

Efforts to Improve Learning
Outcomes Through
Modification of the Baseball
Game for Grade V Students of
Elementary School 107436
Lengo House, Sinembah
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Submission date: 08-Dec-2025 05:16AM (UTC+0530)

Submission ID: 2838957181

File name: Abdi_Syahputra_Tarigan-OKE_galley.docx (201.61K)

Word count: 3510

Character count: 20165



Efforts to Improve Learning Outcomes Through Modification of the Baseball Game for Grade V Students of Elementary School 107436 Lengo House, Sinembah District, Tanjung Muda Hulu

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Abstract.

Background

The background of this study is that students' learning outcomes in playing baseball have not been achieved because students do not understand the learning model, there has been no modification of the equipment, and students have not mastered the techniques of playing baseball so that students are less active in the process of learning baseball. The problem in this study is whether through the application of modifications to the baseball game in physical education and health learning can improve learning outcomes in grade V students of SD Negeri 107436 Rumah Lengo, Sinembah District, Tanjung Muda Hulu.

Objectives

The purpose of this study is to improve the learning outcomes of baseball by implementing game modifications for fifth grade students of SD Negeri 107436 Rumah Lengo, Sinembah District, Tanjung Muda Hulu.

Methods

The type of research used is Classroom Action Research (CAR) which consists of two cycles. Each cycle consists of planning, action implementation, and reflection. The subjects of the research were fifth grade students of SD Negeri 107436 Rumah Lengo, Sinembah District, Tanjung Muda Hulu, while the object of the research was the learning outcomes in the game of baseball with the application of game modifications. The first cycle of research was carried out on Saturday, May 9, 2015 and the second cycle of research on Saturday, May 23, 2015. The data collection techniques in this study used observation and documentation methods. The data analysis technique used was descriptive qualitative data.

Results

The results of the study showed that the application of modified baseball games in physical education and health learning in the first cycle resulted in a total of 11 students completing the lesson, with 13 students completing the lesson with a percentage of 61.90%. In the second cycle, a total of 21 students completing the lesson was 17 students completing the lesson with a percentage of 80.95%, an increase from the first cycle of 19.05%.

Conclusion

The conclusion of this study is that by applying modifications to the baseball game in physical education and health learning, it can improve the baseball learning outcomes of fifth grade students at SD Negeri 107436 Rumah Lengo, Sinembah District, Tanjung Muda Hulu.

Keywords: Learning, Baseball, Game Modification.

Received: November 30, 2025 Accepted: December 08, 2025

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How to Cite: Tarigan, A. S., & Abdurrahman, E. (2025). Efforts to improve learning outcomes through modification of the baseball game for Grade V students of Elementary School 107436 Lengo House, Sinembah District, Tanjung Muda Hulu. *International Journal of Emerging Sport Science*, 1(4), 68–73.

INTRODUCTION

Learning is defined as the process of behavioral change resulting from interactions between individuals and their environment. This behavior encompasses aspects of knowledge, skills, and attitudes. Behavior can be divided into two groups: observable and unobservable (Husdarta and Yudha M. Saputra, 2020:2). Teaching is a very complex process. The teacher's role is not only to convey information to students but also to strive to encourage students to learn. Because teaching is a deliberate effort, teachers must first prepare the material to be presented to students (Husdarta and Yudha M. Saputra, 2021:3).

Learning outcomes are a crucial factor in the teaching and learning process, as they can be used to measure the extent to which students have mastered the material presented by the teacher. Success or failure in learning is influenced by several factors, including those originating within the individual (internal factors) and those originating outside the individual (external factors). The implementation of the educational process, specifically teaching and learning activities, is a strategic endeavor to achieve desired goals. Learning activities are carried out by students, and through these activities, behavioral changes occur. Meanwhile, teaching and learning activities are carried out by teachers to facilitate the learning process.

These two factors are interrelated and influence the relationship between the two subjects, although the teacher plays a more crucial role as the administrator.

