Efforts to Improve Long Jump Learning Achievement Through 50-Meter Sprint Training

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Abstract

Study purpose. When it comes to sports, particularly long jump, many students are less active. The author became interested in doing class action study under the topic Efforts to Improve Long Jump Learning Achievement Through 50 Meter Fast Running Exercises, as previously mentioned.

Materials and Methods. The research was conducted via multiple cycles in the hopes of increasing the results to be obtained, including (a) lesson planning, (b) action implementation, (c) observation, and (d) reflection. The approach employed was Classroom Action Research (PTK), also known as action research.

Results. In cycle I, the average score was obtained with poor/low criteria, the average result of the learning completeness criteria was 48%. Furthermore, in cycle II, the average score was obtained with good criteria, the average result of the learning completeness criteria was 98%. Data was obtained from 25 students, the lowest score was 69 by Aprilia Pranadia and the highest score was 86 by Ibrahum Nasir.

Conclusion. By using the 50-metre sprint learning method, students' ability to perform the long jump can improve. The ability of students to take part in learning by using the Sprint Run method from cycles I and II had increased, namely student completeness reached 99% based on the Minimum Completeness Criteria (KKM) value.

Keywords: Learning Results, Long Jump, Training, 50 Meter Sprint

Introduction

Good physical education should be able to increase children's knowledge of movement principles. This knowledge will enable children to understand how a skill is learnt to a higher level, thus making all their movements more meaningful (Suganda & Suharjana, 2013). In carrying out this education, an educational institution is needed to obtain knowledge and skills, namely school. School is a formal and systematic educational institution that provides various

opportunities for students to carry out various activities (Bangun, Sunarno, Damanik, Ilham, & Suganda, 2023). Through this education, students can develop their creativity and can encourage students to achieve expectations in accordance with what they want.

Physical education in primary schools has been oriented towards teaching sports that are directed at mastering detailed techniques and achievements in the sports taught (Faridah, Rubiyatno, Adam, & Suganda, 2021). Such demands always affect the perceptions and mindsets of physical education teachers and students. This reality can be seen in the field, from observations it can be said that the implementation of physical education has not been well managed with the growth and development of students both in terms of cognitive, affective, psychomotor, and physical (Oliveira, Maher, & Pinto, 2020). The subject of physical education, sports, and health (Penjasorkes) is one of the efforts to change students towards the expected direction in accordance with national goals (Alif & Sudirjo, 2019). Physical Education, Sports, and Health are part of general education that prioritizes movement activities as a medium of learning.

In the physical education learning process, teachers are expected to teach various basic movement skills, techniques, and strategies of sports games, internalization of values (sportsmanship, honesty, cooperation), and habituation to a healthy lifestyle (Hendri & Aziz, 2020). For this reason, the implementation of physical education does not only involve conventional teaching in the classroom which is a theoretical study, but also involves physical, mental, intellectual, emotional, and social elements (Mastika Yasa & Bhoke, 2019). In addition, the activities provided in teaching must have a touch of methodical didactics, so that the activities carried out can achieve teaching goals (Manurung, Junaidi, & Hermawan, 2021). There is no education that does not have pedagogical targets, and no education is complete without physical education. Movement as a physical activity is the basis for humans to know the world and themselves, which naturally develops in line with the times.

The long jump is one of the individual athletic sports taught in elementary schools starting from class IV to class VI (Zainuri, 2020). The main purpose of the long jump is to be able to jump as far as possible. To be able to do a long jump, many factors support and need to be taught to students or learners (Mubaligin, Candra, Irawan, Study, & Physical Health and Recreation, 2018). When a teacher provides long-jump learning in order to produce reliable and successful students in learning, it is not enough to only provide basic techniques, because, in the long jump, many factors contribute to the success of a student, including the right learning method, qualified and capable teachers who are good and right, supporting models, supporting body proportions, the physical condition of the students concerned, qualified sports infrastructure and other supporting factors.

