

THE USE OF AN INTERACTIVE "SNAKE AND LADDER" LEARNING MEDIA TO ENHANCE STUDENT INTEREST AND LEARNING OUTCOMES IN THE THIRD GRADE AT INPRES 3/77 WATU ELEMENTARY SCHOOL

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ABSTRACT

This study primarily highlights the effectiveness of interactive media, particularly educational games, in fostering increased interest and learning achievement among third-grade students in Islamic Religious Education (PAI) at Inpres 3/77 Watu Elementary School. The main objective of this study is to enhance student interest and learning outcomes through interactive media in specifically educational games, in the PAI learning process. The method used was Classroom Action Research (CAR), conducted in two cycles. The first cycle took place on October 17, 2025, and the second on October 24, 2025, at Inpres 3/77 Watu Elementary School in Watu Village, Barebbo District, Bone Regency, South Sulawesi Province. The research subjects consisted of 16 third-grade students. Data were collected through observation, interviews, and documentation. Data analysis was performed using descriptive statistical methods. The research findings showed a significant increase in student interest and learning outcomes after the application of interactive media (educational games) in PAI learning. This improvement was evident in indicators such as attention, participation, and enjoyment, which remained in 81% in both cycles. Based on these findings, it can be concluded that interactive media (educational games) are highly effective in increasing student interest and learning outcomes in PAI instruction at Inpres 3/77 Watu Elementary School.

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INTRODUCTION

Interest in learning has a significant impact on student engagement and learning outcomes. When student interest is low, critical thinking skills and academic achievement also decline; therefore, educators need to ensure that students' interest continues to develop throughout the learning process (Waruwu & Sitinjak Debora, 2022). Interest is a sense of attraction toward something or

an activity considered enjoyable, and in education, it serves as the initial step that determines students' success in learning (Amalia et al., 2024).

To maintain students' interest in learning, instruction must be designed as a comprehensive system consisting of objectives, content, methods, media, and assessment. Among these components, instructional media play a crucial role by capturing students' attention and facilitating their understanding of the material. (Hansa et al., 2024) . The success of instruction is reflected in learning outcomes—that is, behavioral changes in the form of knowledge, skills, or attitudes acquired by students after undergoing the learning process. These learning outcomes indicate whether educational goals have been achieved. (Rahman, 2021) . This entire process demonstrates that education plays a major role in improving the quality of human life. Therefore, schools, as formal institutions, need to create a learning environment that is comfortable and enjoyable, and that encourages student engagement in order to produce high-quality human resources. (Surani & Fricticarani, 2023) .

However, education today faces various challenges, including low student engagement in the learning process. (Ulfa Khairani et al., 2024) . Based on observations conducted at SD Inpres 3/77 Watu, it was evident that teachers had made every effort to deliver instructional material effectively through classroom explanations; however, students paid little attention to the material and showed low concentration during instruction. This situation is characterized by students playing on their own, chatting with friends, or engaging in other activities that disrupt the learning process. Consequently, the learning process becomes less effective, leading to a decline in students' learning outcomes. One factor suspected to be causing this situation is the continued dominance of conventional, lecture-based, or rote-learning models. In fact, advances in the understanding of learning psychology call for the use of more interactive and engaging learning media and models to enhance student motivation, active participation, and comprehension during the learning process (Agustini et al., 2024) .

To address this challenge, instructional media should not be one-way—merely something students watch or listen to. The media used must foster interaction with students throughout the learning process. Effective interactive instructional media not only present content but also incorporate elements that help students analyze and enhance their thinking skills. These thinking skills can be honed through activities such as observing, experimenting, reasoning, communicating, and drawing conclusions. (Priska et al., 2021)

One type of interactive media that attracts attention is the Snakes and Ladders game. Using the Snakes and Ladders game in learning can make students more active and directly involved in the teaching and learning process. This is in line with Mundar's view, which emphasizes that learning should be designed in foster children's holistic creativity, create a fun learning atmosphere, and encourage student engagement. Through the Snakes and Ladders game, students become more enthusiastic, active, and eager to participate in learning activities. The Snakes and Ladders game is an educational tool used as a supplementary resource in the learning process. Typically, this game

uses a board featuring images of snakes and ladders, where players move forward or backward according to the number rolled on the die (Khomsin & Rahimmatussalisa, 2021).

