



# Improving Learning Outcomes of Relay Running Using Modified Media Sticks from Wood for Class V Students of SD Inp. 6/75 Corawali, Barebbo District, Bone Regency, Indonesia

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**Abstract.** The objectives of this study were to 1) fifth grade students of SD Inpres 6/75 Corawali, Barebbo sub-district, Bone district. 2) To describe the use of modified wooden baton media to improve the learning outcomes of relay running for fifth grade students of SD Inpres 6/75 Corawali, Barebbo sub-district, Bone district This research was conducted using a qualitative approach. This approach is descriptive with the type of research used in this research is *classroom action research*. The subjects of this study were teachers and students of Class V SD INP. 6/75 Corawali, Barebbo sub-district, Bone district. The number of students is 20 people, consisting of 9 boys and 11 girls who are active in the even semester of the 2022/2023 school year. Data collection techniques in this study are observation and test. Data analysis techniques are data reduction, data presentation, conclusion drawing. The results showed that using modified media sticks from wood can improve the learning outcomes of relay running of Class V SD INP students. 6/75 Corawali Barebbo District, Bone Regency. This is evidenced by an increase in the learning outcomes of relay running before being given action with a low category / score increasing to a high category.

**Keywords:** Learning Outcomes, Relay, Modified Media, Physical Education

## 1 Introduction

The Physical Education Sports and Health program organized in elementary schools (SD) should be able to provide a lot of movement experience for children. The success of the PE education process in schools cannot be separated from the participation of all elements of education both from school policies, school officials, educators / teachers, facilities and infrastructure in schools and parents of students. Through various forms of movement in PE education, it can provide a very large and meaningful contribution for elementary school children to the development of their knowledge, values and attitudes. Thus it is not an exaggeration to say that the PJOK program is an integral part of education, meaning that physical education is one of the tools to achieve educational goals.

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Muliadi (2022) states that the implementation of physical education learning in elementary schools will run effectively if all elements synergize. The elements in it are teachers, principals and PBM supporting facilities, teachers stay in the main part in implementing learning. Lutan, (2020), physical education at elementary age is like clay and they are ready to be formed, because the process of growth and development of children's motor abilities is related to the process of growth and development of children's movement abilities. The typical nature of children is thirsty to do motion, so through these activities they will grow and develop fertile, optimally, and naturally. Thus the development of children's abilities will be clearly visible through the various movement activities they receive in physical education lessons in elementary schools such as in physical ability development activities, athletics, gymnastics, games, martial arts sports, water sports and health education that they can do.

Many benefits are obtained in learning PE in elementary school, which include being able to form good body attitudes including anatomical, physiological, health and physical abilities. The benefits for the spirit are psychology, personality and character will grow in the direction in accordance with the demands of society. At least the focus is on children's skills, this can be in the form of physical and motor skills, thinking skills and problem solving skills, and even emotional and social skills.

One of the PE materials taught in elementary schools is athletics which must be given to students starting from elementary school to high school level, Athletics is the mother of most sports, where movements in athletics such as walking, running, jumping and throwing have these basic movements that are almost all sports. Therefore, basic athletic movements are absolute and must be owned by students. For this reason, PE teachers are required to be able to teach various basic running skills, one of which is relay learning which is a running sport in athletics. To be able to achieve maximum learning goals, of course, a PE teacher must be able to plan, select and organize materials, methods, strategies and media or props for PE in elementary school. In the implementation of the presentation of the learning process in accordance with the level of maturity, strength, concentration, growth and development of students who are directed, guided and systematic and creative. The role of highly professional teachers is very instrumental in its implementation.

The lack of facilities and equipment owned by schools, (SD) requires PJOK teachers to be more creative in empowering and optimizing the use of existing facilities and equipment according to the conditions of students and schools. Not a few students who feel failed or dislike the learning material delivered by the teacher because of the teacher's ability to deliver the material provided, both in the use of facilities and equipment used in the presentation of material, to optimize the learning environment and in evaluating learning outcomes. Any subject teacher, especially PJOK lessons, must be able to inspire students to be actively involved by not feeling forced and doing activities in a joyful atmosphere.

These efforts cannot be separated from the teacher's ability to modify everything related to the learning process by reducing or increasing the level of difficulty faced by students both in terms of tools and equipment, the characteristics of the material adapted to the circumstances of the students, the learning environment, and the way of evaluation given at the end of the activity later. Creative teachers will be able to create something

new, or modify existing ones to be presented in a more interesting way, so that students feel happy to follow the lessons given. Related to Physical Education learning in schools, there are many obstacles, especially those related to facilities and infrastructure, time constraints, large numbers of students, and most importantly also how to develop the media owned by the teacher.