Running speed in the long jump has a very large role in achieving squatting long jump learning outcomes. A long jumper who has running speed will get a huge advantage in the form of a stronger forward push when the body is lifted up. (Wahidi & Nurcahya, 2019). Thus it can be said that the faster the run, the longer the resulting jump distance will be. For this reason, in order to select or select long jump students, a sprinter is very appropriate to be used as an alternative main choice, because a sprinter has a good physical condition in terms of leg muscle strength and running speed. A long jumper who has leg muscle strength and running speed will be able to develop a longer jumping style in the air so that with his leg muscle strength and running speed he will be able to make long jumps (Bagus Endrawan, 2021). Leg muscle strength is a quality that allows the development of muscle tension in maximum contraction which will be used in jumping as far as possible. According to (Arisma, Jafar, & Nusufi, 2016) the long jump is the simplest number compared to other field numbers. Before students are given long jump lessons or exercises, they can already perform basic long jump movements, so students will quickly learn the long jump correctly.

Initial learning results at SD Negeri 13 Prabumulih on 4 May 2023. Students had not been able to do the long jump squatting style properly and correctly, especially in class V, after seeing the students' final grades and student learning completeness. The reason behind the research sampling of class V students was that many students were not able to do the squat long jump properly and correctly and were not able to make a good prefix. However, it had never been known that running speed had an effect on long jump ability in grade V students of SD Negeri 13 Prabumulih. To produce a long jump properly and correctly, a teacher needs to know the factors that affect the ability to squat long jump. In addition, there are Competency Standards and Basic Competencies in the K13 Syllabus that contain squatting long jump material, so this study will examine "Efforts to Improve Long Jump Learning Achievement through 50 Meter Sprint Training at Prabumulih 13 State Elementary School".

Materials and Methods
Participants

The population and samples in this study were class V.A and class V.B which totalled 47 people consisting of 21 boys and 26 girls. The sample was part of the number and characteristics of the population, or a small number of members of the population taken according to certain procedures so that they could represent the population. (Sugiyono, 2015) This sampling system uses Cluster Sampling, which is a crowd, group, cluster, or bond that is similar (has the same characteristics or circumstances). So a "swarming" population means a population in which there are groups or groups. In this case, the group or group does not contain a group because the level or group is multilevel, so from the existing population, the researcher took a research sample of class V.A which can be seen in Table 1.

Tabel 1. Tabel Sample

No	Class	Man	Woman	Total
1	V.A	12	13	25

(Source: Tata Usaha SD Negeri 13 Prabumulih, 2023)

Through observation, the sample for the study was class V.A because 60% of the students could not perform the long jump properly and correctly based on observation.

Study organization

The method used was Classroom Action Research (PTK) often called action research (Arikunto, 2015), wherein multiple cycles of this research would be conducted with the aim of enhancing the desired outcomes. Experts vary in their suggestions for classroom action research models, but generally speaking, four stages are utilized: (a) Learning Planning; (b) Action Implementation; (c) Observation; and (d) Reflection. Moreover, KKM (Minimum Completeness Criteria) is the lowest standard by which pupils can be said to have attained completeness (Zainuri, 2020). Subject KKM is determined by instructors or groups of teachers based on three criteria: student intake, carrying capacity, and complexity.
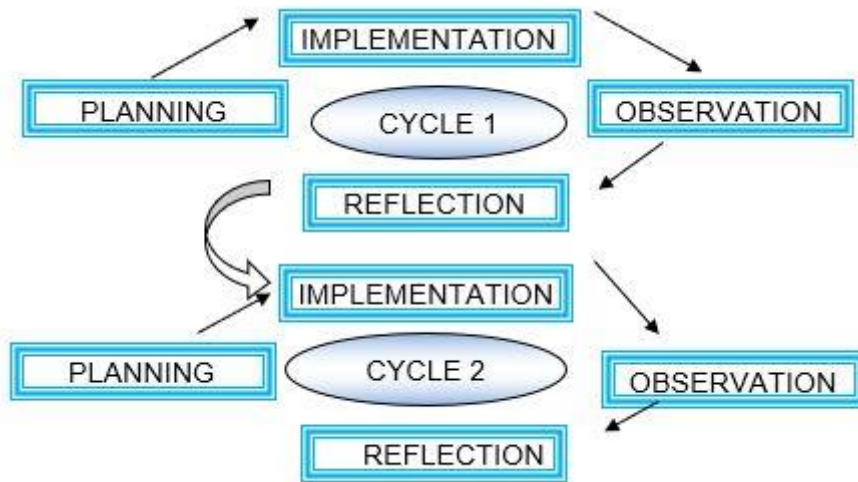
Figure 1. Research Design

