



Implementation of the Circuit Learning Model to Improve Physical Fitness Based on the Independent Curriculum for Grade V at SDN 79 Mambue, Maros Regency

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ARTICLE INFO	ABSTRACT
Published Online: 11 July 2026	The results of the study showed that the percentage of student completeness in (pre-cycle) there were no students who achieved the KKTP value with a percentage of 0%, in (cycle I meeting 1) there were no students who achieved the KKTP value with a percentage of 0%, in (cycle I meeting 2) there was 1 student who achieved the KKTP value with a percentage of 3.84%, in (cycle I meeting 3) there were 6 students who achieved the KKTP value with a percentage of 23.07%, in (cycle II meeting 1) there were 13 students who achieved the KKTP value with a percentage of 23.07% who obtained the Good category value and 26.92% who obtained the value with the Sufficient category, in (cycle II meeting 2) there were 19 students who achieved the KKTP value with a percentage of 0%. 3.84% who obtained grades in the Very Good category, 19.23% who obtained grades in the Good category, and 50% who obtained grades in the sufficient category, in (cycle II meeting 3) there were 21 students who achieved KKTP grades with a percentage of 19.23% who obtained grades in the Very Good category, 34.61% who obtained grades in the Good category, and 26.92% who obtained grades in the Sufficient category. So in conclusion, it can be seen that the increase in the ability of physical fitness learning outcomes in grade V students of SDN 79 Mambue, Maros Regency by using the development of the Circuit learning model can increase significantly.
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KEYWORDS: Physical Fitness, Circuit Based Learning	

I. INTRODUCTION

This Physical Fitness Program for Elementary Schools is designed to create an environment that supports an active and healthy lifestyle. The program will include various activities tailored to the needs and abilities of children, with the main goal of improving physical fitness and fostering healthy habits from an early age. Based on the researcher's observations during the learning process in physical education and health lessons on physical fitness material at SDN 79 Mambue, Maros Regency, students experienced difficulties in applying and developing certain movements. This can be seen from the results obtained by fifth-grade students when performing tests on psychomotor, affective, and cognitive aspects at the beginning of the lesson: out of 28 students, 7 students (23.33%) achieved scores meeting the minimum completeness criteria (KKM) of ≥ 70 , while 21 students (76.66%) did not reach the minimum completeness criteria (incomplete), i.e., ≤ 70 . This is caused by the fact that many students still do not understand the learning of physical fitness. In the process of learning Physical Education and sports at school, there are many things that a

teacher must consider, one of which is selecting a suitable learning model to be applied to students so that the learning process can run well.

Modifying an appropriate learning model can improve students' abilities, so that the teaching and learning process at school can run smoothly, as well as effectively and efficiently. Based on the above problem, the author attempts to provide a solution to tackle the issue by developing a learning model that appears varied, thereby increasing students' abilities, namely the circuit learning model. This circuit learning model is believed to enhance physical fitness learning for students at SDN 79 Mambue, Maros Regency. The self-circuit learning model has several different movement phases which are then combined into a single learning model so that motion engineering can be adjusted according to the students' needs. Based on the background above, the author has determined the title of their writing: "Development of a Circuit Learning Model to Improve Physical Fitness Based on the Merdeka Curriculum for Grade V Students of SDN 79 Mambue, Maros Regency".

II. METHODS

The type of research used in this study is Classroom Action Research (CAR). With this Classroom Action Research, the researcher can observe students by using a specific learning model to improve student learning outcomes. This Classroom Action Research is deliberately carried out with a specific purpose in the form of a series of cyclical activities, carried out in four stages, namely planning, implementation, observation, and reflection. Thus, progress in a learning process or activity can be monitored.