Sugiyanto, (2010), states that the development of children essentially depends on the child's efforts in developing himself. So, a PE educator/teacher must be aware of their duties and functions, because they are in charge of helping to improve the growth and development of children. Regarding the functions and responsibilities of teachers, the attachment of the Minister of Education and Culture Regulation No. 22 of 2006 in the scope of subjects contained in the National Education Standards by the National Agency for Education Standards (BNSP) 2006 physical, sports and health subject groups (PJOK) in SD / MI / SDLB are intended to increase physical potential and instill sportsmanship and awareness of healthy living, (Depdiknas. 2006).

Dadan Heriyana, (2010), explains that, the material of physical education sports and health (PJOK) in elementary school is divided into two groups, namely the main material and optional material. The main material is a subject that must be taught based on the applicable curriculum. While optional material is a sports activity outside of school hours in the form of extracurricular activities. Relay Running is one of the athletic sports which includes the main material of PJOK. Athletic learning, especially relay running in elementary school in the syllabus is mentioned, Competency Standards: Practicing various variations of basic movements into games and sports with modified rules and the values contained therein. Basic competencies: Practicing variations of basic movements into modified athletics, as well as the value of enthusiasm, sportsmanship, confidence and honesty. As an educational sport, the basic movements of running, relay running are taught through the PJOK learning process, where one of the goals of learning is to know, understand and master and be able to improve student learning outcomes. Therefore, a PJOK teacher to achieve the learning objectives of the relay run, must pay attention to child development, child characteristics, child abilities and child preferences and the goals that must be achieved. In the implementation of athletic learning, especially relay running in elementary schools, there are still many PJOK teachers who have not provided an interesting form of athletic learning, namely by modifying props or media that are fun, effective and efficient, so that students are not quickly saturated, scary, and boring. Therefore, students need to be given subject matter by teachers using media that is properly planned and good and interesting.

Based on initial observations in preliminary research, researchers obtained information from the PJOK teacher at SD Inp. 6/75 Corawali, Barebbo sub-district, Bone district that there are several problems faced by teachers and students in relay running material, among others, namely; the relay baton facilities / facilities used are very limited in number, because there is no special funding from the school for the procurement of sports media for PE in elementary schools, the existence of PE media in this elementary school is assistance from the government which sometimes exists and sometimes does not exist every year (very temporary). Then the relay running stick used is a patent relay stick (metal material), it is difficult to find the goods, it is also expensive so that the

stick is only 1 with 20 students, as a result a lot of time is wasted waiting for the turn of the anterior to practice the basic techniques of relay running, starting the technique / how to hold, pass / move the stick, running techniques, until crossing the finish line, finally students are less enthusiastic about practicing relay running. While the problems faced by PJOK teachers include never having received training in making modified media in learning, including modified media for relay running, namely wooden relay sticks, materials that are easy to obtain, cheap and easy to make, do not take a long time, are simple and attractive and effective for elementary school children. In addition to the information that has been described, data on the learning outcomes of Estafet running class V students of SD Inp. 6/75 Corawali, Barebbo sub-district, Bone district, that there are still many students who are not complete, almost half of whom get scores below the KKM (Minimum Completeness Criteria) set by the school, KKM PJOK at SD Inp. Corawali is 75. While the number of class V students is 20 people. 9 male students and 11 female students. Of the 20 students, only about 45% of students whose scores have reached the KKM, while those who have not reached the minimum completeness are 55%.

After the researchers identified the problems in the learning, there were several things that caused the learning outcomes of students' Estafet running at SD Inp. 6/75 Corawali, Barebbo sub-district, Bone district is still below the KKM score. among others; (1) lack of student understanding of the basic techniques of relay running, (2) the lack of props (relay running sticks) available at school ultimately has an impact on the lack of practice of the basic techniques of relay running on students, (3) students wait more for anterior than demonstrating basic techniques, (4) students lack interest and motivation when the teacher demonstrates relay running because the time students demonstrate is longer waiting for anterior.

Basic athletic skills are basic abilities that must be mastered by every elementary school student as a basis for being able to perform skills in other sports. However, in reality, athletic lessons, especially relay running material, which is classified as a basic technique for sprinting numbers, are less attractive to students. On the basis of the foregoing, the researcher seeks to find a solution to how to overcome so that the objectives of Estafet running learning can be achieved properly. One of the efforts that can be made in learning to overcome the problems faced by PJOK teachers in improving the learning outcomes of relay running at SD Inp. 6/75 Corawali, Barebbo sub-district, Bone district, is the use of modified media relay sticks from wood to be able to motivate students in improving the learning outcomes of relay running for grade V students of Corawali Elementary School. The objectives of modifying the media in physical education learning include; so that students effectively and efficiently use time, get satisfaction in participating in lessons, and to increase the likelihood of success in participating, and students can perform motion patterns correctly according to the goals to be achieved. It is hoped that the class action research (PTK) conducted by the researcher can provide a way out of the problems that have been faced by PJOK teachers in general and learning Estafet runners of fifth grade students of SD Inp. 6/75 Corawali in particular, as well as being able to improve the learning process of PJOK in elementary schools which in turn can improve student learning outcomes in every field / sports branch in general.

