

**IMPROVEMENT OF BASIC LOCOMOTOR MOVEMENT ABILITY THROUGH
THE FARTLEK METHOD BASED ON DEEP LEARNING IN FIFTH GRADE
STUDENTS AT STATE ELEMENTARY SCHOOL 2 LOKTABAT SELATAN**

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ABSTRACT

This study aims to describe the implementation of the Fartlek method based on Deep Learning and to improve the basic locomotor movement skills of students in Class 5B at SDN 2 Loktabat Selatan. The study was motivated by the low locomotor movement ability of students, where only 7 out of 27 students (25.93%) achieved mastery in the pre-cycle stage with a class average of 61.11. This research employed a Classroom Action Research (CAR) design using the Kemmis and McTaggart model, conducted over two cycles. The research subjects were 27 students of Class 5B for the 2025/2026 academic year. Sampling was conducted through purposive sampling based on the results of an initial diagnostic observation. Data collection techniques included student activity observation and locomotor skills performance tests. Data were analyzed using comparative descriptive techniques. Results showed significant improvement: classical mastery increased from 25.93% (pre-cycle) to 55.56% (Cycle I) and 81.48% (Cycle II), with average scores improving from 61.11 to 71.60 and 78.09. Student activity improved from Adequate to Very Good (81.48%) at the end of Cycle II. It is concluded that the Fartlek method based on Deep Learning is effective in improving basic locomotor movement skills in elementary school students.

Keywords: basic locomotor movement, Fartlek method, Deep Learning, Physical Education, CAR

ABSTRAK

Penelitian ini bertujuan untuk mendeskripsikan penerapan metode Fartlek berbasis Pembelajaran Mendalam serta meningkatkan kemampuan gerak dasar lokomotor siswa kelas 5 B SDN 2 Loktabat Selatan. Latar belakang penelitian didasarkan pada rendahnya kemampuan gerak dasar lokomotor siswa, di mana hanya 7 dari 27 siswa (25,93%) yang mencapai ketuntasan pada tahap pra-siklus dengan nilai rata-rata kelas 61,11. Penelitian ini menggunakan desain Penelitian Tindakan Kelas (PTK) model Kemmis dan McTaggart yang dilaksanakan dalam dua siklus. Subjek penelitian adalah 27 siswa kelas 5 B Tahun Pelajaran 2025/2026. Pengambilan sampel dilakukan secara purposive sampling berdasarkan hasil observasi diagnostik awal. Teknik pengumpulan data mencakup

observasi keaktifan siswa dan tes unjuk kerja keterampilan gerak lokomotor. Data dianalisis menggunakan teknik deskriptif komparatif. Hasil penelitian menunjukkan peningkatan signifikan: ketuntasan klasikal meningkat dari 25,93% (pra-siklus) menjadi 55,56% (Siklus I) dan 81,48% (Siklus II), dengan nilai rata-rata dari 61,11 menjadi 71,60 dan 78,09. Keaktifan siswa meningkat dari kategori Cukup menjadi Sangat Baik (81,48%) pada akhir Siklus II. Disimpulkan bahwa metode Fartlek berbasis Pembelajaran Mendalam efektif meningkatkan kemampuan gerak dasar lokomotor siswa sekolah dasar.

Kata Kunci: gerak dasar lokomotor, metode Fartlek, Pembelajaran Mendalam, PJOK, PTK

A. Introduction

Physical Education, Sports, and Health (PJOK) is one of the subjects that uses physical activity as the main medium to achieve educational goals in a holistic manner (Syaputra, et al., 2023). According to the Ministry of Education, Culture, Research, and Technology Regulation Number 7 of 2022, Physical Education (PJOK) learning at the Elementary School Phase C level (grades 5–6) emphasizes mastering basic locomotor movement skills, which include walking, running, jumping, and leaping in a coordinated and directed manner. Good basic locomotor movement skills become an important foundation for mastering more complex motor skills at the next level (Mustafa, 2022). Locomotor movement ability is an important foundation in mastering more complex motor skills. According to

