

## **Optimizing Learning through Game-Based Learning to Effectively Improve the Quality and Outcomes of Student Learning**

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### **Abstract**

Received: December 1, 2024  
Revised: December 15, 2024  
Accepted: January 3, 2025

This study aims to examine the optimization of learning through the Game-Based Learning (GBL) method to effectively improve the quality and learning outcomes of students. Game-Based Learning is an approach that integrates games into the learning process to enhance student engagement, motivation, and understanding of the subject matter. By using GBL, students are expected to be more active and enthusiastic in learning while developing important cognitive and social skills. This study analyzes the implementation of GBL in various educational contexts and assesses its impact on improving student learning outcomes. The results show that the use of GBL can increase learning motivation, conceptual understanding, and academic performance. Therefore, Game-Based Learning can be an effective solution to improve the quality of education at various levels.

### **Keywords:**

Game-Based Learning, interactive learning, learning outcomes.

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### **A. Introduction**

The world of education is a dynamic world, the concept of education is always developing both in terms of the concepts it applies and in terms of the material it conveys. Education in general must be relevant to the lifeline, to educate the people and elevate the honor and dignity of the nation, in order to build mutually beneficial cooperation. The concept of education in Indonesia as stated in Law no. 20 of 2003 concerning the National Education System states that education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble morals and the skills needed by themselves, society, nation and state. (Syafuruddin, 2021)

Education is very important for human life. Because Allah SWT has given a great blessing to mankind in the form of the holy book Al-Qur'an which contains educational values for the life of mankind. Al-Qur'an is a holy book revealed by Allah SWT to Prophet Muhammad SAW through the angel Jibril, his presence has had an extraordinary

influence on the birth of various concepts that humans need in various areas of life. (Nata, 2005)

Therefore, Allah SWT said in the Qur'an in Surah Al-Baqarah verse 2, as follows:

ذَٰلِكَ الْكِتَابُ لَا رَيْبَ فِيهِ هُدًى لِّلْمُتَّقِينَ

*"It is a book in which there is no doubt as a guide for the pious".*

In the verse above it is stated that the Al-Qur'an is a guide, of course the meaning of this guidance can be explained in a wide scope, including guidance in educational matters. The Qur'an is also a source of knowledge, it explains various aspects of life, including education. Every verse mentioned in the Qur'an has significant meaning and values, and the values contained are learning and education for human life. (Indonesian Ministry of Religion, 2012)

Learning is the main activity in the educational process at school. Learning is a conscious effort to change attitudes and behavior. In an effort to achieve behavior change, motivation is needed. Strategies and methods that can motivate students are strategies and methods that involve students learning by doing. One element that needs to be considered in learning to increase student motivation is the learning method. Methods are very important in the teaching and learning process in educational institutions. If the educational process does not use appropriate methods, it will be difficult to achieve the expected learning objectives. The right method for teaching depends on how carefully the teacher chooses it. Each method chosen and used has a direct or indirect effect on the achievement of the results obtained in the learning process. In the process of delivering lesson material, one of the important factors is the method used by teachers to convey lesson material to students.

Learning can be said to be an interaction between students and teachers, which is supported by learning elements such as facilities and infrastructure, learning materials, teacher teaching methods, models applied, school environmental conditions and evaluations given by teachers. All of these elements are needed to support the learning process, especially the use of media, models and learning methods. If used correctly it will influence the success of the learning process. However, in reality, currently there are still many teachers who apply conventional methods during the learning process and there is a lack of innovation to apply more modern models, methods and media. Apart from teachers, students must be involved in the learning process so that learning can run as it should, teachers provide material to students so that interaction occurs between teachers and students. (Saiful, 2010)

Therefore, as teachers we must have strategies in teaching so that learning can be carried out optimally according to the goals to be achieved, especially in choosing what methods to use in learning in order

to facilitate the learning process. By choosing the right learning method, a teacher can help students understand and master the subject matter better.

