

# FLIPPED LEARNING IN PHYSICAL EDUCATION IN JUNIOR HIGH SCHOOL: WHY NOT?

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## Abstract

This research aims to improve junior high school students' learning outcomes in physical education subjects, after learning using flipped learning. The research method used is action research developed by John Elliot. The results of the research show that there is an increase in learning outcomes in each cycle, namely in the pre-cycle as many as (35%) students are in the complete category, in cycle 1 as many (80%) students are in the complete category, and in cycle 2 almost all (95%) students are in the complete category. The level of student satisfaction with learning using blended learning was 55% quite satisfied, 34% felt satisfied and 11% felt very satisfied. With this increase in learning outcomes, the application of flipped learning can be used as an alternative solution to improve the learning outcomes of junior high school students in physical education subjects.

**Keywords:** Flipped Learning, Learning Outcomes, Action Research, Physical Education.

## INTRODUCTION

Advances in information and communication technology have opened new opportunities in the world of education, technology has played an increasingly important role in various aspects of our lives (Arisman et al., 2024), including physical education. The use of modern information technology tools, such as interactive whiteboards (IWB), computerized exercise programs and video recording systems, has been introduced into physical education teaching and training at all levels from elementary school to university (Ji, 2023). There are many technology-based learning models that are currently being massively used in physical education learning.

One of them is the Flipped Learning learning model. Flipped Learning is an innovation that utilizes technology to change the way students acquire knowledge and skills. Conventional learning models in physical education are often dominated by direct instruction in the classroom (Tannenbaum, 2022; Mukhopadhyay, 2021; Østerlie., et al, 2023), where students receive knowledge and skills directly from the teacher. However, this approach may not allow for all students to reach their maximum potential, especially for students who have different learning styles or need more time to understand the concepts being taught.

Physical education is not only about mastering physical skills, but also involves the development of social skills, leadership skills, and an understanding of the importance of a healthy lifestyle (Karimova, 2022; Rhoads, 2022). The Flipped learning model places emphasis on students' active role in the learning process, allowing them to take advantage of more meaningful learning experiences. The application of the flipped learning model in physical education has been found to provide several benefits. This increases student involvement in learning (Karaman, 2023). By flipping the traditional classroom structure, students have more time for hands-on practice in the field or in physical activities (Aruna & Gopal, 2023). This allows for a more direct and experiential learning approach, which can improve skill development and conceptual

understanding (Yip., et al, 2023; Karaman & Arslan, 2023) Additionally, the flipped learning model allows for differentiation of instruction based on individual student needs. This means that teachers can adapt their instruction to meet the specific learning styles and abilities of each student, leading to a more personalized and effective learning experience because learning good things is done by listening and showing good things (Septiani et al., 2023). Overall, the flipped learning model has the potential to transform physical education by making it more engaging, practical, and student-centered. A few studies have highlighted the effectiveness of flipped learning in various educational contexts. However, there is a need to explore and understand in more depth how this learning model can be applied effectively in physical education learning in schools.

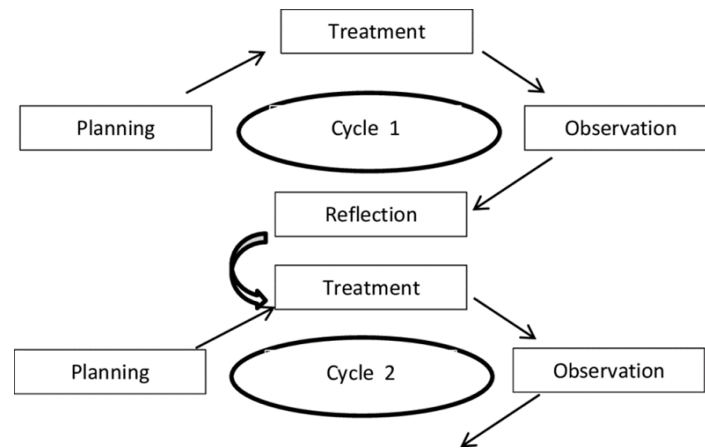
Based on the results of observations and interviews with physical education subject teachers, it is known that there are several obstacles experienced by students while participating in physical education learning: (1) It is known that as many as 55% of students have difficulty understanding the learning material presented by the teacher, the cause is the teacher's lack of time. in delivering material and carrying out practice in the field. Students are less interested in taking part in physical education lessons. This is known from the initial test which states that 45% of students have little interest in learning physical education, the reason is because teachers still use conventional learning methods so that they are considered uninteresting for students. Then there are 60% of students whose learning outcomes have not been completed, this is caused by the lack of time students must understand the learning material and the difficulty of accessing learning resources.

