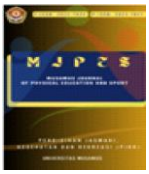
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Transforming Squat-Style Long Jump Instruction Through Active Demonstration and Play-Based Learning in Grade 5 at SD Negeri 19 Tanjung Harapan (2025/2026)

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Abstract
Objectives: This study aims to determine the improvement in learning outcomes for the squat style long jump through a play based approach among 5th grade students at SD Negeri 19 Tanjung Harapan during the 2025/2026 academic year.
Materials and Methods: This study employed a qualitative method, specifically Classroom Action Research (CAR). The subjects of this study were 5th grade students at SD Negeri 064011 Medan Deli (Academic Year 2025/2026), consisting of 32 students (20 boys and 12 girls) who were subjected to an intervention using a play based approach to improve their squat style long jump performance.
Results: Results from the Cycle II learning assessment showed that 29 students (90.6%) achieved the mastery level, while 3 students (9.4%) did not, with an average learning score of 90.4%. An increase in the average score was observed from Cycle I to Cycle II (an 11.1% rise), alongside an 18.7% increase in classical mastery.
Conclusions: Based on the research findings, it can be concluded that the use of a play based approach can improve learning outcomes in the squat style long jump among fifth grade students at SD Negeri 19 Tanjung Harapan for the 2025/2026 academic year.
Keywords: Demonstration; Long Jump.

Introduction

Physical Education and Health is an integral component of the national education system and plays a strategic role in developing well rounded students. This subject has multifaceted objectives that extend beyond physical development to include character building, discipline, teamwork, and awareness of the importance of maintaining a clean and healthy lifestyle. Conceptually, Physical Education and Health is designed to provide students with extensive opportunities to develop physical fitness, motor skills, knowledge, and attitudes that support an optimal quality of life. Its inclusion in the primary and secondary education curricula is essential and cannot be neglected, considering its fundamental role in supporting children's holistic growth and development.

Through Physical Education and Health lessons, students are systematically guided to master fundamental motor skills that serve as the foundation for developing more complex movement abilities in the future. This learning process also encourages positive affective attitudes, such as courage, self confidence, responsibility, and sportsmanship. Furthermore, this subject plays an important role in instilling healthy lifestyle habits, including awareness of the importance of regular physical activity to maintain physical fitness and prevent various degenerative diseases that are increasingly common in modern society.

The implementation of Physical Education and Health must always be adapted to the ecological, social, and cultural conditions of the educational environment. This adaptive

principle is particularly relevant given Indonesia's extensive geographical and demographic diversity. In elementary schools, Physical Education learning materials are designed progressively, beginning with basic concepts of health and personal safety, followed by mastery of locomotor, non locomotor, and manipulative skills, and continuing with constructive and educational play activities. These activities aim to establish healthy and physically active lifestyle habits while helping students maximize their physical, motor, and psychosocial development during their golden years of growth.

Schools, as formal educational institutions, have strategic functions and responsibilities in designing and implementing effective and efficient learning processes. As the primary environment for teaching and guiding students under the supervision of professional educators, schools must create a supportive and inspiring learning atmosphere. The success of teacher student interactions is largely determined by how clearly the intended learning objectives are understood. When basic competencies and competency achievement indicators are clearly formulated and understood by all parties, an effective and high quality learning process can be achieved optimally.

Based on these considerations, educators are required to design learning strategies that are relevant, contextual, and engaging for students. Learning designs must consider students' developmental characteristics, learning needs, abilities, and interests. In addition, assessment must be comprehensively designed to measure students' competency mastery objectively and continuously. Authentic assessment integrating cognitive, affective, and psychomotor aspects is essential to provide a comprehensive picture of students' learning progress.

One of the important topics included in the Physical Education and Health curriculum at the elementary school level is long jump, particularly the squat style. Long jump is an athletic event that relies on a combination of strength, speed, flexibility, and movement coordination. The long jump can be performed using several techniques, including the squat style, hang style, and walking in the air style or hitch kick. These three techniques essentially share the same objective, namely achieving the greatest possible jumping distance through optimal movement efficiency.

Among these three techniques, the squat style is the most fundamental and relatively easier for beginners, including elementary school students, to learn. This technique is commonly selected during the initial learning process because its movement patterns are less complex than those of other styles. In the squat style, the body movement during the flight phase involves bending both knees and bringing them toward the chest, while the arms embrace the knees or remain beside the body to maintain balance. During landing, both legs are extended forward, while the hands help support the body behind the heels.

Elementary school children are generally introduced to and trained in the squat style as a foundation before progressing to more complex techniques. However, actual conditions in the field indicate that although this material is regularly taught and practiced, the learning outcomes are often unsatisfactory. Outstanding athletic performance is rarely achieved through school based learning, indicating fundamental problems in the learning system being implemented.