The achievement of learning objectives can be seen from the ongoing learning process and the results obtained by students after the learning process. Teaching strategies are the concrete actions of teachers or the practice of teachers carrying out teaching in certain ways that are considered more effective and more efficient. (Ika, 2017)

In the learning process, learning motivation has a positive and significant effect on student activities in achieving learning achievement, so that student learning motivation can increase and produce better learning outcomes. Increasing student learning motivation requires learning methods that can make students more active and motivated. One learning method that can help improve understanding of learning is by using the method *game based learning* based *game* which is expected to help teachers provide maximum, effective and efficient teaching so that students can more easily accept material and are more motivated to participate in learning. (Sudjana, 2013)

Method selection *game based learning* It is hoped that it can create an innovative, creative and effective learning process. So, *game based learning* is the use of games for serious educational purposes as a tool that significantly supports the learning process. Therefore, the author uses the method *game based learning* to provide opportunities for students to increase students' social interactions in learning, and encourage students to think at a higher level. Method implementation *game based learning* In learning the Aqidah Morals, it is hoped that it will be able to improve student learning outcomes.

### **1. Learning methods**

Teachers use learning methods to create a learning environment that becomes the basis for teacher and student activities. Teaching methods are teaching methods that are formed according to certain principles and systems. Learning methods are steps from the chosen strategy towards realizing learning objectives. (Fauzan, 2020)

A learning method is a way or technique for teachers to present learning material to achieve the learning objectives that the teacher has conveyed to students. By taking knowledge as a characteristic of various learning methods, teachers will more easily determine learning methods that suit class conditions. The actual use of learning methods depends on the learning objectives. (Parwati, 2018)

It can be concluded that the learning method is important when learning takes place so that students do not get bored and bored when delivering the material and it is also easier for students to understand the learning. Therefore, a teacher can use this method when learning

Aqidah Akhlak and use the appropriate method to improve students' activities and learning outcomes.

## **2. Method *Game Based Learning***

### **a. Understanding *Game Based Learning***

The world is currently entering a digital era which is marked by the very rapid development of information technology. This also happens in the world of education. Therefore, teachers must be more creative and innovative in developing existing learning methods.

One learning method that is suitable for the digital era is the learning method *game based learning*. Learning methods *game based learning* is a game-based learning model that captivates and engages users, with a specific end goal such as developing knowledge and skills. Game-based learning methods can provide different types of learning content in different settings. Game-based learning is often used as a one-time teaching event to provide formal learning either online or in the classroom. *Game based learning* is an innovation in the world of education that combines the learning process with play. *Game based learning* is use *game* with serious goals (i.e. educational goals) as a tool that supports the learning process significantly. (Komang, 2020) There are also other meanings of *game based learning* as a learning method that combines learning material into education so that students are involved with each other through the game activities provided. (Firoso, 2018)

Implementation *game based learning* is one of the cognitive developments because playing is an action that cannot be separated from the stages of a child's cognitive development that contributes to it. Play activities will make children activate their thinking schemes in ways that make it possible for them to go beyond them in real life, namely by completing a series of activities in the game. (Space, 2019)

*Game based learning* is a learning method, if translated into Indonesian it means a game-based learning method. So, a lesson that is in accordance with the teaching materials and is assisted by technology and displays several achievements when completing the quiz. *Game Based Learning* is a learning method that uses applications or game-based learning media specifically designed to help the learning process. (Maulidina, 2018)

In this learning, students are required to learn, but with a playing approach. *Game* is one of the media used to hone brain skills in overcoming conflicts or problems in the game. Problems or conflicts created in a *game* taken from real life and combined

with a side of fantasy. This is intended to make the flow of conflict or problem more interesting to solve. (Teguh, 2011)

In determining the appropriateness of the media to be prepared and used through the decision making process it is related to the capabilities possessed by the media including the advantages of the characteristics of the media in question in relation to various learning components. Development *game based learning* can provide an environment that is motivating, encouraging, fun and increases creativity. Approach *game Learning* is able to stimulate students' emotional, intellectual and psychomotor skills. Therefore, *game based learning* could be an interesting solution for learning. All the potential you have *game* as a medium it can be used as a motivational learning medium for students. Its ability to influence the user's cognitive and emotional aspects simultaneously can be a strength as a learning medium. Besides that, *game* has a number of capabilities that other learning methods lack, including aspects of interactivity, provision *feedback* directly, and *event* in a study. (Hidayat, 2018)

