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UPGRADE DRIBBLING LEARNING ACHIEVEMENT THROUGH DIFFERENTIATED LEARNING FOR MIDDLE SCHOOL STUDENTS

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ABSTRACT

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The study aims to improve basketball dribbling skills through differentiated learning for grade VIII students at a public middle school. This research is classroom action research. We conducted this research in two cycles, each involving planning, action implementation, observation, and reflection. The subjects of the study were 28 grade VIII students of public Middle School 3 Bontomarannu. The study collected data through tests and observations. We conducted the data analysis using qualitative descriptive techniques, specifically percentage techniques. The study's findings revealed that in Cycle I, out of 28 students, the learning achievement for front basketball dribbling in grade VIII at public Middle School 3 Bontomarannu were as follows: 43%, or 12 students, met the completion criteria, while 57%, or 16 students, fell short. In Cycle II, the number of students who met the completion criteria increased to 82%, or 22 students, while only 18%, or 6 students, met the incomplete criteria. The data analysis results above suggest that differentiated learning can enhance the basketball dribbling learning achievement for grade VIII students at public Middle School 3 Bontomarannu.

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1. INTRODUCTION

Physical education is an integral part of the education system that plays a strategic role in developing students' skills, knowledge, and attitudes through physical activity (Irfan et al., 2024). Basketball, as one of the materials in physical education, requires an innovative and comprehensive learning approach to optimize students' competency achievements (Metzler, 2017; Wang et al., 2024).

Basic basketball skills, especially dribbling, occupy a fundamental position in the success of mastering game techniques (Rose, 2012; Koh & Wang, 2020). The ability to control the ball while moving is the main prerequisite for each player to be able to contribute effectively to the match. The complexity of dribbling techniques requires a learning approach that can accommodate the diversity of student abilities (Mitchell et al., 2020; Newell & Rovegno, 2021).

The reality in the field shows that the basketball learning process, especially at the junior high school level, still faces significant challenges in developing dribbling skills (Dania & Harvey, 2020; Hari et al., 2023; Perdima et al., 2024). Most teachers tend to use conventional methods that pay less attention to individual differences in students, resulting in a very striking gap in competency achievement (Marzano & Toth, 2013; Sáinz et al., 2020; Cabral-Gouveia et al., 2023).

Initial analysis at public middle school 3 Bontomarannu revealed that out of 120 students, only 35% were able to master dribbling techniques well. Several factors, such as a uniform learning approach, a lack of variation in training methods, and minimal attention to individual student characteristics, contribute to the low achievement of these skills.

Differentiated learning serves as an innovative solution to bridge the gap in students' abilities to master dribbling skills. Teachers can tailor learning strategies to each individual's ability, interests, and learning style using this approach (Gheyssens et al., 2022; Tomlinson & Jarvis, 2023; Susanti et al., 2024). The concept of differentiation is not just differentiating tasks but also presenting a meaningful and inclusive learning experience (Eikeland & Ohna, 2022; Thapliyal et al., 2022; Alhamuddin et al., 2023).

The ideal hope in basketball learning is the creation of a learning environment that encourages each student to develop their maximum potential (Shao et al., 2023). However, the reality shows that the education system still tends to use a classical approach that pays less attention to the uniqueness of each individual. This gap between expectations and reality is what drives the need for innovation in learning strategies (Saito et al., 2008).

Related research shows that a differentiation approach can significantly improve learning achievement. Several empirical studies have shown that by implementing learning strategies tailored to student characteristics, competency achievement can increase by up to 40%–50% (Day et al., 2016; Brühwiler & Vogt, 2020; González-Salamanca et al., 2020). This provides a strong argument for the importance of research when implementing a differentiated learning model.

The setting is a public middle-school 3 Bontomarannu is a strategic locus to explore the effectiveness of a differentiated learning approach in improving dribbling skills. The diversity of student characteristics in the school offers a unique opportunity to test an innovative pedagogical intervention model. This study does not merely seek methodological solutions but also provides theoretical contributions to the development of physical education.

