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The Talking Stick Learning Model for Introducing Relay Running to Fifth-Grade Elementary Students

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ABSTRACT

Physical education classes at the elementary level frequently teach relay running through teacher-led demonstration alone, leaving students with limited opportunity to discuss and internalize the concepts of baton exchange, starting technique, and teamwork that the event requires. This classroom action research aimed to improve fifth-grade students' learning and knowledge of relay running at SDN 14 Kwandang by implementing the Talking Stick learning model. The subjects were 27 fifth-grade students (18 boys and 9 girls). Data were collected across a pre-cycle baseline observation, Cycle I, and Cycle II, covering three domains: cognitive, affective, and psychomotor. The mean student score was 52.49 ("Poor" category) at pre-cycle baseline, rose to 68.72 ("Fair" category) after Cycle I, and reached 83.33 ("Good" category) after Cycle II. Based on the two action cycles conducted, it is concluded that the Talking Stick learning model improves fifth-grade students' knowledge of relay running, with improvement occurring across all three domains: cognitive, affective, and psychomotor.

Keywords: Learning Model; Talking Stick; Relay Running

ABSTRAK (Bahasa Indonesia, 150–200 kata)

Pembelajaran pendidikan jasmani di tingkat sekolah dasar sering kali mengajarkan lari estafet hanya melalui demonstrasi guru, sehingga siswa memiliki kesempatan terbatas untuk mendiskusikan dan menginternalisasi konsep pergantian tongkat, teknik start, dan kerja sama tim yang dibutuhkan dalam nomor ini. Penelitian tindakan kelas ini bertujuan untuk meningkatkan pembelajaran serta pengetahuan lari estafet pada siswa kelas V SDN 14 Kwandang melalui penerapan model pembelajaran Talking Stick. Subjek penelitian adalah 27 siswa kelas V (18 laki-laki dan 9 perempuan). Data dikumpulkan melalui observasi awal (pra-siklus), Siklus I, dan Siklus II, yang mencakup tiga aspek yaitu kognitif, afektif, dan psikomotor. Rata-rata nilai siswa pada observasi awal yakni 52,49 (kategori "Kurang"), meningkat menjadi 68,72 pada Siklus I (kategori "Cukup"), serta meningkat menjadi 83,33 pada Siklus II (kategori "Baik"). Berdasarkan hasil penelitian yang dilakukan melalui dua siklus tindakan, dapat disimpulkan bahwa Model Pembelajaran Talking Stick dapat meningkatkan pengetahuan lari estafet pada siswa kelas V. Peningkatan terjadi pada ketiga aspek utama, yaitu aspek kognitif, aspek afektif, dan aspek psikomotor.

Kata Kunci: Model Pembelajaran; Talking Stick; Lari Estafet

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INTRODUCTION

Learning activities at school are a series of activities designed to help students acquire new knowledge, skills, and understanding through teaching, discussion, practice, and evaluation, encompassing classroom lessons, practicums, projects, group discussions, and more. Learning is a stage or process through which students carry out learning activities and, within it, teachers are required to develop students' potential across the cognitive, affective, and skill domains (Angga & Iskandar, 2022).

Physical education formally instills knowledge and values through physical activity that encompasses learning in the development and care of the body, ranging from simple exercises to yoga, gymnastics, and the management of athletic games (Chandler, 2002, as cited in Mustafa, 2022). Physical education is not focused on the body alone; it also plays a distinctive role in raising academic standards, promoting healthy living, teaching students to manage risk, and building movement competence and confidence (Green, 2008, as cited in Mustafa, 2022).

Relay running is a team sport that requires cooperation, speed, and precision in passing the baton from one runner to the next. Although it has long been an integral part of school athletics programs, challenges frequently arise in improving the quality of instruction and student engagement in this activity. Relay running aims to develop baton-exchange skill, strengthen teamwork, improve speed, plan effective race strategy, build a winning mentality, and achieve overall team performance; through this combination of aims, relay running builds not only physical skill but also values such as cooperation, preparation, and perseverance (Sales, 2022; Endris, 2021).