Fajarwati & Arini, (2023), Locomotor movements include walking, running, and jumping. Walking is a natural movement with an alternate step pattern where the feet are always in contact with the ground, whereas running is an extension of walking with a phase where the body is airborne. Meanwhile, jumping is a movement in which the body is briefly lifted into the air and requires strength, balance, and good body coordination. However, the conditions in the field show a different picture. Based on initial observations and diagnostic evaluations conducted during the Field Experience Program (PPL) in grade 5 B of SDN 2 Loktabat Selatan, it was found that out of 27 students, only 7 students (25.93%) achieved a minimum mastery criterion (KKM) ≥ 75 , while 20 students (74.07%) had not yet reached mastery with a class average

score of 61.11. A similar condition was also confirmed by Amirunni'am et al. (2024), who stated that the locomotor movement skills of fifth-grade students in several elementary schools are still in the low category and require innovative learning interventions.

The problem is caused by several factors, including the monotonous and less varied PJOK learning methods which result in low student motivation and enthusiasm, the lack of stimulation for diverse physical activities, as well as the suboptimal use of training methods that can improve students' endurance, agility, and movement coordination. (Suyono, 2024). Previous research that was conducted Irianto, et, al., (2023) proving that an active and varied learning approach is able to increase the mastery of locomotor movement learning outcomes up to 83% at the end of the second cycle.

To address this problem, the researcher proposes the application of the Fartlek method (speed play) based on Deep Learning. The Fartlek method integrates variations of locomotor movements such as walking, running, jumping, and leaping into a sequence of

continuous, enjoyable activities, in accordance with the characteristics of elementary school students (Hariono et al., 2023; Syarif et al., 2023). The integrated Deep Learning approach encourages students not only to perform movements mechanically, but also to understand their meaning, benefits, and to be able to transfer the learned motor skills into real-life contexts, in line with the Merdeka Belajar principle.

The novelty of this research lies in the integration of two innovative approaches, namely the Fartlek method and the Deep Learning approach in Physical Education learning at Phase C Elementary Schools. Until now, the Fartlek method has been more widely used in the context of athletic training and the development of physical fitness for competitive sports, particularly to improve endurance, speed, and movement coordination. However, in this study the Fartlek method was developed and adapted into a learning strategy that is suitable for the characteristics of elementary school students, particularly in learning basic locomotor movements. In addition, this study also presents a Deep Learning approach that

emphasizes meaningful, reflective, and active learning experiences, as well as being transferable to students' daily lives. The integration of these two approaches becomes an innovation that has not been widely applied in physical education learning in elementary schools, because basic movement learning is generally still carried out through conventional teacher-centered methods and provides little in-depth learning experience for students.

Through the application of the Fartlek method based on Deep Learning, students not only practice basic locomotor movement skills such as walking, running, and jumping, but are also trained to think actively, cooperate, reflect on learning experiences, and understand the benefits of physical activity for daily life. Thus, learning becomes more enjoyable, contextual, and meaningful, thereby enhancing student engagement and movement abilities optimally.

This study aims to: (1) describe the implementation of the Fartlek method based on Deep Learning in the learning of basic locomotor movements; and (2) improve the basic locomotor movement skills of

fifth-grade B students at SDN 2 Loktabat Selatan. The results of the study are expected to provide theoretical and practical contributions as a reference for Physical Education teachers in selecting and developing innovative learning methods that are effective, active, and meaningful in improving the quality of physical education learning in elementary schools.

B. Research Method

This research is a Classroom Action Research (CAR) that is collaborative and participatory (Arikunto, 2021). The PTK model used refers to the Kemmis and McTaggart model, which includes four stages in each cycle, namely: (1) planning, (2) acting, (3) observing, and (4) reflecting. The research was conducted at SDN 2 Loktabat Selatan, Banjarbaru Regency, South Kalimantan Province, in the even semester of the 2025/2026 Academic Year, namely from March to May 2026.

