



The Implementation of the Game Based Learning Model to Improve Student Learning Outcomes in Grade V at Inpres Rotnama Elementary School

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Abstract

This study aims to analyze the implementation of the Game-Based Learning (GBL) model in improving the learning outcomes of fifth-grade students at SD Inpres Rotnama, Mdonu Hyera District, Southwest Maluku Regency. This research employs the Classroom Action Research (CAR) method with 14 students (12 males and 2 females) as subjects. Data were collected through pre-test and post-test in Cycle I and Cycle II. The results of Cycle I showed an increase in the average score from 48.28 to 61.78, but it had not yet reached the Minimum Mastery Criterion (65). In Cycle II, the average score significantly increased to 78.21, indicating the successful implementation of GBL in improving student learning outcomes. Thus, the GBL model is effective in enhancing students' understanding and can be applied as an innovative learning method in elementary schools.

Keywords: game based learning, learning outcomes, classroom action research.



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INTRODUCTION

Social Studies is an important subject in the elementary school curriculum because it aims to develop students' abilities to understand the social, cultural, economic, and geographical conditions of society. This subject is integrative in nature, combining concepts from various social science disciplines such as history, geography, sociology, economics, and anthropology (Wibawa et al., 2020). Wahyuning (2022) explains that the goal of social studies education is to shape individuals who can actively participate in social, national, and state life.

Social studies learning emphasizes an understanding of social realities and the complex relationships between humans and their environments (Capperucci, 2015).

Therefore, teaching approaches should encourage students' active participation, reasoning skills, and critical thinking abilities (Mashudi & Azzahro, 2019). However, in practice, social studies learning often still relies on conventional and verbalistic methods, such as lectures, which fail to maximize students' potential (Indrawan & Ichsan, 2021).

An observation conducted on March 18, 2024, at SD Inpres Rotnama revealed that social studies learning in Grade V was not yet optimal. Out of 14 students, only 4 met the Minimum Competency Criteria (KKM) of 65, while the remaining 10 did not achieve the target. This reflects the ineffectiveness of the teaching methods used (Rusman, 2020). According to Djamarah and Zain (2013), monotonous approaches can cause students to lose focus and motivation to learn.

Students tend to feel bored when the learning process is unengaging and does not align with their learning styles (Andryannisa et al., 2023). Therefore, teachers are expected to select and apply learning models that are innovative, enjoyable, and student-centered. Khaerunnisa et al., (2022) state that 21st-century learning must integrate technology, creativity, and students' individual needs.

One innovative learning model being developed is Game-Based Learning (GBL). GBL as a learning approach that integrates game elements into the teaching and learning process to create an enjoyable and interactive atmosphere. This model is not only entertaining but also effective in enhancing students' understanding and absorption of the material (Bashir & Bramastia, 2022).

(Yustina & Yahfizham, 2023) states that creative learning models can optimize learning comfort and foster the development of critical thinking skills. This is crucial, considering that 21st-century skills include critical thinking, communication, collaboration, and creativity.

Students with high learning interest are more likely to understand the material, participate actively in the learning process, and achieve better academic results. According to Maulidina et al., (2018), intrinsic motivation and learning interest are

interrelated in shaping independent and responsible learners. Meanwhile, Winkel (2004) emphasizes that motivation is the main driving force in learning and a prerequisite for achieving educational goals.

The GBL model provides opportunities for students to actively explore knowledge, conduct experiments, and engage directly in learning through educational games (Aprido et al., 2020). This aligns with the constructivist approach, which emphasizes the importance of students' active involvement in constructing knowledge (Piaget, 1952; Vygotsky, 1978). When students are engaged in relevant play-based activities, they not only learn important concepts but also develop social skills, cooperation, and responsibility (Slavin, 2006).

According to Matitaputty et al., (2024), learning outcomes encompass behavioral changes in the cognitive, affective, and psychomotor domains resulting from the learning process. Supardi (2013) adds that learning outcomes are not only reflected in test scores but also in students' understanding and changes in attitude. Suprijono (2016) describes learning outcomes as the accumulation of knowledge, skills, and values acquired during the educational process.

In the context of social studies learning in elementary school, the implementation of the GBL model is expected to improve students' learning outcomes holistically. As explained by Bloom in the Taxonomy of Educational Objectives, effective learning outcomes include dimensions of knowledge, skills, and attitudes (Afifa et al., 2022). Therefore, it is essential for teachers to adopt learning models that integrate these elements in a balanced manner.

Based on the explanation above, the author is interested in exploring this issue further through the study titled The Implementation of the Game-Based Learning Model to Improve Student Learning Outcomes in Grade V at Inpres Rotnama Elementary School.