## 2 Research methods

This research was conducted using a qualitative approach. This approach is descriptive, meaning that it describes all events that occurred during the research.

The type of research used in this study is *classroom action research*. In classroom action research, teachers can examine the learning practices they carry out in the classroom/field with the help of collaborators, through actions that are planned, implemented and evaluated.

The focus of this research is: 1) Using the modified media of wooden relay sticks in learning physical education sports and health (PJOK) on relay running material in class V SD Inpres 6/75 Corawali 2) Learning outcomes, namely the value obtained by students in learning relay running in PJOK subjects after using the modified wooden relay stick media, the value is through practical tests held at the end of each cycle.

Research Setting, This research was conducted in class V of SD Inp. 6/75 Corawali, Barebbo sub-district, Bone district, which is located on the Watampone-Sinjai City axis road, kilometer 6, approximately 100 meters from the Corawali village head office, Barebbo sub-district, Bone district. The subjects of this study were teachers and students of Class V of SD Inp. 6/75 Corawali, Barebbo sub-district, Bone district. The number of students is 20 people, consisting of 9 boys and 11 girls who are active in the even semester of the 2022/2023 school year.

According to Suharsimi, (2014: 16), in outline, this research procedure includes four stages, namely *planning*, *action*, *observing*, and *reflecting*. Each of these stages can be described as follows:

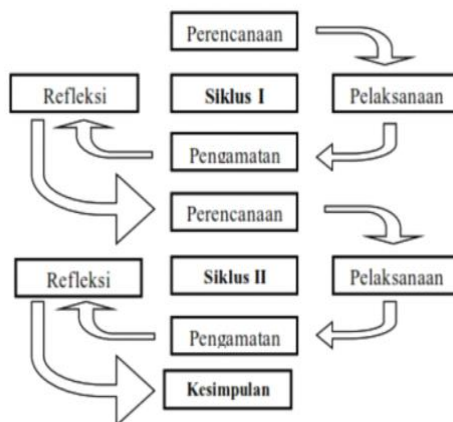


Chart 1. Research procedure

The data collection techniques used in this study are:

### 1. Observation Method

In this study, observation was used to determine the level of student activeness in the learning process of relay running by using the modified media of

wooden relay sticks for fifth grade students of SD Inp. 6/75 Corawali, Barebbo sub-district, Bone district in the form of an observation sheet.

## 2. Test Method

The test method used to determine the improvement of student learning outcomes in relay running is a test of basic technical skills; holding a stick, performing a squat star technique for the first runner, and a flying start for the second, third and fourth runners, as well as the technique of crossing the finish line.

## 3. Documentation

Data obtained in the form of photos and images during the learning process (practice).

The data collection procedure in this study starts from pre-research or preliminary research, to find out the problems faced by teachers and students in the PJOK learning process. In order for the existing data to be valid, it is necessary to use data collection techniques.

As for the procedure used to determine the extent of the level of student learning outcomes in PJOK lessons, an evaluation is held using tests. The tests used were in the form of practical tests (skills) on basic techniques; holding a stick, doing a squat star technique for the first runner, and a flying start for the second, third and fourth runners, as well as the technique of crossing the finish line, which was carried out at the end of each cycle.

To observe the suitability of the implementation of actions and plans that have been prepared, the technique used is observation. Included in the observation are observation guidelines aimed at teachers and students. To find out the improvement of student learning outcomes in relay running lessons and an overview in the implementation of research, documentation techniques are used in the form of recording photos of the implementation of actions in the field.

The data analysis technique used there are three stages that must be done in analyzing qualitative research data, namely (a) data reduction (*data reduction*); (b) data exposure (*data display*); and (c) *conclusion drawing* and verifying.

The indicator of success in this study is the data obtained in this study in the form of observation sheets, and learning outcomes tests. If the research results in cycle I reach 70% completeness, and cycle II research reaches 80% or more completeness, it can be concluded that learning through the use of modified wooden baton media can improve student learning outcomes in relay running learning at SD Inp. 6/75 Corawali, Barebbo sub-district, Bone district.

## 3 Results and Discussion

Before conducting the research process, the researchers first conducted an initial survey to find out the real situation that exists at SD Inpres 6/75 Corawali, Barebbo sub-district, Bone district. Information obtained through interviews with PE teachers on relay running learning is as follows: (1) There are 20 students consisting of 9 male students and 11 female students, (2) there are several students who have not completed their

grades, almost half of whom get scores below the KKM (Minimum Completeness Criteria) set by the school at SD Inpres 6/75 Corawali sub-district Barebbo Bone district, KKM PJOK is 75. Of the 20 students, only about 45% of students whose scores have reached KKM, while those who have not reached the minimum completeness are 55%.