Statistical analysis.

After the field data in Cycle 1 and Cycle 2 were collected, the data analysis technique used was to calculate the percentage and use Excel tools. The formula used to calculate the percentage of respondents is as follows:

$$P = \frac{F}{N} \text{ X } 100 \text{ \%}$$

Information:
P = Percentage
F = Frequency
N = Number of subjects

Results

Pre cycle Results

The results obtained by students before being given action can be seen in Table 2 below:

Table 1. Pre-Cycle Data for Long Jump Values Squat Style

No.	Name of Student Class V	KKM Score	Score	Information
1	ALL	70	73	Complete
2	MAP	70	80	Complete
3	APW	70	64	Not Complete
4	AAM	70	60	Not Complete
5	AP	70	68	Not Complete
6	ALL	70	76	Complete
7	DA	70	64	Not Complete
8	DP	70	60	Not Complete

9	EIN	70	68	Not Complete
10	FWF	70	80	Complete
11	FAW	70	83	Complete
12	FA	70	65	Not Complete
13	HG	70	64	Not Complete
14	IN	70	60	Not Complete
15	IH	70	68	Not Complete
16	K	70	64	Not Complete
17	MAS	70	60	Not Complete
18	MRP	70	68	Not Complete
19	MAK	70	69	Not Complete
20	MAF	70	64	Not Complete
21	MFD	70	60	Not Complete
22	MRC	70	68	Not Complete
23	NSK	70	64	Not Complete
24	NSA	70	60	Not Complete
25	NVA	70	68	Not Complete
	Total		1.678	
	Mean		67,12	
	Percentage		20%	

