey and Paulo Freire that education is an implementation of social transformation and improving the quality of living together (Specia and Osman, 2015). In line with the thoughts of John B. Cobb (Cobb, 2010), in the context of a pluralistic society rich in religious values, education needs to develop the ability of each individual to be involved in developing cooperation in transforming society.

The majority of Indonesian people understand the real and natural condition in this world as a pilgrimage towards authenticity. The people who have deep knowledge express their knowledge in daily life. "They are the ones who have concern and who know that all have a meaning, and is significant to the understanding of one's personal life" (Mulder, 1998).

The philosophical foundation of environmental learning also needs to be tested so that the learning process has a vital consideration. The philosophical foundation of ecological understanding is the awareness and belief that each person is God's creation that can only develop fully and optimally in a harmonious relationship with nature and intensive cooperation with others (Lombo and Russo, 2015). The responsibility to preserve relationships with others, soul, and God becomes one of the keywords underlie environmental learning. There is a reciprocal and organic interrelation between human beings and the environment. By nature, all people are created as organic beings associated with others and surrounding things in their community.

In multicultural and multi-religious Indonesian society, self-awareness is a meeting point for building social care as part of the environment. In addition, children learn to preserve the domain early in the highly severe environmental damage problem. For Mangunwijaya, protecting the environment is a form of religious awareness. For this reason, having a religion is not enough. Children need to be cultivated spiritual understanding, which is the essence of religious life. Religiosity is about the relationship between humans and the



Creator and His creations. It is about loving and admiring every wonderful creature and respecting every small and weak creature as the integral part of the world where we live together. Becoming a more religious person is a way to develop brotherhood and harmony with fellow human beings and all of God's creation.

The learning environment should be a school program to develop the character of all school community members so that they can recognize their identity and orientation in their living context as social and natural beings. Environmental learning helps school community members realize themselves as God's creations that need each other to develop themselves. The learning process in the School is oriented towards developing human beings as a whole in solidarity, social care, and willingness to build an ordinary life and preserve an environment based on cultural values. This is a philosophical foundation of environmental learning in education.

Applying environmental learning in School brings some consequences. First, the educator is an animating force who stimulates the students, curiosity, and initiative for active learning. A teacher is not the boss or the director that determines the living process of each student but a leader of shared activities. It demands that the teacher actively participates in the learning process for understanding students and their environment so that they find suitable learning resources and effective methods. Secondly, the focus of the educative process is not merely to develop abstract knowledge but primarily to develop the capacity to evaluate the actual situation and make a decision. Thirdly, the educative process fosters students' desire for continuing growth, life-long education, and ongoing inquiry. Therefore, an environmental learning process does not simply deal with a technical affair. Still, it is primarily concerned with the process of living to uphold a whole life contextually and to develop an inclusive capacity. In the context of a multicultural society that lives in biodiversity, environmental learning is a practice of living together inclusively.

D. CONCLUSION

The environmental learning process in the Experimental Elementary School of Mangunan unites some learning elements. First of all, the ecological learning process unifies indoor and outdoor activities. The learning activities guide the children in developing themselves fully in a joyful atmosphere full of brotherhood, mutual friendship, and inclusive Secondly, the environmental learning process aligns with the Interest of Mangunwijaya and John Dewey to develop explorative, active, experiential, and integral education that puts children as a center of learning activity. It is a form of integrated learning in which reasoning or theory and doing or practice are united organically in the learning process. Thirdly, since the view and the pattern are connected, students can develop their intellectual, moral, social, and skill capacities. It is a form of experiential learning involving teaching and learning strategies to lead students to practice community service (Waterson and Moffa, 2015). Fourthly, the practice of the environmental learning process continuously promotes the student to have a habit of building interrelationship among the students in a positive and creative collaboration for taking of natural environment. The practice is an essential aspect of building character since it is an internal disposition that manifests an integrated person's cognitive, affective, and behavioral qualities (Grzadziel, 2014). Fifthly, It is a must for every education model to help students explore themselves as natural human beings. An environmental learning process is a model of the natural educative process to develop ecological empathy of each student in an inclusive living together.

It is an evolutive and natural approach to overcoming ecological crises in this era. In line with the idea of Scott, the environmental learning process helps the students to develop their empathically inclusive capacities (Scott: 2010). During this pandemic, the learning



activity at home helps the parents and students improve their ability towards nature emphatic. For global interests, environmental learning is fundamental to foster students' self-awareness and responsibility to conserve the environment, which is one of the characters that need to be developed from an early age amid the global challenges of environmental damage. Environmental learning needs to be integrated with mathematics, natural sciences, history, and social sciences. It is essential to expand opportunities for students to foster an inclusive life capacity in relations with others and the environment in the context of the diversity of social life.