The research subjects were fifth-grade B students of SDN 2 Loktabat Selatan in the even semester of the 2025/2026 academic year, totaling 27 students, consisting of male and female students. The determination of

class 5 B as the research subjects was conducted using purposive sampling, which is the selection of samples based on certain considerations according to the research objectives (Machali, 2022). Class 5 B was chosen because based on the results of observations and initial diagnostic evaluations, the basic locomotor movement ability of students in that class was found to be the lowest compared to other parallel classes, thus requiring immediate and planned learning interventions. The data collection techniques used in this study include: (1) Observation, which is direct observation of students' activeness covering aspects of discipline, sportsmanship, and responsibility, conducted by the researcher and the supervising teacher using a structured observation sheet at each meeting; (2) Skills Test, in the form of a 3-Zone Fartlek Course Performance Test that measures basic locomotor movement abilities including walking (Zone 1), running (Zone 2), and jumping (Zone 3), with scores of 1–4 per zone and the final score = $(\text{total score}/12) \times 100$; and (3) Documentation in the form of activity photos and score lists to complete the research data. The

research data were analyzed using comparative descriptive analysis techniques, namely by describing and comparing the data from the basic locomotor skills test and observation data on student activeness across stages (pre-cycle, Cycle I, and Cycle II). Quantitative data analysis was conducted by calculating the class average score, the percentage of classical completeness, and categorizing the level of student activeness based on the observation score percentage. The activeness categorization was established as follows: 75.01–100% = Very Good (VG), 50.01–75% = Good (G), 25.01–50% = Fair (F), and 0–25% = Poor (P). The research success indicator was set if at least 75% of students (at least 21 out of 27 students) achieved a score of ≥ 75 and the classical activeness reached at least the Good category.

C. Research Results and Discussion

Pre Cycle

Before the implementation of the action, a diagnostic evaluation was conducted to obtain an initial picture of the students' basic locomotor movement abilities. Based on the pre-

cycle skill test, the following data was obtained:

Table 1 Pre-Cycle Basic Locomotor Skills

Test	
Category	Result
Students Completed	7 (55,56%)
Students Not Completed	20 (74,07%)
Average Score	61,11

The data in Table 1 shows that out of 27 students, only 7 students (25.93%) were declared complete with scores ≥ 75 , while 20 students (74.07%) were not complete. The class average score in the pre-cycle stage was 61.11, with the highest score of 83.33 and the lowest score of 41.67. Observational results of activeness showed that the majority of students were in the Fairly Active category, indicated by low initiative and participation of students in movement activities. This condition became the basis for carrying out actions in Cycle I.

Cycle I

Table 2 Results of Basic Locomotor Movement Skills Test Cycle I

Category	Result
Students Completed	15 (55,56%)
Students Not Completed	12 (44,44%)
Average Score	71,60

Based on table 2, in Cycle I there was a fairly significant increase in learning outcomes. As many as 15 students (55.56%) were declared

complete, an increase from 7 students (25.93%) in the pre-cycle. The class average score increased to 71.60.

Table 3 Results of Student Activeness Observation Cycle I

Category	Amount	Percentage
Very Good	8	29,63%
Good	17	62,96%
Sufficient	2	7,41%
Poor	0	0%

In Table 3, the level of student activity, the majority of students (62.96%) have reached the Good category and 29.63% have reached the Very Good category. Although there was a significant increase, the classical completeness of 55.56% has not reached the minimum target of 75%, so the research continued to Cycle II.

Cycle II

Table 4 Results of Basic Locomotor Movement Skills Test Cycle II

Category	Result
Students Completed	22 (81,48%)
Students Not Completed	5 (18,52%)
Average Score	78,09

Based on the results in Cycle II, there was a very significant increase. As many as 22 students (81.48%) were declared complete, increasing from 15 students (55.56%) in Cycle I. The class average score increased to 78.09.

Table 5 Results of Student Activeness Observation Cycle II

Category	Amount	Percentage
Very Good	22	81,48%
Good	5	18,52%
Sufficient	0	0%
Poor	0	0%

Based on cycle II, student activity increased significantly, with 22 students (81.48%) reaching the Very Good category and 5 students (18.52%) in the Good category, with no students in the Sufficient or Poor categories. The classical completeness achievement of 81.48% has exceeded the success indicator target of 75%, so the study is declared successful.

Discussion

The research results show a consistent and significant increase in students' basic locomotor movement abilities at each stage. The class average score increased from 61.11 in the pre-cycle to 71.60 in Cycle I, and then increased again to 78.09 in Cycle II. The percentage of classical completeness increased consecutively from 25.93%, 55.56%, to 81.48%. Overall, over the two research cycles, there was an increase in classical completeness of 55.55 percentage points.