Therefore, implementing the flipped learning model is an attractive solution because it allows students to gain an understanding of concepts through material studied at home via videos, reading materials, or other learning resources, while time in class can be better utilized for direct practice, discussions, and interactions between students and with teachers. Thus, research on the application of the Flipped Learning learning model in physical education subjects in junior high schools is relevant and urgent for further exploration to improve the effectiveness of learning and learning outcomes in physical education learning for junior high school students.

## **METHOD**

Research Method is a scientific way of searching and obtaining data related to procedures in conducting research and technical research. Research methods discuss a lot about how to carry out research. In contrast to research procedures that focus more on the tools used in measuring and collecting research data (Putra et al., 2021). Thus, research methods include both things, namely, research procedures and techniques.

This research aims to improve learning outcomes in physical education, sports, and health subjects in junior high schools (SMP). Based on these objectives, the appropriate research method to use is classroom action research. The research method used in the research is the John Elliot model whose steps are described as follows.

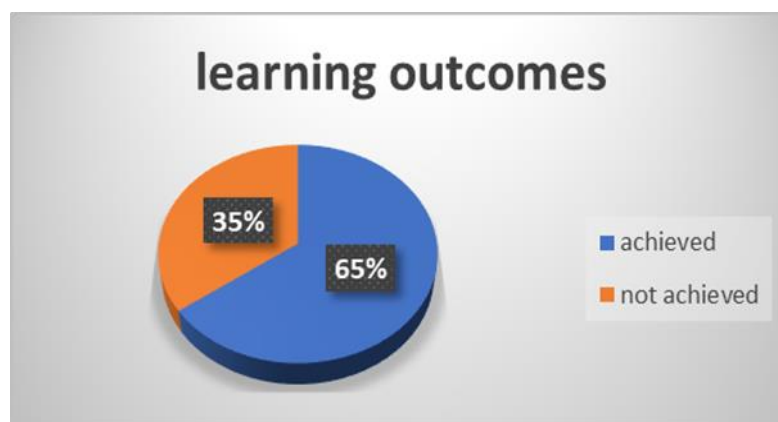


**Figure 1: Action Research Method (Elliot, 1991)**

Based on Figure 1 above, the classroom action research procedure carried out consists of 4 stages, namely: a. Planning, at this stage the researcher plans of action to be carried out, b. Implementation: researchers carry out actions as previously planned. c. Observation: namely the researcher observes the ongoing learning process, interactions between students, as well as weaknesses in the actions taken. d. Reflection: the researcher reflects on what has been done. The four stages above are carried out continuously until the expected target is achieved, namely 85% of students achieve the specified learning outcomes. The subjects of this research were 30 Jakarta state junior high school students' class VII who took part in physical education lessons, namely 31 students. Data collection techniques in this research are participatory observation and documentation. Data analysis in this research uses qualitative and quantitative descriptive analysis.

## RESULTS AND DISCUSSION

The results of initial observations of students regarding physical education subjects show that students' understanding of material concepts in physical education learning is still low or lacking. This can be seen from the pre-test that was carried out on students taking physical education subjects. The results of measuring students' conditions before implementing flipped learning are presented in the picture.



**Figure 1: Percentage of Achievment of Student Learning Outcomes in Pre-Cycle**

Figure 1 shows that a small portion (35%) of students is in the achieved category in the concept material in physical education subjects, while the majority (65%) of students are in the not achieved category. The low student learning outcomes on conceptual subjects in physical education subjects indicate that efforts are needed to improve understanding of concepts in physical education subjects. Researchers tried to apply flipped learning to increase students' understanding of physical education subjects which can be seen in improving their learning outcomes. The application used in online learning in flipped learning is a landing page application in the form of a learning website link. Researchers consider using a landing page application in the form of a learning website link that is easy for students to use.