### **3.1. Cycle I Action Data Exposure**

Action research was carried out at SD Inpres 6/75 Corawali, Barebbo sub-district, Bone district, Researchers together with collaborators made observations of the PJOK learning process in an effort to improve the learning outcomes of relay running using modified media relay sticks from wood. The research process was carried out in two cycles, each of which consisted of several stages, namely: Planning, Action Implementation, Observation and Interpretation, Analysis and Reflection. Each activity is described as follows:

#### **Cycle I Action Planning**

In the planning stage, researchers together with collaborators/teachers plan learning scenarios and also prepare supporting facilities to implement the action scenarios. In detail, the activities carried out in the planning stage are:

1. The research team conducted a curriculum analysis to find out the basic competencies that students will convey in learning.
2. Preparing a Learning Implementation Plan (RPP) about basic athletic movements, namely relay running using modified wooden relay stick media.
3. Prepare student attendance list and student assessment sheet during relay running practice.
4. Prepare teacher and student observation sheets that are useful for seeing how the teaching and learning process of relay running in the field.
5. Prepare learning tools (stop watch, meter, bender, chalk powder for relay running lines and relay sticks from modified wood).
6. Note-taking/writing tools.

#### **Stage of Implementation/Action Cycle**

Cycle I was carried out on February 12, 2023, in the courtyard of SMK Negeri 4 Bone, Bone Regency, located in Corawali village, Barebbo sub-district, approximately 200 meters from the location of SD Inpres Corawali, because it is not possible to be carried out in the school yard of SD Inpres 6/75 Corawali because it is narrow and dangerous to run for elementary school students. The learning time is three (3) effective lesson hours (105 minutes), with the following sequence of activities:

### *Initial activity*

The time used in the initial activity is 15 minutes, namely the students are lined up in three rows, the teacher leads the prayer after that checks the attendance of the students, then the teacher explains the material to be taught, namely facilities and infrastructure facilities, basic techniques for sprinting / relay running or sambung running, with the main points of material; basic techniques for holding relay sticks, passing (giving and receiving) sticks with visual and non-visual techniques both from above and from below, relay running techniques (body position, leg movements and hand movements, views until crossing the finish line), star techniques used in relay running; the first runner squats, the second, third and fourth runners star drift. As well as the technique of crossing the finish line. Next warm up, which leads to core learning, namely students doing static and dynamic stretching with the teacher giving examples and together with researchers.

### *Core activities*

Entering the core activities, the time used in core activities is 75 minutes. The core activities carried out are:

1. Perform a modified wooden baton holding technique
2. Perform visual and non-visual techniques of passing / giving and receiving sticks (both from above and below)
3. Perform squatting star techniques (short star, medium star and long star) and floating star.
4. Perform basic sprinting/ relay techniques (body position, foot and hand movements, gaze until crossing the finish line.
5. Performing the technique of crossing the finish line
6. Practice a series of basic relay running techniques starting with the initial technique of holding a stick, star technique, giving and receiving sticks both visually and non-visually, techniques from above and from below, sprinting techniques to cross the finish line.
7. Practice basic relay running techniques using modified wooden baton media, starting the technique; holding a stick, star, giving and receiving sticks visually and non-visually both from above and below, running position, until crossing the finish line.
8. Perform a relay run in a race using a modified wooden relay stick by applying basic relay running techniques according to official running race rules (actual relay running rules).
9. The evaluation was conducted during the relay race.

### *Closing Activities (Calming)*

Closing activities, the time used is 15 minutes. In the closing activities students are gathered to be given a thorough reflection and correction of the basic relay running



techniques that have been carried out / taught, then provide opportunities for students to ask questions, followed by reflection, giving assignments, and moral messages, praying together, and students are dismissed.

### **Observation Results (Observation) Cycle I**

The results of observations made by collaborators, obtained results:

#### *Warmup*

During the warm-up, students looked happy and excited with the warm-up led by the PJOK teacher and the research team. Students are very enthusiastic about warming up because they feel that there is something different from the location of PE learning that they always use, namely; usually learning PJOK in their school environment, different from the atmosphere outside the school environment so that there is its own motivation, moreover students are still limited by conditions during the Covid 19 pandemic, students have not practiced in the field for a long time so they are very motivated to take lessons.

#### *Learning Core*

At the core of learning, students seem happy and excited to do PJOK learning whose material is relay running using the modified wooden baton relay media made by the research team. This modified wooden relay stick turned out to be very attractive to students because it is completely natural, which is easily obtained material, making it very simple, does not require a long time, is not dangerous to use, weighs very ideally for students, and the number of sticks prepared is one stick two students, so it is very effective in its implementation time. This is also evident from the active role of students when learning takes place and repeatedly students ask to re-do the movements that have been taught. And likewise when performing a series of basic relay running techniques, starting to hold the relay baton, the technique of giving and receiving the baton both in a visual and non-visual way, both receiving the baton from above and from below, and the star technique, as well as the running technique until crossing the finish line, all students, both boys and girls, show their respective abilities and look earnest in doing so, so it is evident that there is a change in motivation and ability to do relay running owned by previous students.

