Analysis of Teacher Ability in Implementation of The Thematic Ecolearning Model in Elementary School

Fadhil Sidiq[1], Nana Supriatna[2], Sapriya[3], Wahyu Sopandi[4]

[1234]Universitas Pendidikan Indonesia
[1]Universitas Samudra

fadhil.sidiq@upi.edu, fadhil.sidiq@unsam.ac.id,
nanasup@yahoo.com, sapriya@upi.edu, wsopandi@upi.edu

Abstract. The thematic ecolearning model is a learning model that naturally gives students the flexibility to learn in the surrounding environment and students are expected to be able to adapt to the surrounding environment. The purpose of this study was to determine the teacher's ability to implement the thematic ecolearning model in the learning process in the classroom. The research method used is descriptive qualitative method. The research subjects were teachers and fourth grade students at SDN 13 Langsa City. The results showed that; 1) The teacher is able to apply the thematic ecolearning model with the learning steps that have been prepared; 2) It is easier for the teacher to give concrete problems that are in accordance with the environment around students; 3) Teachers are motivated to link the thematic ecolearning model with natural learning media; and 4) Students look very ambitious in the learning process. Furthermore, this research should be used as a contribution for teachers in considering the use of innovative learning models in the learning process in the classroom. The suggestion for further research is that researchers will develop and synchronize this thematic ecolearning model in the application of differentiated learning models in the independent curriculum.

Keywords: Teacher Ability, Thematic Ecolearning Model, Elementary School

1   Introduction

Primary school children education is the education of children starting from the age of 6 years to 12 years. At this age, children have the characteristics of playing games, working together in groups, moving a lot, and enjoying concrete things that can be felt directly. Based on the stages of development, children aged 6-9 years are still categorized as middle childhood, while those aged 10-12 years are categorized as late childhood [1]. Therefore, teachers should develop learning models that can stimulate children's abilities by playing, moving and moving with direct practice in the field and provide flexibility for children to be directly involved in the learning process. Students

in elementary school are in childhood, at that age all aspects of intelligence development such as IQ, EQ and SQ will continue to develop. Generally, children at that age still see everything as a whole and understand a simple concept relationship. The learning process they receive depends on the objects they see from the concrete and direct experiences. Therefore, the implementation of learning activities in elementary schools needs to be designed according to the developmental stages of children who still see everything as a whole [2].

The effectiveness of education is determined by internal and external factors in the world of education. The thing that is also very important in the world of education is environmental education. According to Nurjhani and Widodo as quoted by [3], Environmental education is very necessary and must be given to children from a young age so that they understand and they do not act to damage the environment. Further, [4] states that education The environment has a definition as a process that aims to form values, behaviors and habits to respect the environment. Environmental education will be meaningful if the environment taught in the learning process is closer to the actual condition of the students, namely the environment that must be preserved and sustainable.

In line with the opinion above, the components of learning that must be carried out in environmental education will also have a very significant influence on the formation of effective and efficient learning with the environment around children. Another very important component is the existence of an environment-based learning model or method. Thus, environmental education becomes a very important thing to do in the development of learning models or methods. So that it can be seen from the curriculum objectives, curriculum content and environmental education. There are several previous studies that are relevant to research studies that discuss the application of environmental learning in the school curriculum including; The course material package uses an inquiry approach in environmental education to improve environmentally friendly behavior in elementary education students [5]; Integration of environmental education through social studies subjects in elementary schools as a reserve in realizing green schools [6]; Analysis of environmental education curriculum conducted in schools [7]; Analysis of the implementation of environmental-based curriculum policies in the independent Adiwiyata program [8]; The application of the adiwiyata program to students' cognitive, affective and psychomotor aspects [9]; The integration of environmental education forms the character of environmental care in elementary schools [10].