Initial data on student learning results obtained from the daily test scores of students in class V.A SD Negeri 13 Prabumulih before the cycle (pre-cycle) on Long Jump material obtained an average class completeness value of 20%. The data shows that there were 20 students who were below the KKM score out of a total of 25 students in class V A SD Negeri 13 Prabumulih or around 80% had not completed the PJOK subject, especially the Long Jump material with a class KKM value of 70. The data can be seen in the following graph is depicted in the diagram as follows:
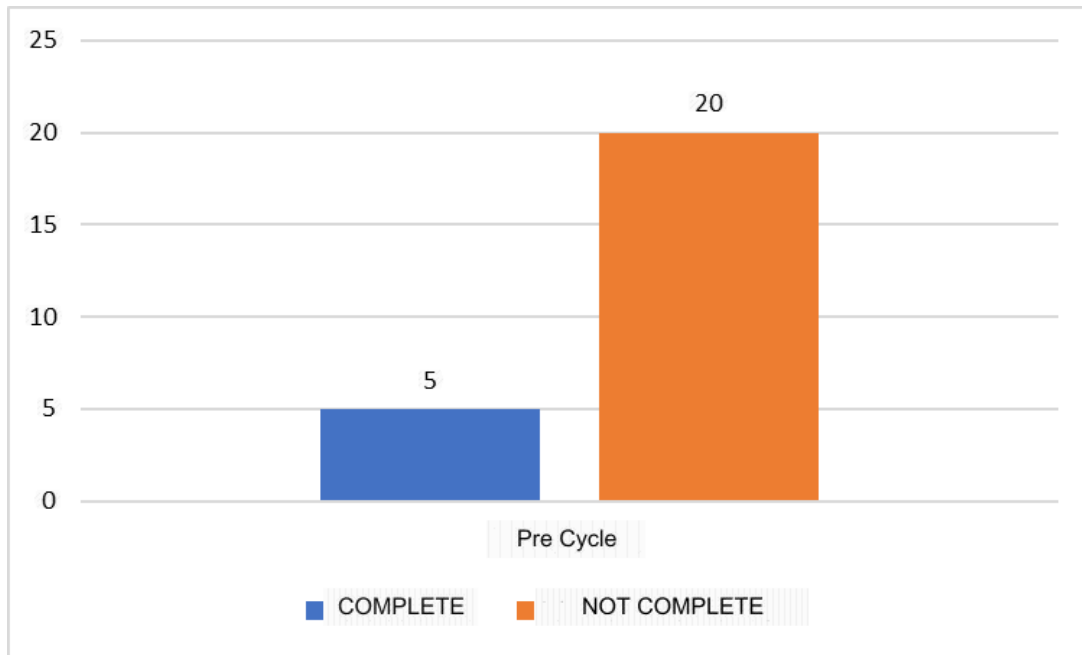
Figure 2. Grade V.A Students of SD N.13 Prabumulih (PreCycle)

Cycle I

Observation activities in the implementation of the cycle I consisted of 1) Observing student activity in learning the long jump and 50-meter run, 2) Assessing students in learning the long jump and running 50 meters, and 3) Processing the results of learning the long jump and running 50 meters.

Table 2. Data from Cycle 2 Long Jump Squat Style Results

No.	Name of Students Class 5	KKM Score	Score	Information
1	AIL	70	73	Complete
2	AAP	70	80	Complete
3	APW	70	80	Complete
4	AAM	70	80	Complete
5	AP	70	68	Not Complete
6	AIL	70	76	Complete
7	DA	70	80	Complete
8	DP	70	68	Not Complete
9	EIN	70	80	Complete
10	FWF	70	80	Complete
11	FAW	70	68	Not Complete