The significance of the study lies in the systematic effort to transform the learning paradigm from a conventional approach to a model that is more responsive to individual needs. We hope to create an inclusive learning space through a differentiated approach, enabling each student to develop their dribbling skills to the best of their abilities (Jefferson-Buchanan, 2022; Liebermen et al., 2024).

Based on the complexity of the problem and the potential for scientific contribution, this study aims to improve dribbling learning achievement through differentiated learning for junior high school students. We anticipate that this study will not only offer

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practical solutions to basketball learning challenges but also shed light on the development of more humanistic and effective physical education strategies.

2. METHOD

This research is a type of classroom action research. We conducted this research at public middle school 3, Bontomarannu, Gowa Regency. The subjects in this study were 120 students of class VIII, consisting of eight classes. The sample determination used a purposive sampling technique. We use the purposive sampling technique to select samples based on several considerations that align with the desired criteria. The study's sample consisted of 28 students from class VIII at public middle school 3 Bontomarannu.

Each cycle, which spans two weeks and involves two meetings or three lesson hours, includes the design stages of planning, implementation, observation, and reflection. In each research cycle, a final test gathers data. The process of collecting data aligns with the guidelines outlined in the class action. The psychomotor test evaluates basketball dribbling skills in the context of learning basketball games. Data analysis in this study includes qualitative analysis and descriptive statistics. Tables present descriptive statistics, while qualitative analysis provides a description of the data collected and its subsequent use.

The data analysis indicates an increase; if the first cycle's results meet the learning expectations based on the set indicators, the research will proceed to the next cycle. The Action Success Indicators allow us to stop the cycle once the students' learning achievement, both individually and classically, has reached completion. The indicators of the success of student learning achievement include an increase in the percentage of student activity in each cycle. (2) The average value increases with each cycle. (3) The level of student success classically reaches 75% of the total number of students who have passed the KKM with a score of at least 75.

3. RESULTS AND DISCUSSION

Results

Researchers conducted an assessment to improve basketball dribbling skills. We carried out the learning in two cycles, each involving four meetings. We evaluated the learning process with a dribbling skills test at the last meeting to determine whether student learning achievement had improved. Figure 1 displays the results of completing the classical pre-cycle.



Figure 1. Histogram of Pre-Cycle Learning Completion Values

Figure 1 demonstrates that, out of 28 students, 9 students, or 32%, have completed the pre-cycle learning, while 19 students, or 68%, have not.

Description In Cycle I

This section will discuss the results of observations of student learning achievement in cycle I. We present the results in a table based on the observations. We then analyze the results to determine if we should continue the action in cycle II or only in cycle I. The results of students' Cycle I learning completion scores, using differentiated learning, are presented in Figure 2.



Figure 2. Histogram of Learning Completion Values for Cycle I

Figure 2 demonstrates that out of 28 students in Cycle I of the differentiated learning application, 12 students, or 43%, have finished it, while 16 students, or 57%, have not, indicating the need for follow-up.

This is because in cycle I it has not yet reached the level of classical completion with a minimum completion of 75%. The learning activities have progressed effectively. The researcher provides basketball dribbling material using the differentiated learning method. The researcher explains the stages of dribbling movements while delivering the given material. During the learning process, students actively participate in the movement with tremendous enthusiasm. Using the differentiation learning method can

stimulate students' interest and reasoning toward the material presented by the teacher, leading to optimal learning achievement. Finally, aligning expectations and beliefs can enhance the quality of learning achievement.

Description of Cycle II

This section will discuss the results of observations on student learning achievement in cycle II. We present the results in a table based on the observations. Similar to Cycle I, the actions taken in Cycle II are more active, involving both teachers and students. Figure 3 displays the results of the students' learning completion scores in cycle II, utilizing differentiated learning methods.