In contrast to the studies above, this study emphasizes the analysis of the teacher's ability to apply the thematic ecolearning model as a learning model in elementary schools. This thematic ecolearning model is also a goal and strategy used as an agent of change in maintaining and preserving the school environment on the basis that students are also part of the environment and will become agents of environmental change. Piaget states that every child has its own way of interpreting the environment as a learning adaptation. Each child has its own uniqueness with a cognitive structure called schemata, which is a system of concepts that exist in the child's mind as a result of his understanding of objects in his environment. Understanding of the object through assimilation and accommodation in the mind. Based on this, the student's learning behavior will be strongly influenced by aspects of himself and the surrounding environment.

The thematic ecolearning model that is applied is designed in such a way that it follows the natural learning environment around the child so that the syntax and stages of learning that will be carried out are more systematic and easy to apply in learning in elementary schools. This research is expected to be able to increase the ecological intelligence of elementary school students in instilling awareness of the surrounding environment, utilizing the surrounding environment as educational land, and the values of responsibility in preserving the surrounding environment. Therefore, researchers consider it important to apply this thematic ecolearning model in the learning process in elementary schools. This is because there are still many young people who do not love the environment, this can be seen from the initial observations of researchers in the field about the habit of students littering and not loving the surrounding nature as part of a place to learn.

2   Methodology

The research method in this study is a qualitative descriptive method. The subjects studied were teachers and fourth grade students at SDN 13 Langsa City. This study uses an instrument of observation sheets and interview guidelines. For data collection is done by observing student activities, observing teacher activities and interviews. This is in accordance with the opinion of Cresswel [11] which says "in qualitative research, the researcher acts as a key instrument (researcher as a key instrument) collecting data through documentation, behavioral observations or interviews. This human instrument is built on the basis of knowledge and uses methods that are in accordance with research demands. To facilitate data collection in the field, researchers were guided by observation guidelines, interview guidelines, and documentation study guidelines. The data analysis used followed the model of Miles and Huberman [13], that is Data Collection, Data Reduction, Data Display and Data Verification/Conclusion.

3   Results

Based on data analysis in the application of the thematic ecolearning model in learning in class IV at SDN 13 Langsa City, it can be explained as follows:

3.1   Interview Results Regarding Learning Planning Using The Thematic Ecolearning Model

Based on the researcher's observations of the learning planning process carried out by fourth grade teachers at SDN 13 Langsa City, it looks good, this can be seen from the learning implementation plan, namely indicators of competency achievement, learning objectives and learning activities designed to link environment-based learning using the ecolearning model. thematic in the learning process. To get clarification on the results of these observations, the researchers conducted interviews with teachers in grade IV at SDN 13 Langsa City. Based on the results of interviews related to planning for the

implementation of learning, the teacher feels comfortable with implementing learning using the thematic ecolearning model so that the learning design is designed according to students' daily activities related to environment-based learning. In addition, the teacher is also easier to provide concrete problems that are in accordance with the environment around students so that the problems raised in the learning process are not far from students' experiences in everyday life. The following is a snippet of the dialogue between the researcher and the teacher in grade IV at SDN 13 Langsa City.

According to [22] suggested that lesson plans are guidelines or guidelines used in the learning process. Learning tools become a benchmark in the implementation of the learning process. Teachers are an important key in the success of improving student learning outcomes. One of the characteristics of quality education is the creation of a good learning process starting from planning, implementation and evaluation. The Learning Implementation Plan is a teacher's guide in teaching material in the classroom. A teacher must be able to plan, implement the learning process in accordance with the learning objectives, as well as assess and evaluate learning outcomes [23].

3.2 Observation Learning Process Using The Thematic Ecolearning Model for Student Activities

In the learning process using the thematic ecolearning model, it is carried out in 3 (three) stages of activity, namely; 1) Preliminary Activities, 2) Core Activities and 3) Closing Activities. Based on observation activities on student activity observation sheets using the thematic ecolearning model in learning are as follows:

Table 1. Student Activity Observation Sheet Score Recapitulation

Description	Meeting 1	Meeting 2
Get Score	38	40
Number of Indicators	11	11
Assessment Score Results	3,45	3,63
Assessment criteria	Good	Good

Based on the results of the recapitulation above, student activities are in the Good category with a score of 3.45 at the first (first) meeting, while at the second (second) learning meeting the results obtained an assessment score of 3.63 in the Good category. Judging from the learning process from beginning to end, it was seen that students were very enthusiastic in participating in the ongoing learning activities. This is because students are given the freedom to express their opinion regarding the theme of the environment around them. Students are invited to tell their daily experiences related to the environment in which they live and start the discussion process between students in each activity related to the experiences told by their friends.