#### *Teacher Learning Process*

In the teacher learning process there are successes and shortcomings or limitations that occur, as for the successes and limitations are as follows:

### 1. Teacher Success:

Relay learning using a modified wooden relay stick can provide motivation, confidence, and increase the active role of students during learning, because this modified tool / media has advantages compared to the original relay stick made of metal (a mixture of metal, aluminum, iron), students are not reluctant / afraid to do the exercise because it is natural; lightweight, harmless, and the relay stick meets the number of students with student needs, so that students are more motivated or excited in participating in relay learning.

### 2. Teacher Shortcomings/ Limitations Include:

When giving an example of holding a relay baton, the position of the teacher during the demonstration made it difficult for some students to see the demonstration clearly because they were shielded by their own friends, as a result students asked many questions because they did not understand, even mistaken and confused, especially those in the back row.

The teacher does not give more attention (special guidance) to students who have difficulty (confusion) in performing basic techniques: star, technique of giving and receiving relay sticks, running techniques and techniques for entering / crossing the finish line.

### *Student Aspect Development*

The results of observations by collaborators and researcher notes that have been carried out in cycle I show that there has been an increase in motivation, courage, cooperation, although overall there are still some students who do not understand and master the technique of giving and receiving the baton both visually and non-visually which is done from above and from below correctly, so that the implementation has not taken place as it should, but the overall enthusiasm of the students looks good, this is evidenced that all students actively participate in learning to run the relay well, even among students there are tired but they still smile and continue their activities until completion.

Thus it is concluded that the teacher still has shortcomings or weaknesses, and likewise students still have difficulties or confusion in performing basic relay running techniques, correct relay stick holding techniques, as well as techniques for giving and receiving sticks both visually and non-visually and from above and below, star techniques, running techniques to enter the finish line according to the established relay running competition regulations, so that learning outcomes cannot be achieved optimally according to the success indicators set by the research team. For this reason, a learning design is needed in the next cycle, cycle II, which is more perfect in order to improve the learning outcomes of rejecting bullets correctly, as well as efforts to further increase student activeness, abilities and skills and create more enjoyable learning activities.

## Cycle I Reflection

The results of the reflection of the research team collaborators and the PJOK teacher in terms of observing and assessing learning activities in cycle I show that:

### *Teacher learning process*

1. The teacher's learning process activities are quite capable of encouraging student creativity to move during learning. However, the position when giving examples of movement (demonstration) is still in one place and facing the students, so that students who are behind and some distance from the teacher are less clear to students.
2. The teacher's learning process using the modified wooden relay stick media is in accordance with the bullet shot teaching material (RPP). However, teachers still need to pay special attention and guidance for students who have difficulty in the basic techniques of giving and receiving sticks both visually and non-visually with hands from above and from below, as well as star and running techniques to cross the correct finish line.

### *Students learning process*

1. Students' attention and motivation in the learning process relay running are mostly good enough, cooperation and courage and self-confidence from students have appeared to the maximum.
2. Overall, students are quite good at participating in the relay running learning process using the modified wooden baton. Most students are motivated to do relay running techniques, starting with the technique of holding the stick, the technique of giving and receiving sticks both visually and non-visually from above and from below, the running technique until crossing the finish line even though the results show that there are still some students who have not been able to do the relay running technique optimally / according to the official competition regulations.
3. The discipline attitude of students in carrying out the relay running rules has not been maximized, because there are still some students crossing the star line, especially the first runner who uses a squatting star, there are also some students who are not correct at the time of non-visual (not seeing) sticking with the correct technique.

### *Improved Learning Outcomes of Relay Running*

Based on the results of reflection on cycle I learning activities, the learning outcomes of students' relay running Class V SD Inpres 6/75 Corawali have increased, this is evident that the class average at the beginning of the study (Pre-action) was 73.1, and increased in cycle I, 74.6 or in the pre-action there were 55% of students who were complete and increased in cycle I 65% who completed their learning outcomes. Therefore it can be concluded that in cycle I there was an increase compared to student

learning outcomes at the beginning (preaction) by 10%, but not yet according to the success indicators set by the research team and collaborators, so the action of learning to reject bullets using plastic ball media filled with sand for grade V students of SD Inpres 6/75 Corawali, Barebbo sub-district, Bone district was continued in cycle II. For this reason, it is necessary to design learning in the next cycle (cycle II) based on the results of this cycle I reflection, to improve the process and learning outcomes of bullets, so that learning goals and outcomes can be achieved. The research team and teachers continue to strive to further improve student activeness, abilities and skills to create more enjoyable learning activities. For more details, the data table on the learning outcomes of relay running using the modified media of wooden relay sticks for grade V students of SD Inpres 6/75 Corawali Cycle I.

