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LEARNING MODELS GAME BASED LEARNING (GAME *LaKaSiSiKu*, *LaKaTaSiSiPa*, AND *LaKaTaSiSiHa*) INCREASING THE LEARNING MOTIVATION OF STUDENTS IN CLASS VIII OF SMP NEGERI 1 MUMBULSARI

Nurul Handayani[1], *Ermi Purwanti*[2], *Yayuk Mulyati*[3]
[1]Postgraduate Program of Science Education, Universitas Negeri Malang
[2]SMP Negeri 1 Mumbulsari, Jember Regency
[3]Department of Science Education, Faculty of Mathematics and Natural Sciences, Universitas Negeri Malang

Abstract

This study was prepared with the aim of increasing student's learning motivation using a game-based learning model through the game *LaKaSiSiKu*, *LaKaTaSiSiPa*, and *LaKaSiSiHa* in class VIII-C students of SMP Negeri 1 Mumbulsari, Jember, East Java Academic Year 2022/2023. The learning motivation referred to in this study, namely the activeness of students both mentally and physically. This type of research is Classroom Action Research (CAR), where students are facilitators and observers in learning. This research design uses the Kemmis and Mc. Taggart model, which is a research model consisting of four components including planning, action implementation, observation, and reflection. The research was conducted in the even semester of the 2022/2023 academic year. The research subjects were students of class VIII-C SMP Negeri 1 Mumbulsari. The object of the research is student's earning motivation. Data collection techniques used observation and interviews. The data were analyzed descriptively and presented in the form of tables and graphs. The results showed an increase in learner motivation, in cycle I of 75.32%, then in cycle II it increased to 79.61%, and increased in cycle III by 90.09%. This means an increase of 14.77%. Thus, the use of game-based learning models in science subjects can increase the learning motivation of students in class VIII-C SMP Negeri 1 Mumbulsari.

Keywords: Game-Based Learning Learning Motivation, Classroom Action Research

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[1] **Corresponding Address:**
Postgraduate Program of Science Education,
Universitas Negeri Malang
E-mail: nurulhandayani50@gmail.com

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1. INTRODUCTION

Learning motivation is a factor that encourages students to want to learn. Learning motivation can be classified into two, namely intrinsic and extrinsic motivation. Learning motivation greatly affects the success of student learning. Learning success will be achieved if students have the will and encouragement to learn (Emda, 2017). Facts in the field related to the learning motivation of class VIII-C students at Mumbulsari 1 Public Middle School, namely that the learning motivation of students is low so that the teaching and learning process becomes hampered. During the teaching and learning process, students are less focused on the lesson being followed in class.

The game-based learning model is a game-based learning model, which involves students with specific goals (Asmaka, 2019; Atoulloh et al., 2024). Games can present a lot of content, involve students competing in games and there are winners and losers. The importance of game-based learning models can make students learn in happy and comfortable conditions.

LaKaSiSiKu Game, (stands for "*Langkah Kaki Sistem Ekskresi Kulit*" because it is played by stepping your feet to get to the next problem), *LaKaTaSiSiPa Game* (stands for "*Langkah Kaki Tangan Sistem Ekskresi Paru-paru*" because it is played by walking and moving your hands to get the questions and answer the questions in the game), *and LaKaTaSiSiHa Game* (stands for "*Langkah Kaki Tangan Sistem Ekskresi Hati*" because it is played by walking and moving your hands to get the questions and answer the questions in the game) are learning games made by the author and have been adapted to the characteristics of student VIII-C based on the results of observations and questionnaires. This game is made to activate students' motor skills, knowledge, and willingness to learn. Learning with fun is expected to make learning more meaningful and memorable for students. *LaKaSiSiKu* game is played in groups where there is a person in charge of reading the questions and the others line up in front of him to answer. Those who can answer go one step forward and those who cannot answer are allowed to answer until the answer is correct. The winner is the group that reaches the finish line first. if someone cheats then take one step back. *LaKaTaSiSiPa* game and *LaKaTaSiSiHa* game is played in groups where there is a person in charge of reading the questions and the others line up in front of him to answer by lifting the answer choices that have been held. Each group member brings an answer choice consisting of the correct answer and the answer that outwits all the questions in the game. Those who can answer go one step forward and those who cannot answer are allowed to answer until the answer is correct. The winner is the group that reaches the finish line first. if someone cheats then take one step back.