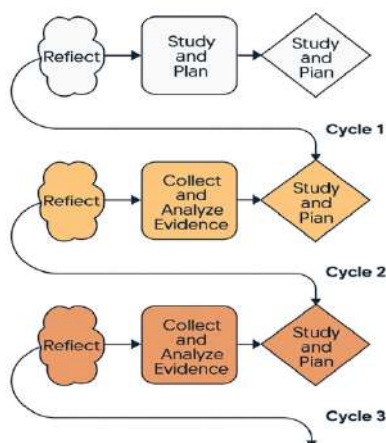


Figure 1. Margaret Riel's Classroom Action Research Cycle (Sudirman Burhanuddin, 2024)

This classroom action research procedure was carried out using two cycles, with each cycle following the same stages, so in this study, it was conducted in two cycles. In other words, if Cycle I was not successful, it would be continued with Cycle II. In Cycle II, improvements to the activities in Cycle I are expected. The implementation of this research focuses on two aspects, namely the learning process by applying the circuit model and the physical fitness learning outcomes of fifth-grade students at SD Negeri 79 Mambue, Maros Regency.

1. **Process Focus** The process focus involves observing the events or activities that occur during the learning process, which includes the activities of teachers and students as well as the interactions among all elements during the implementation of the Circuit model in the physical fitness learning process for fifth-grade students at SD Negeri 79 Mambue, Maros Regency.

2. **Outcome Focus** This research will focus on learning outcomes, namely observing the improvement in student learning results after using the Circuit learning model through research cycles and conducting assessments. The data collection process in this classroom action research was carried out using tests. Tests are the main instruments of the research used to gather data in order to measure physical fitness using the Circuit learning model. The tests given were cognitive, psychomotor, and affective tests. In this

study, the tests provided to examine these three aspects in students were a grid (Assessment) containing questions, steps to perform sprint, sit-up, vertical jump, plank, and backbend movements, as well as matters related to attitude. The researcher conducted this to measure the students' level of ability and understanding of physical fitness. The focus of this study is to improve physical fitness using the circuit learning model for fifth-grade students of SD Negeri 79 Mambue, Maros Regency.

Research instruments are tools used to collect data during the research process. The instrument used is the Assessment Evaluation.

This learning outcome test instrument is used to measure the level of success of students in improving physical fitness using the circuit learning model. The tests given in the final evaluation include a test to measure students' cognitive understanding of physical fitness and a practical test assessed from the psychomotor aspect, which is the students' ability to perform sprinting, sit-ups, vertical jumps, planks, and backbends correctly and properly.

Indicators of Learning Success The indicators of success in this classroom action research are the improvement of physical fitness through the Circuit learning model in Grade V of SD Negeri 79 Mambue, Maros Regency. According to the Minimum Mastery Criteria (KKTPM) set by the school, the minimum individual mastery standard is a score of 70, and classical mastery is achieved when 80% of Grade V students at SD Negeri 79 Mambue, Maros Regency meet the standard. The percentage of student activity increases in each cycle. There is an improvement in the average learning outcomes in each cycle, and The level of classical student mastery reaches >80%. Class mastery is calculated using the formula = (Number of Students Mastered)/(Total Students) x 100%.

Table 1. Student Learning Outcome Completion Indicators

No	Value Range	Criteria	Description
1	91 – 100	Very good	complete
2	80 – 90	good	complete
3	70 - 79	Sufficient	complete
4	69- 51	poor	incomplete
5	<50	very lacking	incomplete

III. RESULTS

1. Description of the initial condition (Pre-Cycle)

Before conducting the research process, the researcher together with collaborators carried out an initial observation to determine the baseline condition regarding physical fitness material in fifth-grade students of SDN 79 Mambue, Maros Regency, before implementation was provided during the study.

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Table 2. Initial observation data of physical fitness

No	Value Range	Frequency	Percentage	Criteria	predicate
1	90-100	0	0%	A	Very good
2	80-89	0	0%	B	good
3	70-79	0	0%	C	Sufficient
4	50-69	1	3,84%	D	poor
5	< 50	25	96,15%	E	very lacking
Amount		26	100%		

Based on Table 2 above, it can be concluded that out of 26 students, 1 student received a D grade "poor" with a percentage of 3.84% and 25 students received an E grade "very poor" with a percentage of 96.15%. Therefore, it can be concluded that none of the 26 students have achieved the KKM score of 70 that was applied. For that reason, the researcher will implement an intervention on the learning outcomes of fifth-grade students at SDN 79 Mambue, Maros Regency, by implementing the circuit learning model in physical fitness lessons. This research is a combination of Classroom Action Research and Experimental Research, designed for 3 meetings in 1 cycle, with each cycle having the stages of planning, implementation, observation, and reflection. The results of this study have slight differences from other written works in that the research result percentages will only appear in the conclusions for each cycle. Therefore, from the 3 meetings in each cycle, the meeting with the best score in the cycle will be selected.