Awareness of the environment must be owned by students in responding to conditions that occur in the surrounding environment so that students are able to implement it in everyday life. To obtain the results of these objectives, teachers must participate in determining the ability of students' ecological intelligence. This is in line with the results of research conducted by Chile [14] which states that the ecological intelligence

mastered by students is determined by the ability of the teacher. Teachers have an important role in conveying knowledge related to ecological intelligence in the implementation of learning in the classroom.

Supriatna [15] states that ecological intelligence is very important to be taught in schools as a provision for student life because: 1) students become agents of change who will always socialize ecological intelligence to be instilled into social characters in society, 2) students become agents who understand scarcity. energy that cannot create problems and global warming, 3) students who can implement ecopedagogy-based learning in schools and communities.

Environmental problems presented in the theme of the learning environment in elementary schools that need to be addressed with the existence of ecological intelligence. Ecological intelligence is also very closely related to students' awareness of ecological things that every elementary school student needs to have. This ecological awareness must also be sustainable meaning that; 1) ecological awareness is not only the responsibility of every individual, but the government must also encourage programs and policies that are carried out consistently, 2) ecological awareness must be lived and realized in concrete actions [16]. Therefore, ecological intelligence really needs collaboration from all relevant parties so that this can run smoothly and sustainably.

As a way to develop sustainability in environmental education, collaboration with students from an early age is needed to care about the environment [17]. If environmental education is instilled in students from an early age, it will provide benefits for these students, namely students have a sense of responsibility to maintain the environment, privacy, and improve environmental systems. For example, utilizing nature without destroying it and having self-awareness about an environmental problem that is difficult to overcome alone. So that environmental education is needed for students because it makes students have knowledge about the environment and its surroundings, as well as students in the long term towards the environment. This is also in line with previous research which states that a stimulant and continuous learning environment can improve students' learning environment [18, 19]. In addition to improving pedagogic abilities, ecolearning can also improve students' critical thinking skills [20]. Ecolearning that is applied in learning must also emphasize authentic problems [21]. Learning problems must follow the student's environment to find the right solution for the solution of the surrounding environment.

3.3   Observation Learning Process Using The Thematic Ecolearning Model for Teacher Activities

In the learning process using the thematic ecolearning model, it is carried out in 3 (three) stages of activity, namely; 1) Preliminary Activities, 2) Core Activities and 3) Closing Activities. Based on the observation activities on the teacher activity observation sheet using the thematic ecolearning model in learning are as follows:

Table 2. Teacher Activity Observation Sheet Score Recapitulation

Description	Meeting 1	Meeting 2
Get Score	36	38
Number of Indicators	11	11
Assessment Score Results	3,27	3,45
Assessment criteria	Good	Good

Based on the results of the recapitulation above, the teacher's activities are in the Good category with a score of 3.27 at the first (first) meeting, while at the second (second) learning meeting, an assessment score of 3.45 is obtained with a Good score. category. In line with the results of the analysis above, when in the process of observing the implementation of the ongoing learning, the teacher looks very maximal in applying the thematic eco-learning model in the learning process in the classroom. This can be seen from the provision of concrete examples that directly relate the problem to the environment around students. According to [24] defines that the environment is the state around us. The environment is generally divided into two types, for the natural environment and the artificial environment. In general, teaching is an activity of transferring knowledge to others. While the notion of teaching outside the classroom specifically is teaching and learning activities between teachers and students, but not in the classroom, but carried out outside the classroom or in the open, as student learning activities [25].

