

## **ASSISTING GAME BASED LEARNING TO ENHANCE STUDENTS MOTIVATION AND PHYSICAL ACTIVITY IN PHYSICAL EDUCATION**

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### **Abstract**

This community service activity aimed to enhance students' learning motivation and physical activity through learning assistance based on Game-Based Learning in Physical Education, Sports, and Health classes. The activity was conducted at SMP Negeri 2 Bireuen and involved students and physical education teachers as community service partners. The implementation method consisted of three stages: preparation, implementation, and evaluation, which included designing game-based activities, assisting the learning process, and conducting reflective discussions with teachers. The results of the activity indicated that the application of Game-Based Learning was able to create a more active and enjoyable learning atmosphere, thereby increasing students' enthusiasm, participation, and engagement in physical activities during the learning process. In addition, this mentoring activity provided teachers with new experiences and insights in implementing innovative, student-centered learning models. Therefore, game-based learning is recommended as an alternative approach in physical education that can be sustainably applied to improve the quality of learning in schools.

**Keywords:** Game-Based Learning; Physical Education; Learning Motivation; Physical Activity; Community Service

### **INTRODUCTION**

Physical Education, Sports, and Health (Physical Education) is an integral part of the education system that plays an important role in developing students' physical, mental, social, and emotional aspects. Through physical education learning, students are not only directed toward achieving physical fitness but are also fostered to develop sportsmanship, cooperation skills, discipline, and awareness of the importance of adopting an active and healthy lifestyle from an early age (Nugroho & Prasetyo, 2022).

In practice, physical education learning at the junior high school level still faces various challenges. Several studies indicate that students' learning motivation in physical education tends to fluctuate and often decline due to learning approaches that lack variation and remain teacher-centered (Rahman et al., 2021). This condition directly affects students' active participation and results in low levels of physical activity engagement during the learning process.

Similar problems were also identified at SMP Negeri 2 Bireuen based on initial observations and discussions with physical education teachers. Students demonstrated low levels of enthusiasm, suboptimal movement involvement, and a tendency to be passive during physical education classes. Low levels of physical activity during physical education learning may

hinder the achievement of learning objectives, particularly in improving physical fitness and developing active lifestyle habits among students (Hidayat et al., 2022).

One of the main factors contributing to this condition is the use of conventional and less innovative learning models. Monotonous learning tends to create boredom, which reduces students' motivation to participate actively. Therefore, physical education teachers need to be encouraged and supported in implementing more creative, enjoyable, and engaging learning models that actively involve students both physically and psychologically (Susanto, 2024).

Along with the development of 21st-century learning paradigms, student-centered learning approaches have become increasingly emphasized. One approach that is particularly relevant to physical education learning is Game-Based Learning. This model integrates game elements into the learning process, enabling the creation of a learning environment that is enjoyable, challenging, and competitively healthy (Basri et al., 2022).

Various studies have shown that Game-Based Learning has great potential to enhance students' learning motivation. Game elements can foster enjoyment, curiosity, and intrinsic motivation, encouraging students to actively engage in the learning process. In addition, game-based learning promotes positive social interaction and enhances students' self-confidence (Liao & Chen, 2023).

Beyond its impact on affective aspects, Game-Based Learning has also been proven effective in increasing students' physical activity levels. Well-structured game activities provide students with opportunities to engage in more active movement at intensities appropriate to the characteristics of physical education learning. This approach is highly relevant to efforts aimed at increasing students' active learning time during lessons (Susanto, 2024).

Nevertheless, the implementation of Game-Based Learning in schools still requires guidance and support, particularly for physical education teachers. Teachers need practical examples of implementation, appropriate game planning aligned with learning objectives, and evaluation of the learning outcomes on students. Therefore, community service activities serve as an effective strategy to bridge the gap between theory and the practical application of innovative learning approaches in schools (Lestari et al., 2023).

Based on the above considerations, this community service activity aims to implement and provide assistance in the application of Game-Based Learning in physical education classes at SMP Negeri 2 Bireuen. This activity is expected to offer solutions to the problems of low learning motivation and physical activity among students, as well as to contribute meaningfully to improving the quality of physical education learning at the junior high school level.

## **METHOD**

The implementation method of this community service activity was carried out in the form of learning assistance based on Game-Based Learning in the subject of Physical Education, Sports, and Health. The mentoring approach was selected because it provides direct support to both teachers and students in implementing innovative learning models oriented toward active student participation (Borko et al., 2021). This activity involved students and physical education

teachers as the main partners, with the aim of enhancing students' learning motivation and engagement in physical activities through active and enjoyable learning processes.

The implementation of the activity was conducted through three main stages: preparation, implementation, and evaluation. These stages are commonly applied in community service activities as they allow systematic planning, execution, and reflection processes (Patton, 2021). During the preparation stage, the community service team coordinated with the school and physical education teachers to identify the initial conditions of learning and the needs of the partners. In addition, the team developed game-based learning plans tailored to students' characteristics, physical education content, and the facilities and infrastructure available at the school (Rusman, 2022).

The implementation stage was carried out through direct assistance during physical education learning activities. The community service team supported teachers in applying game-based activities designed to encourage students' activeness, teamwork, and optimal physical engagement. Game-based learning enables students to naturally participate in active movement, thereby making the learning process more meaningful (Hamalik, 2021). Throughout the activity, teachers acted as learning facilitators with guidance and support from the community service team.