2. Cycle I

In this step, observations were made by researchers and collaborative teachers during the learning process. At this meeting, all students were present, there were 26 students in total. After the implementation process of the circuit-based learning model on physical fitness in class V students of SDN 79 Mambue Kabupaten Maros. The following are the results of observations of physical fitness in class V students of SDN 79 Mambue Kabupaten Maros which are assessed from three aspects, namely cognitive, psychomotor, and affective.

Table 3. shows the data results in cycle I

No	Value Range	Frequency	Percentage	Criteria	predicate
1	90-100	0	0%	A	Very good
2	80-89	0	0%	B	good
3	70-79	0	0%	C	Sufficient
4	50-69	2	7,69%	D	poor
5	< 50	24	92,30%	E	very lacking
Amount		26	100%		

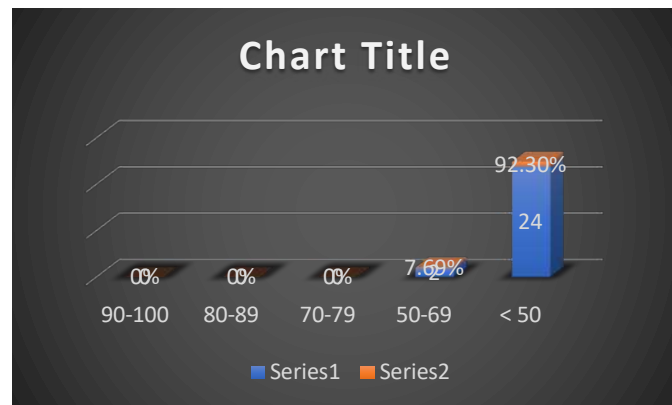


Figure 2. Observation Graph Cycle 1

Based on Table 3 above, it can be concluded that out of 26 students, 2 students received a D grade 'poor' with a percentage of 7.69%, and 24 students received an E grade 'very poor' with a percentage of 92.307%. Therefore, it can be concluded that none of the 26 students have reached the KKKP score of 70, which was applied, resulting in a percentage of 0%.

This stage was carried out at the end of Cycle I to review all observation results during the learning process. The obstacles and successes during the activities are as follows: 1). Male and female students were very enthusiastic in participating in physical fitness lessons. 2). Based on the scores obtained, each individual showed an increase in several points, although it had not yet reached the expected score. The obstacles encountered are: 1). Students still have a very limited understanding of each movement in performing physical fitness exercises. 2). The use of time is still not very effective.

3. Cycle 2

In this step, observations were made by the researchers during the learning process. At this meeting, all 25 students were present. This was after implementing the circuit-based learning model in physical fitness lessons for class V students at SDN 79 Mambue Kabupaten Maros. The following are the results of the physical fitness observations of class V students at SDN 79 Mmambue Kabupaten Maros, assessed from three aspects: cognitive, psychomotor, and affective.

Table 4. shows the data results in cycle II

No	Value Range	Frequency	Percentage	Criteria	predicate
1	90-100	5	19,23%	A	Very good
2	80-89	9	34,61%	B	good
3	70-79	7	26,92%	C	Sufficient
4	50-69	5	19,23%	D	poor
5	< 50	0	0%	E	very lacking
Amount		26	100%		