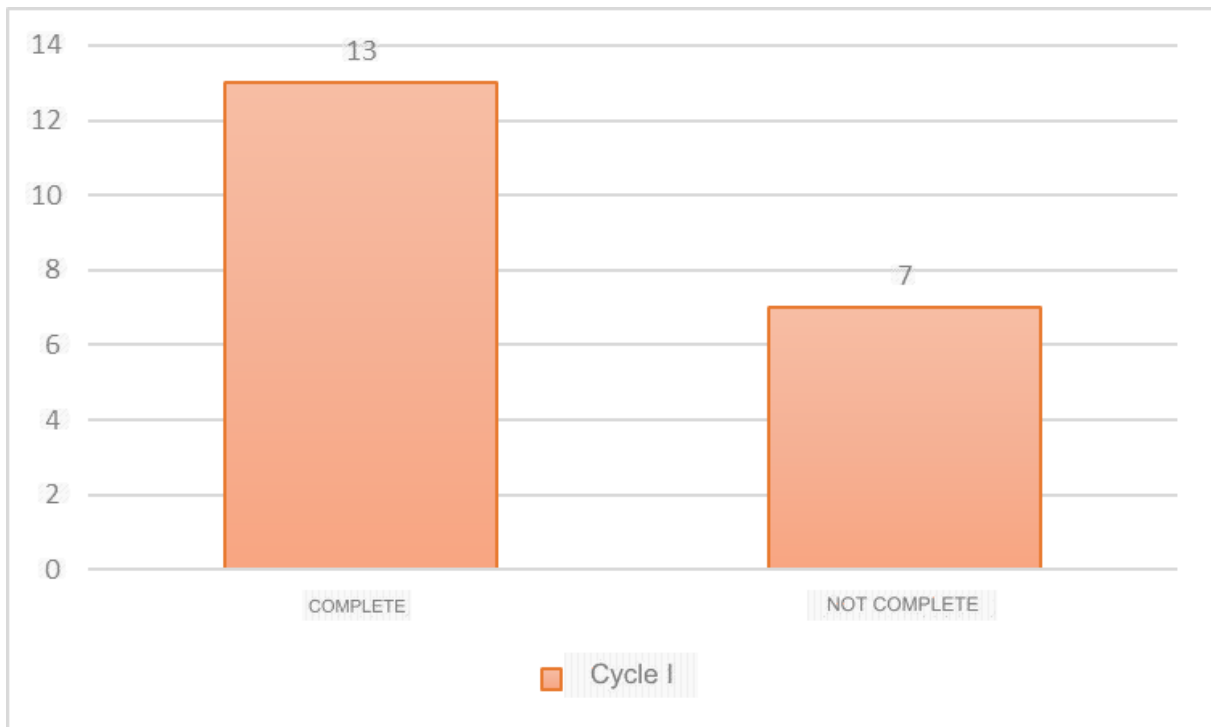| 12	FA	70	80	Complete
13	HG	70	80	Complete
14	IN	70	80	Complete
15	IH	70	80	Complete
16	K	70	68	Not Complete
17	MAS	70	80	Complete
18	MRP	70	80	Complete
19	MAK	70	68	Not Complete
20	MAF	70	80	Complete
21	MFD	70	68	Not Complete
22	MRC	70	80	Complete
23	NSK	70	80	Complete
24	NSA	70	68	Not Complete
25	NVA	70	80	Complete
	Jumlah		1.678	
	Average		67,12	
	Completeness		20%	

Figure 3. List of Student Scores Results from Observation of Implementation of Cycle I

Based on the data from the first cycle, 12 students met the KKM score requirements, while 13 students fell short of the KKM score. With a 70% research success criterion, it may be determined that the class average of completed pupils was 48%. This indicates that there was a 28% rise in order to meet the success criterion and forward the research to the next cycle, cycle II.

Cycle II

From the cycle I data above, the results obtained were that 12 students had completed the KKM score and 13 students were below the KKM score. Furthermore, in Cycle II the data can be seen in the following graph:
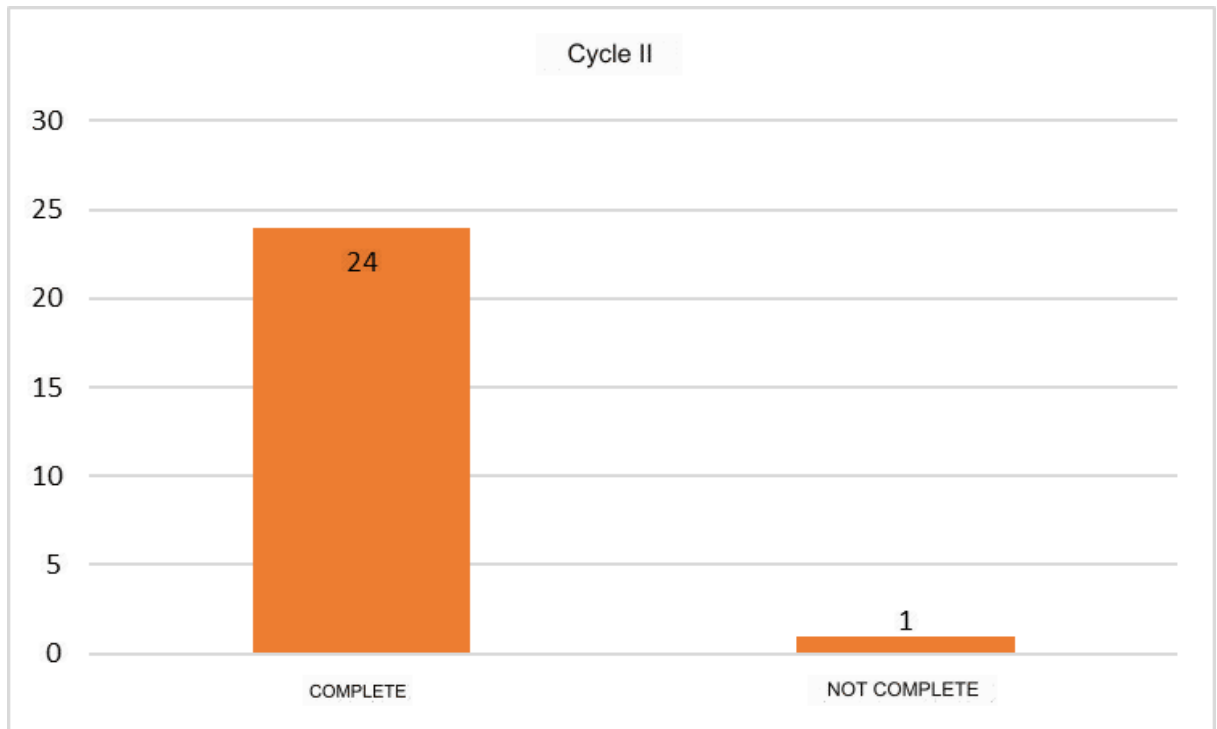
Figure 4. List of Student Scores from Cycle II