**Table 4.1.** Data on learning outcomes of relay running using modified wooden baton media for grade V students of SD Inpres 6/75 Corawali Cycle I

No.	Score	Frequency	Percentage	Note
1.	Less than 75	7	35 %	Not complete
2.	$\geq 75$	13	65%	Complete
Total		20	100%	Advanced Actions

The table above, shows that, 7 students (35%) who have not completed the learning outcomes of relay running while students who have completed their learning outcomes are 13 students (65%).

#### *Action Plan for Cycle II*

Based on the results of the analysis in learning in Cycle I, there needs to be improvements at the next meeting in Cycle II, in order to improve the process and learning outcomes of a more optimal relay run. The things that are done include: So that students are not wrong and confused in performing each basic technique in relay running learning activities, the research team and collaborators provide explanations on how to perform the basic techniques of relay running correctly and guide students in the implementation of learning basic relay running techniques.

The teacher's approach and strategy in modeling movements to students should be in the middle of the students so that all students can see clearly when the teacher demonstrates the movements.

Students who do not understand and have not been able to succeed in the first cycle meeting are given more intensive attention and training at the next meeting in cycle II, so that they are able to perform relay running techniques starting from how to hold the relay stick, squat star and floating star, techniques for giving sticks and receiving sticks visually and non-visually both from above and below, sprinting techniques and techniques for crossing the finish line correctly according to the rules of the relay race. The research team must continue to provide understanding and motivation for learning to students who are oriented towards relay running, so that students remain motivated and are more happy, cheerful and happy to carry out learning activities.

### 3.2. Cycle II Data Exposure

Learning activities in Cycle II were carried out on Monday, February 20, 2023, in the courtyard of SMK Negeri 4 Bone, Bone Regency, located in Corawali village, Barebbo sub-district, approximately 200 meters from the location of SD Inpres Corawali, because it is not possible to carry out in the school yard of SD Inpres 6/75 Corawali because it is narrow and dangerous to run for elementary school students. The learning time is three (3) effective lesson hours (105 minutes), with the following sequence of activities:

#### Planning Stage

At this stage the research team: 1) Preparing lesson plans with reference to the previous meeting, 2) Prepare instruments used in cycle II, namely the relay run assessment format, 3) Prepare media modification of wooden relay sticks that are sufficient according to the number of students (one bullet for two students) to use in teaching so that the relay run learning implementation process can take place effectively and smoothly, 4) Develop learning observation sheets for teachers and students, and 5) Writing tools to record student scores.

#### Implementation/Action Stage

##### *Initial activity*

In the implementation of this stage, namely the initial activity, the time used in the initial activity is 15 minutes, namely: 1) Students are lined up in rows of three, 2) The teacher leads the prayer after that, 3) Check the attendance of students, 4) Provide motivation, 5) Ask questions about past learning material, 6) Convey the learning objectives to be achieved, 7) The teacher explains the main / core material to be taught, namely relay running techniques; a) the technique of holding a relay running baton starting the technique of holding a baton, b) squat star technique (first runner, and floating star for second, third and fourth runners), c) techniques for giving and receiving sticks both visually and non-visually from above and from below, d) sprinting techniques (body position, leg and hand movements, views) e) techniques for crossing the finish line. Then 8) Warming up, students do static and dynamic stretching (warm-up led by the teacher).

##### *Core activities*

In the core of learning, the teacher again explains the learning material for relay running starting from the technique of holding the stick, star technique, technique of giving and receiving sticks both visually and non-visually from above and from below, running technique until crossing the correct finish line. After the teacher finishes explaining then students are given the opportunity to practice doing the basic movements of the learning. Students perform relay running starting from the technique of holding the

stick, the star technique, the technique of giving and receiving the stick both visually and non-visually from above and from below, the running technique to cross the finish line and still apply the rules in the race.

After completing the exercise accompanied by the teacher and the research team then the students were gathered to evaluate the learning that had been done so that students knew their shortcomings and also gave students the opportunity to ask about the bullet shot learning material that had not been understood and mastered. After completing the question and answer session, students were assigned to re-perform the movements of the basic relay running techniques to reinforce the learning material that had been taught.

Students perform a series of basic techniques relay running starting from holding the stick, star techniques, techniques for giving and receiving sticks both visually and non-visually from above and from below, running techniques to cross the finish line by applying the rules in the relay race.

### *Closing/ Calming Activity*

Closing activities, the time used is 15 minutes. In the closing activity, students are gathered for a thorough correction of the basic techniques of relay running and the rules in the race that have been carried out / taught, then provide opportunities for students to ask questions, reflect, continued cooling, moral messages, praying then students are dismissed.

## **Observation Results (Observation) Cycle II**

The results of observations of fifth grade students of SD Inpres 6/75 Corawali in learning relay running in cycle II, are as follows:

### *Teacher Learning Process*

1. The teacher has used a modified wooden baton as a substitute for the original baton which is quite expensive and less popular with students, in accordance with the lesson plan.
2. Basically, learning to run the relay by using the modified media of wooden relay sticks, is enough to provide new passion and enthusiasm for relay learning for students, this can be seen from the active role of students during the learning process.

