

## An Analysis of the Role of Game-Based Learning in Enhancing Student Participation in Physical Education Classes

Elisa Pitria Ningsih

Yogyakarta State University, Indonesia

e-mail: [elisapitria@student.uny.ac.id](mailto:elisapitria@student.uny.ac.id)

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### ABSTRACT

Physical Education, Sport and Health (PJOK) is an important part of the school curriculum that aims to improve students' physical fitness, motor skills and mental health. Monotonous learning can affect student participation and academic achievement. One approach that has gained attention is game-based learning. This study aims to analyze the role of game-based learning in increasing students' participation in physical education. The research method used is qualitative research. Data were collected through observations, interviews with PJOK teachers, and group discussions with students. Data analysis was conducted by identifying patterns in students' participation, students' responses to game-based learning, and its impact on students' interest in PJOK learning. Preliminary findings show that game-based learning has a positive impact on students' interest and participation. Students are more enthusiastic and actively involved in learning when using this approach. Students explained that the games made the lessons more fun. In addition, teachers also noted an increase in student participation and peer interaction during learning. Game-based learning can play a significant role in increasing students' interest and participation in PJOK subjects. The implication is that it is important to integrate this approach into school teaching practices to enhance students' learning experiences and achieve broader physical education goals.

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### INTRODUCTION

One of the academic disciplines taught at the educational level is Physical Education, Sports, and Health (PJOK) (Sau et al., 2022; Fauzan et al., 2023). PJOK is an integral part of the school curriculum designed to improve students' physical fitness, motor skills, and mental and social health. PJOK is an integral part of education as a whole, aimed at improving physical fitness, motor skills, thinking abilities, social skills, reasoning, emotional stability, moral conduct, and aspects of a healthy lifestyle. All of this is achieved through physical activities, sports, and health-related activities that are systematically selected to meet national learning objectives (Prayoga et al., 2022). The primary objective of PE instruction in schools is to foster awareness of the importance of physical activity in supporting physical growth and development and maintaining an active lifestyle throughout life. This course also aims to develop self-management skills in maintaining physical fitness, preserving health and well-being through a proper healthy lifestyle, and improving basic movement skills, motor skills,

concepts/knowledge, principles, strategies, and tactics in games and sports. Additionally, Physical Education (PJOK) aims to instill a strong moral character foundation through the internalization of values such as self-confidence, sportsmanship, honesty, discipline, responsibility, cooperation, self-control, leadership, and a democratic attitude in physical activities. This program also seeks to create a more positive school environment, develop local wisdom within Indonesian society, and provide a recreational atmosphere that is both challenging and conducive to self-expression (Suherman, 2018). It is hoped that through Physical Education, students will gain an understanding of physical health and its importance. It is hoped that students with good physical health will be able to participate effectively in all learning processes, both in academic and non-academic areas (Yusfi & Sriwijaya, 2023).

However, the reality on the ground shows that student interest and participation in Physical Education (PJOK) classes are often less than optimal. There are several reasons for this, such as a lack of variety in teaching methods, monotonous material, and a lack of active student engagement, which often contribute to this low level of interest and participation. Given that Physical Education is taught from elementary school (SD) through high school (SMA), the material taught is largely the same, making it essential for teachers to demonstrate creativity in applying teaching methods. Teachers play a crucial role in creating a conducive learning environment (Ningsih & Rizki, 2024). Varied teaching methods can capture students' interest and alleviate boredom. Many students enjoy Physical Education (PJOK) classes because they get to learn outdoors, rather than because of the subject matter itself; consequently, students do not always focus on the material being taught. To improve student focus and engagement, a more structured approach is needed to spark students' interest in Physical Education (PJOK). Physical Education (PJOK) is essential for improving students' physical fitness. Therefore, teachers need to find the right methods for teaching PE. One way to do this is by presenting varied, non-monotonous lesson content, such as using game-based learning methods to add diversity to PE instruction (Hidayat, 2023).

