

Analysis of Preschool Teacher's Understanding of Marine Content for Children in North Maluku

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Abstract

This research aims to explore the understanding of preschool teachers in marine content for children in the coastal area of North Maluku. The study focuses on how preschool teachers introduce marine content in children's play activities. This quantitative descriptive research was conducted in North Maluku with 175 teachers as respondents using a random sampling technique. Data were obtained using a questionnaire. The data revealed that the average understanding of preschool teachers in North Maluku in introducing marine content in children's play activities is 68%, so it can be categorized at a partial level. It means that not all components of marine content can be introduced to children properly.

Keywords: environment, marine, understanding, preschool teacher

INTRODUCTION

Indonesia has the second longest coastline in the world after Canada. The coastal length reaches 54,716 km or is equivalent to 1.3 times the Earth's circumference. Of course, it can be caused by Indonesia's large number of islands. Based on data from the Geospatial Information Agency (BIG), there are approximately 17,504 islands in Indonesia, consisting of large and small islands. With the total area of Indonesia reaching 7.81 million km, Indonesia has earned its name as the largest archipelago in the world. (Amani et al., 2021, Kristian, 2013). Knowledge about the sea is the starting point for maritime education. This is recognized globally as nautical literacy, which can be fostered in marine education. It is recognized globally as marine literacy, which can be fostered in marine education. The ocean covers 71% of the Earth's surface and is the dominant feature of the Earth. The ocean regulates weather and climate, supplies almost all of the Earth's oxygen, supports a great diversity of life and provides a rich source of food for human populations (Cava et al., 2005; Strang et al., 2007; UNESCO, 2022)

The strategic position of Indonesia has the potential of Indonesia's seas and coasts, the majority of which are sourced from fish, coral reefs, ecosystems, mangroves, seagrass ecosystems, marine potential, and so on. And, of course, the potential for coastal tourism is Indonesia's current advantage. This certainly causes coastal areas to become a source of income for the people of Indonesia, but with extensive coastal and marine areas, it has yet to be able to make a significant contribution to national economic development (Lasabuda, 2013; Manapa, 2010). Indonesia's coastal and marine areas, especially North Maluku, have high biodiversity with various types of aquatic biota, including mangrove ecosystems, seagrasses, and coral reefs. However, recently, the quality of the coastal and marine environment has begun to decline due to natural and human activities. (Widyasari et al., 2022)

The education system is one way to create a generation that understands the coastal and marine environment. It should include the concepts necessary for learners to develop a coherent understanding of coastal environment issues for everyday life. (Nurishshobakh et al., 2018; Pertama et al., 2021). This is undoubtedly a way of learning that provides broad positive implications for the community around students and teachers. Early childhood education is a level for children before they enter further education, namely Elementary School (SD). Early childhood education is a development that is intended for children aged 0-6 years, where at this age, it becomes a golden age as the formation of the child's personality and character. Early childhood education is where children can express, play, learn, and explore their abilities. Therefore, the role of early childhood education teachers is undoubtedly significant in developing the six aspects of early childhood development, including religious and moral values, cognitive, language, social-emotional, and art.. (Amani et al., 2021). As a teacher, it is undoubtedly one of the factors in determining the effectiveness of every educational endeavour. Teachers are always required to have broad insights not only in the field of science they teach but also in other fields, such as coastal and marine environmental issues and in mastering skills in their application in everyday life and in the future that can be given to students.

According to Law No.14 of 2005, n.d., a qualified preschool teacher must have four competencies in the success of the learning process in the classroom, namely pedagogic competence, professional competence, personality competence and social competence. Meanwhile, the learning process in early childhood should be carried out to provide basic concepts that have meaning for children through real experiences that allow children to show activity and curiosity optimally. (Nurani, 2019). As also stated in Regulation of the Minister of Education and

Culture, Number 146 of 2014 states that learning implemented in early childhood education uses thematic learning with a scientific approach.

Based on the observation, it is sometimes different from the standards set by the government. The ability of preschool teachers to participate in workshops, seminars, or competency improvement activities related to maritime still needs to improve, so they do not have maximum competence, one of which is professional competence. Teachers need to develop the concept of their scientific field in line with the needs of children in the coastal environment and with the requirements of children in the coastal environment and the stage of child development. Teachers only use what happens in the curriculum. Of course, the curriculum concept is very open, and teachers can develop themes or materials for the coastal environment and child development.

