Analysis of the Quality of Maritime Based Teaching Modules at the Nusa Indah Teluk Bakau PAUD Post

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Abstract. Planning is very necessary in learning. Learning planning documents in the independent curriculum are called teaching modules. It is hoped that the maritime-based teaching module can make participants recognize their environment and become problem solvers. This research aims to determine the usefulness and quality of maritime-based teaching modules as learning guidelines according to the characteristics of students and their environment. This type of research is quantitative descriptive which was carried out at the Nusa Indah Teluk Bakau PAUD Post, Gunung Kijang District, Bintan Regency. The subjects of this research were the school principal and four teachers who were asked to develop a maritime-based teaching module. The teaching modules that have been prepared are then entered into Google Drive for analysis. Data collection was carried out through analysis of the collected teaching modules with a focus on minimum components, namely learning objectives, learning activities and assessments. Overall, based on the results of the quality analysis of maritime-based teaching modules, very decent results were obtained with a score of 90% and met the criteria for quality teaching modules and were appropriate for use as learning guides at the Nusa Indah Teluk Bakau PAUD Post.

1 Introduction

Learning is basically to develop students’ potential (1). This development is very necessary to prepare students to compete in their time. In the 21st era, students are given more space than teachers (2). This aims to provide them with opportunities to develop according to their characteristics such as their interests and talents. The learning that is designed needs to be adapted to the nature experienced by students. This nature is in accordance with what was conveyed by Ki Hajar Dewantara through his educational philosophy, namely the nature of nature and the nature of the times (3).

First, natural nature. The nature of nature provides confirmation that learning is adapted to nature or the environment students live in. This is important because it is hoped that students will recognize their environment and then become problem solvers if problems are discovered. Education about the natural surroundings is very beneficial for the growth and development of young children (4). This kind of learning is also called contextual learning. The student's environment greatly determines the processes and topics that are emphasized in learning. This is expected to become a habit and give students the opportunity to explore their environment. This situation differentiates the learning carried out at each school, this arises due to differences in the geographical location and environment of the school.

Second, the nature of the times. This nature provides information to teachers so that they are adaptive to the changing times. Teachers can no longer apply learning as they experienced in the past, considering that the era they are going through is different from the era they are going through now and that students will face in the future. So teachers must adapt learning according to the students' era. It is necessary to know the background of students so that learning is designed according to students' learning readiness (5).

In response to this, the Badan Standar Kurikulum Asesmen dan Pembelajaran (BSKAP) of Kementerian Pendidikan dan Kebudayaan (Kemendikbud) publishes learning outcomes at each level of education. In the Early Childhood Education (PAUD) unit, learning outcomes are oriented towards religious values and character, identity, as well as the basics of literacy in mathematics, technology, engineering and the arts (6). This is considered important so that these three things become principles that students need to achieve while studying at PAUD. PAUD is a foundation phase that is expected to provide students with a sense of security and comfort in participating in learning. This underlies the emergence of the PAUD-SD Transition program which aims to ensure that these two things are implemented well (7). PAUD – SD Transition is a program that contains processes to support learning readiness for young children who will enter elementary education.
school (8). When students feel this, then indirectly the aspects within students can develop slowly, such as physical and motoric, social and emotional, as well as literacy and numeracy. Therefore, learning in PAUD units is no longer justified to emphasize reading, writing and arithmetic (CALISTUNG) activities but rather to focus on playing while learning activities (9).

Following up on these expectations, learning planning plays an important role in determining learning success. Through planning, teachers can outline what will be done during the learning process so that the learning carried out becomes more directed and focused in achieving the desired goals. Learning planning can also be called learning implementation guidelines. In the learning plan the teacher writes down the learning objectives to be achieved, the process that will be carried out and the evaluation that will be used. This document in the 2013 curriculum is called the Learning Implementation Plan (RPP). However, in the independent curriculum it is called teaching modules (10). Even though the name has changed, looking at the components, nothing has changed in the content of the teaching module. It’s just that the teaching module contains an initial assessment which will be used to see students’ learning readiness.