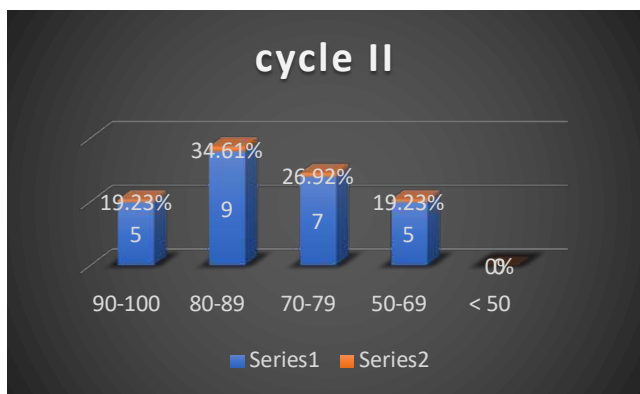


Figure 3. Observation Graph Cycle II

Based on the table 4. above, it can be concluded that out of 26 students, 5 students obtained an A grade “excellent” with a percentage of 19.23%, 9 students obtained a B grade “good” with a percentage of 34.61%, 7 students obtained a C grade “satisfactory” with a percentage of 26.92%, and 5 students obtained a D grade “poor” with a percentage of 19.23%. Therefore, it can be concluded that out of 26 students, 21 students achieved the KKTP score of 70, which is applied with a percentage of 80.76%.

This stage is carried out at the end of cycle II to review all the results of observation activities during the learning process. The successes achieved during the activity process are as follows: 1) Each assessment aspect—affektive, cognitive, and psychomotor—has shown that it has reached the applied KKM (Minimum Competency Criteria) value of 70. 2) There are already 5 students who obtained an A with a 'very good' category, 9 students obtained a B with a 'good' category, and 7 students obtained a C with a 'sufficient' category. Based on the successes achieved during the learning process, the criteria for completeness in Classroom Action Research have been met with an 80% success rate, so there is no need to proceed to the next stage.

VI. DISCUSSION

“Classroom Action Research is an observation of learning activities in the form of an action that is deliberately introduced and occurs collectively in a classroom. The action is given by the teacher or under the teacher's guidance and carried out by the students” (Sudirman Burhanuddin 2015:6). This study aims to determine whether the development of a circuit learning model can improve physical fitness in fifth-grade students at SDN 79 Mambue, Maros Regency. Education is one of the main factors in improving the quality of human resources. In the learning process, students' learning outcomes are an important indicator to assess the effectiveness of education. Good learning outcomes indicate that students have understood and mastered the material taught. Physical education is an integral part of overall education, characterized by very fundamental traits that distinguish it from other subjects, marked by the involvement of physical components, such as

endurance, strength, flexibility, speed, and other physical components encompassed in the objectives to be achieved. According to Slameto (2003), learning is the process of effort carried out by an individual to achieve a comprehensive change in behavior as a result of experience and interaction with the environment. According to Abner (2023), Circuit Learning is a learning model that combines project-based learning with modern technology. Students learn through a series of activities at several "stations" or "posts" alternately, which encourages active interaction, collaboration, and deep understanding. Based on the observations and expert opinions above, it can be concluded that physical education learning using the circuit model in improving the physical fitness of fifth-grade students at SDN 79 Mambue, Maros Regency, can be considered successful. This also illustrates that the implementation of the circuit learning model is very effective and highly suitable for use in Physical Education and Health lessons, especially in the material related to physical fitness. From the explanation above regarding the research on all aspects, it can be concluded that out of 26 fifth-grade students who participated in physical fitness lessons with the sub-materials of 40 M running, sit-ups, jumping jacks, plank, and bridge exercises, assessed in affective, cognitive, and psychomotor aspects, 21 students achieved the predetermined score (KKTP=70). This means that 80.76% of the fifth-grade students are able to perform physical fitness exercises correctly and properly.

V. CONCLUSION

Based on the results of the research conducted, it can be concluded that the implementation of the Circuit learning model has been proven to significantly improve physical fitness learning outcomes in fifth-grade students of SDN 79 Mambue, Maros Regency, who use the Merdeka Curriculum. Hope for the future: 1. The results of this study provide valuable information for academics and educational institutions at large about how the circuit learning model can improve physical fitness learning outcomes for fifth-grade students at SDN 79 Mambue, Maros Regency. 2. The research results can offer academic contributions to researchers, expanding scientific knowledge on how to apply disciplinary fields, particularly in physical education and sports. 3. Continue practices that have proven effective in learning and further develop methods that have been tested during the study. 4. Conduct further research focusing on aspects that were not optimal or not covered in previous studies, test the effectiveness of the method in different contexts, such as other grade levels or subjects, to observe result consistency, and develop sharper evaluation instruments to measure the impact of actions more accurately.

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