Long jump instruction in schools is generally limited to brief theoretical explanations followed by direct practice without systematically structured learning stages. This condition creates various obstacles to students' skill development. This situation is unfortunate because schools should ideally provide an environment that rekindles children's enjoyment, energy, motivation, and enthusiasm for mastering various physical education skills, including the squat style long jump.

Long jump learning has unique characteristics because it involves the integration of several components, including physical, mental, and intellectual aspects. Physical components include leg muscle strength, agility, coordination, and balance. Mental

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components involve courage, concentration, and the ability to control fear. Meanwhile, intellectual components include understanding the biomechanical principles of movement, calculating the approach distance, and determining proper timing. Given this complexity, comprehensive and structured learning strategies are necessary to provide students with optimal opportunities to improve their long jump performance.

Previous studies have revealed that coaches and physical education instructors continue to face considerable challenges due to limited training facilities and infrastructure. These limitations directly affect the quality of students' skill development and jumping performance in competitions and learning assessments. Inadequate facilities make the learning process less effective and prevent students from practicing with sufficient intensity and frequency.

In addition to infrastructure limitations, another problem is students' low interest and motivation in participating in long jump lessons. This phenomenon is caused by monotonous, repetitive, and less engaging teaching methods. The approaches commonly used remain conventional, relying on repetitive drills without sufficient variation, which leads to boredom and a lack of enthusiasm. Consequently, student participation becomes passive and learning outcomes remain suboptimal.

Based on observations and interviews with the Physical Education teacher at SD Negeri 19 Tanjung Harapan, concerning data were obtained regarding students' squat style long jump learning outcomes. Of the 32 students enrolled in Class V, only ten students (31.25%) achieved the Minimum Mastery Criteria (KKM), while the remaining 22 students (68.75%) failed to meet the required standard. The school has established a minimum mastery score of 80 (eighty) for the squat style long jump material. This means that students must obtain a minimum score of 80 based on the established assessment rubric to be considered successful in achieving learning mastery.

The learning mastery rate of only 31.25% is considerably below the expected standard, which requires at least 80% of students in a class to achieve learning mastery. This condition indicates systemic problems in the learning process that need to be addressed immediately. If left unresolved, these problems may negatively affect students' competencies and undermine the overall quality of Physical Education learning.

Further analysis of the existing learning practices indicates that the teacher previously employed the command style, a teacher centered approach. Under this method, the teacher fully controls the learning process by providing instructions, while students simply imitate the demonstrated movements. This approach provides limited opportunities for active student participation and neglects the playful activities that are characteristic of elementary school children.

The problem is further complicated by limited facilities and infrastructure. The only available mat is used as a substitute for a sandpit landing area, preventing students from experiencing actual long jump conditions and making them concerned about potential landing injuries. As a result, many students are still unable to perform the complete sequence of long jump movements correctly and optimally. They frequently make technical errors, such as insufficient approach speed, an improper take off angle, uncoordinated movements during the flight phase, and incorrect landing techniques.

The researcher intends to teach Physical Education using a play based approach to improve students' learning outcomes and prevent boredom or lack of enthusiasm during lessons, particularly in the long jump material. This approach is expected to create an enjoyable learning environment through joyful learning, thereby significantly increasing students' intrinsic motivation.

Various types of games are specifically designed to develop the skill components required in long jump. Running while transferring traditional marbles or small stones is intended to train eye foot coordination, balance, and speed, which are important components of

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the approach phase. Jumping over used tires is designed to develop leg muscle strength, flexibility, and proper landing techniques. Rope jumping activities aim to improve explosive power, rhythm, and lower limb coordination. Meanwhile, jumping over cardboard boxes is designed to develop accuracy, timing, and confidence during the take off phase.

The game rules are carefully designed to ensure that children can easily understand and participate in the activities without experiencing significant difficulties in learning the long jump material. Through this play based approach, students are expected to develop greater interest in long jump activities while gradually improving their motor skills.

In addition to the play based approach, this study also applies the active demonstration method as a learning strategy. Active demonstration directly involves students in observation, analysis, and practical activities under the teacher's guidance. The teacher not only demonstrates the movements but also provides detailed explanations of correct movement techniques, common mistakes to avoid, and tips for improving jumping performance. Students are given opportunities to observe demonstrations repeatedly, ask questions, and immediately practice the movements while receiving direct feedback and corrections from the teacher.

Materials and Methods

Study Design

This study employs Classroom Action Research. It is conducted with the aim of gathering information on teaching through a play based approach and a variety of instructional methods, implemented via a classroom action process structured into cycles of learning.

Study Participants

The subjects of the study are 32 fifth grade students at SD Negeri 19 Tanjung Harapan for the 2025/2026 academic year, consisting of 20 boys and 12 girls.