From the cycle II data above, the results obtained were 24 students completed with the KKM score and 1 student below the KKM score. It can be concluded that the class average of students who were complete was 98% with the research success criteria being 70%. This means that this research has been successful. The data can be seen in Table 3.

Table 3. Data from Cycle 2 Long Jump Squat Style Results

No.	Name Of Students Class V	KKM Score	Score	Information
1	AIL	70	73	Complete
2	AAP	70	80	Complete
3	APW	70	80	Complete
4	AAM	70	80	Complete
5	AP	70	68	Not Complete
6	AIL	70	76	Complete
7	DA	70	80	Complete
8	DP	70	80	Complete
9	EIN	70	80	Complete
10	FWF	70	80	Complete
11	FAW	70	83	Complete

12	FA	70	80	Complete
13	HG	70	80	Complete
14	IN	70	80	Complete
15	IH	70	80	Complete
16	K	70	80	Complete
17	MAS	70	80	Complete
18	MRP	70	80	Complete
19	MAK	70	80	Complete
20	MAF	70	80	Complete
21	MFD	70	80	Complete
22	MRC	70	80	Complete
23	NSK	70	80	Complete
24	NSA	70	80	Complete
25	NVA	70	80	Complete
Jumlah			1.678	
Average			67,12	
Completeness			20%	

The data above shows that there was a very good increase in learning completeness, from the first cycle data of 48% to 99% in the second cycle because students were very enthusiastic. Among other things, due to motivation from teachers and students who really understood how to run and long jump well and correctly, by using this method students succeeded and completed the Long Jump material. The above data can be seen in the following graph:
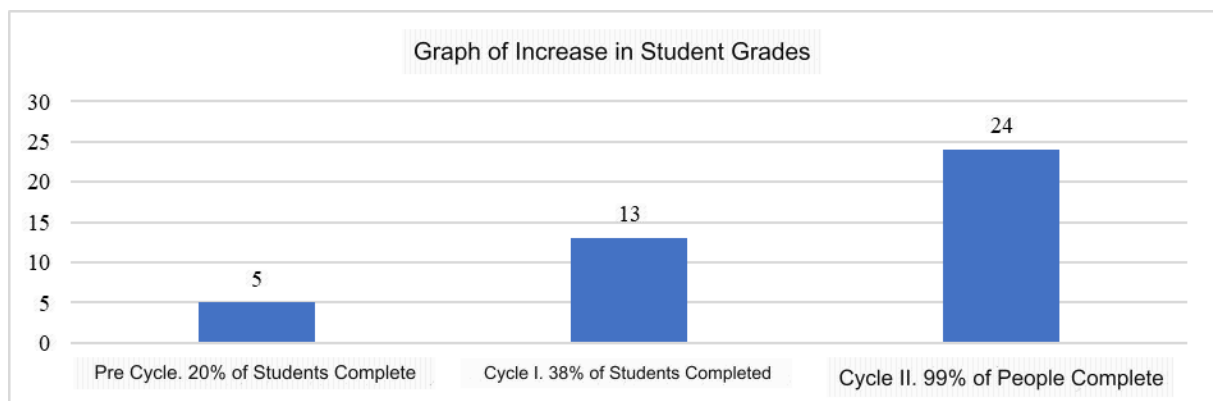