Fun learning, namely learning that is relaxed, free from pressure, safe, and interesting, students' interest in learning is visible, there is full involvement of students in learning, students' attention is focused on learning, the learning environment is interesting, enthusiastic, feeling happy (Junita, 2021). Interest in class VIII-C students at SMP Negeri 1 Mumbulsari in learning, using games that are fun and easy to help students understand the subject matter being studied. Learning can be done in class or outside the classroom, so students have a change of atmosphere or learning environment that can motivate students to learn and understand lessons.

Students' motivation functions to generate, underlie, and drive learning actions. Most students who have great motivation will work hard, look dashing, do not want to give up, and are active in reading to improve their learning outcomes and solve the problems they face. On the other hand, those who have low motivation seem indifferent, and easily discouraged, and their attention is not focused on learning, and as a result, students will experience learning difficulties. Based on previous research, there are significant differences in learning motivation between classes using direct learning models and classes using game-based learning models, there are differences learning achievement, learning motivation increases because it uses a game-based learning model (Winatha & Setiawan, 2020). Game-based learning can improve student learning and make the learning process fun and interesting. Learning that is done with a happy heart will make it easier for students to learn. Weaknesses Game-based learning takes a long time and requires tools and additional media for learning to be carried out properly (Oktavia, 2022).

Based on the description of this background, researchers will conduct research to increase students' learning motivation in learning science using a game-based learning model. Guided by the background of the problems described above, the following problem formulation can be taken: "How to increase student learning motivation through the application of a game-based learning model in class VIII-C students of SMP Negeri 1 Mumbulsari?" The purpose of this study was to find out the description of the process of applying the game-based learning model (game *LaKaSiSiKu*, *LaKaTaSiSiPa*, and *LaKaTaSiSiHa*) so that it can increase the learning motivation of class VIII-C students at SMP Negeri 1 Mumbulsari.

METHOD

Research design

This type of research is Classroom Action Research (PTK) using the Kemmis and McTaggart model research design (Kemmis et al, 2014; Rusman, 2020). Using three cycles, each cycle consists of planning, implementing, observing, and reflecting. The planning stage makes learning plans in the form of devices which are then implemented in class. The learning model used is game-based learning using learning media in the form of game kits made by the author with the Game *LaKaSiSiKu*, *LaKaTaSiSiPa*, and *LaKaTaSiSiHa*.

Research Objectives

The subjects of this research were class VIII-C students of SMP Negeri 1 Mumbulsari. This research was conducted in the even semester of the 2022/2023 academic year. The location of this research was carried out at SMP Negeri 1 Mumbulsari, Jember Regency, East Java.

Data collection technique

Data collection techniques using observation and rubrics. Data were analyzed descriptively and presented in the form of tables and graphs. Observations were made during the implementation of learning, the things that were observed were student activities, and teacher activities during learning, the rubric used was the rubric for assessing student learning outcomes for each cycle.

RESULTS AND DISCUSSION

Based on the implementation of actions for 3 cycles which were carried out for 6 meetings, the data obtained by students' learning motivation increased. The increase in students' learning motivation can be seen from observing students' activities and learning outcomes by applying game-based learning models (game *LaKaSiSiKu*, *LaKaTaSiSiPa*, and *LaKaTaSiSiHa*). The results of observations of student activity during learning on the application of game-based learning models provided in Table 1.

Table 1. Observation data on student activity cycles I, II, and III

Cycles I	Cycles II	Cycles III
84.23%	90.89%	99.78%

Based on the research that has been carried out, it is known that the learning activities of students in science learning through the application of game-based learning models with *LaKaSiSiKu*, *LaKaTaSiSiPa*, and *LaKaTaSiSiHa* games have increased (see Table 1). The percentage in cycle I was 84.23%, cycle II was 90.89% and cycle III was 99.78%, an increase from cycle I to cycle III was 15.55%.