### *Student's Aspect Development*

1. Student Activity  
The learning process activities are able to encourage students' creativity to move during learning activities. Most students can complete the exercise tasks given by the teacher quite well, but are still accompanied by the teacher and the researcher.

## 2. Student Motivation

The learning atmosphere looks very pleasant, this is evidenced by some students looking very happy and not looking bored doing the activities.

## 3. Assesment of Relay Running Technique

The results of the assessment of the development of the basic techniques of student relay running using the assessment sheet conducted by the collaborator, obtained the results that students who got a complete score were 19 students or 95% and students who did not complete were 1 student or 5%, this is physically and self-confidence is less than their friends. So there is improvement but it has not yet reached completion.

**Table 4.2.** Data on learning outcomes of relay running using modified wooden baton media class V SD Inpres 6/75 Corawali Cycle II

No.	Score	Frequency	Percentage	Note
1.	Less than 75	1	5 %	Not complete
2.	≥ 75	26	61.5 %	Complete
Total		20	100%	Action Terminated

Table 4.2 above, shows that, 1 student (5%) who has not completed the learning outcomes of relay running while those who have completed the learning outcomes of relay running are 19 students (95%). The data above shows that the results achieved are in accordance with the success indicators set by the research team with collaborators / PJOK teachers of SD Inpres 6/75 Corawali, Barebbo sub-district, Bone district, which is 80%.

## Cycle II Reflection

The results of the reflection of learning activities in cycle II showed that:

1. From the test results in cycle II, it shows that the learning outcomes of relay running increased from 55% in the initial condition to 65% in cycle I and increased to 95% in cycle II. From the comparison of the percentage increase, the teacher is able to provide good relay running learning material, namely relay running using modified wooden baton media. In the learning process of relay running, it has an impact on students' enthusiasm in participating in learning well so that students are able to understand the learning of basic relay running techniques to the maximum and also the achievement of maximum bullet shot learning results. The use of plastic ball media filled with sand turns out to be able to provide solutions as an alternative in the learning process to increase the active role of students in participating in relay running learning so that students can understand and perform basic relay running techniques well and they are more confident, brave, responsible in doing tasks and exercises from the teacher.

2. From the percentage above, the results of relay running learning in cycle II have met the expected target. Therefore, the use of wooden baton media in the implementation of relay running learning can provide enlightenment to teachers as an alternative in choosing effective learning modification media, especially relay running learning materials to improve student learning outcomes and also as a form of teacher effort in delivering learning materials so that students can play an active role during the learning process so that the objectives of the learning can be achieved optimally.

### 3.3. Discussion

Several things can be obtained from the results of the action stage research, namely from the results of the action in cycle I, the results of observing the learning process in relation to the attitude of student activity during the learning process. In the learning process students look active and enthusiastic in following all the tasks and exercises given by the teacher. However, in learning in this first cycle, obstacles or obstacles were still found from both teachers and students so that relay running using modified wooden baton media was not optimal, namely there were still some students who did not understand the basic techniques of relay running; holding a relay baton, giving and receiving a baton, star, running techniques, until crossing the finish line by applying the rules in the relay race, it can be understood that the implementation of these basic techniques requires or requires good understanding, attitude and skills and concentration. However, one thing that needs to be maintained and appreciated to students is the attitude of discipline, cooperation, responsibility, motivation, sincerity, and the desire of students is very good so that enthusiasm in learning is very high. This is evident from the active role of students when learning takes place. In the learning process, the excellent attitude possessed by students is the attitude of courage, cooperation, responsibility, sincerity, and students' desire is very high so that learning activities can take place smoothly.

In cycle II, the learning process of relay running using modified wooden baton media for students was even better and quite satisfying, because all students were seen participating in activities and attitudes following the learning process. The actions taken in cycle II are to improve all weaknesses or obstacles carried out by teachers and students in cycle I, among others; the position of the teacher when giving examples of movement (demonstration), has been improved with the research team. Then the research team together with collaborators paid special attention and guided and trained specifically to students who did not understand (often wrong) in performing basic techniques starting with techniques; holding a relay stick, giving and receiving stick techniques both visually and non-visually from above and from below, star techniques, running techniques to cross the finish line.

The results of observations and notes of the research team together with collaborators in cycle II assess that the basic techniques of relay running of class V students of SD Inpres 6/75 Corawali are getting better, this can be proven when evaluating the process both with the technique of giving and receiving the relay stick visually and non-visually both from above and from below until entering the finish by applying the relay running



rules can be done well. In this cycle II, the learning process of relay running using the modified wooden relay stick media has improved and is satisfying, because it has met the previously set success indicators. However, the results of the evaluation of learning to throw bullets still have one student whose ability and skills to reject bullets are not correct, which ultimately cannot reach the minimum completion criteria.