Several experts converge on a similar definition: relay running is a run carried out in succession or in turns by a team, in which each runner starts from their own mark, hands the baton to the next runner upon arrival, and the team works together to deliver the baton to the finish line (Dwiningsih et al., 2019; Sari & Sinaga, 2020; Rokhimaturrizki, 2022). The event is unique among running competitions in that runners must exchange the baton while sprinting at speed, a skill that depends not only on individual sprinting ability but on the precise coordination, timing, and communication between incoming and outgoing runners within the exchange zone (Zarębska et al., 2021), and, more broadly, on the fundamental movement competence that underlies all athletic skills (Stodden et al., 2008).

Relay-running technique has its own particular requirements compared with other forms of running, including starting technique, baton-giving technique, and baton-receiving technique (Nopiyanto & Raibowo, 2020). The first runner uses a crouching start while

subsequent runners use a flying start; baton exchange is ideally carried out crosswise, with the first and third runners holding the baton in the right hand while the second and fourth runners receive it with the left hand (Nopiyanto & Raibowo, 2020). There are two techniques for handing off the baton, an underhand pass and an overhand pass (Amanda et al., 2025; Muhtar & Irawati, 2020), and receiving the baton can likewise be done either visually or non-visually (Paiman, 2022).

The Talking Stick method is a communication technique that gives every group member a structured, respected opportunity to speak. In a meeting or discussion, only the person holding the stick, or another object serving the same function, is permitted to speak while the others listen attentively; the stick is then passed to the next person who wishes to speak, ensuring equal opportunity to participate while promoting respectful, active listening (Locust, 1998). The term itself has a long history: the practice originated among Native American peoples, who used it to invite every participant in a tribal gathering to speak or share an opinion, and it has since been adopted as a cooperative classroom learning technique (Rosdiani et al., 2022; Pulukadang, 2021). As a cooperative learning technique, Talking Stick is consistent with the broader body of evidence showing that structured small-group interaction, in which every member is held individually accountable for contributing, tends to raise both academic achievement and engagement relative to purely teacher-centered instruction (Slavin, 2014).

In classroom practice, the teacher explains the material, gives students an opportunity to review it, and then begins the Talking Stick activity itself: the stick is handed to a student at random while a song or piece of music plays and is passed from student to student until the teacher stops the music at an agreed signal, at which point whoever is holding the stick must answer a question from the teacher (Rosdiani et al., 2022). Students consequently become more confident about voicing their opinions (Perwita & Indrawati, as cited in Kamarudin et al., 2021), while the game-like format of passing the stick to music keeps the classroom atmosphere lively rather than monotonous (Pulukadang, 2021). By integrating the Talking Stick method into relay-running instruction, the aim is to improve communication among team members, strengthen students' understanding of each runner's role within the team, and stimulate deeper reflection on both individual and team progress.

A growing number of classroom action research studies report that the Talking Stick method improves student learning outcomes across a range of subjects: mathematics (Baid et al., 2022), civics education (Kamarudin et al., 2021), students' questioning activity in social studies lessons (Rosdiani et al., 2022), and speaking skills supported by picture-story media (Sukmadewi & Ganing, 2020). A recent systematic literature review likewise concludes that the Talking Stick method consistently raises social studies learning outcomes across multiple school levels (Nursamsiyah & Sujarwo, 2024).

Preliminary observation, carried out through an interview with a physical education teacher at an elementary school, found that relay running is still rarely taught, largely because of limited facilities and equipment, so that teachers seldom provide direct instruction in the skill to their students. This points to a clear gap in the existing literature: prior applications of

the Talking Stick method concentrate almost entirely on cognitive, academic subjects, and none was found that applies the method to a psychomotor, athletic skill such as relay running or that evaluates improvement simultaneously across the cognitive, affective, and psychomotor domains that such a skill actually requires.

The present study addresses this gap and offers a corresponding point of novelty: rather than treating Talking Stick solely as a discussion technique for academic subject matter, this classroom action research integrates it into relay-running instruction and measures its effect across all three learning domains, cognitive, affective, and psychomotor, over a two-cycle action research design. Accordingly, this study aims to improve fifth-grade students' learning and knowledge of relay running at SDN 14 Kwandang through the implementation of the Talking Stick learning model.