Method *game based learning* has high learning value which hones skills such as critical thinking, group communication, and appropriate decision making. By implementing learning methods *game based learning* The aim is for the learning materials to have clearer meaning so that students can better understand them in mastering and achieving learning objectives. Students can also do more learning activities, because they not only listen to the teacher's explanations, but also other activities such as observing, doing, demonstrating, acting out and so on. Thus, the purpose of learning media is very important to use in the learning process, so that teaching and learning activities run effectively and efficiently and learning objectives can be achieved in accordance with those previously determined.

#### **b. Types *Game Based Learning* In Learning**

*Game based learning* or learning based *game* has become a learning method that has now spread to various fields including education. This method is believed to be an effective method for increasing motivation, learning outcomes and overall student skills. In *game based learning*, learning is carried out through fun and challenging games, so students feel more motivated to learn. However, students will also continue to be guided and directed to achieve the learning goals that have been set. There are 2 types *game based learning* which can be adopted by teachers as a means of learning in the classroom, namely *online* using digital technology and *offline* or manually using visual learning media. (Natalis, 2022)

**B. Previous Research**

Research taken by Nur Asiah Safitri with the title "Application of the Model *Game Based Learning* "To Increase Students' Learning Motivation in the Aqidah Moral Subject at Madrasah Tsanawiyah Negeri 2 Muaro Jambi". From the results of observations of learning activities using the GBL model, it has shown quite effective results. It can be seen that student learning motivation increased from pre-cycle to cycle I, cycle I to cycle II, and cycle II to cycle III, student learning motivation in cycle I reached 75%, in cycle II it increased to 80%, and experienced an increase in cycle III to 90%. (Nur Asiah Safitri, 2022) The similarity between Nur Asiah Safitri's research and research conducted by researchers is that they both use learning methods *game based learning* on the subject of Aqidah Akhlak, while the difference between the research conducted by the researcher and Nur Asiah Safitri is that the researcher researched improving student learning outcomes and Nur Asiah Safitri researched increasing student learning motivation.

**C. Research methods**

The type of research used in this research is Class Action Research (PTK). The problem solving method used in this class action research is the implementation of a qualitative approach. This approach is expected to improve the learning outcomes of Aqidah Akhlak in class VIIC MTs Al-Ukhuwwah Lok Bangkai students in the academic year 2023/2024. In the implementation of this class action research, it will be implemented in II cycle and each cycle consists of 2 meetings. Each cycle consists of four stages that include planning, implementation, observation, and reflection. The indicator of success measured in this research is to improve student learning outcomes measured by using learning-based methods *game based learning*.

**D. Results and Discussion**

Madrasah Tsanawiyah Al-Ukhuwwah Lok Bangkai, Banjang District, North Hulu Sungai Regency is a formal educational institution which is the first secondary school after SD/MI and is under the auspices of the Department of Religion (DEPAG). Madrasah Tsanawiyah Al-Ukhuwwah Lok Bangkai, Banjang District is located in a strategic area and the environmental conditions are supportive, namely in the middle of residential areas where the community is very religious. This educational institution is the object of this research. In this section, the findings from the research that have been carried out will be discussed. The bar diagram shows that there are several findings which will be explained as follows.

**1. Teacher Activities**

The increase in teacher activity in cycle I and cycle II can be seen in the following bar diagram image:



Figure 1 Bar Diagram Comparison of Increased Teacher Activities

From the picture above, it can be seen that the average value of teacher activity has increased. The average value of teacher activity in cycle I, meeting 1, was 3.5, which increased in cycle I, meeting 2, to 3.7. In the implementation of cycle II meeting 1 the average value of teacher activity was 3.8 and increased to 3.9 including the good category in cycle II meeting 2. So it can be concluded that the teacher is good at carrying out learning by applying the method *game based learning*.