In the field of education, this game can be modified by adding questions or tasks to each square in accordance with the material being studied. In this way, students not only play but also learn in a fun and interactive manner. This approach helps students understand the material more easily because it is presented in the form of engaging and entertaining activities. (Nurroin & Jamhuri, 2025) . Several empirical studies support the effectiveness of the Snakes and Ladders game as an educational tool. For example, a study by Lumbantobing (2022), published in the Sebatik Journal, found that using the "Snakes and Ladders" game, supplemented with number cards, increased student engagement and learning outcomes. (Lumbantobing et al., 2022) Additionally, research conducted at Muhammadiyah University of Malang showed that the "Digital Snake and Ladder Game" improved students' thematic learning outcomes. In this study, the focus is on students' learning interest and learning outcomes following the implementation of the educational Snakes and Ladders game. Learning interest is important because it serves as an internal motivator that encourages students to participate actively without coercion, while learning outcomes indicate the extent to which this medium effectively enhances students' understanding. Given this background, this study is highly relevant. This study will investigate how implementing the Snakes and Ladders game improves students' interest in learning and learning outcomes.

METHOD

This study is a classroom action research study conducted in the classroom during the learning process. The study was conducted at SD Inpres 3/77 Watu over two cycles: the first on October 17, 2025, and the second on October 24, 2025. The subjects of this study were the 16 third-grade students at SD Inpres 3/77 Watu. The subject of the study was Islamic Education (PAI). The data collection techniques used in this study were observation, interviews, documentation, and direct participation during the learning process between teachers and students. The research data were then analyzed using descriptive statistical analysis.

RESULTS AND DISCUSSION

RESEARCH RESULTS

The Application of the "Snakes and Ladders" Game as a Learning Medium in the PAI Subject

This study focused on addressing learning challenges and improving the teaching and learning process in the classroom. Consequently, the study was conducted in two cycles, using an interactive learning medium—the "Snakes and Ladders" game—to enhance students' interest and learning outcomes in third-grade PAI lessons at SD Inpres 3/77 Watu.

1. Cycle I

The first cycle of classroom action research at SD Inpres 3/77 Watu was conducted during a single session on Friday, October 17, 2025. The following are the stages of implementing classroom action research in Cycle I:

a. Planning Stage

In this stage, the researcher prepared the learning materials by implementing an interactive educational Snakes and Ladders game. Planning activities included preparing the game materials (snake-and-ladder board, question cards, dice, game pieces, and game rules), developing an instrument to assess learning interest, creating learning-outcome test questions with an answer key and scoring guidelines, and preparing tools to document the learning process.

b. Implementation

The lesson began with an opening activity consisting of greetings, a prayer, a presentation of the learning objectives, and an icebreaker to boost student motivation. The teacher used the "Let's Learn to Fast" material as an introduction, then introduced the Snakes and Ladders game and its rules. Students played in groups and answered questions related to the material whenever their token landed on a question square. The teacher acted as a facilitator by observing, guiding, and ensuring student engagement throughout the game. After the game, students completed an assessment to measure their understanding of the material.

c. Observation/Data Collection Phase

Observations during the first-cycle learning process in the first cycle showed that when interactive media was used with the taught material, almost all students focused on it. Most students began to show active engagement in learning and appeared enthusiastic about the game; however, some students still required special guidance. While students responded well to questions, their performance was not yet consistent across all groups.

2. Cycle II

a. Planning Phase

In this stage, the researcher prepared the learning materials by implementing interactive media in the form of an educational snakes-and-ladders game. Improvements were made by redesigning the game board, instruction cards, and questions to make them more engaging and easier for students to understand. The researcher also prepared an observation instrument to measure learning interest, which included indicators of attention, engagement, enthusiasm, and student attitude, and developed essay test questions, along with observation and scoring guidelines, to assess students' interest and learning outcomes. Additionally, documentation tools were prepared to record the learning process.

b. Implementation Phase

The lesson began with a greeting, a prayer, a brief explanation of the material and the improved learning materials, and an icebreaker. Next, students were divided into groups, and the teacher explained the updated rules of Snakes and Ladders, including the use of instruction cards, questions, and rewards. Students played the game in groups, taking turns rolling the dice and answering questions. Throughout the activity, the teacher observed students' interest in learning and guided groups experiencing difficulties. After the game ended, students completed an essay-type test to measure their learning outcomes.

c. Observation/Data Collection

Observations were conducted while students played Snakes and Ladders to gauge their interest. 14 third-grade students attended the learning activity in Cycle II. During the game, it was evident that the students had shown increased interest by actively participating and collaborating with their groupmates to complete the game. This was because the game became increasingly challenging and included rewards, which made the students more enthusiastic about playing. This is what demonstrated a significant difference between Cycle I and Cycle II.