Understanding related to introducing a coastal or maritime environment can be integrated into marine themes to support the creation of maritime-minded learners because it contains maritime values to rebuild the maritime culture. LIPI, through the Coral Reef Rehabilitation and Management Program-Coral Triangle Initiative (COREMAP-CTI) educational component, is very active in providing content related to environmental and coastal awareness competency materials to the curriculum and book centre (Puskurbuk). Of course, it will strengthen teachers' understanding of coastal environmental issues in their learning. (Fielding et al., 2019; Greely, 2008; Ryacudu & Sumintaatmadja, 2018; Sulistiani & Mustami'ah, 2016). Therefore, the researcher is interested in exploring teachers' understanding of the introduction of maritime content in their learning activities for children in coastal areas.

RESEARCH METHOD

This research employed a questionnaire survey targeting all the preschool teachers in A and B groups in Maluku Utara Province. The questionnaire was distributed among 175 teachers in December 2022. A total of 175 questionnaires were returned with a response rate of 100%. The questionnaire asked participants to indicate their school's name, grade and sex and their understanding of maritime concepts to early childhood according to a 4-point scale. After collecting the questionnaire, it will be analyzed using descriptive analysis.

RESULT AND DISCUSSION

The environment of the coastal population of North Maluku has essentially occurred environmental degradation where environmental changes that occur are caused by fishing communities that can exploit natural resources and low levels of community education, environmental knowledge, and low participation in managing the coastal environment, as well as garbage scattered in the coastal environment. Increasing preschool teachers' understanding of the coastal environment is necessary to change attitudes to manage the environment with responsibility, the importance of changing attitudes and behaviour to act rationally towards their respective environments. This needs to be given to children from an early age to understand the importance of the marine environment better, it also brings children closer to the natural environment, and they very quickly interact that nature is essential for survival, especially in North Maluku.

The maritime concepts should be given early to children in coastal areas in North Maluku so that children grow with high maritime enthusiasm and values because currently, their interest in maritime is still low (Fuad & Musa, 2017; Hapidin et al., 2022; Hindrasti, 2018; Wardani et al., 2019). Learning with the maritime theme is the proper and practical step to overcome children's

low interest and also provide a learning experience about the maritime. In learning activities, the materials provided to children at PAUD Institutions include an introduction to the environment and coastal seas, types of marine life, causes of damage to coastal and marine ecosystems, and how to maintain coastal and marine ecosystems, as described in the following table.

Table 1. The Children's Learning Topic

No	Topic
1	Coastal and marine environments
2	Types of biotas in the sea
3	The Causes of damage to coastal and marine ecosystems
4	How to maintain coastal and marine ecosystems

In introducing the marine contents using material related to the marine environment, the problems and measures taken to protect the coastal area received a good response. They influenced the professional competence of preschool teachers.

Table 2. The result of Teachers' Understanding

No	Categorization	%
1	Good concept understanding	25.1
2	Partial concept understanding	68
3	Specific misunderstanding	6.9
4	No concept understanding	0

Figure 1. Indicates that preschool teachers in North Maluku understood the coastal environment, which consisted of 10 questions with four alternative answers. In this data, it can be seen that the score that has the most frequency is 119 (68%), 44 (25.1%) teachers and 12 (6.9%), so it can be concluded that most of the teachers' understanding of the marine contents with the topic given is in the partial category or above the average score.



Figure 1. Learning activities with maritime concept



Figure 2. Fieldtrip to the Ahmad Yani Harbour

In conclusion, implementing marine education is an attempt to help preschool teachers in North Maluku master the marine concepts that deal with the theory and practice. It is implemented in such a way that the teachers are able to integrate it into teaching to the children in a coastal area. Moreover, it also can raise interest in children. The success or failure of marine education in children depends on the preschool level of preparation of teaching material. It is, therefore, important that teachers use a learning strategy, communicating the material to attract children's interest. Children look up to the teacher as a motivator to acquire marine learning. The teacher also helps them develop the skill of utilizing the learning facilities needed to complete the assignments.

CONCLUSION

This research concluded that preschool teachers' understanding of the introduction of marine content for children in North Maluku Province could be categorized as a partial level. Marine content provides experience and meaning to early childhood. This lesson emphasizes the students acquire scientific knowledge on the ocean through marine education.

ACKNOWLEDGEMENTS

The authors are grateful to Pembina 1 Preschool Ternate for their support.

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