REFERENCES

- 1. Cobb, J. B. (2010). Rethinking Christianity Faith in the Context of Religious Diversity. In Cobb, J. B. & McAfee, W. M. (Eds.) *The Dialogue Comes of Age: Christian Encounters with Other Traditions*. Minneapolis: Fortress Press.
- 2. Dewey, J. (1943). The School and Society. Chicago: University of Chicago Press.
- 3. Dewey. J. (1966). *Democracy and Education: an Introduction to the Philosophy of Education*. New York: The Free Press.
- 4. Dewey, J. (1958). Experience and Nature. New York: Dover Publications.
- 5. Dewey, J. (1959). Moral Principles in Education. New York: Philosophical Library.
- 6. Dewey, J. (1963). Experience and Education. New York: Macmillan Publishing Company.
- 7. Dewey, J. (1972). *My Pedagogic Creed, in The Early Works* V. ed. by Jo Ann Boydston. Carbondale: Southern Illinois University Press.
- 8. Dewey, J. (1976). *The Child and The Curriculum*. The Middle Works II. ed. by Jo Ann Boydston. Carbondale: Southern Illinois University Press.
- 9. Dewey, J. (1976). *Interest and Efforts in Education*. The Middle Works VII. ed. by Jo Ann Boydston. Carbondale: Southern Illinois University Press.
- 10. Dick, B. (2007). Action Research as an Enhancement of Natural Problem Solving. *International Journal of Action Research*, 3(1-2), 149-167.
- 11. Grzadziel, D. (2014). Educare il Carattere. Roma: LAS.
- 12. Handlin, O. (1959). *John Dewey's Challenge to Education: Historical Perspective on the Cultural Context*. New York: Harper Brothers.
- 13. Hong, C. E. & Lawrence, S. A. (2011). Action Research in Teacher Education: Classroom Inquiry, Reflection, and Data-Driven Decision Making. *Journal of Inquiry and Action in Education*, 4(2), 1-17.
- 14. Liu, X. (2014). The Problem of Character Education and Kohlberg's Moral Education: Critique from Dewey's Moral Deliberation. *Philosophical Studies in Education*, 45, 136-145.
- 15. Leafler, E. (2020). Teachers' capacity to create inclusive learning environments. *International Journal for Lesson & Learning Studies*, 9(3), 221-244.
- 16. Lombo, J. A. and Russo, F. (2017). *Philosophical Anthropology: An Introduction*. Illinois: MTF. Retrieved from *www.theologicalforum.org*.
- 17. Mangunwijaya, Y. B. (1986). *Menumbuhkan Sikap Religius Anak-anak*. Jakarta: Gramedia.
- 18. Mangunwijaya, Y. B. (2020). Sekolah Merdeka: Pendidikan Pemerdekaan. Jakarta: Kompas.
- 19. Mangunwijaya, Y. B., Suharyo, I., & Jatmiko, Y. S. (2005). *Dari Pelajaran Agama ke Pendidikan Religiositas*. Yogyakarta: Dinamika Edukasi Dasar-Misserior.
- 20. McDonough, D. (2012), Applying Learner-Centered Principles and Strategies: From Face to Face Instruction to a Hybrid Course Learning Format. *Journal of Learning in Higher Education*, 8(2), 31-40.

International Journal Publishing INFLUENCE: International Journal of Science Review Volume 4, No. 1, 2022 https://internationaljournal.net/index.php/influence/index



- 21. Mulder, N. (1998) Mysticism in Java: Ideology in Indonesia. Yogyakarta: Kanisius.
- 22. Scott, Ch. (2010). Ecological Identity through Dialogue. Canadian Journal of Environmental Education, 15, 137-149.
- 23. Specia, A. & Osman, A. A. (2015) Education as a Practice of Freedom: Reflections on bell hooks. *Journal of Education and Practice*. 6(17), 195-199.
- 24. Xyst, K. (2016). Constructivism, Dewey, and Academic Advising. *NACADA Journal*, 36(2), 1-19.
- 25. Waterson, R. A., & Moffa, E. D. (2015). Applying Deweyan Principles to Global Citizenship Education in a Rural Context. *Journal of International Social Studies*, 5(1), 129-139.
- 26. Young, M. R. (2010). Action research: enhancing classroom practice and fulfilling educational responsibilities. *Journal of Instructional Pedagogies*, 3(June), 1-10.