The Application of the Interactive “Snakes and Ladders” Learning Medium to Increase Students’ Interest in Learning

There are three dimensions of student learning interest addressed in this study, namely:

1. Attention

The indicators for this dimension are that students focus on following the game through to the end and pay attention to the questions or instructions that appear at each step.

Table 1. Observation Results for the Attention Dimension in Cycle I and Cycle II

Observation Activities	Cycle 1		Cycle 2	
	Number of active students	Percentage	Number of active students	Percentage
Students focused on following the game until the end.	11	68.75%	14	100%
Students pay attention to the questions or instructions that appear at each step of the game.	10	62.5%	14	100%
Average score		65%		100

Based on the data in Table 1, the following graph compares students’ attention dimensions in Cycle I and Cycle II to clarify the improvement observed.

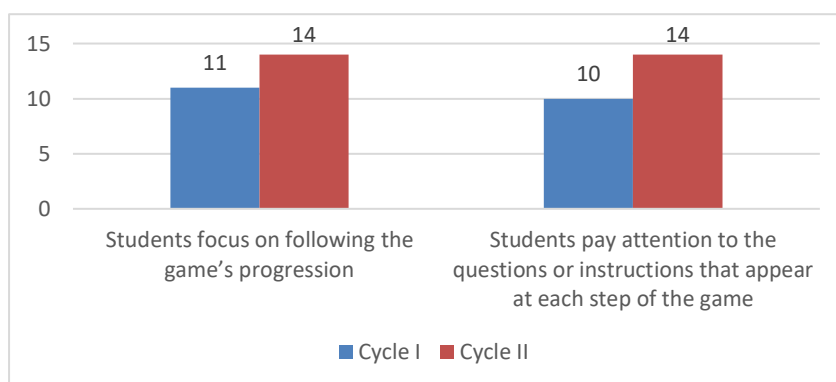


Figure 1. Comparison of students’ learning interest in the attention dimension

Based on the table and diagram, the observation results show that students' focus and attention to the game—as indicators of the attention dimension—have increased from Cycle I to Cycle II.

2. Active Engagement

The indicators for this dimension are: students actively asking and answering questions.

Table 2. Observation Results for the Active Engagement Dimension in Cycle I and Cycle II

Observation Activities	Cycle 1		Cycle 2	
	Number of students	Percentage	Number of students	Percentage
Students are actively asking and answering questions.	5	31.25%	8	57%

Based on the data in Table 2, the following graph compares the dimensions of students' active engagement in Cycle I and Cycle II to illustrate the improvement.

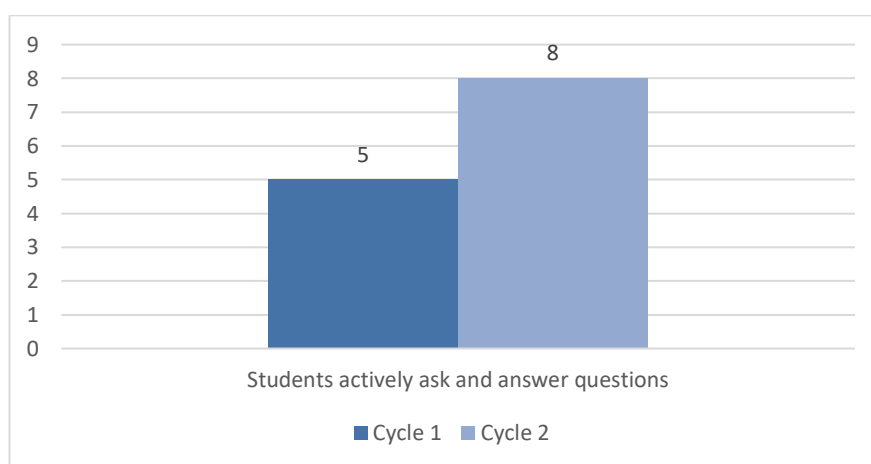


Figure 2. Comparison of learning interest in the active engagement dimension

Based on the table and diagram, the observation results show that the active engagement dimension—specifically, students actively asking and answering questions—has increased from Cycle I to Cycle II.

3. Joy and positive feelings

Based on this dimension, the indicators are that students feel happy playing while learning and that they do not feel forced to learn through games.

Table 3. Observation Results for the “Sense of Joy” Dimension in Cycle I and Cycle II

Observation Activities	Cycle I		Cycle II	
	Number of Active Students	Percentage	Number of active students	Percentage
Students enjoy playing while learning.	13	81.25%	14	100%
Students do not feel forced to learn through games.	13	81.25%	14	100%
Average score		81.25%		100%

Based on the data in Table 3, the following graph compares students' "Enjoyment" dimension scores in Cycle I and Cycle II to illustrate the improvement.

