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The Application of the Peer Teaching Model on the Improvement of Futsal Playing Skills Among Extracurricular Futsal Students at SMP PGRI Pasirjambu

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ABSTRACT

This study aims to investigate the effectiveness of the peer teaching model in enhancing futsal playing skills among students participating in extracurricular futsal activities at SMP PGRI Pasirjambu. The research employed a Classroom Action Research (CAR) design, which allows for iterative cycles of planning, action, observation, and reflection to assess instructional interventions in authentic learning settings. The participants in this study were selected using a purposive sampling technique, focusing specifically on students actively involved in the school's futsal extracurricular program. To evaluate changes in performance, the study utilized the Game Performance Assessment Instrument (GPAI), a standardized observational tool for measuring skill execution and tactical decision-making in gameplay. The results revealed a marked improvement in students' futsal skills, as evidenced by an increase in the average performance scores from Cycle 1 Action 1 (15.33 or 57%) to Cycle 2 Action 2 (20.33 or 75%). This substantial gain indicates that the implementation of the peer teaching model significantly contributes to the development of game-related competencies in futsal. The findings support the use of peer-led instructional strategies as an effective pedagogical approach in physical education and extracurricular sports settings, promoting both skill acquisition and collaborative learning among students.

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1. INTRODUCTION

Physical education is an educational process focused on and through physical activities, games, and selected sports to achieve educational goals (Royana, 2017). At schools, physical education, often referred to as PJOK (Physical Education, Sports, and Health), is a mandatory subject for all students. In this context, physical education teachers must possess the ability to deliver effective teaching. PJOK is part of overall education that emphasizes physical activity and the promotion of healthy living for physical, mental, social, and emotional growth and development. As stated by Rusli Lutan (2000, p. 15), through physical activities, children are directed to learn, resulting in behavioral changes that involve physical, intellectual, emotional, social, and moral aspects. According to (Muslim, 2021), there are three types of learning activities in schools: intramural, extracurricular, and co-curricular. Extracurricular activities are those conducted outside of regular class hours, either at school or elsewhere, aimed at enriching and broadening students' knowledge and skills beyond their academic studies. Extracurricular activities also serve as a platform for student development within an educational institution, aiming to create a generation that values sports and understands the importance of physical and mental health. These activities are intended to help students develop their personality, talents, and skills in various non-academic areas through educational activities outside the core subjects and counseling services to support students' development according to their needs, potential, talents, and interests through specially organized activities by qualified teachers and trainers.

In achieving these goals, physical education teachers must plan their instruction effectively by preparing syllabi, lesson plans (RPP), and teaching strategies. When designing teaching strategies, a teacher must be knowledgeable about teaching styles, methods, learning models, and approaches. Thus, Physical Education, Sports, and Health (PJOK) teachers can achieve their objectives effectively and efficiently. A key aspect of the learning process is the teaching and learning process itself. (Adawiyah, 2021) explain that "learning is an activity or process to acquire knowledge, improve skills, correct behavior, attitudes, and strengthen personality." To achieve successful learning, an effective and efficient teacher is required. This is reinforced by (Arifudin, 2015), who state that the role of the teacher in the learning process is to design instruction, conduct teaching and learning activities (KBM), and act accordingly.

Physical Education, Sports, and Health (PJOK) is a subject conducted outside the classroom. Students frequently inquire about various basic techniques and sports developments. They still rely heavily on teachers for information and in the learning process of PJOK (Zakiah, 2020). Additionally, there are various issues that arise in teaching and learning activities (KBM) at school, stemming from both internal and external factors. Internal factors include students' physical condition, intelligence, and psychological state, while external factors encompass the teacher's teaching ability, lesson planning, educational media, teaching models, teaching materials, and the curriculum used (Sierra-Díaz et al., 2019). A lack of student engagement in KBM at school can create a boring and uninteresting atmosphere, leading to student apathy and lack of motivation. The teaching model that monotonous or conventional teaching models can have a negative impact on students in school (Wong, 2000).

