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OPTIMIZING PHYSICAL EDUCATION LEARNING: DEVELOPING LOCAL WISDOM-BASED LEARNING MATERIALS TO IMPROVE STUDENTS' LEARNING MOTIVATION

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Abstract. Local wisdom is a characteristic or specialty of a region that must be preserved. However, currently, the rapid development of technology has various impacts on life, especially the neglect of various games and cultures from a region. This study will develop local wisdom-based teaching materials in Physical Education and Sports subjects in Elementary Schools Implementing local wisdom-based learning in basic learning is an effort that can be used as a basis for building awareness of local culture. The method used is research and development (R&D) with a 4D design (Define, Design, Develop and Disseminate). The results of the Expert assessment show that Local Wisdom-based Teaching Materials are categorized as very good and feasible to be applied to learning. The results of the trial of local wisdom-based teaching module products show that the achievement of high learning motivation reaches 82.69% in every aspect of student learning motivation indicators. These results indicate that local wisdom-based teaching materials in PE subjects are feasible to use and further research can develop these teaching materials at the secondary education level.

Keywords: Physical Education Module, Local Wisdom, Traditional Games, Development, Learning Motivation.

I. INTRODUCTION

Local wisdom is a characteristic of a region that must always be preserved and maintained as an effort to maintain the identity of a region. The rapid development of technology today has various negative effects, especially the fading of various local wisdoms such as regional games (Prasadi et al., 2020). This problem is an urgent problem that must be resolved, especially maintaining the existence of local wisdom as an identity or characteristic of a region (Jumriani et al., 2021). Education is the main driver that must be the foundation in solving this problem (Ockta et al., 2024; Umar et al., 2023). However, currently, learning that is directed to maintain local wisdom in schools is still limited (Theeramongkol et al., 2023). This is because teachers have

not been able to develop teaching materials that are in accordance with local wisdom. The difficulty in implementing Local Wisdom-based learning, especially in Physical Education (PE) learning, can be seen from the difficulty of teachers in determining the appropriate model, design and teaching materials to be integrated into learning.

The most common difficulty experienced by PE teachers in learning is the lack of teaching materials that can be used to develop students' knowledge and skills in PE learning (Ferdian et al., 2023; Insani et al., 2024). Teachers still have problems in choosing the type of local wisdom and integrating it into learning (Rahail et al., 2023; Satriawan et al., 2023). Teachers have not been able to design appropriate learning flows and teaching aids to integrate local wisdom-based learning in PE learning (Hasibuan et al., 2022). In addition,

teachers also experience problems with how to form a learning model that is in accordance with local wisdom in PE subjects (Pratama, 2018). This problem is still an obstacle in implementing local wisdom-based learning in PE learning in schools, especially at the elementary school level (Ganda et al., 2020; Utama et al., 2022). Many innovations have been carried out in solving this problem through several studies and have provided various clear pictures of achievements (Pitnawati et al., 2023; Safitri et al., 2024).

Recent research related to local wisdom that has been carried out in overcoming local wisdom-based learning problems in PE subjects such as utilizing the wayang sandal game to improve students' motor skills where the game can improve students' balance and coordination (Satriawan et al., 2023). Even research related to the development of sports education learning models has been carried out by paying attention to local aspects in compiling characteristics and steps in the implementation of learning models (Andica et al., 2024). Local wisdom-based learning is also effective in improving students' collaboration skills through cooperative learning (Kane et al., 2017). Even the application of local wisdom in PE learning has been applied as a training tool for teachers to be applied as a learning tool in schools (Pratiwi et al., 2020). Previous research has provided a clear picture that local wisdom-based learning can have a positive impact on student development in schools. However, previous studies have not provided a clear picture regarding the development of local wisdom-based teaching materials that are in accordance with local wisdom in Jambi province that can be integrated with PE learning (Nusri et al., 2024; Ockta & Hardiansyah, 2023; Rambe et al., 2024; Yuliana et al., 2023). So based on the problems that have been raised, it can be seen that previous studies have not accommodated the problems experienced by teachers at this time in implementing local wisdom-based learning.

Local wisdom-based learning in sports learning has been widely implemented, such as utilizing Wayang Sandals which are implemented using games to improve students' motor skills, using Traditional Malele Wood in shaping students' attitudes and characteristics (Rahail et al., 2023). Even the development of local wisdom teaching materials based on learning media has been developed. Several developments have also been confirmed to be able to improve student cooperation, such as developing a cooperative learning model by presenting issues related to local wisdom (Kane et al., 2017). Although research related to local wisdom has been widely conducted, previous research has not further accommodated the application of local wisdom, especially in the Muaro Jambi area in education and sports learning. Several studies have suggested developing various traditional games based on local wisdom to be used as learning materials that can facilitate students to get to know culture and develop knowledge (Nurhikmah et al., 2022; Pratama, 2018).