3.4   Constraints in the Learning Process Using the Thematic Ecolearning Model

In general, there are no obstacles in the learning process using the thematic ecolarning model. This can be seen from the results of observations in the learning process, the teacher is enthusiastic in the learning process taking place. In addition, the teacher is able to apply the thematic ecolearning model with the learning steps that have been prepared, so that the teacher is easy to provide concrete problems that are in accordance with the environment around students. The obstacle observed by researchers through observation is that teachers are very difficult in dividing time in the learning process by providing direct assessments. While other obstacles obtained from the results of the interview are: First, the teacher complains about the many demands that must be made in the assessment process. Second, teachers are required to conduct assessments in the learning process so that it is difficult to prioritize learning objectives or the assessment itself. Third, time is not effective, so you have to do an assessment outside of working hours so that learning outcomes are more optimal.

In line with the above results, Ruslan [12] in his research said that first, the obstacles experienced by teachers in conducting assessments in the learning process are the many aspects that must be assessed in the assessment aspect. Second, the assessment is carried out simultaneously with the learning process, thus making the teaching and learning process less effective. Third, the teacher feels burdened because he has to add up each value obtained by the students as a whole and then describe the value obtained per subject.

Conclusion

Based on the results of the research above, it shows that; 1) The teacher is able to apply the thematic ecolearning model with the learning steps that have been prepared; 2) It is easier for the teacher to give concrete problems that are in accordance with the environment around students; 3) Teachers are motivated to link the thematic ecolearning model with natural learning media; and 4) Students look very ambitious in the learning process. Furthermore, this research should be used as a contribution for teachers in considering the use of innovative learning models in the learning process in the classroom. In addition, this thematic eco-learning model not only provides an understanding of the environment around children, but also shapes student behavior in preserving and protecting the surrounding environment and being aware of the environment.

References

1. Wangid, Muhammad Nur, Ali Mustadi, Vera Yuli Erviana, dan Slamet Arifin. 2014. "Kesiapan Guru SD dalam Pelaksanaan Pembelajaran Tematik-Integratif pada Kurikulum 2013 di DIY'. Jurnal Prima Edukasia 2 (2); 175-182.
2. Abduh, Muhammad. 2015. "Pengembangan Perangkat Pembelajaran Tematik-Integratif Berbasis Sosiokultural di Sekolah Dasar." Jurnal Penelitian Ilmu Pendidikan.
3. Landriany, E. 2014. Implementasi Kebijakan Adiwiyata dalam Upaya Mewujudkan Pendidikan Lingkungan Hidup di SMA Kota Malang. Jurnal Kebijakan dan Pengembangan Pendidikan, 2 (1).
4. Jufri, Jumarddin, L, F., Ratna, U,N. 2018. Pendidikan Lingkungan di Sekolah Dasar Negeri 1 Baruga Kota Kendari. Jurnal Al-Ta'dib, 11 (2). 164-181.
5. Simbolon, B. R. 2010. Paket Materi Pembelajaran Inkuiri Dalam Pendidikan Lingkungan Hidup Untuk Meningkatkan Perilaku Berwawasan Lingkungan Siswa SD Di Jakarta. Jurnal Ilmiah Pendidikan Lingkungan dan Pembangunan, 11 (2), 1-20.
6. Afandi, R. 2013. Integrasi Pendidikan Lingkungan Hidup Melalui Pembelajaran IPS Di Sekolah Dasar Sebagai Alternatif Menciptakan Sekolah Hijau. PEDAGOGIA: Jurnal Pendidikan, 2 (1), 98-108.
7. Alpusari, M. 2013. Analisis Kurikulum Pendidikan Lingkungan Hidup Pada Sekolah Dasar Pekanbaru. Primary: Jurnal Pendidikan Guru Sekolah Dasar, 2 (02), 10-17.
8. Mukminin, A. 2014. Strategi Pembentukan Karakter Peduli Lingkungan di Sekolah Adiwiyata Mandiri. Ta'dib: Journal of Islamic Education (Jurnal Pendidikan Islam), 19 (02), 227-252.
9. Jumadil, K., & Hamzah, A. 2015. Penerapan Program Adiwiyata pada Aspek Kognitif, Afektif dan Psikomotor Tentang Pengelolaan Lingkungan Hidup Sekolah Dasar di Kota Kendari. Jurnal Sains dan Teknologi, 15 (2), 115-125.
10. Shanta, R., & Kristi, W. 2018. Pengintegrasian Pendidikan Lingkungan Hidup Membentuk Karakter Peduli Lingkungan Di Sekolah Dasar. Trihayu: Jurnal Pendidikan Ke-SD-an, 4 (2), 327-331.
11. Creswell, J.W. 2010. *Research Design Qualitative, Quantitave and Mixed Method Approach (Third Edition)*. Penerjemah Achmad Farwaid. Yogyakarta: Pustaka Pelajar.