This issue can be addressed by replacing the traditional teaching model with a different approach that makes students more interested and engaged, helping them focus and concentrate on what they are learning. The success of teaching depends on several factors, including the selection of teaching materials, lesson planning (RPP), choice of educational media, teaching models, teaching resources, and the curriculum used. The implementation of teaching should be meaningful for students to ensure that they achieve optimal results. Therefore, teachers must be adept at applying appropriate teaching models to make learning meaningful for students. Another consideration in choosing a teaching model is its alignment with the learning objectives, as well as the availability of facilities and time. One teaching model that can offer better results compared to conventional models is the peer teaching model. This model is not a new teaching method but rather an old approach that has often been used but was less effective in the past due to a teacher-centered learning focus. However, with the current curriculum shift towards student-centered learning as per the [2013 curriculum](#), peer teaching aligns well with this approach. According to [Febianti \(2014\)](#), the peer teaching model is student-centered, where, as [Raudhah \(2018\)](#) notes, students learn from peers with similar age and maturity levels. This helps students feel more comfortable receiving ideas and attitudes from their peers rather than a teacher. Based on some of the opinions above, it can be concluded that the peer learning model is a learning procedure or learning method where some students who are good and have more abilities in the academic field or knowledge are appointed by the teacher to help or facilitate other students with the same grade level who are experiencing difficulties in learning which aims to make the student better understand the learning material in terms of knowledge, good understanding and skills from their peers. Indirectly, students who are smarter become resource persons or teachers for their other friends.

The advantages of the peer teaching learning model include encouraging students to think higher, learning becomes easier to convey and understand with the material being discussed, for students who are better at this method can train confidence, responsibility in carrying out tasks and practice patience and increase self-esteem. The peer teaching learning model can also bring students' social interaction closer, and increase students' motivation to learn. Increased student learning motivation will have an impact on improving learning outcomes. In the implementation of the peer teaching learning model, teachers do not intervene directly but only direct so that the learning process can run well. Skill ability is very influential in a game because playing well determines a good game in a sport that is played. According to [\(Vargas del Valle et al., 2016\)](#) Playing is closely related to skills, in a game the form of playing skills is very important to master, because if there is no playing skill, a game played will not run well. Students who do a lot of play activities in PJOK learning at school will get more innovation compared to students who rarely play. Thus, play skills are an activity or tool to attract students' interest in PJOK learning at school. It is the same as the opinion presented by [\(Jauhari, 2018\)](#), namely that the importance of play also lies in the nature or element of stimulation of the desire to learn or education.

2. METHODS

This study employed the Classroom Action Research (CAR) method, which is widely recognized as a practical, reflective, and cyclical approach to improving instructional practices and learning outcomes. Research methods, in essence, refer to systematic procedures and strategies used by researchers to obtain, analyze, and interpret data for the purpose of achieving specific research objectives. In the context of this study, CAR was selected as the most appropriate methodology due to its capacity to address real-time problems in educational settings through continuous cycles of planning, action, observation, and reflection.

CAR is defined as a form of applied research conducted by educators within their own classrooms or teaching environments, with the goal of enhancing pedagogical effectiveness and student achievement. The central focus of CAR lies in solving instructional problems through deliberate interventions, accompanied by reflective analysis to assess their impact. The research was conducted over two cycles, each consisting of two actions. This approach enabled the researcher—who also played the role of the instructor—to systematically implement a peer teaching model aimed at improving futsal playing skills among students, while observing and evaluating the progress achieved in each cycle.

The research subjects consisted of 20 students from grades VII to IX who were actively involved in the extracurricular futsal program at SMP PGRI Pasirjambu. Participants were selected using purposive sampling, as they represented students who regularly participated in futsal training and were thus relevant to the objectives of the study. The setting allowed the researcher to engage in an authentic teaching-learning context, aligning with the core principles of CAR that emphasize contextual relevance and collaborative inquiry.

Data collection in this study relied on performance assessments using the Game Performance Assessment Instrument (GPAI), which is specifically designed to evaluate players' in-game decision-making, skill execution, and tactical involvement. Observations were conducted systematically during each intervention phase, with scoring criteria focused on indicators of playing competence. The reflection process involved analyzing the effectiveness of each action, identifying areas for improvement, and planning subsequent interventions. Through this iterative process, the study sought to produce both practical improvements in student performance and scientific insights into the effectiveness of the peer teaching model as a pedagogical strategy in sports education.