Study Organization

The research instrument used was a squat style long jump performance test to assess the learning outcomes of fifth grade students at SD Negeri 19 Tanjung Harapan in the 2025/2026 academic year. Each student performed two individual attempts, assessed through four movement phases: approach, take off, flight, and landing. Three assessors evaluated the performance, with each responsible for specific movement phases. Each phase consisted of four indicators scored on a scale of 1–4, depending on the number of correctly performed indicators. The assessment was supported by equipment including a sand filled long jump pit, a sand leveling tool, a measuring tape, a whistle, and a portfolio.

Statistical Analysis

Data analysis involved two main stages: data reduction and data presentation. Data reduction was conducted by selecting, simplifying, and transforming field data to identify students' errors and determine necessary improvements. The collected learning outcomes were then presented in tables and analyzed using individual and classical learning mastery percentages. Students were considered to have achieved mastery if their scores reached at least 80, while classical mastery was achieved when at least 85% of students obtained scores of 80 or higher.

Results

The following is a description of the research data from SD Negeri 19 Tanjung Harapan for the 2025/2026 academic year, covering the tests conducted in Cycle I and Cycle II.

Table 1. Average Scores for Student Learning Outcomes in the Long Jump (Squat Style)

NO	Score Average	Approach	Take off	Flight	Landing	Total Skor

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1.	Cycle I	$\sum = 119$ $\bar{x} = 3,7$	$\sum = 90$ $\bar{x} = 2,8$	$\sum = 100$ $\bar{x} = 3,1$	$\sum = 97$ $\bar{x} = 3,1$	$\sum = 406$ $\bar{x} = 12,7$
2.	Cycle II	$\sum = 123$ $\bar{x} = 3,8$	$\sum = 116$ $\bar{x} = 3,6$	$\sum = 112$ $\bar{x} = 3,5$	$\sum = 112$ $\bar{x} = 3,5$	$\sum = 463$ $\bar{x} = 14,47$

Note:
$\sum$ = Total sum of scores for each indicator of the long jump (crouch style/tuck style).
$\bar{x}$ = Average score for each indicator of the long jump (crouch style/tuck style).

From the table above, it can be seen that the students' overall long jump performance in Post test I yielded a total score of 406. Specifically, the approach phase scored 119 (average 3.7), the take off phase scored 90 (average 2.8), the body position during the flight phase scored 100 (average 3.1), and the body position during landing scored 91 (average 3.1).

Meanwhile, the results for Post test II yielded a total score of 463, with the approach phase scoring 123 (average 3.8), the take off phase scoring 116 (average 3.6), the body position during the flight phase scoring 112 (average 3.5), and the body position during landing scoring 112 (average 3.5).

Based on the observations from cycle I, the following data were obtained:

Table 2. Results of Test I (Cycle I)

NO	Test Results	Description	Number of Students	Percentage
1.	Score ≥ 80	Complete	23	71,9%
2.	Score < 79	Incomplete	9	28,1%
		Amount	32	100%

The results observed in Cycle I indicate that some students have not yet achieved mastery; this is evidenced by the observation sheets for both students and teachers. Specifically, the areas in which the teacher has yet to demonstrate proficiency include communicating learning objectives, providing opportunities for students to ask questions, and offering reinforcement and motivation regarding the crouch style long jump technique.

Regarding the students, the observation sheets reveal several areas where mastery is lacking, such as the ability to independently interpret their own jumping performance, decide when to repeat a sequence of jumps, and evaluate their own proficiency in executing the crouch style long jump. Furthermore, the test results from Cycle I show a particularly low performance in the take off phase. To address this, the researcher intends to increase the duration of each long jump related game or activity, thereby allowing students more frequent opportunities to repeat their jumps within the context of the exercises taught.

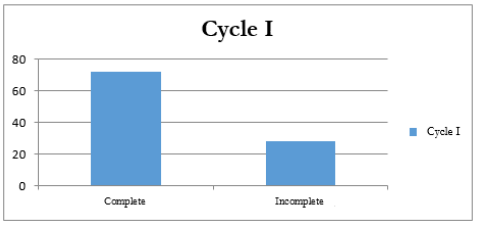


Figure 1. Graph of Learning Outcome Mastery for Cycle I

The mastery of student learning outcomes in Cycle II can be seen in the following table and graph.