The improvement indicates that the Deep Learning-based Fartlek method is effective as an intervention in PE learning. This is in line with the

findings Hariono et al., (2023) which proves that Fartlek training significantly improves agility and movement speed, because it combines slow, medium, and fast running phases alternately, thus providing comprehensive movement stimulation. In the context of elementary school learning, such variations in physical activity are very suitable for the developmental characteristics of elementary school students who tend to be active and enjoy challenges (Irianto, et, al., 2023).

Component-by-component movement analysis revealed that the most significant improvement occurred in the jumping aspect. In the pre-cycle, many students were unable to perform a one-foot push-off simultaneously and land in a balanced manner. After providing special exercises and intensive technique correction in Cycle II, students began to perform the push-off correctly, maintain balance during the flight phase, and land stably. This confirms the importance of gradual learning with immediate feedback as emphasized by Suyono, (2024) that a planned playing method effectively

improves students' jumping and leaping abilities.

The integration of the Deep Learning approach has a significant impact not only on motor skills but also on the affective dimension. Student activity increased from the Fair category in the pre-cycle to the Good category in Cycle I and Very Good (81.48%) in Cycle II. This improvement occurred because the Deep Learning approach encourages students not merely to move mechanically, but to understand the meaning and benefits of each movement activity, reflect on their learning experiences, and connect the skills they have learned to everyday life. This is in accordance with Fullan et al., (2018) which emphasizes that deep learning that stresses active, collaborative, and reflective engagement is capable of significantly enhancing students' motivation and learning responsibility.

The difference in results between Cycle I and Cycle II also proves the effectiveness of the reflection process in the Classroom Action Research model. The completeness, which only reached 55.56% in Cycle I, prompted the researcher to make structured

improvements in the form of more intensive correction of individual techniques, the addition of specific exercises in weak areas, and the implementation of a peer observation system. These improvements proved effective, with completeness increasing to 81.48% in Cycle II. This confirms the view Machali, (2022) that the cyclic PTK model is very effective for the continuous improvement of learning quality.

Compared to the research Amirunni'am et al., (2024) Using traditional games and achieving 90% completeness in cycle II, this study reached 81.48% with the Fartlek method. This difference in achievement can be explained by differences in subject characteristics and assessment instruments. However, both equally prove that active and varied learning methods are effective in improving the locomotor movement skills of fifth-grade elementary school students. The limitation of this study lies in the fact that there were only two cycles, so it is not yet known whether additional cycles could help the five students who have not yet achieved completeness to reach it. An individual remedial program for these

five students is recommended as a follow-up.

D. Conclusion

Based on the research results and discussion that have been described, it can be concluded that the implementation of the Fartlek method based on Deep Learning has been proven effective in improving the basic locomotor movement abilities of 5th grade B students at SDN 2 Loktabat Selatan. The implementation of this method was carried out through a 3-zone track that integrates continuous movement variations, in two cycles of classroom action research with the stages of planning, implementation, observation, and reflection. The integration of Deep Learning principles in the form of meaningful engagement, reflective practice, and transfer of learning successfully created a learning atmosphere that is active, meaningful, and enjoyable.

The improvement in basic locomotor movement skills is shown quantitatively through the increase in the class average score from 61.11 (pre-cycle) to 71.60 (Cycle I) and 78.09 (Cycle II), as well as the increase in classical completeness from 25.93% to 55.56% and 81.48%.

The achievement of 81.48% has exceeded the success indicator target of 75%. Student activeness also increased from the Sufficient category to Very Good (81.48%) at the end of Cycle II.

Based on these findings, several suggestions are presented: (1) PJOK teachers are advised to implement the Fartlek method as a variation of basic locomotor movement learning in higher classes, by designing varied courses and integrating the principles of Deep Learning; (2) Schools are advised to support the implementation of classroom action research periodically and provide adequate PJOK facilities; (3) Future researchers can develop this study by increasing the number of cycles, expanding the research subjects, or combining the Fartlek method with other innovative learning approaches.

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