The preparation stage in the implementation of the first cycle includes students being introduced to the landing page application in the form of a learning website link, which explains how to use it. Next, the teacher provides an explanation to students regarding the learning strategies that will be carried out. Students enter the website that has been created, the teacher presents the main learning materials for physical education material that students will study independently through online classes. The stage of implementing the first cycle of action is for students to take part in face-to-face learning by holding discussions related to students' understanding of learning materials that have been studied independently through a landing page application in the form of a learning website link. The teacher makes observations related to student discussion activities. Furthermore, to see the success of student learning, tests are carried out directly during the learning process. Data from the implementation of cycle 1 are presented in figure 2.

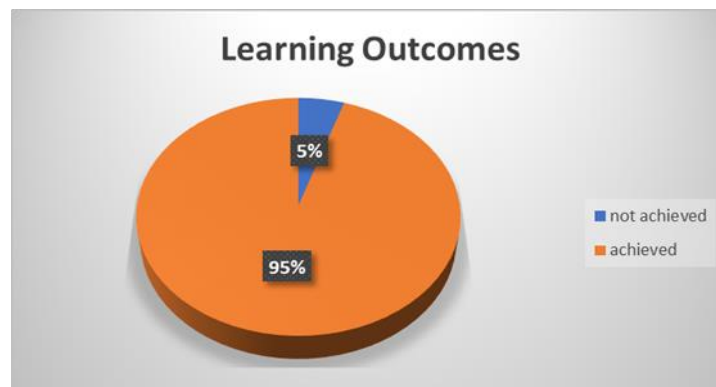


**Figure 2: Percentage of Achievement of Student Learning Outcomes in Cycle 1**

Figure 2 above shows that the majority (80%) of students are in the achieved category on the subject matter of physical education, while as many students (20%) are in the not achieved category. Even though there is an increase in learning outcomes from the cycle stages, the percentage of completion is still below 85% or has not reached the specified target. This is because students are not yet accustomed to using flipped learning. The results of the observations also showed that not all students were involved in class discussions, therefore the action research was continued to cycle 2.

The implementation of cycle 1 treatment can be reflected as follows. First, the discussion activities carried out only focus on active students. teachers pay less attention to passive students. Second, the feedback provided by teachers is not optimal. Thus, the improvements made in cycle 2 were focused on carrying out discussions. The main topic of discussion in cycle 2 is the main material of physical education. In cycle 2, learning begins with discussions. Class discussions were

initiated by students who were less active in cycle 1 to convey their understanding regarding learning materials that had been previously studied independently through a website-based landing page application. Next, the teacher asked other students, especially those who seemed active in the cycle 1 to respond to his friend's understanding. The teacher also provides feedback on the responses given by the students. This activity takes place continuously, so that most students are actively involved in class discussions. The researcher is tasked with directing the ongoing discussion towards achieving learning objectives. Data from the implementation of cycle 2 are presented in figure 3.



**Figure 3: Percentage of Achievement of Student Learning Outcomes in Cycle 2.**

Figure 3 above shows that almost all (95%) students are in the completed category, while only a small portion (5%) of students is in the incomplete category. The results of the second cycle showed a significant increase in learning outcomes, where the percentage of completeness of student learning outcomes reached 95%. This also shows that the learning completion target has been achieved. Thus, the research ended in cycle 2. Based on the research results above, efforts to improve student learning outcomes can be carried out using effective learning models. One learning model that can be used is the flipped learning model. Flipped learning is a “very promising” approach (OECD, 2018) for bringing technology more into the classroom, helping develop students' digital competencies (Kostaris, Sergis, Sampson, Giannakos, & Pelliccione, 2017), improving high-level thinking skills high and active learning time (Gough, DeJong, Grundmayer, & Baron, 2017), encourages problem-solving skills, teamwork and collaboration (Lo & Hew, 2017), and has the potential to increase parent and student engagement (Bond, 2019; Aycicek & Yelken, 2018).

## CONCLUSION

Based on the results of the research and discussion described above, several conclusions can be obtained as follows. First, there is an increase in student learning outcomes in physical education subjects and they have achieved the targets determined in cycle 2 after being taught using flipped learning. This increase can be seen from the percentage of complete learning outcomes in each cycle. Second, all students felt satisfied (with varying levels of satisfaction) with the learning carried out. This shows that the use of flipped learning can attract students to take part in physical education learning, especially in conceptual material. Flipped Learning can be used as an alternative solution to improve student learning outcomes, especially in physical education learning in junior high schools. However, there are several things that need

attention when using flipped learning, namely the teacher's ability to provide online learning materials for students to study independently, as well as the ability to utilize various learning strategies both in face-to-face meetings and online.

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