

Project-Based Marine Thematic Learning in Early Childhood

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Abstract

Thematic learning is a characteristic of early childhood education. The principle of thematic learning is child-centered and the needs of children. This study aims to analyze project-based marine thematic learning in early childhood. The research method used is qualitative. The participants of this study were the principal and students of group B PAUD Pembina 1 Ternate. The data collection was a direct observation, in-depth interviews, and documentary methods. Data analysis used the transcript of the interview results followed by coding to find research focusing on project-based marine thematic learning. Data analysis in this study used taxonomic analysis. The results revealed that teachers in group B had implemented project-based thematic learning. Some obstacles met by teachers in composing daily lesson plans. The teachers have difficulty integrating play activities with marine education-based learning related to school conditions, learning models, and media used in the marine education-based learning process. The teacher's effort in overcoming these problems is that teachers continue to apply marine thematic learning to students as a generation living in archipelagic areas.

Keywords: Early Childhood, Marine, Project, Thematic.

1. Introduction

Based on its geographical location, Indonesia is the largest archipelagic country in the world. Thus, 2/3 of the total area is surrounded by the sea. Indonesia is also a maritime country because most of the daily activities of the Indonesian people make the sea their living space and way of life to earn a living. The Indonesian Sea has the potential for biological and non-biological resources. It can also give a contribution to the country's economy if it is managed properly, that is why it is time for the Indonesian people to change the paradigm from an agrarian country to a maritime country (Lasabuda, 2013; Manapa, 2010). Meanwhile, North Maluku Islands is one of the Provinces in Indonesia with an area consisting of 1,474 islands, the number of inhabited islands is 89 and the remaining 1,385 are uninhabited. North Maluku is a province in Indonesia that has a strategic location. (Administration et al., n.d.) Along with the current direction of Indonesia's development policy the sea supports the economic sector so human resources must have maritime character, spirit and insight. In this context, marine education implemented in marine thematic learning is needed in early childhood learning (Greely, 2008; Hapidin et al., 2022; Matsumoto et al., 2017; Mocos et al., 2020). Age 4-6 years is a sensitive period for children to get an education. The experience that children get from the environment, especially the sea, which is the closest environment for children in coastal areas, is a stimulus given by the teacher and the surrounding environment that will affect their future. Therefore, some efforts are needed to facilitate them in developing aspects that exist in children along with their age, needs and interests. Early childhood has a role in the process of laying the foundation for the education of future generations. Early childhood education is the initial stage of the educational process that is structurally organized to form human and marine resources in Indonesia so that later they become a generation that can compete in the era of globalization. Marine local wisdom will motivate children to move and play a direct role in utilizing marine potential and resources through the creativity of children and teachers in thematic learning (Derman, 2018; Joni, 2009).

In early childhood education, thematic learning is one of the characteristics of the Indonesian Early Childhood curriculum (John, 2015; Education et al., 2014; Suryana, 2007; Tatminingsih, 2016; Yuliasri & Sandy Ramdhani, 2018). Thematic learning is learning that one theme covers all concepts and learning content through play activities in achieving the expected level and competence (Farida, 2017; Sujiono, 2013). Thematic learning has several advantages

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for young children. It is easier for young children to focus on one predetermined theme. Children's understanding of the material presented is also deep, because between subjects is still one theme. Studies of marine literacy in Indonesia are still very few (Brennan et al., 2019; Fuad & Musa, 2017; Matsumoto et al., 2017; McPherson et al., 2018), even though Indonesia is the country with the second longest coastline in the world after Italy. Marine education is a necessity that must be the focus of education policies and implementation to prepare the maritime generation from an early age and early grade elementary school. This policy is a strategic issue and should be a strategic program if the government is serious about realizing Indonesia as the world's maritime axis. The concept and implementation of marine education will help prepare the marine generation. The thematic learning process integrates the substance. Research on marine education implementation includes the rarest focus of study and is very difficult to find because research methodology related to marine is quite difficult to conduct. Based on the observations and interviews, it was revealed that early childhood teachers, especially in PAUD Pembina 1 Ternate, met many obstacles in developing marine thematic learning themes. This is partly due to the lack of knowledge about the sea, creativity in making marine-based teaching media, and the sensitivity and courage of educators. Marine thematic learning emphasizes the involvement of students in the learning process actively in the learning process so that students can gain hands-on experience and be trained to be able to discover for themselves the various knowledge they have learned about the sea. Through direct experience, students will understand the marine concepts they are learning and relate them to other concepts they have understood. Based on the background problems mentioned above, the problems can be formulated as follows: How is project-based marine thematic learning?