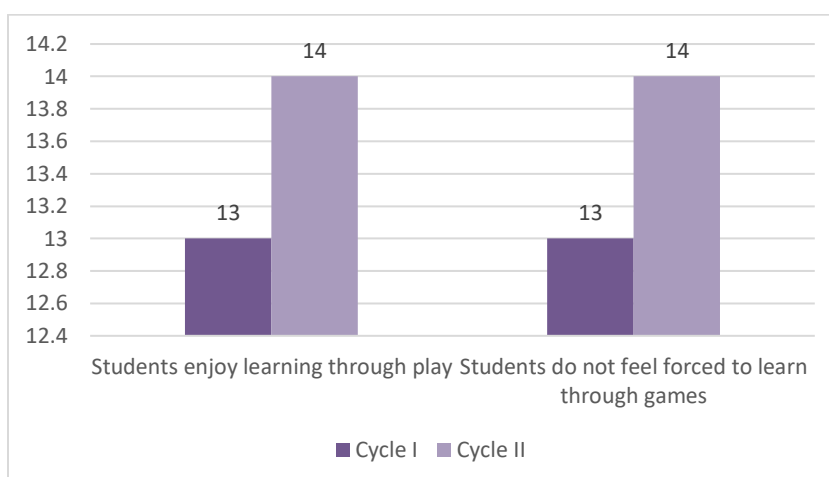


Figure 3. Comparison of the "enjoyment" dimension of learning interest

Based on the table and diagram, the observation results show that the "enjoyment" dimension—where students feel happy and not forced to participate in the game—has increased from Cycle I to Cycle II.

Application of Interactive Learning Media (Educational "Snakes and Ladders" Game) to Improve Student Learning Outcomes

In addition to the increase in students' interest in learning, their learning outcomes improved significantly. This is evident from the rise in the class average score and the increase in the number of students who achieved mastery in each cycle. This improvement is clearly evident in the following table and graph.

Table 4. Comparison of Student Learning Outcomes in Cycle 1 and Cycle 2

Cycle 1		Cycle 2	
Class average	57.2	Class average	86
Highest score	85	Highest score	100
Lowest score	25	Lowest score	45
Students who passed	37.5%	Students who passed	78.5
Students who have not met the standard	62.5%	Students who have not met the standard	21.5

Based on the data in Table 4, the following graph compares student learning outcomes in Cycle I and Cycle II to illustrate the improvement.

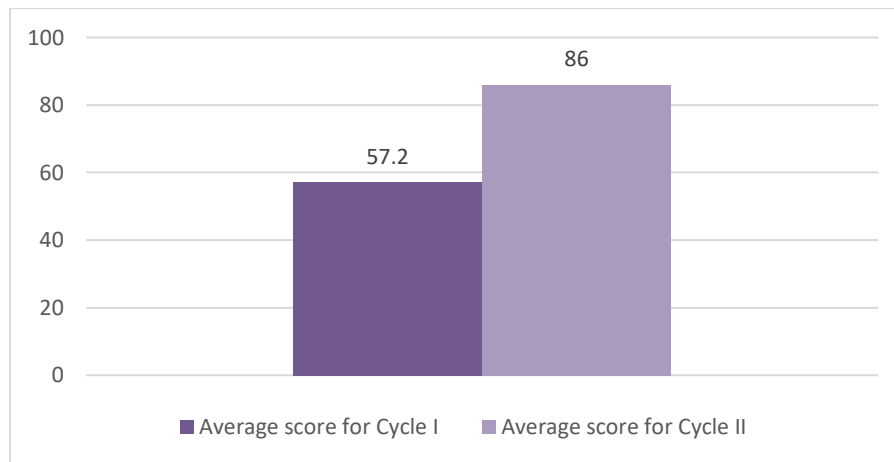


Figure 4. Comparison of Student Learning Outcomes in Cycle I and Cycle II

DISCUSSION

The Use of the Snakes and Ladders Game to Increase Students' Interest in Learning

Attention plays a very important role in the learning process. According to Gage and Berliner, as cited by Dimiyati and Mudjiono, the information-processing theory of learning suggests that learning cannot occur without attention. Attention is the act of using one's consciousness to accompany and direct an action or activity. (Lubis, 2019) In addition to attention, active engagement is also a key aspect of successful learning. Active engagement refers to a situation in which students do not merely passively receive information, but actively participate—cognitively, behaviorally, and emotionally—in the learning process. (Zulaika et al., 2024) .