Figure 5. Graph of Increase in Grade V.A Students of SD N.13 Prabumulih

Discussion

The learning process of the Long Jump through the application of the 50 Meter Sprint Run (Suhaedi, 2016) properly and correctly at SD Negeri 13 Prabumulih could improve student learning outcomes on Long Jump material and understand the material more purposefully, students were required to understand the basics of long jump movements, especially in the prefix part, namely running.

In the results of the research (Hakim & Jumaldi, 2017) it was found that there was a significant direct contribution between running speed and long jump ability. Furthermore, the results of research (Andi Nur Abady, 2019) show that there was a positive and significant relationship between leg muscle explosiveness and long jump ability in the air (r = 0.72). Leg muscle explosiveness contributes 51.84% to students' long jump ability. It was found that students basically needed a complete understanding of learning so that students could play an active role and understand the material provided and students needed to make learning modifications or learning updates so that students would get new experiences in participating in learning, especially the Long Jump. Based on appropriate and well-executed actions, researchers can create updated hypotheses for learning how to long jump. A poor average result was attained, and the average result fell short of the 48% research success requirement, based on observations made during the learning of the Long Jump utilizing a 50-meter sprint in cycle I.

Based on the results of observations during learning the Long Jump using the 50 Meter Sprint in cycle II, an average score with Very Good criteria was obtained and these results were above the average research success criteria of 99%. From the research data above, data from 25 students were obtained, the lowest score was 6.9 by AP and the highest score was 8.3 by DA because AP from start to finish had not been able to understand the movements in the elements of the long jump so that he got results below the minimum. So from this data, it can be concluded that using the 50 Meter Fast Run properly and correctly in the Long Jump can increase success by 99%. From the results of the relevant research, it can be seen that the ability to run fast affects the ability to long jump.

Based on the research results obtained, the results of this class action research can be concluded that the results of the long jump test before being given action were 5 people with an average of 67.12 or 20% of the 25 students who had long jump results that met the Minimum Completion Criteria. After being given the first cycle it was still not successful because it only reached an average of 69.98 or 48%. Success was only seen in cycle II because it reached learning completeness with an average of 78.68 or 99%. From the achievement of 100% completeness, only 1% were incomplete on the grounds that one student had a different posture from other students (stiff movements), resulting in ineffective test assessment movements. Thus, there was a significant increase in the results of the long jump after playing the 50-meter sprint run game for fifth-grade students of SD Negeri 13 Prabumulih.

Conclusions

By using the 50-meter sprint learning method, students' ability to perform long jumps could improve. The ability of students to take part in learning by using the Sprint Run method from cycles I and II had increased, namely student completeness reached 99% based on the Minimum Completion Criteria (KKM) value. There are still shortcomings in the study because this study only used a sample of elementary school students and the efforts made were only 50-meter sprints. Future research can use other methods to improve long jump ability, such as jumping cardboard, jumping blocks and combined with other variables.

Conflict of interest

No conflicts of interest to declare.

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