The evaluation stage was conducted descriptively through observation and reflective discussions with physical education teachers. The evaluation focused on students' responses, levels of participation, enthusiasm, and engagement in physical activities during the learning process. A descriptive evaluation approach was chosen as it aligns with the characteristics of community service activities that emphasize learning processes and practical impacts (Arikunto, 2021). The evaluation results were used as reflective material to assess the achievement of the activity objectives and as a basis for improving the implementation of game-based learning in future activities.

## **RESULTS AND DISCUSSION**

### **Results of Implementation**

The implementation of the community service activity through the application of the Game-Based Learning model at SMP Negeri 2 Bireuen was carried out successfully and in accordance with the planned activities. The program began with mentoring physical education teachers in preparing and implementing game-based learning activities tailored to the instructional materials and the characteristics of eighth-grade students.

During the implementation, students demonstrated positive responses to the applied learning model. Students appeared more enthusiastic in participating in the lessons, actively engaged in each game-based activity, and showed increased interaction and cooperation among peers. The competitively designed and enjoyable game activities encouraged students to move more actively compared to previous conventional physical education learning practices.

Observation results indicated that most students were actively involved in physical activities throughout the learning process. Students not only followed the teacher's instructions but also showed initiative in participating in the games and completing the assigned movement tasks. In

addition, physical education teachers reported that the learning atmosphere became more conducive, enjoyable, and easier to manage, as students were more focused on the game-based activities.

As documentation of the implementation of the community service activity, the game-based physical education learning activities are presented in the form of images as follows.



Figure 1. Mentoring of Game-Based Learning in Physical Education for Students

Figure 1 illustrates the mentoring process involving teachers and the active engagement of students during the learning activities. Students are shown participating in game-based activities that require active movement, teamwork, and sportsmanship.

In addition, the documentation highlights students' involvement in group-based game activities, which encourage social interaction and promote active participation among all students during the learning process.



Figure 2. Students' Activities in Game-Based Physical Education Learning During the Mentoring Program

Figure 2 shows that the implementation of Game-Based Learning enhanced students' overall physical engagement. Students were actively moving and participating in each stage of the



game activities, resulting in more optimal active learning time during physical education lessons.



Figure 3. Mentoring and Reflective Discussion with Physical Education Teachers After the Learning Implementation

Figure 3 illustrates the mentoring and reflective activities conducted by the community service team together with physical education teachers after the implementation of Game-Based Learning. At this stage, the team and teachers engaged in discussions to evaluate the learning process, including students' engagement, responses to game-based activities, and challenges encountered during the implementation. This reflection process aimed to provide constructive feedback to teachers as community service partners, while also strengthening their understanding of how to sustainably implement game-based learning.

Through the mentoring and reflection activities, teachers are expected to be able to adapt and further develop more innovative physical education learning strategies that are oriented toward active student participation. The findings of this implementation indicate that the community service activity not only contributed to improving students' motivation and physical activity levels but also provided teachers with new experiences in applying more engaging and effective innovative learning models.

## DISCUSSION

The implementation of the community service activity through the application of the Game-Based Learning model demonstrated positive impacts on the physical education learning process at SMP Negeri 2 Bireuen. The increased enthusiasm and student engagement observed during the activity indicate that contextually designed and enjoyable learning experiences can foster more meaningful learning. This finding aligns with the perspective that activity-based learning can enhance students' physical and emotional engagement in the learning process (Darling-Hammond et al., 2021).

The game-based activities implemented in this community service program encouraged students to engage in more active movement without experiencing pressure from instructional

demands. Students participated naturally in physical activities through games that required cooperation, speed, and movement accuracy. These findings reinforce previous studies suggesting that the integration of games into physical education learning can increase both the duration and quality of students' physical activity during lessons (Casey & Goodyear, 2022).

In addition to its impact on students, this community service activity also contributed to the improvement of physical education teachers' competencies. Through direct mentoring, teachers gained practical experience in designing and implementing innovative learning strategies oriented toward active student participation. The collaborative reflection process between the community service team and teachers served as an important mechanism for enhancing teachers' understanding of game-based learning strategies. This finding is consistent with the view that collaborative community service activities can support the sustainable professional development of educators (Borko et al., 2021).

The application of Game-Based Learning also fostered a more inclusive and participatory learning environment. Students with varying levels of physical ability were able to actively engage in flexible and adaptive game-based activities. This condition supports the principles of inclusive education, which emphasize providing equal learning opportunities for all students (Florian & Spratt, 2023).

Overall, the discussion of the implementation results indicates that Game-Based Learning functions not only as an enjoyable instructional strategy but also as an effective means of improving the overall quality of physical education learning. These findings highlight the importance of adopting innovative, game-based learning models as part of broader efforts to enhance instructional quality and empower physical education teachers at the junior high school level.

## **CONCLUSION**

This community service activity demonstrates that the implementation of the Game-Based Learning model in physical education learning can enhance students' motivation and participation during the learning process. Through structured game activities tailored to students' characteristics, learning becomes more active and enjoyable, encouraging both physical and social engagement among students. In addition, this activity provides teachers with practical experience in implementing innovative learning models that can serve as alternative strategies to address low student learning motivation. Therefore, Game-Based Learning can be considered an effective and applicable instructional strategy in the context of school-based physical education learning.

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