From the explanation of the activities of each cycle, namely cycle I and II, it shows that the results of student observations in learning to throw bullets always have a good increase, besides that the encouragement to students in participating in learning activities to throw bullets given by the teacher using plastic ball media filled with sand makes students feel motivated to be able to do the basic tenics of throwing bullets well. Thus in cycle II, it has reached the target and even exceeded the target desired by the research team, namely 80% of the total number of students who have reached the KKM score.

In accordance with the results of the research previously described, this is supported by Bahagia's opinion, (2012) which states that modifying media in teaching, will be able to develop students' skills faster than with standard equipment for adults, and can also foster excitement and fun in children in competitive situations.

Regarding the learning modification media used in PJOK learning, Sukiman (2012). argues that one of the functions of learning media is as a learning aid, which influences the situation, conditions and learning environment in order to achieve learning objectives that have been created and designed by the teacher. In line with this opinion, the use of media in physical education and health learning aims to facilitate learning activities. The media used must be able to adjust the needs and conditions and the learning environment. This is because the use of learning must be able to have a good influence on the implementation of learning.

This research provides a clear picture that the success of the learning process depends on several factors. These factors come from the teacher and students as well as the learning tools used. Factors from the teacher's side are the teacher's ability to develop material, the teacher's ability to deliver material, the teacher's ability to manage the class, the approach used by the teacher in the learning process, and the techniques and approaches used by the teacher as a means of delivering the subject matter. While factors from students are student interest and motivation in participating in the learning process. An interesting learning approach can also help motivate students to learn so that optimal learning outcomes will be obtained in this case, especially the relay running approach using the modified wooden relay stick media. These factors support each other, so it must be pursued to the maximum so that all these factors can be owned by teachers and students in the learning process that takes place in the classroom or in the field. If the teacher has a good ability to deliver material and manage the class and is supported by appropriate / effective and adequate techniques and facilities and infrastructure, the teacher will be able to deliver the material well. The material will be accepted by students if students also have high interest and motivation to be active in the learning process. Thus, teaching and learning activities can take place smoothly, conducively, effectively and efficiently.

This study also provides a clear description that using a modified wooden baton can improve student learning outcomes (both process and results), so this research can be

used as a consideration for teachers who want to choose alternatives in using approaches and learning models, especially relay running learning.

For teachers in the field of Physical Education, Sports and Health (PJOK), the results of this study can be used as an alternative in carrying out the PJOK learning process, especially those related to improving the learning outcomes of effective and interesting bullets that make students more active and fun learning. Especially for teachers who have more creative abilities in making more varied learning approaches. He can channel his abilities and utilize the facilities available at school in an effort to improve performance as a professional and innovative educator.

PJOK learning, which was initially boring for students, became fun learning for students. The provision of actions from cycles I and II provides a description that there are deficiencies or weaknesses that occur during the learning process. However, these shortcomings can be overcome in the implementation of actions in the next cycle (cycle II). From the implementation of the action which is then reflected on the learning process, it can be described that there is an increase in the quality of PJOK learning both the process and the improvement of student learning outcomes. In terms of the learning process relay running by using modified media relay sticks from wood can stimulate the motor aspects of students. In this case students are required to be active in learning the basic techniques of bullet throwing which can later be useful for developing physical fitness, developing cooperation, developing skills and developing a competitive attitude, all of which are very important in physical education in elementary schools.

#### **4 Conclusions and Suggestions**

Based on the results of research and discussion, it can be concluded that: Using modified media wooden relay sticks can improve the learning outcomes of relay running of fifth grade students of SD Inpres 6/75 Corawali, Barebbo sub-district, Bone district, this is evidenced by the increasing process and completeness of student learning outcomes, namely; in the pre-action learning completeness 53.85% increased after being given action in cycle 1 learning completeness 73.08% and in cycle 2 increased student learning completeness reached 96.15%, which means that the target achievement of student learning completeness is in accordance with the established research success indicators.

Based on the conclusion, it can be suggested as follows: 1) PJOK teachers, should use modified media relay sticks from wood as an alternative in learning relay running, because this modified media is attractive, easy to obtain, cheap, safe to use and proven to be very effective in improving the learning outcomes of students' relay running in elementary schools. 2) For schools to prepare funds for the needs of PJOK facilities and infrastructure, because adequate facilities and infrastructure can facilitate PJOK learning, so that learning objectives can be achieved properly 3) For the government of the Bone district office, it is necessary to improve the quality and quantity of PJOK learning facilities and infrastructure in elementary schools in Barebbo sub-district, Bone district 4) For further research, it is hoped that this research can develop by

conducting research on a wider range of materials related to modified media to overcome the limitations of PJOK learning facilities and infrastructure in elementary schools, so that it can be used as a better solution.

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