Figure 3. Histogram of Learning Completion Values in Cycle II

The data from cycle II, as shown in Figure 3, indicates an increase in the students' ability to perform the classical test. While some students' results may remain unchanged, overall, there has been an increase. Of the 28 students, there are 22 students (82%) who have achieved the learning completion value, while 6 students (18%) have not.

We can conclude from the conducted test results that the students' abilities have increased. Learning was the catalyst for this increase. The results of this second cycle of learning have been considered quite successful, as students have achieved a learning completion rate of 82%. If adequate facilities and infrastructure are available, learning will run smoothly and optimally. Additionally, well-packaged and delivered teaching materials will enable students to encounter difficulties and solve them with guidance from teachers, thereby fostering a positive interaction pattern between students, teachers, and schools. Interesting learning facilities and devices can positively impact students. Figure 4 presents a comparison between the cycles.



Figure 4. Comparison of Cycle I and Cycle II Data

Figure 4 above shows that in cycle II, 22 students, or 82%, have completed learning. Compared to Cycle I data, there are 12 students, or 43%. In cycle II, 6 students, or 18%, have not completed learning. Compared to Cycle I data, there are 16 students, or 57%. In the pre-cycle, 9 students, or 32%, have completed their learning, while 19 students, or 68%, have not. The average results indicate an increase from cycle I to cycle II, culminating in learning completion. Based on these results, we can conclude that this study met the research success indicator, with 75% of students achieving learning completion in the learning completion category, indicating no need for further action in the next cycle.

Additionally, during the physical education learning process for class VIII at public middle school 3 Bontomarannu, we collected student observation data over two learning cycles. Overall, learning basketball dribbling using the differentiation learning method has gone very well. The assessment of the learning activities was positive from start to finish. Students demonstrated a strong ability to collaborate effectively, preparing the team to execute the learning process. Students also appear active, enthusiastic, and able to collaborate with friends throughout the learning process. The teacher also provides an advantage by allowing students to ask questions about the challenges they face, which facilitates their understanding of the presented material.

Discussion

Classroom action research includes two cycles, namely cycle I and cycle II. The stages carried out in cycle II represent improvements over the previous cycle. We derived the study's results from tests conducted using basketball dribbling material during physical education lessons, utilizing the differentiated learning approach. We use the results of the two cycles to measure the increase in student learning completeness. The results of the basketball dribbling skills test, collected before and after the action, demonstrated an increase in student learning completeness. And in the pre-cycle, there are 9 students, or 32%, who have completed it, and 19 students, or 68%. The average

results show an increase from cycle I to cycle II, indicating a level of learning completeness. Based on these results, we can conclude that this study met the research success indicator, with 75% of students achieving minimal learning completion in this category.

This study demonstrates that adjusting differentiated learning to the abilities and basic difficulty levels taught can significantly improve basketball dribbling skills. This is because there are teachers who continue to apply learning methods that students do not like. where only by teaching basic techniques in a way that makes students not serious. Learning that is packaged in a way that allows students to know how far they have mastered the technique (Almusawi et al., 2021; Fernandez-Rio & Casey, 2021; Felder & Brent, 2024) and could improve it will provide opportunities for students to have good techniques. Different learning methods that provide opportunities for students to develop according to their abilities will make a positive contribution (Sokhanvar et al., 2021; Rahmatullah et al., 2022).

4. CONCLUSION

The study and discussion results indicate an increase in basketball dribbling skills at public middle school 3 Bontomarannu through differentiated learning. Cycle II data shows that 22 students, or 82%, have completed their learning, compared to Cycle I data for 12 students, or 43%. However, cycle II data shows that 6 students, or 18%, have not completed their learning, compared to cycle I data for 16 students, or 57%. In the pre-cycle, 9 students, or 32%, have completed their learning, while 19 students, or 68%, have not.

As a suggestion, combining all learning methods or strategies into differentiated learning will improve learning achievement by tailoring the learning process to the needs of students. Further research suggests that we could utilize a wider range of subjects.

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