2. Method

This research is qualitative research. The objective is to analyze project-based marine thematic learning for children. The study was conducted for three months involving the principals and teachers of group B PAUD Pembina 1. The participants of this study were the principals, teachers, and students of group B PAUD Pembina 1 Ternate. Participants gave consent before data collection. To make it easier to analyze interview data, the researcher gave the code KS (principal) and G (Teacher) who became participants and students (PD). The considerations are 1) The school principal has the authority to ratify the marine curriculum and implement the maritime curriculum, and 2) Teachers and students become the compilers and implementers of marine thematic education operationally in the teaching and learning process. Data was collected using a semi-structured interview instrument conducted with respondents for about 45 to 60 minutes. An interview guide was used, based on thematic learning theory. Principals and teachers of group B as participants were given 15 questions. Documentation in the form of pictures and learning videos from the teacher is used as supporting data. The data analysis used is taxonomic analysis that the results of interviews and in the form of a collection of coding will be grouped in marine thematic learning (Creswell, W. John & Creswell, 2018; Creswell, 2009; Denzin, 2010).

3. Result and Discussion

PAUD Pembina 1 Ternate is one of the formal early childhood institutions located in the coastal area, in the Village of Kampung Nelayan (DesneLan) Dufa-Dufa sub-district, which has been carried out marine education since 2019. The course can provide the conceptual application of maritime based on local Maluku wisdom. Moreover, marine life introduces positive habits like eating fish so that in the future they can protect natural potential and maximize marine wealth to support development, especially in the economic sector, especially human resources who have maritime character and spirit and have maritime insight. In this context, marine education can be implemented in marine thematic learning to strengthen all competencies, namely, character competencies, basic literacy competencies, and thinking competencies that effectively jump-start all dimensions of children's growth and development. Children learn and play with teaching media related to marine ecosystems and have a caring attitude and sensitivity to marine and coastal waters. That way, the maritime axis has been present from an early age so that in the future the maritime axis will manifest in the mindset of the nation's children.

The Process of Applying Project based Marine Thematic Learning

Based on the results of observations, it reveals that the Maritime Curriculum used regularly by PAUD Pembina 1 is a nationally determined curriculum and needs to be adapted at all the levels (Iskandar & Hasbi, 2019). The maritime curriculum program is a program that aims to introduce the potential of marine and fisheries in Indonesia's coastal areas to the younger generation, this aims to further evoke the spirit of love for the sea in coastal communities, especially students in coastal schools. The need for maritime-oriented educational curriculum designs whose content is structured at the early childhood level in an effort to achieve Indonesia's development mission. Therefore, the maritime curriculum

needs to be implemented from an early age. The maritime theme was developed based on the principles of theme development (closeness, simplicity, child interest, and incidentally). The development of maritime themes is then included in the semester, weekly, and daily programs.

Marine Thematic Learning Planning at PAUD Pembina 1

Before the teacher carries out the lesson, the teacher develops a maritime curriculum by composing a lesson plan called the planning stage. To find out the planning stages, the followed the implementation planning process carried out at PAUD Pembina 1. In general, the maritime curriculum implementation planning at each level made by the teacher contained the same learning stages researchers namely: preparing a lesson plan as a guide in carrying out the process, learning, preparing learning media, preparing materials and tools to create maritime-based projects, preparing games and stories, and providing some songs or game movements in class.

Implementation of Project based Marine Thematic Learning in PAUD Pembina 1

The initial preparation before the implementation of maritime-based learning, the school is conducting training in understanding maritime-based learning for six months. Compose a weekly learning implementation plan (RPPM) containing maritime-based indicators in it. Then the teacher prepares a daily lesson plan (RPPH) by taking the theme from the weekly program implementation plan (RPPM). The following are activities for developing the application of maritime-based learning applied to PAUD Pembina 1 Ternate:

a. Preparation Activities

In preparation activities, the teachers prepare themselves in front of the school to welcome the arrival of students. After students enter the schoolyard, students carry out free play activities in the schoolyard supervised by teachers. After the age-free play activities, students line up neatly in the yard and perform movements and songs before entering the classroom. After the bell rang, the children lined up neatly in the yard to perform movement and song activities before entering their respective classes.

b. Teacher Preparation Plan

There are several preparations done by teachers and getting attention in designing preparations for carrying out marine thematic learning activities using project methods in learning, including:

1. Determine the objectives and themes of teaching activities using the project method. The theme that will be studied is the theme of 'Profession' with the sub-theme of 'Fishermen'.