Table 3. Cycle II Results Data

NO	Test Results	Description	Number of Students	Percentage

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1.	Score ≥ 80	Complete	29	90,6%
2.	Score < 79	Incomplete	3	9,4%
		Amount	32	100%

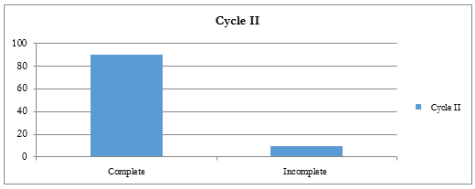


Figure 2. Graph of Learning Mastery in Cycle II

The results from the Cycle II assessment indicate that all aspects included in the student and teacher observation sheets have shown positive progress. Out of the 32 students who took the test, 29 students (90.6%) achieved learning mastery, while the remaining 3 students (9.4%) did not. The average class score obtained was 90.4% (indicating mastery). It can be concluded that the students' learning outcomes regarding the long jump (using the squat technique) have been successful; however, mastery has not yet reached 100%. According to the researcher's analysis, this is because those specific students still require additional time to fully master the technique.

Discussion

The results of Cycle I showed that the number of students who had achieved the minimum learning mastery criteria in the squat style long jump was still relatively low. This was because students did not fully understand the correct techniques, resulting in unsatisfactory jumping performance that did not meet the established learning achievement standards. Several difficulties were identified during the first action of Cycle I. During the approach run, students tended to maintain an upright body position instead of leaning slightly forward, resulting in ineffective take off movements. Some students also placed their take off feet beyond the take off board. Furthermore, inconsistent approaches and incorrect foot placement affected their body positions during the flight phase, as the take off leg was not properly swung forward, preventing the body from achieving sufficient elevation. During landing, students failed to extend both arms forward and instead moved them sideways or backward. Other weaknesses included students' lack of participation in expressing opinions and engaging in learning activities. Their limited interest and attention to the lesson resulted in poor understanding of the teacher's explanations and difficulties in performing the practical movements. Several achievements were observed in Cycle I. During the first meeting, although not all indicators specified in the lesson plan had been achieved, improvements were evident, as shown by the assessment results, in which 23 students had achieved the Minimum Mastery Criteria (KKM). The application of a play based learning approach by the researcher and teacher also made the learning process more interesting and enjoyable, allowing teaching and learning activities to proceed more effectively. Furthermore, the psychomotor, affective, and cognitive assessment results showed improvement, although they had not yet reached the target established for Cycle I. Therefore, the research needed to continue with further improvements in the subsequent cycle. To improve long jump performance, the teacher also planned to provide additional time for students to practice independently. These findings highlighted the importance of teachers and researchers understanding individual differences among students and providing appropriate learning support. The analysis of the Cycle I assessment results indicated that students' squat style long jump performance had not yet achieved the expected level of learning mastery, making it necessary to proceed to Cycle II.

To improve students' learning outcomes, the researcher conducted further observations during the second action of Cycle II throughout the learning process. These observations

aimed to ensure that students could perform the learning activities correctly and effectively. The learning activities followed the same approach as Cycle I, namely the play based learning approach to improve squat style long jump performance. At the end of the cycle, students completed another learning achievement test. The observation process was conducted by the researcher with the assistance of the physical education teacher and the supervisory team, beginning with the implementation of activities to develop students' mastery of squat style long jump techniques. The observations indicated that students were able to perform each phase of the jump correctly, while their discipline and cooperation were also categorized as good. Several improvements were achieved in Cycle II. The teaching and learning process was implemented according to the lesson plan, and the first meeting showed substantial improvement in the achievement indicators. This was demonstrated by the assessment results, in which 29 students achieved the Minimum Mastery Criteria (KKM). Nevertheless, teachers still needed to monitor students closely because some remained inattentive during lessons, while those experiencing difficulties required additional guidance and support.

Mastery of fundamental techniques is a key factor in achieving success in every sport, including the discus throw using the side style technique. Similarly, mastering the squat style long jump requires appropriate teaching methods to deliver learning materials effectively, particularly through the implementation of a play based learning approach. The learning outcomes of the squat style long jump in Cycle II were satisfactory. During the second action of Cycle II, the researcher redesigned the play based learning activities and extended the practice duration based on the difficulties identified in Cycle I. The activities were adjusted to match the learning indicators and students' abilities. During the approach phase, students were encouraged to run as fast as possible toward predetermined obstacles, while the obstacles used during the take off phase were adjusted to their individual abilities to encourage active participation and create an enjoyable learning environment. These improvements successfully addressed the difficulties experienced in Cycle I. Students became accustomed to running quickly during the approach phase, performed the take off movement correctly through appropriately adjusted obstacles, and achieved better body elevation during the flight phase because of improved approach and take off techniques. Consequently, students were able to perform proper landing movements by extending both arms forward. Although the Cycle II assessment results showed significant improvement, not all students achieved learning mastery in the squat style long jump. Three students had not yet met the established criteria. Based on the researcher's analysis, these students required additional practice time to master the movements properly.

Conclusions

Based on the research findings, it can be concluded that the use of a play based approach can improve learning outcomes in the squat style long jump among fifth grade students at SD Negeri 19 Tanjung Harapan for the 2025/2026 academic year.

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Conflict of Interest

The authors declare no conflict of interest.

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