RESEARCH METHOD

This study used a Classroom Action Research (Penelitian Tindakan Kelas) design to be implemented in an elementary school. The subjects were elementary school students totaling 27 in number (18 boys and 9 girls) with varying prior knowledge and skill in relay running. This class was selected because its learning completeness was relatively low, falling into the category requiring special guidance for students' understanding and skill in relay running.

The classroom action research variables comprised input, process, and output variables. The input variable covered the teacher's activities in planning the lesson and preparing facilities, infrastructure, and students for each learning session aimed at improving relay running through the Talking Stick learning model. The process variable covered the teacher's activities in delivering the previously planned lesson and monitoring student activity during the relay-running lesson using the Talking Stick method. The output variable covered the achievement of the planned research indicators, together with feedback on each stage of student learning outcomes and evaluation of the lesson that had been studied.

Classroom action research is carried out to continuously improve teaching practice, an activity intimately tied to the professional mission entrusted to teachers; its central aim, improving teachers' professional service in managing the teaching and learning process, is achieved through reflection to diagnose the classroom situation (Tamalea et al., 2025). Following Arikunto et al. (2015), classroom action research proceeds through four steps: Planning, Acting, Observing, and Reflecting.

Preparation for this classroom action research involved coordinating directly with the school principal and teaching staff and requesting permission to conduct the study, followed by direct observation in the school while students carried out the learning process, and preparing the equipment needed to conduct the research at the school. The action stage of this research rested on cooperation between the researcher and a partner teacher, specifically the physical education teacher, ensuring that the lesson was implemented in accordance with the planned action scenario. The procedure for this action research proceeded cycle by cycle: if the results of a given cycle had not yet met the established indicators, the action was continued into the

next cycle.

Monitoring and evaluation were carried out throughout the research process. During the implementation of the action, the researcher conducted observation and collected data on students' development in the field, focusing specifically on students' ability to perform relay running. Feedback to re-evaluate the results of the action was provided by the researcher and the partner teacher once the action had been completed. All data collected at this stage were analyzed, and the results were used to reflect on every stage of the learning activity so that it could be clearly determined whether shortcomings remained in the lesson that had been carried out; this, in turn, served as a reference for deciding whether further action was needed. Data were collected using several techniques based on the reflective data-analysis stage described above, principally observation of elementary school students across several aspects, namely students' ability to understand relay running, comprising the cognitive, affective, and psychomotor domains.

RESULTS

Data for this study were obtained through observation of students' introduction to relay running in Class V. Data collected covered three aspects: the cognitive, affective, and psychomotor domains. Data were collected across two action cycles, and the results were compared with baseline conditions (pre-cycle) to trace the development that occurred over the course of the intervention.

Before implementing the Talking Stick learning model, the researcher carried out a baseline observation to measure Class V students' knowledge of relay running. Data collected at this baseline stage likewise covered the cognitive, affective, and psychomotor domains as a whole.

The mean score of Class V students at SDN 14 Kwandang fell into the Poor category at baseline. No students (0%) achieved the Very Good category, no students (0%) achieved the Good category, 5 students (18.52%) achieved the Fair category, and 22 students (81.48%) fell into the Poor category, giving a class mean of 52.49, classified as Poor. These results are presented in Table 1 and Figure 1.

Table 1. Baseline (Pre-Cycle) Analysis of Basic Relay-Running Knowledge.

No.	Interval	Category	Frequency	Percentage
1	86 – 100	Very Good	0	0%
2	75 – 85	Good	0	0%
3	60 – 74	Fair	5	18.52%
4	0 – 59	Poor	22	81.48%
	Total		27	100%
	Mean		52.49	
	Category		Poor	