Based on the latest problems and research, it can be seen that the development of teaching materials, especially teaching materials based on local wisdom of the Muaro Jambi area in the context of PE learning in Elementary Schools is still limited. This is an urgent problem that must be followed

up immediately. Based on this research problem, the objectives of the study are as follows: 1) To produce teaching materials based on local wisdom that are appropriate based on expert assessments in terms of material and learning design; 2) To determine the effectiveness of teaching materials based on local wisdom in improving the achievement of students' PE learning outcomes.

II. METHODS

This research is a research and development (R&D) designed to be able to produce local wisdom-based teaching materials. The design used in this study is 4D which consists of 4 stages, namely Diffine, an initial analysis will be carried out regarding local wisdom-based learning needs. The Design stage aims to produce an initial product design. The Develop stage aims to test the initial product through content validation and empirical validation, this stage is designed to obtain research instruments and final products that are valid in content and empirically. The develop stage involves several experts who are involved in assessing the research instruments and the desired final product. In the empirical trial, researchers will conduct limited tests on products that have been validated in content by experts. The Disseminate stage is the final publication of the product which is planned to involve 93 Elementary School students in Muaro Jambi.

This research will involve 3 Elementary Schools in Muaro Jambi, namely Elementary School 046/IX Muaro Jambi, Elementary School 76/XI Muaro Jambi, Elementary School 11/XI Muaro Jambi. This research will be implemented in the classroom by implementing local wisdom-based learning with the help of appropriate teaching materials presented as a product of the research conducted.

The instruments used in this study were the validation sheet of the PE teaching module which would be validated by learning experts, a motivation questionnaire used to determine student motivation after using the local wisdom-based teaching module. Measurement of student learning motivation was only carried out after using the local wisdom-based teaching module. The research instruments used were in accordance with the indicators in table 1 below:

TABLE I
 MOTIVATION INSTRUMENT INDICATORS

Variabel	Sub-Variabel	Indicator	Item
Motivation to learn	Attention	- Related to learning - Persistence in doing assignments - Efforts to learn	7
	Relevance	- Need to learn - Prior knowledge of the material	5
	Trust	- Learn individually - Don't give up easily - Be confident in your abilities	7
	Satisfaction	- Satisfied with the results received - Happy with the material - Understand the material	7
Total Item			26

of local wisdom-based teaching modules. Student motivation

was measured using a five-point scale questionnaire and presented and described according to the achievement of the scores obtained, the achievement of motivation was obtained from filling out the questionnaire carried out by students.

III. RESULTS AND DISCUSSION

The developed teaching module is assessed by experts before being tested, this is done to determine the feasibility of the teaching module before being tested in schools. The assessment is carried out based on several aspects of Content Suitability, Pedagogical Suitability, Learning Instruments used and Language used in Student Worksheets. The results of the assessment carried out by experts on the developed teaching module in detail are in accordance with table 2 below.

TABLE II
 EXPERT VALIDATION RESULTS FOR LOCAL WISDOM-BASED TEACHING MODULES

Assessment Aspects	Validator			
	I		II	
	Score	%	Score	%
A. Content Suitability Aspects	25	83,33%	24	80%
B. Aspects of Pedagogical Suitability	27	90%	28	93,33%
C. Aspects of the learning instruments used	18	90%	18	90%
D. Language aspects used in LKPD	18	90%	17	85%
Score	88		87	
Percentage	88%		87%	
Validator Score Total	175			
Average Percentage	87,5%			
Criteria	Very good			

The developed teaching module has an average presentation value of 87.5% with a very good category. This shows that the teaching module has high validity in theory and can be tested. The developed product was tested in class 5. The results of the product trial were carried out to determine the achievement of student learning motivation.

The achievement of students' learning motivation after using local wisdom-based teaching modules shows that the achievement of students' learning motivation has an average of 82.69% with a Very Good category. This shows that the developed teaching module is effective in maximizing the achievement of students' learning motivation in PE subjects. The highest aspect of student learning motivation is the Satisfaction aspect with an achievement of 83.44% in the Very Good category and the lowest aspect is the relevance aspect with an achievement of 81.61% in the Very Good category.

The implementation of local wisdom-based teaching modules generally provides a clear picture of the achievement of students' learning motivation. This high achievement shows that the developed teaching modules contribute to increasing students' interest in learning, which is a positive impact on the implementation of learning, especially in PE learning.