The initial stages of learning the material to be studied, whether it concerns cognitive, affective, or psychomotor aspects, can be somewhat unfamiliar to students. However, as teachers strive to introduce, focus, and capture students' attention during the lesson, this unfamiliarity gradually diminishes. Students then become more enthusiastic and engaged with what the teacher is doing. Therefore, teachers must strive to manage the classroom as effectively as possible by organizing the learning environment and carefully planning materials to ensure an engaging and well-planned learning process.

Classroom action research is one effort to address learning outcomes in physical education and health education. Based on these observations, classroom action research in physical education and health education can create an active, innovative, creative, effective, and enjoyable learning environment. This learning environment can facilitate students in mastering their learning tasks optimally, thus achieving optimal learning outcomes. The author will conduct a classroom action so that students can learn proper techniques, rules, and infrastructure. In addition, to attract students' attention and interest in playing baseball, learning modifications are made in terms of equipment and rules. The introduction of new game modifications can be implemented in schools, namely during learning through various methods. One of them is here the author will implement a modification method for a small ball game, namely baseball. With this modification, it is hoped that it will make students more interested.

A fifth-grade physical education teacher at SD Negeri 107436 Rumah Lengo, Sinembah District, Tanjung Muda Hulu, encountered several obstacles during physical education lessons, including the teaching and learning process (KBM), equipment and facilities, and students' baseball playing techniques. Some students' learning outcomes fell below the minimum completion criteria (KKM).

- 1) In terms of the teaching and learning process (KBM), students lacked understanding of the learning model. Students paid little attention and lacked focus on the material presented, particularly baseball. Several female students complained of pain and fear of being hit by the ball while playing baseball. Furthermore, female students tended to be less active; they quickly became bored during baseball lessons and often sat on the sidelines.
- 2) The equipment and facilities used included tennis balls, which were too small. Students found it difficult to catch. Furthermore, if the ball was thrown at their bodies, it would cause pain. Furthermore, the bats used were heavy and the hitting surface was too narrow, making it difficult for fifth-grade elementary school students to master hitting techniques and miss. Physical education (PE) lessons, specifically for baseball, were held in the schoolyard. Elementary school grounds are too small for baseball. This limited student mobility, resulting in some students being less active in the learning process.
- 3) Students struggled with hitting techniques during baseball lessons. This is a particular concern because hitting the ball with a bat is crucial for beginning baseball.
- 4) Learning outcomes, particularly for baseball, showed many students scored below the minimum passing grade (KKM), which is 76.

Of the 21 students, 8 students scored above the KKM. While 13 students scored below the KKM. The average score was 69.63 and the percentage of student learning completion was 38.09%. In connection with the above problems, so that students can improve their baseball learning outcomes and make them more comfortable playing baseball, one way is to use the application of baseball game modifications. With the existence of learning media as a learning aid, it is hoped that students can more easily accept and master the material so that the learning objectives can be achieved. The difficulty often experienced by fifth grade elementary school students in the material on hitting techniques is timing when hitting the ball, because the ball is moving.

Elementary school students generally haven't mastered ball-hitting techniques. Inadequate use of learning media can contribute to poor ball-hitting skills in baseball. This is crucial for skills development, especially for beginners. Difficulties in learning with existing facilities and infrastructure require teachers to be creative in achieving learning objectives.

Problems that arise during physical education and health learning, especially baseball, include the techniques of throwing, catching, and hitting the ball, which are difficult for students to perform because the ball used is small. The wooden bat is heavy for fifth grade elementary school and the surface for hitting the ball is narrow. Then, students understand the learning model, so students are less active in learning. This requires special handling so that student learning outcomes can be maximized and above the minimum completion criteria (KKM). Therefore, the author made a modification of the baseball game to help optimize learning outcomes. The application of the modified baseball game is expected to overcome student difficulties in terms of throwing, catching, and hitting the ball. It can complete student learning outcomes

where some students' scores are below the Minimum Completion Criteria (KKM). It can optimize student abilities in the psychomotor, cognitive, and affective domains. Then, it makes physical education and health learning, especially baseball, an active, innovative, creative, effective, and enjoyable learning.

METHOD

Research Design

Research methods are a crucial factor in completing a scientific paper. ⁴ The method used in this study was classroom action research, which utilizes direct observational data from classroom learning processes. The data obtained was then analyzed through several stages in a series of cycles.