The instructional model used serves as a key tool for enhancing student participation in Physical Education (PE) lessons from start to finish (Alifia et al., 2023). One approach that has proven effective in boosting student interest and participation is game-based learning. This approach integrates game elements into the learning process, creating a fun and interactive learning environment. Games not only make physical activities more engaging but also facilitate the learning of motor skills and fundamental Physical Education concepts in a more natural and enjoyable way. Game-based learning is a method for providing enjoyable learning experiences that can enhance student participation in the learning process (Sindi et al., 2023). The use of games is an innovative alternative learning model that can be applied in every Physical Education (PJOK) learning process (Panjaitan & Fardana, 2023). Game-based learning is recognized as an effective tool for stimulating gross motor development not only in terms of physical strength but also in learning about cooperation, rules, and problem-solving (Nurdiana, 2023). The application of games in the learning process can capture students' attention, encouraging them to participate more actively in Physical Education lessons. Game-based learning methods will pique students' interest because these activities evoke feelings of joy and excitement. This new approach will undoubtedly eliminate boredom among students (Pambudi & Wijaya, 2024). It is hoped that students will be more motivated and enthusiastic about participating in physical education activities. One

concrete example is the development of running skills through the game of tag, which can add variety and enjoyment to the teaching and learning process.

Game-based learning can create a learning environment that fosters active engagement and collaboration among students, while providing a positive learning experience. In Indonesia, research on the implementation and effectiveness of game-based learning in the context of Physical Education, Health, and Sports (PJOK) remains limited; therefore, further research is needed to explore its potential in enhancing student participation. This study aims to examine the effectiveness of game-based learning in increasing student participation, as well as to identify the factors that support and hinder the implementation of this method. The results of this study are expected to contribute to the development of more effective and enjoyable physical education learning strategies, thereby improving the quality of physical education in elementary schools.

## **METHODOLOGY**

This study employs a qualitative approach to gain an in-depth understanding of the experiences of students and teachers in implementing game-based learning. The research design used is a case study, which allows the researcher to explore the specific context of game-based learning in physical education. The population in this study consists of students and teachers involved in physical education at a secondary school. The sampling technique employed purposive sampling, specifically selecting students and teachers who had experience using game-based learning. Data collection techniques included observation and interviews. Observations were conducted to directly observe how game-based learning was implemented in a real-world context; interviews were conducted with teachers to understand their preparation, implementation, and reflections on the use of game-based learning. Additionally, interviews were also conducted with students to gather their perspectives on their learning experiences. The data collected will then be analyzed and presented in the results and discussion section. Students reported that they felt happier and more enthusiastic during physical education lessons implemented through games. Students stated that the game-based method made the lessons

## **RESULTS AND DISCUSSION**

The results indicate a significant increase in the number of students actively participating when game-based learning methods are implemented; students move around, interact, and engage in activities more frequently. Students demonstrated interest in physical education lessons. They reported feeling happier and more enthusiastic during physical education lessons that incorporated games, as this approach makes learning more enjoyable and reduces boredom. Game-based learning prevents students from getting too bored, making the learning process more enjoyable for them (Muslimah & Rizal, 2024). The games also facilitate the development of teamwork, communication, and sportsmanship skills. Games like "Fort" require students to collaborate and communicate effectively to win the game. Research findings (Prabowo et al., 2022) indicate that the five game models applied in the study significantly influenced the improvement of student participation; through games, students can learn effectively, efficiently, and enjoyably.

The results of the study indicate that game-based learning plays a significant role in increasing student participation in physical education classes. This method makes learning more engaging and enjoyable, and helps develop students' social skills.

However, the successful implementation of this method requires support in the form of teacher training and improved school facilities; thus, game-based learning can serve as an effective strategy for enhancing the quality of physical education in elementary schools.