The results of the product trial on the achievement of student learning motivation in detail are in accordance with table 3 below.

TABLE III
 STUDENT LEARNING MOTIVATION ACHIEVEMENT RESULTS

Learning Motivation Variables	Learning Motivation Indicators	Average Score	Percentage
Attention	Related to learning	4,18	83,65%
	Persistence in doing tasks	4,05	81,07%
	Efforts to learn	4,06	81,29%
	Average Attention aspect	12,3	82%
Relevance	The need to learn	4,08	81,72%
	Prior knowledge of the material	4,07	81,5%
	Average Relevance aspect	8,16	81,61%
Trust	Learn individually	4,18	83,65%
	Not easily give up	4,25	85,16%
	Be confident in abilities	4,07	81,5%
	Average Trust aspect	12,51	83,44%
Satisfaction	Satisfied with the results received	4,19	83,87%
	Feel happy with the material	4,19	83,87%
	Understanding the material	4,11	82,36%
	Average Satisfaction aspect	12,5	82,36%
Average score of students' learning motivation			82,69%

Local wisdom-based teaching modules, especially in the context of PE, have shown significant potential in increasing student activity and engagement. Research shows that local wisdom-based teaching modules can facilitate meaningful learning experiences, thereby increasing learning achievement and activity among students. Research shows that the module significantly outperforms conventional teaching materials previously used by teachers in developing various skills needed in the 21st century, as evidenced by increased scores in all aspects of student learning motivation indicators (Ade et al., 2023). In addition, the development of local wisdom-based modules in PE learning has been validated for its effectiveness in education, achieving high scores in content validity and student performance.

The integration of local wisdom in Local Wisdom-based teaching modules has been recognized as a necessary approach to improve various physical skills such as agility, especially in the application of regional games that are implemented as the basis for the application of local wisdom in learning (Satriawan et al., 2023). Overall, these findings suggest that local wisdom-based PE teaching modules can significantly enrich students' experiences by promoting critical thinking and engagement among students.

Local wisdom-based teaching modules play an important role in increasing students' learning motivation in PE subjects. By including elements of local wisdom, such as traditional games, local sports culture, or health values that have been passed down from generation to generation, this module is able to create a deeper connection between the subject matter and students' daily lives. Teaching that is relevant to their

cultural context not only makes students more interested, but also fosters a sense of pride and appreciation for cultural heritage. As a result, learning motivation increases, because students feel that the material they are learning is more meaningful and related to their own identity.

Research shows that student learning motivation is an important factor that influences learning outcomes in PE (Hambali et al., 2024; Oktadinata et al., 2024). When students have strong self-confidence (self-efficacy) and high interest in the material being taught, they are more likely to be actively involved in learning and achieve better results (Amin et al., 2023; Ismail et al., 2024). Local wisdom-based modules play an important role in improving these factors, by creating a positive correlation between local wisdom and student performance. In this context, teaching that combines local culture with a modern curriculum not only improves academic performance but also strengthens students' ties with their community and culture, thus creating more holistic and meaningful learning.

In general, these findings underline the importance of customized teaching modules in fostering a motivating learning environment in PE, which ultimately leads to improved educational outcomes. PE teaching modules based on local wisdom provide a positive contribution to PE learning, especially in improving the achievement of students' learning motivation. The development of local wisdom-based teaching modules must pay attention to the appropriate form of local wisdom integration. The local games that are raised must be selected according to the learning objectives to be achieved. The integration of the selected local wisdom must be able to contribute to the learning objectives to be achieved. Achievement can be in the form of cognitive, affective or psychomotor aspects. However, in this study, measurements were only carried out on the affective aspect, especially on the aspect of students' learning motivation.

IV. CONCLUSIONS

The development of local wisdom-based teaching modules that have been developed has a high level of content validation, this is proven by the score obtained from the results of expert research reaching 87.5% with a very good category. The results of empirical trials conducted at Elementary School 76/IX Muaro Jambi showed that the achievement of learning outcomes after learning reached 82.69% with a very good category. The results of this study indicate that local wisdom-based teaching modules in PE subjects have a great influence on the achievement of learning in the classroom and have other advantages, namely being able to preserve local culture in learning. The research conducted was limited to PE subjects for grade 5 and only measured learning motivation after using local wisdom-based teaching modules that had been developed. Further research is expected to develop local wisdom-based teaching materials by focusing on physical development and agility. In addition, the development of local wisdom-based teaching materials also has the potential to be developed at higher levels of education

such as Junior High School.

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