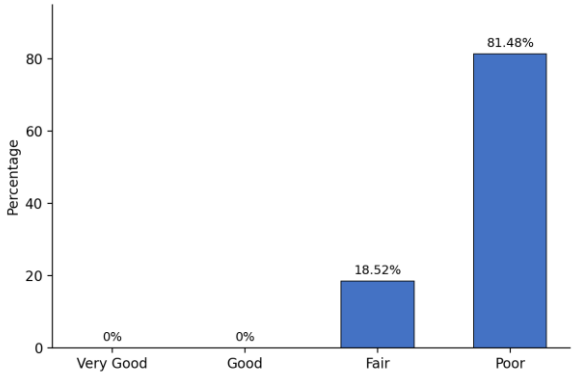


Figure 1. Histogram of Student Ability Data Prior to Baseline Observation

Baseline observation revealed the following conditions. Cognitive domain: 10% of students were able to understand the basic rules, baton-giving technique, and the concept of start and finish positions in relay running correctly, while 85% of students had not yet understood these concepts, making it difficult for them to practice relay running. Affective domain: 10% of students were able to cooperate within a team, motivate their peers, and demonstrate a sense of responsibility for assigned tasks, while 85% of students had not yet been able to accept failure, cooperate within a team, or motivate their peers. Psychomotor domain: 10% of students were able to understand and correctly practice starting and finishing technique, running technique, and baton-giving technique, while 85% of students had not yet been able to perform these techniques.

Cycle I aimed to improve Class V students' ability to be introduced to relay running through the Talking Stick learning model. At this stage, planning, action, observation, evaluation, and reflective analysis were carried out to examine the effectiveness of the action taken.

Action planning was aimed at providing a structured, systematic approach to introducing relay running through the Talking Stick learning model. Its objective was to improve students' knowledge of relay running, such as starting and finishing technique, baton-giving technique, and running technique. Observation was carried out while the lesson was in progress; the activity observed by the researcher was whether the technique performed by students during relay running was already correct. Once this was complete, students rested briefly and prepared to carry out the Talking Stick learning model, with the aim of determining whether they had already understood the fundamental technique of relay running.

Table 2. Analysis of Basic Relay-Running Knowledge, Cycle I.

No.	Interval	Category	Frequency	Percentage
1	86 – 100	Very Good	0	0%
2	75 – 85	Good	5	18.52%
3	60 – 74	Fair	19	70.32%
4	0 – 59	Poor	3	11.11%

	Total		27	100%
	Mean		68.72	
	Category		Fair	

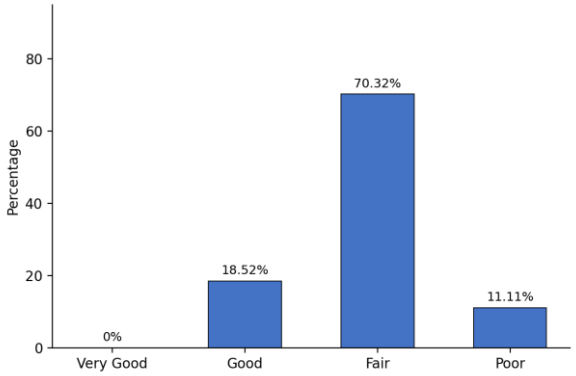


Figure 2. Histogram of Student Ability Data in Cycle I

As implemented in Cycle I, applying the Talking Stick learning model produced an improvement in relay-running learning among Class V students of SDN 14 Kwandang. The class mean score fell into the Fair category. No students (0%) achieved the Very Good category, 5 students (18.52%) achieved the Good category, 19 students (70.32%) achieved the Fair category, and 3 students (11.11%) fell into the Poor category, giving a class mean of 68.72, classified as Fair. These results are presented in Table 2 and Figure 2.

After this first intervention using the Talking Stick learning model, the Cycle I data indicated an improvement in student ability, although several weaknesses still required correction. Cycle I showed improvement in several aspects of students' ability, particularly in fundamental technique; however, challenges remained in the cognitive and affective domains that needed to be addressed in Cycle II. Further action was subsequently taken to improve students' technique, with an emphasis on strengthening both attitude and knowledge.

In Cycle II, the actions taken followed up on the reflection from Cycle I. Its focus was on correcting the weaknesses identified, namely students' still-limited cognitive understanding, still-low affective attitudes, and the need to better integrate the overall movement sequence of relay running.