## 2. Student Activities

The increase in student activity in cycle I and cycle II can be seen in the following bar diagram image:

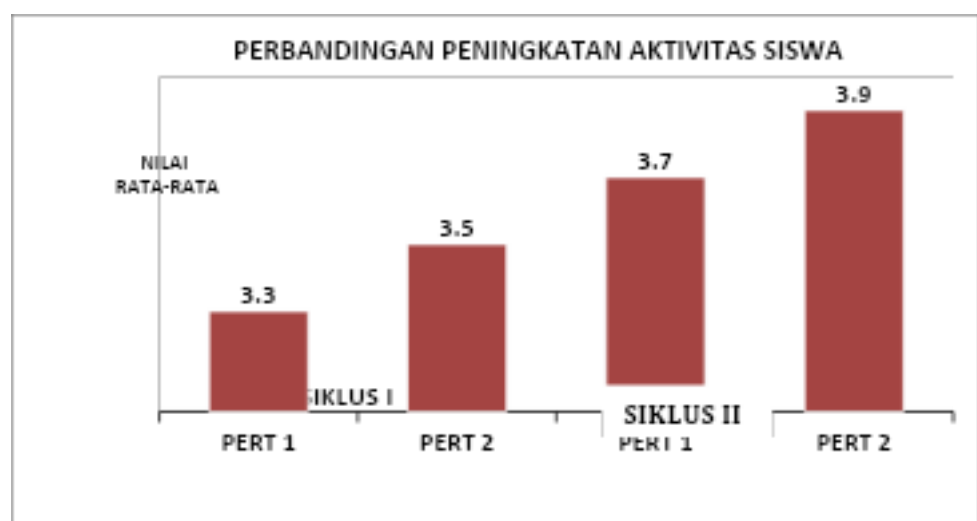


Figure 2 Bar Diagram Comparison of Increased Student Activity

In cycle I, meeting 1, the average value of student activity was 3.3, increasing in cycle I, meeting 2, to 3.5. In cycle II, meeting 1, student activity increased to 3.7 and in cycle II, meeting 2, it increased again to 3.9, including in the good category. So it can be concluded that students are good at paying attention or are interested in learning using the method *game based learning*.

### 3. Student Learning Outcomes

Implementation of learning using learning methods *game based learning* in class VIIC MTs Al-Ukhuwwah students can influence the learning outcomes achieved by students. For more clarity can be seen in the following picture:



Figure 3 Bar Diagram Comparison of Improvement in Student Learning Outcomes

The test results show that the percentage of students' scores with the learning method *game based learning* was 66.67% at meeting 1 in cycle 1, and at meeting 2 in cycle 1 it increased to 87.50%. In cycle II, meeting 1, the test results were 87.50% and then in cycle II, meeting 2, the test results increased to 91.67%.

Based on the data above, it is known that learning activities using the game based learning method in the Aqidah Akhlak subject are quite effective in helping students improve their learning outcomes so that at the end of this activity students get better grades. By using the method *game based learning* with *game* crossword puzzles students feel challenged to be able to answer questions so that the class atmosphere becomes active and fun and can increase students' understanding of the subject matter discussed. So the results of this research show that there is an increase in student learning outcomes



by applying the method *Game Based Learning* On the Subject of Moral Beliefs to Improve Student Learning Outcomes at MTs Al-Ukhuwwah Lok Bangkai.

**E. Conclusion**

From the results of the research that has been carried out, it can be concluded that by using the method *game based learning* can improve student learning outcomes in the subject of Aqidah Akhlak at MTs Al-Ukhuwwah Lok Bangkai. This can be seen from the learning results of students from cycle I and cycle II, after the implementation of the teaching and learning process at MTs Al-Ukhuwwah Lok Bangkai.

The increase in student learning outcomes can be seen from the increase in student scores in each cycle. In cycle I of the first meeting the average student score was 77.91 with a percentage of 66.67%, then the average score of students increased to 80.62 with a percentage of 87.50% in cycle I of the second meeting and in cycle II of the first meeting the average score of students was 90.62 with a percentage of 87.50% then the average value of students increased to 94.79 with a percentage of 91.67% in cycle II of the second meeting. As a result, students are able to accept the material presented and there are changes in learning outcomes, especially in the subject of Aqidah Morals. And the results of teacher and student observations were carried out well.

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