Participant

The subjects of this study were 21 fifth grade students, consisting of 7 male students and 14 female students who participated in physical education learning activities in Class V of SD Negeri 107436 Rumah Lengo, and the object of this study was improving baseball learning outcomes through modifications to the baseball game in Class V of SD Negeri 107436 Rumah Lengo.

Data Analysis

¹ The analysis technique used in this classroom action research is ³ to use a qualitative descriptive analysis technique, namely a research method that describes reality or facts according to the data obtained with the aim of knowing the learning outcomes achieved by students and also to know students' responses to learning activities and student activities during the learning process.

RESULTS AND DISCUSSION

Results

The student learning achievement is based on findings made by researchers during remedial actions for 21 fifth-grade students at SD Negeri 107436 Rumah Lengo in Physical Education and Health (PE). This statement implies that learning is inseparable from evaluation to determine student achievement. In the baseball game learning process, researchers used modified games. Based on findings and reflections, several changes were identified.

This is evident from the results of implementing modified baseball games in PE lessons. Student learning outcomes are assessed based on psychomotor aspects, including hitting, throwing, and catching techniques. Cognitive aspects include students' knowledge of how to solve problems based on the material taught. Affective aspects include cooperation, sportsmanship, and honesty.

In addition to the three aspects assessed: psychomotor, cognitive, and affective, assessing students' physical fitness is also important. Physical fitness assessment ² can be conducted by examining the ten components of physical fitness. These components include strength, endurance, muscle power, speed, flexibility, agility, coordination, balance, accuracy, and reaction time. These assessments can be observed when students implement modified rounders. Each student will have a different assessment of physical fitness based on their individual abilities. The more active a child is in playing, the stronger their physical fitness ⁷ be. Conversely, if a child tends to be passive, their physical fitness is weak.

Based on the results of observations and interviews conducted by researchers with physical education teachers at SD Negeri 107436 Rumah Lengo, before the implementation of the baseball game modification, the average score was 69.63. Student learning completion was 38.09%, namely 8 out of 21 students, while 13 students had not achieved the completion score of 76. Incompleteness reached 61.90%.

Discussion

The learning outcomes of cycle 1, there are still many who have not completed or met the KKM, namely 8 students. The learning outcomes of the application of the modification of the baseball game to grade V students of SD Negeri 107436 Rumah Lengo can be seen that the psychomotor aspect of students reached an average value of 28.57. In the cognitive aspect, it reached an average value of 24. In the affective aspect, it reached an average value of 19. The average value of learning outcomes is 72.36 with a completeness of 38.09%, namely 13 out of 21 students, while 8 students have not reached a completeness value of 76. Incompleteness reached 69.90%. The shortcomings that occurred in cycle I were in the modification of the baseball game, the students as a whole were not active. This happened because the batting team when they were at the free pole was more than one person so students chose to be safe and did

not run to the next pole. Meanwhile, only a few people from the guard team were active. This occurs because students are unable to work together effectively to throw and catch, effectively killing opponents by burning bases. The bats used are too wide and large in cross-section to hit the ball, thus not meeting the standards for baseball bats. The balls used are too small, using a tonic ball, making it difficult for students to catch the ball.

In the first cycle, students were less active in modifying the baseball game and in terms of throwing, catching, and hitting techniques, students had not yet achieved the indicators that were in accordance with the psychomotor aspect assessment standards. This was based on the average percentage of psychomotor aspect assessment results, which was 28.57%, where out of 21 students, only 13 students met the Minimum Completion Criteria (KKM). While the maximum percentage of psychomotor aspect assessment was 50%. The percentage of cognitive aspect assessment was 30%. In the first cycle, the percentage of cognitive aspect assessment results was 24%. This showed that students were able to grasp the material given by the teacher. During the learning process, students worked on the questions given after the game was finished with the baseball game material. In the first cycle, some students did not show good cooperation between friends. This can be seen from the percentage of affective aspect assessment results, which was 19%. While the maximum percentage of affective aspect assessment was 20%. In the first cycle, students played fairly and honestly while playing. The assessment of affective aspects is based on the Competency Standards (SK) and Basic Competencies (KD) of Grade V Elementary School.