Planning objective: to improve students' ability more comprehensively in relay running by correcting the aspects that remained weak from Cycle I and maximizing students' understanding at every stage of the movement. Planning steps: increasing the intensity of learning and knowledge of relay running, with Cycle II lessons delivered with greater intensity and integrated repetition so that students became more accustomed to remembering the full sequence of relay running; and a focus on attitude, strengthening students' attitudes to help build good character, ensuring that every student could respect one another, cooperate within a team, and build good mental attitude, carried out periodically so as to shape good character among students.

Table 3. Analysis of Basic Relay-Running Knowledge, Cycle II.

No.	Interval	Category	Frequency	Percentage

1	86 – 100	Very Good	5	18.52%
2	75 – 85	Good	22	81.48%
3	60 – 74	Fair	0	0%
4	0 – 59	Poor	0	0%
	Total		27	100%
	Mean		83.33	
	Category		Good	

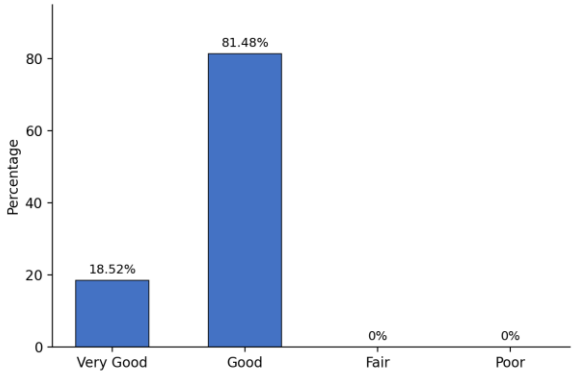


Figure 3. Histogram of Student Ability Data in Cycle II

Observation in Cycle II was carried out to determine whether the action taken was able to improve students' ability across all aspects of understanding relay running. The class mean score fell into the Good category. Five students (18.52%) achieved the Very Good category, 22 students (81.48%) achieved the Good category, no students (0%) fell into the Fair category, and no students (0%) fell into the Poor category, giving a class mean of 83.33, classified as Good. These results are presented in Table 3 and Figure 3.

Cycle II showed a significant improvement in students' understanding of relay running, particularly in running technique, baton-giving technique, and starting and finishing technique. Although some students still required additional practice, the action taken had succeeded in correcting most of the problems identified in Cycle I. Further action would focus more on refining the understanding of students who still required further improvement.

DISCUSSION

This study carried out two action cycles to implement the Talking Stick learning model for introducing relay running to Class V students. Learning outcomes from the pre-cycle, Cycle I, and Cycle II stages showed a significant improvement in students' ability to perform relay running, spanning three main aspects: cognitive, affective, and psychomotor. The discussion below examines these results in more detail.

The cognitive aspect is the most fundamental of the three, since it determines the movements students subsequently attempt to practice. At pre-cycle, many students had difficulty concentrating and appeared hesitant, unable to understand the material to its full extent. After the action taken in Cycles I and II, particularly with the addition of the Talking Stick learning model, observation showed a significant improvement: by Cycle II, roughly 80%

of students were able to perform the fundamental technique of relay running with correct movement, although some still required additional instruction. This indicates that the Talking Stick learning model produced a positive effect, consistent with prior classroom action research reporting that the method reliably raises learning outcomes across a range of subjects, from mathematics (Baid et al., 2022) to civics education (Kamarudin et al., 2021).

The affective aspect is important in all learning because a positive mental state tends to produce better focus. At pre-cycle, students generally found it difficult to display caring attitudes, particularly the confidence to perform in front of others. Using the Talking Stick learning model proved effective in improving both attitude and mental confidence: whereas Cycle I showed that most students had already improved to some extent in attitude and mental confidence, by Cycle II around 75% of students were able to display good attitude and mental confidence. This is consistent with the view that structured, small-group cooperative techniques, in which every member is individually accountable for contributing when called upon, tend to raise engagement precisely because they distribute the opportunity, and the obligation, to participate across the whole group rather than a few vocal students (Slavin, 2014).