Tabel 1. Data on students who take part in extracurricular futsal SMP PGRI Pasirjambu

No	Name	Class
1	Agung GK	7
2	Kustian	8
3	Ramdan	9
4	Cecep GK	7
5	Rendi	8
6	Encep Dias	7
7	Sopian GK	8
8	Sandria	9
9	Regi	8
10	Wawan	9
11	Wisnu	7
12	Kaka	8
13	Aldi	8
14	Heri	9
15	Bayu	8
16	Gian	7
17	Andri	9
18	Riki Sidik	7
19	Ridwan	7
20	Faldi	8

To observe the students' performance in playing, Griffin, Mitchell, and Oslin created an assessment instrument called the Game Performance Assessment Instrument (GPAI), which consists of seven components (Oslin et al., 1998), namely:

1. *home base*
2. *adjust*
3. *decision making*
4. *skill execution*
5. *support*
6. *cover*
7. *guard or mark*

However, the GPAI instrument is flexible, allowing physical education teachers to determine which components need to be observed. Ideally, physical education teachers should use all seven components to comprehensively assess students' performance in playing. Nonetheless, components such as decision-making, skill execution, and support are sufficient to represent the other components in evaluating students' game performance (Oslin et al., 1998).

In this study, the author used three components that were adjusted to the research needs. The author selected these three components to assess students' playing skills because they sufficiently represent the variables being studied, namely:

1. *decision making*
2. *skill execution*

3. *support*

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1. *decision making*
2. *skill execution*
3. *support*

In this stage, the researcher and observer develop an action plan with the following steps:

1. Develop a Lesson Plan (RPP) by applying the peer teaching model and designing systematic movement tasks for futsal skills.
2. Create an observation sheet, which includes:
 - Notes: Used as a medium to record all occurrences during the learning process. These notes should be orderly and systematic as they will serve as the source of information for data processing and analysis.
 - Electronic Devices: Use electronic tools (such as phones or cameras) to record or document important facts and data gathered during the learning process. These recordings can be used for corrections and evaluations to improve the teaching process in subsequent stages.
3. Create a daily journal used as a data collection tool related to the aspects of activities during the learning process.
4. Prepare the facilities and equipment for teaching futsal skills, such as cones, balls, and other relevant items.

In the implementation process, the researcher acts as the teacher to conduct futsal skills instruction through the application of the peer teaching model used in the learning process. The steps taken in this implementation are:

1. The researcher implements the Lesson Plan (RPP) by applying the systematic peer teaching model and futsal skills tasks.
2. The researcher teaches directly on the field while simultaneously observing all the students who are learning. The observation process must be conducted consciously, critically, systematically, and objectively.

3. After the lesson ends, the researcher records all activities, incidents, and any challenges encountered during the lesson into the prepared observation sheet.

In this Classroom Action Research (CAR), observation activities are conducted concurrently with the learning activities. To facilitate the observation, the researcher is assisted by an observer (such as a coaching staff member or a peer). The focus of the observation is on the activity and effectiveness of the players during the lesson.

Analysis, reflection, and interpretation (meaning-making) of the data obtained from the observations are conducted to determine whether the actions taken have achieved the desired goals. The results from the observation stage are collected and analyzed during this phase. Based on the observation results, the teacher can reflect on their practice by reviewing the data. Observation focuses on whether the activities conducted have improved futsal playing skills? The interpretation of these observation results serves as the basis for evaluation, allowing the formulation of steps for the next actions. This Classroom Action Research will be conducted in two cycles, with each cycle comprising two actions. The following are the steps for implementing the peer teaching model:

1. Selection of material

The teacher presents the material and learning objectives to be achieved to a few more capable students (tutors) for them to study.

2. Group formation

The teacher organizes study groups and assigns the more capable students (tutors) to each group to act as tutors.

3. Assignment of Group Tasks

The teacher provides movement tasks related to the material to each group.

4. Completion of Group Tasks

The teacher allocates sufficient time for each group to complete the movement tasks related to the material.

5. Group Presentation

The teacher invites each group to present their work, while acting as an observer.

6. Learning Evaluation

The teacher conducts an evaluation and provides clarification if there are any misunderstandings, and also gives recognition for achievements.

The research was conducted in mid-December 2020, aligned with the schedule of futsal extracurricular activities at SMP PGRI Pasirjambu, held at the DAF Futsal Sports Hall in Ciwidey, Bandung Regency. During the observation period, the researcher observed and identified several issues that occurred during the learning or training process.