Learning cycle II shows an increase in the value of the three aspects, namely psychomotor, cognitive, and affective. The learning outcomes in the application of modified baseball game in physical education learning for fifth grade students of SD Negeri 107436 Rumah Lengo can be seen that the psychomotor aspect of students reaches an average value of 36.9. In the cognitive aspect, it reaches an average value of 25. And in the affective aspect, it reaches an average value of 19. The average value of learning outcomes is 80.84 with classical completeness of 80.95%, namely 17 out of 21 students, while 4 students have not reached the completeness value of 76. Incompleteness reaches 19.04%.

In cycle II learning, students were able to perform the techniques of throwing, catching, and hitting the ball well according to the established indicators. This is based on the percentage data of student learning outcomes, which was 36.90% of the standard percentage of psychomotor aspect assessment, which was 50%. Students were able to throw and catch the ball well because the ball had been replaced with a larger one than the tonic ball. Then, in performing the hitting technique, 17 of the 21 students had done it according to the indicators because the bat had been modified to be lighter and the cross-section for hitting the ball was wider, namely 10 cm.

The learning process proceeded smoothly, as indicated by the teacher's explanation of techniques and rules. Students listened attentively and asked questions about anything they didn't understand. This fostered interaction within the learning process. This improved student learning outcomes from a cognitive perspective. In Cycle II, the cognitive assessment percentage was 25%, compared to the standard 30%. Students participating in the modified baseball game during physical education and health (PE) demonstrated sportsmanship, honesty, and good cooperation with their peers. Students felt comfortable with the modified baseball game because it was new and eager to practice. This was evident in the affective assessment percentage, which was 19%, compared to 20% for the affective aspect. Therefore, it can be concluded that student activity was very active and can improve learning outcomes in learning using media, one way being to modify the game.

After conducting the research in Cycle I and Cycle II, there were weaknesses and strengths in each cycle, and improvements were made. Therefore, this research was sufficient for two cycles. This is because in cycle II the target of a researcher and physical education teacher has been achieved according to the established indicators, so there is no need to continue to cycle III.

Based on the results of the classical completion percentage of the observation of learning the application of the modification of the rounders game has reached completion of more than 80%, namely 80.84%. This occurs because there are actions from the psychomotor aspect of students being given stimulus to actively move in the rounders game, from the cognitive aspect students answer questions related to the rounders learning material, then the affective aspect students can carry out cooperation, responsibility, and sportsmanship in the modification of the rounders game.

CONCLUSION

The results of classroom action research on the learning outcomes of baseball games with the application of baseball game modifications in physical education learning for fifth grade students of SD Negeri 107436 Rumah Lengo obtained data in cycle I, the average value reached 72.36 with learning

completeness reaching 61.90%, namely 13 out of 21 students, and in cycle II the average value reached 80.84 with classical learning outcomes completeness reaching 80.95%, namely 17 out of 21 students. Based on the data obtained, the learning outcomes of baseball games with the application of modifications have achieved the established success indicators, namely classical completeness of more than 80%, with the KKM for physical education subjects in fifth grade students of SD Negeri 107436 Rumah Lengo of 76. Based on these data, it can be concluded that the application of baseball game modifications in physical education learning for fifth grade students of SD Negeri 107436 Rumah Lengo can improve student learning outcomes.

ACKNOWLEDGMENT

The author would like to thank SD Negeri 107436 Rumah Lengo and Bina Guna Sports and Health College, the researchers and authors who have participated and provided support for this research activity.

AUTHOR CONTRIBUTION STATEMENT

This research was conceptualized and designed by Abdi Syahputra Tarigan, who developed the research objectives and methodology, managed data collection, coordinated with participants, and supervised fieldwork at STOK Bina Guna Medan. Eka Abdurrahman performed data analysis, interpreted the findings, and contributed significantly to the preparation of the manuscript. All authors participated in the revision of the manuscript, approved the final version for submission, and take full responsibility for the integrity and accuracy of the work.

CONFLICT OF INTEREST AND FUNDING

The authors declare no conflict of interest related to the conduct, authorship, or publication of this study.

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