METHOD

This study was conducted using Classroom Action Research. Aqib Zainal (2010) states that classroom action research is research carried out by teachers in their own classrooms through self-reflection with the aim of improving their performance as educators, thereby enhancing student learning outcomes. The subjects of the study were 14 fifth-grade students of SD Inpres Rotnama. The research activities were carried out in two cycles.

RESULT AND DISCUSSION

The results of this classroom action research on the topic of natural landforms using the Game-Based Learning (GBL) model were obtained from two stages of data collection, namely the pre-test and post-test, and were carried out over two cycles. Cycle I consisted of two learning sessions, and Cycle II also included two sessions. At the end of each cycle, a post-test was administered to assess students' understanding of the material taught. At the end of each session in Cycles I and II, the teacher distributed observation sheets to assess students' motivation and learning outcomes in Grade V at SD Inpres Rotnama.

Before implementing the action research, the teacher conducted a pre-test to identify students' initial abilities. Based on the pre-test results, the student performance in Grade V SD Inpres Kaiwatu was as follows: 1 student scored 20 (7%), 3 students scored 30 (21%), 3 students scored 40 (21%), 2 students scored 50 (14%), 1 student scored 60 (7%), 3 students scored 70 (14%), and 2 students scored 80 (14%). Thus, 10 students (71%) scored ≤ 65 , while only 4 students (28%) scored ≥ 65 . These results indicate that learning outcomes had not reached optimal levels due to the teacher's use of conventional teaching methods. As a result, the researcher implemented the Game-Based Learning (GBL) model in teaching natural landforms.

During the learning activities in Cycle I, the teacher used interactive video media and followed the GBL steps: a. The teacher introduced the topic of natural

landforms; b. Teacher and students engaged in a question-and-answer session; c. Before dividing students into groups, the class did an *ice breaking* activity—singing a song to recall types of landforms; d. Students were divided into three groups and given LKPD (student worksheets); e. The teacher explained how to use the Kahoot application on their mobile devices to encourage collaboration. The steps for effective Kahoot usage included: ensuring the app was installed and internet was stable, joining the game with a PIN, selecting a team name, and assigning a group leader to submit answers. For each question displayed on the projector or phone, group members had to discuss and choose the correct answer within the time limit. Colored buttons represented multiple-choice answers. f. The teacher asked the students to observe and evaluate group scores based on speed and accuracy. Scores were projected to show the ranking of each group. After the game, groups discussed and reflected on the questions answered. g. The teacher then gave students 5 minutes to complete a 10-item multiple-choice quiz via Kahoot.

The implementation of the Game-Based Learning (GBL) model increased students' interest and learning outcomes, and enabled them to express ideas during learning. At the end of Cycle I, a post-test was conducted to assess understanding. The results were as follows: 1 student scored 30 (7%), 1 scored 35 (7%), 1 scored 40 (7%), 1 scored 50 (7%), 1 scored 55 (7%), 1 scored 60 (7%), 1 scored 65 (7%), 3 scored 70 (21%), 1 scored 75 (7%), 2 scored 80 (14%), and 1 scored 85 (7%). Thus, 6 students (42%) scored ≤ 65 , and 8 students (57%) scored ≥ 65 .

These results showed that not all students had met the Minimum Mastery Criteria (KKM), prompting the teacher to continue using the GBL model into Cycle II. During the planning and implementation stages of Cycle II, the same GBL steps were followed. As a result, students' learning outcomes improved significantly. In Cycle II, the results were as follows: 5 students scored 70 (35%), 1 scored 75 (7%), 4 scored 80 (28%), 3 scored 85 (21%), and 1 scored 95 (7%). All 14 students (100%) scored ≥ 70 , with an average score of 78.21. Therefore, the IPS learning using GBL on the topic of natural

landforms was considered successful, and the action research was concluded after Cycle II.

The average student score also increased significantly from the pre-test (49.28) to the post-test in Cycle II (78.21). Aside from academic performance, observations and interviews revealed that students were highly engaged and enthusiastic about the use of Game-Based Learning in learning about natural landforms.

In conclusion, the implementation of the Game-Based Learning (GBL) model improved the learning outcomes of Grade V students at SD Inpres Rotnama in the Social Studies subject.

CONCLUSION

The implementation of the Game-Based Learning (GBL) model successfully improved the learning outcomes of Grade V students at SD Inpres Rotnama on the topic of Natural Landforms, as the students' performance met the Minimum Mastery Criteria (KKM) set by the school.

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