From these data, it was concluded that students experienced an increase in motivation seen from the activities of students who were increasingly active in learning. Student motivation can increase with fun learning activities. Trigger factors for the decline in student activity in the learning process are the condition of students in learning, student anxiety during learning, student enthusiasm for learning, and the learning environment (Izzah et al., 2022). With changes in the learning environment and learning system, students become enthusiastic about learning. This is to previous research related to the application of game-based learning, that student learning effectiveness increases, learning in a fun atmosphere and not putting pressure on students so that they get meaningful learning (Oktavia, 2022). In cycle three, the percentage of 99.78% for student activity during learning uses a game-based learning model indicating that students play an active role in learning.

Based on the research that has been carried out, it is known that the learning outcomes of students in science learning through the application of game-based learning models with games have increased. From Table 2, we know that the minimum completeness criteria (KKM) mastery of students increased from cycle I by 13.3%, cycle II by 66.67% and cycle III by 66.67%, an increase from cycle I to cycle III by 53.37%. The achievement of classical learning outcomes in cycle III has reached the success indicator because students experience individual learning completeness ≤ 75.

Table 2. Data on students' evaluation results for Cycles I, II, and III

Data	Mark		
	Cycles I	Cycles II	Cycles III
Average	66.4	68.3	80.4
The highest score	86	100	100
Complete KKM	2	10	10
KKM percentage	13.3%	66.67%	66.67%

It can be seen that students from cycles I, II, and III experienced an increase of 53.37%. For students who have the motivation to learn, the learning outcomes will increase. Motivation can generate, underlie, and drive learning actions. Most students who have great motivation will work hard, look dashing, do not want to give up, and are active in reading to improve their learning outcomes and solve the problems they face. Conversely, those who have low motivation, appear indifferent, easily give up, attention is not focused on learning, as a result, students will experience learning difficulties.

Learning motivation is closely related to student learning outcomes, students tend to be passive and have less value if they are not motivated, whereas if they feel motivated, students will be enthusiastic about learning, active and have good learning outcomes. With the class average score in cycle three which reached 80.4, it indicated that students were good and enthusiastic in learning, and experienced an increase from cycle one to cycle two, and cycle three.

Based on data on Table 3, the comparison of the results of students' learning motivation using game-based learning models is still 75.32%, while in cycle II it reached 79.61%, and in cycle III it reached 90.09%. The results of observations of students learning motivation using the game-based learning model increased from cycle I to cycle III by 14.77%.

Table 3. Comparison of observation results of students' learning motivation

Cycles I	Cycles II	Cycles III
75.32%	79.61%	90.09%

Table 4. Comparison of the results of observations of teacher activities

Cycles I		Cycles II		Cycles III	
Meeting 1	Meeting 2	Meeting 1	Meeting 2	Meeting 1	Meeting 2
88.64%	93.18%	95.45%	93.18%	95.45%	95.45%

The results of observations of teacher activities using the game-based learning model in cycles I, II, and III are presented in Table 4. Teacher's skills in cycles I, II, and III have increased. In cycle I, meeting 1 was 88.64%, at meeting 2 was 93.18%. Whereas in cycle II meeting 1 was 95.45%, at meeting 2 was 93.18%. Whereas in cycle III meeting 1 was 95.45%, at meeting 2 was 95.45%. The teacher has met completeness based on indicators learning implementation.

The use of game-based learning models, in science learning makes science learning more meaningful, and fun, and raises the activity of students because of the game learning model. Game-based learning can facilitate problem-solving, collaborative skills, and can create an effective learning environment (Li & Tsai, 2013).

CONCLUSIONS AND SUGGESTIONS

Conclusion

Based on the results of the research that has been carried out, the data concludes that the application of game-based learning modules with *LaKaSiSiKu*, *LaKaTaSiSiPa*, and *LaKaTaSiSiHa* games in science learning in class VIII-C of SMP Negeri 1 Mumbulsari can increase students' learning motivation.

Suggestion

Researchers provide the following suggestions: 1) schools, should guide teachers to use various learning models, for example, game-based learning so that they can create optimal learning. 2) for teachers, the game-based learning model should be used by the teacher as a variation of the learning model as well as to increase students' learning motivation. 3) future researchers, should conduct a

more in-depth study of the application of game-based learning models and develop further so that they can be better at increasing students' learning motivation.

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