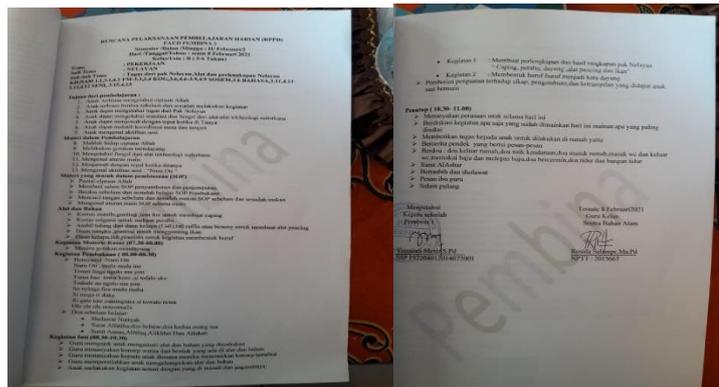


Figure 1. Maritime-based Daily lesson plans

2. Determine the design of materials and tools needed in project activities by making caps and fishing rods. With the tools and materials provided by the teacher, among others: manila cartoons, scissors and fox glue to make hats. Origami paper for folding boats. Coconut leaves, Rafia rope, or thread for making fishing rods. Jackfruit leaves and scissors for cutting fish and coconut leaves, sticks, and plasticine for letter-forming activities.
3. Determine the design of the grouping of children to carry out project activities.
4. Determine the design of the activity steps following the objectives to be achieved, namely the introduction of the concept of work, namely the duties of fishermen and fishermen's tools and equipment.

5. Determine the design of the assessment of teaching activities using the project method in the form of checklists, anecdotes, and children's work.

The Children's Output of Project-based maritime thematic learning activities at PAUD Pembina 1. Hamidah et al., nd (2020) explain that in carrying out project activities for children there are 3 stages that the teacher must do:

1. Pre-Development Activities

First, the teacher must communicate the purpose of the project activity, namely the introduction of the concept of work, namely the task of fishermen and fishermen's tools and equipment. Project activities require several working groups. Firstly, each class is divided into four groups according to the design that has been made by the teacher. The teacher mentions what the working group is and the names of the members and chair of each working group. The teacher shows where the groups should work and where to pick up the necessary materials and tools.

2. Development Activities

To warm up, the teacher asked the children if any of them knew the duties of a fisherman. The answer may or may not know. If the answer is unknown, the teacher will invite the child to talk about the 'fisherman and the fisherman's duties. The teacher invites the children to do rowing movements, and make equipment and the fishermen's catch, including caping, rowing boats, fishing rods, and fish. In addition, the activity forms the letters 'D' into the word 'Paddle'. Then the teacher invited the children to sing the song "Naro oti". And so on, the teacher guides and directs the working groups to be creative.



Figure 2. Students Project on 'Fisherman Caping



Figure 3. Students Enjoy Playing with Their Paper Boats

3. Evaluation and Closing Activities

After the project activities have been completed by each group, letter decorations and picture of boats can be installed. The project activities ended by returning the materials and tools used to their original places, cleaning and tidying the workplace, and led by the teacher, the children were once again invited to sing the song "Naro oti". In terms of name, "Naro" means to row and "oti" means a fish hook, as it represents the local fishermen's way of life. Sometimes the students perform outdoor near to the beach during the peak activity, the theme of the end of the semester.

Teacher Assessment Activities

The assessment of project activities is an integral part of providing maritime learning experiences using the project method. Without an assessment of this activity, the teacher cannot know in detail whether the teaching objectives can be achieved or not through the project method adequately. Moreover, it can be used as a reference in carrying out project activities starting from designing preparations made by teachers, designing the implementation of maritime-laden project activities for children, and designing project activity assessments for children in PAUD Pembina 1 Ternate. Based on the explanation above that in PAUD Pembina 1, concerning the application of marine thematic learning is something that can be considered new in the PAUD environment which is a coastal area, although this has been done since 2019 and teachers have not understood it in depth, so its implementation has not been implemented yet. The introduction of the sea and its contents are still not optimal. In the development of lesson themes, it is still found that there is a lack of understanding among the group B teachers in developing sub-themes. Teachers are also still confused about connecting the theme with sub-indicators (from results and basic competencies) in the field of development. This, some teachers still find it difficult to apply marine thematic learning. This is because teachers have not mastered the marine education curriculum structure and received deeper training on thematic learning. In addition, teachers also still find it difficult to leave the habits of past learning.

Obstacles of Project-based Marine Thematic Learning in PAUD Pembina 1

The obstacle experienced by teachers when implementing marine thematic learning is composing a daily lesson plan with maritime. Some efforts made by teachers in overcoming these obstacles are by continuing to teach basic competencies that cannot be combined separately. This is in line with the theory put forward by (Chumdari et al., 2018; Elies Nur Fauziyah, 2018; Wardani et al., 2019) which explains that not all subjects must be integrated, basic competencies that are not covered by certain themes must be taught either through other themes or independently.

4. Conclusion

In the implementation of project-based marine thematic learning, teachers who teach thematic learning to students should be accompanied by an emphasis on assigning assignments and linking marine themes to the experiences of students. The school principal is expected to provide supporting facilities in providing marine thematic learning such as complementing learning with marine-based learning media and utilizing marine learning resources in school. In addition, there are also supporting facilities in carrying out marine thematic learning, namely by complementing library sources or books support in carrying out marine thematic learning from an early age.

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