Another factor that influences motivation to learn is a sense of joy and positive feelings. A sense of joy is an emotional state that arises when students experience pleasant emotions such as happiness, comfort, satisfaction, enthusiasm, and calmness. These positive feelings play a role in creating a conducive learning environment, thereby motivating students to participate in the learning process. (Kurniawan, 2022). The use of the Snakes and Ladders game as a teaching tool in Cycle I and Cycle II was shown to have a positive and significant impact on increasing students' interest in learning. All indicators of learning interest—attention, active engagement, and enjoyment—showed a clear increase. Students became more focused, demonstrated a greater interest in learning, and were more enthusiastic about participating in each activity.

The most notable improvement was seen in the attention indicator, where student focus increased from 68.75% in Cycle I to 100% in Cycle II, and attention to instructional content also rose from 62.5% to 100%. Students' active engagement increased from 31.25% to 57%, indicating that students began to feel confident enough to ask questions, answer questions, and collaborate with their groupmates. Additionally, students' enjoyment of the learning process increased from 81.25% to 100%, suggesting that game-based learning creates a fun learning environment and evokes positive emotions.

These findings align with “, which confirms that game-based learning media can enhance students’ interest and motivation to learn by providing a more interactive, enjoyable, and student-centered learning experience. This approach not only captures students’ attention but also encourages active engagement and helps them understand the material more easily through a play-based learning process. Additionally, (Masri et al., 2023) states that enjoyable media can foster students’ intrinsic motivation. Thus, the Snakes and Ladders game has proven effective in enhancing interest in learning through an interactive and enjoyable process.

The Application of the Snakes and Ladders Game in Improving Student Learning Outcomes

Student learning outcomes are academic achievements obtained through the learning process, whether from tests, assignments, or classroom activities that support understanding of the material. Learning outcomes are reflected not only in report card grades but also in students’ level of mastery of the targeted competencies. Students’ active participation in asking questions, answering, and discussing also influences these achievements. (Aritonang, 2008) . In addition to increasing interest in learning, the snakes-and-ladders game has also been shown to have a positive and significant impact on student learning outcomes. In Cycle I, the average student score was only 57.2 with a mastery rate of 37.5%; the lowest score was 25, and the majority of students (62.5%) had not yet mastered the material. This situation indicates that students were still adapting to the new learning medium and had not yet fully grasped the material.

After improvements were made in Cycle 2—including refining the game, adding rewards, varying the questions, and providing clearer explanations of the rules—learning outcomes improved dramatically. The average score rose to 86; the highest score reached 100; the mastery rate increased to 78.5%; and the percentage of students who had not yet mastered the material decreased to 21.5%. This indicates that the majority of students can now master the material well. This improvement occurred because answering questions in the game reinforced conceptual mastery, repeated questions facilitated understanding, and group discussions helped students correct each other’s work. These findings align with The idea is that interactive media, including the Snakes and Ladders game, effectively improve learning outcomes through hands-on experience and repeated practice. Thus, the snakes and ladders game can gradually improve learning outcomes while motivating students, fostering cooperation, and developing their thinking skills.

CONCLUSION

Based on the results of the classroom action research conducted over two cycles with third-grade students in Class A at SD Inpres 3/77 Watu, it can be concluded that the use of interactive media—specifically the Snakes and Ladders game—is effective in increasing students’ interest and learning outcomes in the Islamic Education (PAI) subject:

1. The use of interactive media in the form of the Snakes and Ladders game has been proven to increase students’ interest in learning significantly. The game makes learning more engaging, enjoyable, and easy to follow, resulting in a sharp increase in students’ attention, enthusiasm, and engagement from Cycle I to Cycle II. In Cycle II, all indicators of learning interest reached the “very good” category with a 100% achievement rate, indicating that this medium is

effective in creating a more dynamic learning atmosphere and motivating students to participate actively.

2. The Snakes and Ladders game also had a highly significant positive impact on improving students' learning outcomes. The class average score increased from 57.2 in Cycle I to 86 in Cycle II, while the learning mastery rate rose from 37.5% to 78.5%. This improvement indicates that the game medium helps students better understand and retain the material through play-based activities, repeated practice with questions, and group collaboration. Thus, the Snakes and Ladders game is effective in improving students' academic achievement.

Based on these findings, it is recommended that the Snakes and Ladders game continue to be used as an alternative learning tool, given its ability to increase student interest.

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