3. RESULT

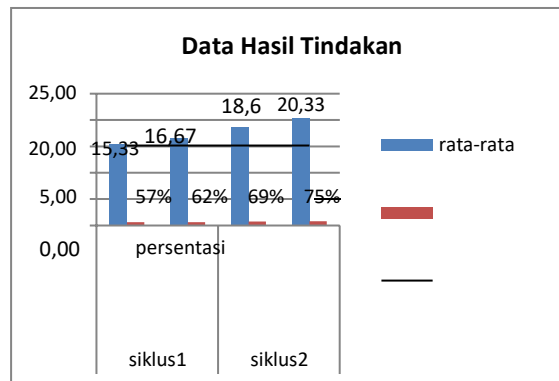
In the data collection process, the researcher used the Game Performance Assessment Instrument (GPAI) with three observers for comparison. The three observers were Bayu as the researcher, Sandy as the PJOK teacher at the school, and Sena as the futsal extracurricular coach at SMP PGRI Pasirjambu. The data obtained is as follows:

Tabel 2. Data on the Implementation of the Peer Teaching Model

Cycle	Intervention	Number of Subjects	Result	Mean	Percentage
1	1	18	276	15,33	57%
	2		300	16,67	62%
2	1		335	18,6	69%
	2		366	20,33	75%

Based on Table 2 the data indicates that there was an increase in each cycle and action. Specifically, from Cycle 1 Action 1 to Action 2, there was an increase of 1.33 or 5%. From Cycle 1 Action 2 to Cycle 2 Action 1, there was an increase of 1.94 or 7%. Meanwhile, from Cycle 2 Action 1 to Action 2, there was an increase of from cycle 2 action 1 to action 2, there was an increase of 1.72 or 6%. Based on the data, Cycle 1 Action 1 had a score of 15.33 or 57%, which increased to 20.33 or 75% by Cycle 2 Action 2. For further clarity, the following graph illustrates this improvement.

Figure 1. Data on the Implementation of the Peer Teaching Model



Based on the graph above, it can be concluded that there was an increase in the average scores resulting from the implementation of the peer teaching model on futsal skills among students in the extracurricular program at SMP PGRI Pasirjambu.

Based on the data analysis conducted using descriptive statistical testing of average scores in Cycle 1 and Cycle 2, the following observations were made: in Cycle 1, the average score was 15.33 or 57%. In Cycle 1, Action 2, the average score increased to 16.67 or 67%. In Cycle 2, Action 1, the average score further improved to 18.6 or 69%. Finally, in Cycle 2, Action 2, the average score reached 20.33 or 75%. Hese results indicate that the implementation of the peer teaching model for futsal skills was quite effective. As shown in the table below.

Tabel 3. Categories of learning success

Category	Value (%)
Very Good	90 % - 100 %
Good	80 % - 89 %
Enough	70 % - 79 %
Less	< 70 %

If the mastery level reaches 80% or more, you can proceed to the next stage. However, if the mastery level is less than 80%, you must review the training process, especially the parts that have not been mastered.

In the peer teaching learning model, there are advantages according to (Haris, 2018) as follows:

1. Increases student motivation
2. Improves the quality and process of learning
3. Enhances students' social interaction in learning
4. Increases the sense of responsibility for self-directed learning
5. Develops communication skills
6. Enhances learning outcomes

The weaknesses of the peer teaching learning model are as follows:

1. Requires a relatively long time
2. If students lack relevant foundational knowledge, this learning model becomes ineffective.
3. There is a possibility that it may be dominated by students who enjoy talking, are assertive, or want to stand out.

From the above opinions, it can be concluded that the advantages of the peer teaching learning model include providing better learning outcomes for students, increasing tutors' understanding of the material being discussed, and helping tutors develop and enhance their sense of responsibility, patience, and self-esteem as they feel capable of helping their peers understand the material. The peer teaching model also fosters closer relationships among students and boosts student motivation. Increased student motivation will, in turn, positively impact learning outcomes.

4. DISCUSSION

The results from the implementation of the peer teaching model in the futsal extracurricular program at SMP PGRI Pasirjambu show a clear and positive trend in student performance. The data reveal a consistent improvement in average scores from Cycle 1 to Cycle 2, indicating the effectiveness of this model in enhancing students' futsal skills. Specifically, the average score rose from 15.33 (57%) in Cycle 1 Action 1 to 20.33 (75%) in Cycle 2 Action 2. This upward trend underscores the model's capacity to facilitate skill development over time.