The psychomotor aspect is the stage at which students are able to put fundamental relay-running technique into practice. At pre-cycle, students still made many errors in fundamental technique, from starting and finishing technique to baton-giving technique and running technique that still required improvement. After Cycles I and II, practice was focused on fundamental relay-running technique, which succeeded in improving students' ability to practice relay running: by Cycle II, around 70% of students showed good improvement in practicing fundamental relay-running technique. Although some students still experienced difficulty, the improvement achieved was already substantial compared with baseline conditions, consistent with the broader principle that sport-specific techniques, including the coordination and timing required for a clean baton exchange, are built upon a foundation of well-practiced fundamental movement skill (Stodden et al., 2008; Zarębska et al., 2021).

As a learning method, Talking Stick proved effective in improving students' ability in relay running. Using this learning model, students were able to think, display good attitudes, and practice the technical movements of relay running; in addition, the Talking Stick learning model also provided an added challenge that helped students improve their thinking ability.

Overall, the results from Cycle I and Cycle II show that a significant improvement occurred in Class V students' understanding of relay running. The three aspects that were the main focus of this study, cognitive, affective, and psychomotor, all showed substantial improvement. This indicates that the action taken through the Talking Stick learning model successfully achieved the objective of the research, namely introducing relay running to students.

The discussion of these findings indicates that the Talking Stick learning model is highly effective in improving the introduction of relay running among Class V students. Improvement occurred across all three main aspects of relay running, namely the cognitive, affective, and psychomotor aspects. Although some students still required additional instruction, the action taken overall had a significant positive impact on improving their relay-

running skill. The structured, repeated instruction provided succeeded in improving technique and increasing students' confidence in performing relay running.

CONCLUSION AND IMPLICATIONS

Based on the research conducted through two action cycles, it is concluded that the Talking Stick learning model is effective in improving Class V students' ability in relay running, with improvement occurring across all three aspects: cognitive, affective, and psychomotor. In the cognitive aspect, most students showed a significant improvement in understanding fundamental relay-running technique, confirming that a Talking Stick model focused on student understanding is effective in improving students' knowledge of relay running. In the affective aspect, the model provided reinforcement directed at attitude, mental confidence, and character, so that students developed a stronger sense of responsibility toward the tasks given by the teacher. In the psychomotor aspect, although some students still required additional practice in fundamental relay-running technique, improvement occurred in running ability, baton-giving technique, and starting and finishing technique. Overall, the Talking Stick learning model proved engaging for students and succeeded in raising their motivation to take part in relay-running lessons; theoretically, these findings extend the application of Talking Stick, previously documented mainly for cognitive academic subjects, to a psychomotor athletic skill, while practically they offer elementary PE teachers a low-cost, readily implementable model for introducing relay running even where facilities are limited.

RESEARCH LIMITATIONS

This study has several limitations that should be taken into account when interpreting its findings. The sample was limited to a single intact class of 27 students at one elementary school, without a comparison group receiving conventional instruction, which limits generalization of the results to other classes or schools. As is typical of classroom action research, data were analyzed descriptively (means and percentage distribution across categories) rather than through inferential hypothesis testing, so causal claims should be made with caution. The percentages reported for the cognitive, affective, and psychomotor sub-aspects within each cycle were derived from the class teacher's and observer's field observation rather than from a separately validated instrument for each sub-aspect, leaving some room for observer judgment. The intervention was also relatively short, spanning only two cycles, so the long-term retention of students' relay-running knowledge and skill beyond the study period remains untested. Future research should consider a longer intervention with retention testing, a comparison group, and replication across multiple classes or schools.

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ETHICAL STATEMENT

This article has complied with the applicable research ethics standards involving human subjects as participants. All research procedures have obtained ethical approval from the Research Ethics Committee of Universitas Negeri Gorontalo with ethical approval certificate number: No. 081/UN47.B7/KEPK/2025. The researchers ensure the confidentiality of all participants' identities and have obtained written informed consent from each subject prior to data collection to ensure compliance with the moral principles in scientific research.

CONFLICT OF INTEREST

The authors hereby declare that there is no conflict of interest in the conduct of the research or in the preparation of this article, whether financial from any specific sponsor or non-financial with any party. All data presented in the research results are objective findings obtained in the field without any external intervention that could affect the integrity and transparency of this study. The authors take full responsibility for the authenticity and validity of the information provided in this manuscript.

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