Indonesia has a wide variety of traditional games that are rich in culture and heritage. Teachers can utilize these traditional games as teaching methods in physical education. The following are some examples of games that can be incorporated into physical education lessons:

- **Bentengan:** This game involves two teams chasing and trying to tag members of the opposing team. The goal is to tag all members of the opposing team without being tagged yourself. Bentengan helps develop running, maneuvering, and teamwork skills.
- **Gobak Sodor:** This game also involves two teams trying to tag members of the opposing team without being tagged themselves. Gobak Sodor is often played in school or community settings and helps improve running and maneuvering skills.
- **Engklek:** Engklek is a game that involves hopping over a shoe placed on the ground with one foot while picking up the shoe. This game helps improve balance, coordination, and agility.
- **Tug-of-War:** A game involving two teams facing each other and trying to pull a rope toward their respective sides. Tug-of-war helps improve physical strength, team coordination skills, and cooperation.
- **Jump Rope:** A game that involves jumping over a rope swung by two or more people. Players must jump over the rope quickly and keep moving. Jump rope helps improve balance, agility, and cardiovascular fitness.
- **Sack Race:** This game involves students racing while running with their feet inside a sack. The goal of the game is to reach the finish line as quickly as possible. Sack races help improve balance, coordination, and speed.
- **Relay Race:** A relay race is a game in which students compete in teams and pass a baton or other object to the next team member. This game helps improve running skills, coordination, and teamwork.

In addition to existing traditional games, teachers can also create their own games tailored to the lesson theme. Teachers can leverage today's advanced technology and modify existing games to suit specific conditions and needs.

When implementing learning through games, there are several factors that can hinder or support the success of learning activities in Physical Education classes. The supporting factors are as follows:

- **Adequate Infrastructure:** The availability of adequate facilities and equipment greatly supports the implementation of game-based learning methods. Good infrastructure enables the use of various types of games that align with learning objectives.
- **A supportive learning environment:** Trained teachers and strong school support are essential. Professional development and support from school administrators can ensure that games are designed and implemented effectively.
- **Active Student Engagement:** Student engagement in this learning process influences the success of game-based learning.

Meanwhile, the following are the factors hindering the implementation of games in Physical Education classes:

- **Facilities:** The availability of adequate playgrounds, equipment, and spaces is

essential for implementing learning activities through play. Many schools lack the necessary facilities to support learning activities through play.

- Teacher resources; teachers need specific skills to design and manage effective and educational games. Heavy workloads and limited time to prepare these activities can hinder teachers' ability to implement them effectively.
- Differences in physical ability: Students have varying levels of physical ability. Some students feel unable to fully participate in games, which can reduce the effectiveness of learning.
- Curriculum and time; learning through play takes more time than traditional teaching methods.
- Assessment and Evaluation: Assessing student progress through games can be challenging because game results cannot always be measured objectively, unlike written tests or standard lab exercises.
- Classroom Management: Managing the class during the game can be challenging, especially if there are unruly or difficult students who might disrupt the flow of the game and the learning objectives.
- Safety and security concerns: Physical activity during the game increases the risk of injury if not properly supervised or if the equipment used is unsafe. This can be a concern for teachers.

Learning through games in Physical Education (PJOK) plays a role in increasing participation in PJOK lessons, as teachers present lessons in fun and varied ways that capture students' interest and encourage them to participate. The games conducted provide students with new learning experiences, and these activities are highly effective in combating students' boredom with the monotonous content and practices of PJOK lessons. In addition to combating boredom, learning through games can foster teamwork, particularly through group-based games. It is hoped that teachers can present a variety of educational games; in addition to existing traditional games, teachers can modify traditional games to suit the current situation and needs, and they can create new educational games, thereby expanding their repertoire of resources for Physical Education lessons.

## **CONCLUSION**

Physical Education, Sports, and Health (PJOK) is a core subject taught from elementary school through high school, a foundational course taken by all students. However, the implementation of PJOK has encountered challenges: students often find the lessons boring because the curriculum content is largely repetitive and the teaching methods are monotonous, leading to boredom among students. Teachers must find solutions to this problem; their creativity is greatly needed. Teachers can utilize the wealth of traditional games found in Indonesia, and they can also take advantage of today's technological advancements to search for game references. Learning through games in the PJOK subject can increase student participation in PJOK activities, as playing makes students feel happy and prevents boredom. The implementation of learning through games is influenced by several factors, both supportive and inhibiting.

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