The observed increase in scores aligns with the categories of learning success described by (Lesmana et al., 2016). Although the final score in Cycle 2 Action 2 falls into the "Adequate" category (70% - 79%), it demonstrates significant progress from earlier cycles. This suggests that while the peer teaching model is effective, there is still potential for further improvement

to achieve higher mastery levels. Continued application and refinement of the model could help in reaching the "Good" category (80% - 89%) and beyond.

The advantages of the peer teaching model are evident from the data and align with the findings of (Haris, 2018). The model not only boosts student motivation but also enhances the quality and process of learning. It encourages greater social interaction among students, fosters self-directed learning, and develops communication skills. These benefits contribute to improved learning outcomes and a more engaging educational experience.

However, the peer teaching model is not without its challenges. The need for a considerable amount of time and the potential ineffectiveness if students lack foundational knowledge are notable concerns. Additionally, there is a risk that the model may be dominated by more vocal or assertive students, which could affect the overall effectiveness of the peer teaching process.

In conclusion, the peer teaching model has demonstrated its potential to significantly improve futsal skills among students, as evidenced by the increased average scores. Despite its challenges, the model's benefits—such as enhanced student motivation, improved learning quality, and better social interactions—highlight its value in educational settings. Addressing the identified challenges and refining the model will be crucial for maximizing its effectiveness and supporting continuous student growth. Future research should focus on these areas to further enhance the peer teaching approach and achieve even greater learning outcomes.

The results from the implementation of the peer teaching model in the futsal extracurricular program at SMP PGRI Pasirjambu provide compelling evidence of its effectiveness in enhancing student performance. The data show a consistent improvement in average scores across the cycles, with scores rising from 15.33 (57%) in Cycle 1 Action 1 to 20.33 (75%) in Cycle 2 Action 2. This positive trend underscores the potential of the peer teaching model to facilitate skill development and improve learning outcomes over time.

The incremental increase in scores is aligned with the categories of learning success as described by (Yusup & Sari, 2020). Although the final score of 75% in Cycle 2 Action 2 falls within the "Adequate" range, it signifies a substantial improvement from the initial cycle. This suggests that while the peer teaching model is making a significant impact, there is room for further enhancement to achieve higher mastery levels. Continued application and refinement of the model could help students reach the "Good" category (80% - 89%) and beyond, indicating even greater levels of understanding and skill.

The peer teaching model offers several advantages that are evident from the data and supported by the findings of (Hermawan & Permadi, 2022). The model effectively increases student motivation, enhances the quality and process of learning, and promotes better social interaction among students. By encouraging self-directed learning and developing communication skills, the model contributes to improved learning outcomes and a more engaging educational experience. These benefits highlight the model's potential to create a more interactive and supportive learning environment.

However, the peer teaching model also presents certain challenges. The requirement for a significant amount of time can be a constraint, and the model's effectiveness may be compromised if students lack relevant foundational knowledge. Additionally, there is a risk that more dominant or assertive students might overshadow their peers, potentially impacting the overall effectiveness of the peer teaching process. Addressing these challenges is crucial for maximizing the benefits of the model.

In summary, the peer teaching model has shown considerable promise in improving futsal skills among students, as evidenced by the increased average scores. The model's

advantages—such as enhanced student motivation, improved learning quality, and better social interactions—demonstrate its value in educational settings. However, to fully realize its potential, it is important to address the challenges identified, such as the need for foundational knowledge and managing student dynamics. Future research and practice should focus on refining the model to address these issues, ensuring its continued effectiveness and supporting ongoing student growth and achievement. By doing so, the peer teaching model can become an even more powerful tool for enhancing learning outcomes in various educational contexts.

5. CONCLUSION

Based on the results of the Classroom Action Research and the discussion, it can be concluded that there is a significant effect of implementing the peer teaching model on the improvement of futsal skills. This is evidenced by the consistent increase observed in each cycle and action. Therefore, there is a significant improvement in the application of the peer teaching model on the futsal skills of students in the futsal extracurricular program at SMP PGRI Pasirjambu.

6. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. Authors confirmed that the paper was free of plagiarism.

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