The Nusa Indah PAUD Post is located on the coast of Trikora, Gunung Kijang District, Bintan Regency, so the material planned in KOSP is generally oriented towards coastal and maritime themes. KOSP was developed in accordance with the conditions and needs of students and the educational unit itself (11). It is important for students to understand coastal and maritime themes from an early age because the school environment and where they live are located on the coast. This is to instill a sense of love and concern in caring for and preserving the beauty of the coastal ecosystem from an early age according to the developmental age of PAUD students.

Based on the description above, this research was conducted to determine the quality of maritime-based teaching modules that have been prepared and used by teachers at the Nusa Indah PAUD Post. The focus of this research is the teaching module component which consists of learning objectives, activity steps or learning processes and evaluations that are implemented. This research aims to determine the usefulness and quality of teaching modules in guiding students’ learning according to the characteristics of each student and the environment in which they live.

2 Method

This type of research is descriptive quantitative with a study of maritime-based teaching modules. Quantitative descriptive research is describing, researching and explaining what is being studied as it is, and drawing conclusions from phenomena that can be observed using numbers (12). This research was conducted at the Nusa Indah Teluk Bakau PAUD Post, Gunung Kijang District, Bintan Regency. The subjects of this research were the principal and four teachers. Teachers and school principals were asked to collect the teaching modules used via Google Drive which had been provided for analysis by researchers using a rubric that had been prepared regarding the components of the teaching modules. The components contained in the teaching module are general information, core components, and attachments (13). The teaching module components at least consist of learning objectives, learning steps, and assessment (14). This research focuses on the minimum components of teaching modules which consist of learning objectives, steps in learning activities and assessment.

The rubric used is:

<table>
<thead>
<tr>
<th>No</th>
<th>Components of Teaching Modules</th>
<th>Rated Aspect</th>
</tr>
</thead>
</table>
| 1  | Learning objectives            | 1) Describe learning outcomes consisting of religious values and character, identity and the basics of literacy in mathematics, technology, engineering and the arts  
                 2) Learning objectives can be tested with various assessments.  
                 3) Learning objectives emphasize maritime contextualization |
| 2  | Learning Activities            | 1) Describe the initial, core and closing activities in detail.  
                 2) Distribution of time allocation according to the content delivered  
                 3) Implementation of student-oriented learning activities  
                 4) Use approaches, methods and models that are appropriate to the material  
                 5) Application of technology in learning. |
| 3  | Assessment                     | 1) Use assessments that are appropriate to the objectives.  
                 2) Using various assessments to identify student development |

The guidelines for giving assessments in the rubric above are as follows:
Table 2. Guidelines for Giving Teaching Module Quality Scores

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Suitable</td>
<td>4</td>
</tr>
<tr>
<td>Compliant</td>
<td>3</td>
</tr>
<tr>
<td>Not Compliant</td>
<td>2</td>
</tr>
<tr>
<td>Highly Unsuitable</td>
<td>1</td>
</tr>
</tbody>
</table>

Then, after the assessment results have been obtained, the next step is to present the results obtained in accordance with the following teaching module quality criteria.

Table 3. Teaching Module Quality Percentage Criteria

<table>
<thead>
<tr>
<th>Interpretation Criteria</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Totally Not Worth It</td>
<td>0%-25%</td>
</tr>
<tr>
<td>Not feasible</td>
<td>26%-50%</td>
</tr>
<tr>
<td>Worthy</td>
<td>51%-75%</td>
</tr>
<tr>
<td>Very Worth It</td>
<td>76%-100%</td>
</tr>
</tbody>
</table>

Source: Pratiwi (2021) (15)

3 Result and Discussion

The results of the analysis of the maritime-based teaching module of Nusa Indah Bay Bakau PAUD Post on the material The Beauty of My Beach are as follows:

3.1 Learning objectives

The teacher wrote several objectives in the maritime-based teaching module with material about the beauty of my beach. The goals to be achieved are describing the beach in your own language, playing and being creative in printing using sand, maintaining the cleanliness and beauty of the beach by working together. The following are the results of the analysis of the teaching module based on the indicators that have been formulated.