12. Ruslan, et. al. 2016. "Kendala Guru dalam Menerapkan Penilaian Autentik di SD Kabupaten Pidie." *Jurnal Ilmiah Mahasiswa Pendidikan Guru Sekolah Dasar FKIP Unsyiah* 1 (1), 147-157.
13. Sugiyono. 2012. Memahami Penelitian Kualitatif. Bandung: Alfabeta.
14. Chili, N. S. 2014. The Ecology of Teaching: Efficiency, Efficacy and Effectiveness of Teaching and Learning of Tourism in Township High Schools. Journal of Human Ecology, 48 (2), 299–312. https://doi.org/10.1080/09709274.2014.11906799
15. Supriatna, N. 2016. Ecopedagogy: Membangun Kecerdasan Ekologis dalam Pembelajaran IPS. Bandung: PT Remaja Rosdakarya.
16. Keraf, A.S. 2014. Filsafat lingkungan Hidup: Alam Sebagai Sebuah Sistem Kehidupan. Yogyakarta : Kanisius.
17. Stone, M K., & Barlow, Z. 2005. Ecologycal Literacy: Educating Our Children for a Sustainable World. Sierra Club Books.
18. Aliman, M., Budijanto, Sumarmi, S., & Astina, I.K. 2019. Improving Environmental Awareness of High School Students' in Malang City through Earthcomm Learning in the Geography Class. International.
19. Sumarmi, S., Bachri, S., Baidowi, A., & Aliman, M. 2020. Problem-Based Service Learning's Effect on Environmental Concern and Ability to Write Scientific Papers. International Journal of Instruction, 13 (4), 161-176. https://doi.org/10.29333/iji.2020.13411a
20. Hayati, W.I., Utaya, S., & Astina, I.K. 2016. Efektivitas Student Worksheet Berbasis Project Based Learning dalam Menumbuhkan Kemampuan Berpikir Kritis Siswa Pada Mata Pelajaran Geografi. Jurnal Pendidikan: Teori, Penelitian, dan Pengembangan, 1 (3), 468-474. https://doi.org/10.17977/jp.v1i3.6174
21. Doppelt, Y. 2003. Implementation and Assessment of Project-Based Learning in a Flexible Environment. International Journal of Technology and Design Education, 13 (3), 255-272. https://doi.org/10.1023/A:1026125427344
22. Nurmajaya, B. F. 2021. Kompetensi Guru Dalam Merancang Rencana Pelaksanaan Pembelajaran. Jurnal Pengabdian 3 (11) 89-95
23. Syaodih, E., et. al. 2020. Pelatihan Keterampilan Guru dalam Membuat Perencanaan Pembelajaran Sains Anak Usia Dini. Pengabdian Pada Masyarakat, 5 (2), 519–528.
24. Hamzah, Nurdin. 2011. Belajar dengan Pendekatan PAILKEM. Jakarta: Bumi Aksara.
25. Vera, Adelia. 2012. Metode Mengajar Anak di Luar Kelas (Outdoor Study). Jakarta: Diva Press.