1) Describe Learning Achievements

BSKAP Decision No. 33 of 2022 explains that the learning outcomes of PAUD units consist of religious values and character, identity and the basics of literacy in mathematics, technology, engineering and the arts (6). Based on the results of the analysis of the teaching module, the researcher concluded that the learning objectives in the module were appropriate and included all three elements. The teachers compose the module by writing down several subelements of the three elements. This is important considering that it is necessary to instill it in students from an early age so that it is hoped that it will become a habit that will have an impact until adulthood. Researchers suggest that the narrative that is the goal needs to be sharpened again so that the desired thing can be easily understood and implemented through learning activities.

2) Can be tested with various assessments

The learning objectives written by teachers can be measured using three assessments and are not focused on one assessment. Assessment is a systematic and continuous process or activity to collect information about students’ learning processes and outcomes in order to make decisions based on certain criteria and considerations (16). To confirm this, the researcher asked the teachers directly and obtained information that the assessment techniques used included observation and verbal questions. The assessment instruments used are checklists and anecdotal notes. Based on this, the researchers concluded that this mustard was very suitable.

3) Emphasis on Maritime contextualization

Maritime character education is an early effort to teach children the maritime spirit, introducing children to love the sea as a part of life (17). Based on learning objectives, if adjusted to the development of PAUD age students and the concept of playing while learning, it provides a sense of security and comfort to students. The researcher concluded...
that the goals to be achieved were very appropriate to the maritime context for PAUD aged children. This is based on the context of cultivating a sense of love and having the potential that exists in the environment where students live from an early age. If this is practiced from an early age, it will become a character within the students.

3.2 Learning Activities
Learning activities are the main thing in the teaching module. Learning objectives will be implemented in this activity. The results of the analysis carried out are as follows:

<table>
<thead>
<tr>
<th>Learning Activities</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application of technology in learning.</td>
<td>4</td>
</tr>
<tr>
<td>Use approaches, methods and models that are appropriate</td>
<td>4</td>
</tr>
<tr>
<td>Implementation of student-oriented learning activities</td>
<td>3</td>
</tr>
<tr>
<td>Distribution of time allocation according to the content</td>
<td>4</td>
</tr>
<tr>
<td>Describe the initial, core and closing activities in detail.</td>
<td>3</td>
</tr>
</tbody>
</table>

Fig. 2. Results of Analysis of Learning Activities

1) Describe the initial, core and closing activities in detail.
The three activities in the learning activity are explained well and appropriately. Students begin initial learning activities by praying, ice breaking and memorizing prayers that have been done previously. Then in the core activities, the activity starts with watching a video then continues learning on the beach around the school. Activities on the beach consist of observing the beach directly, then inviting students to clean up the scattered rubbish and ending with assisting students to be creative by forming or printing something with sand. In the closing activity, the teacher invites students to summarize the material and do ice breaking and sing together. The lesson closed with prayer and the students returned to the PAUD Post.

Researchers provide input that teachers should reflect with students regarding the learning process that has been carried out, how they feel, what they have learned and what they have not understood from the lesson. This needs to be done to prepare for learning at the next meeting.

2) Distribution of time allocation according to the content delivered
In accordance with the government's direction, the allocation of learning time in PAUD aged 4 to 6 years is at least 900 (nine hundred) minutes per week (18). So at the Nusa Indah Teluk Bakau PAUD Post, students' daily time allocation at school is 180 minutes (3 hours). The distribution of time allocation in the teaching module is carried out very appropriately. The teacher divides the three activities in detail, namely 1) initial activity 30 minutes; 2) 120 minutes of core activities; and 3) 30 minute cover.

3) Implementation of student-oriented learning activities
The process of learning activities that students will go through shows active learning according to their respective characteristics. The core activity begins with watching a video of the beauty of the beach. Students are asked to observe the video shown by the teacher and then do questions and answers and relate it to the condition of the beaches around them. Then, the teachers invited students to visit the beach around the school to continue learning. At the beach, learning is filled with activities to clean the beach together by picking up scattered rubbish and students being creative in making shapes they like with sand. This activity stage shows active learning that is student-oriented. Based on these stages, the researcher saw that this activity was in accordance with the objectives to be achieved.

4) Use approaches, methods and models that are appropriate to the material
The approach used in this activity is MIKiR. MIKiR is a learning stage consisting of Experiencing, Interaction, Communication and Reflection (19). In this approach, students' activities are clearly described during learning. Based on this, researchers see this approach as very suitable and appropriate to use in learning with this material.

5) Application of technology in learning.
In terms of the use of technology, learning will use audiovisual media in the form of videos to support the effectiveness of the implementation of learning which is played using a laptop and utilizing a projector. Technology can be used as a medium to introduce the concept of numbers and reasoning to children (20). Therefore, this learning is very suitable to be implemented in PAUD to increase students’ interest and motivation in participating in learning.
3.3 Assessment

Assessment is very necessary in learning to measure the achievement of the learning objectives that have been set (16). The results of the assessment analysis in this research are:

![Assessments](image)

**Fig. 3. Results of Assessment Analysis**

1) Using various assessments to identify student development

PAUD assessment is an integrated part of a learning process that provides comprehensive information as a means of determining the next learning program or strategy (21). The assessments used in teaching modules are very diverse, making it possible to record student achievements during learning. There are (four) assessment instruments or techniques at the PAUD level as the main part of the assessment concept, namely: anecdotal notes; checklist; masterpiece; and photo series (22). The teacher uses observation assessment techniques and verbal questions as well as instruments in the form of checklists and anecdotal notes. This is very suitable for identifying student development during learning.

2) Time to carry out the assessment

Teachers apply assessments not only at the end of learning but also throughout the learning process. This allows teachers to continue to observe student activities during learning which can be used as a report on student progress. Based on this, the implementation time is appropriate but the teacher has not been seen describing the initial assessment such as trigger questions which are carried out at the beginning of learning.

Following are the overall scores from the analysis of maritime-based teaching modules.

**Table 4. Teaching Module Quality Assessment Indicators**

<table>
<thead>
<tr>
<th>No</th>
<th>Components of Teaching Modules</th>
<th>Rated Aspect</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Learning objectives</td>
<td>1) Describe learning outcomes consisting of religious values and character, identity and the basics of literacy in mathematics, technology, engineering and the arts</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2) Learning objectives can be tested with various assessments.</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3) Learning objectives emphasize maritime contextualization</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Learning Activities</td>
<td>1) Describe the initial, core and closing activities in detail.</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2) Distribution of time allocation according to the content delivered</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3) Implementation of student-oriented learning activities</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4) Use approaches, methods and models that are appropriate to the material</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5) Application of technology in learning.</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Assessment</td>
<td>1) Use assessments that are appropriate to the objectives.</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2) Using various assessments to identify student development</td>
<td>3</td>
</tr>
</tbody>
</table>

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Total: 36
Percentage: 90%

The percentage results obtained in this research were 90%, then these results were presented using the teaching module quality criteria and the criteria results obtained were Very Eligible. Therefore, a maritime-based teaching module with
the theme of the beauty of my beach is very suitable to be implemented in supporting learning in accordance with the characteristics and conditions of the school environment.

**4 Conclusion**

Based on this research, it was concluded that the maritime-based teaching module with material about the beauty of my beach is very suitable to be implemented at the Nusa Indah PAUD Post with an analysis result of 90%. This teaching module consists of a minimum component of the independent PAUD curriculum teaching module which consists of learning objectives, assessment learning activities. Teachers have been able to design these three aspects based on student characteristics and environmental conditions. The teaching module consists of PAUD learning outcomes based on BSKAP Decree Number 033 of 2022 which consists of religious values and character, identity, as well as the basics of literacy in mathematics, technology, engineering and art. Teachers also need to sharpen their understanding regarding student-oriented learning along with various assessments that can be used to measure learning achievement in accordance with the objectives formulated so that students always receive meaningful learning in accordance with the demands of a pleasant PAUD-SD Transition.

**Reference**

14. MENTERI PENDIDIKAN, KEBUDAYAAN, RISET DTRI. KEPUTUSAN MENTERI PENDIDIKAN, KEBUDAYAAN, RISET, DAN TEKNOLOGI REPUBLIK INDONESIA NOMOR 262/M/2022 TENTANG PERUBAHAN ATAS KEPUTUSAN MENTERI PENDIDIKAN, KEBUDAYAAN, RISET, DAN TEKNOLOGI NOMOR 56/M/2022 TENTANG PEDOMAN PENERAPAN KURIKULUM DALAM RANGKA PEMUL. 2022.

