



## INTERACTIVE POWER POINT-BASED TEAM GAME TOURNAMENT LEARNING TO INCREASE STUDENTS' INTEREST IN ISLAMIC EDUCATION

Afi Rizqiyah<sup>1</sup>, Gilbrania Affa<sup>2</sup>, Mas Hanik Nur Maimunah<sup>3</sup>, Ali Uroidli<sup>4</sup>  
<sup>1,2,3,4</sup> Universitas Islam Negeri Sunan Ampel, Surabaya, East Java, Indonesia

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### Correspondence to:

afirizkiyah@gmail.com

**Abstract:** This study examined the implementation of an interactive PPT-based TGT learning model to increase student interest. This research was a Classroom Action Research conducted in class IX B Junior high school Islam As Sakinah Sidoarjo which consists of 22 students. This class was chosen as the research subject because it showed a lower learning interest in Islamic Education subjects compared to class IX A with the application of the same learning method. However, according to the Islamic Education teacher, this class has greater potential if the students' interest in learning can be improved. Primary data were collected through observation and questionnaires, then analyzed qualitatively and statistically descriptively. Supported by secondary data obtained through interviews and literature studies to find problems and ensure the availability of facilities, and find out student responses to the learning model applied. The results showed an increase in student interest from pre-action by 62% to 94% after implementing the interactive PPT-based TGT learning model. There was also an increase in the number of active students from 16 students to all students in the class (22 students). It can be concluded that the application of interactive PPT-based TGT learning methods can increase students' interest in Islamic Education learning. Synergizing the TGT learning model with interactive PPT media is one of the right actions to increase student interest in learning. Teachers who find the problem of lack of student interest in learning can apply the TGT learning model by utilizing interactive PPT media as done in this study. In addition, this study can be a reference for further researchers who want to examine the implementation of TGT learning or interactive PPT media in learning.

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## INTRODUCTION

Learning is designed to facilitate the learning process of students. Thus, learning design is carried out by taking into account the conditions of learning

implementation (Williamson et al., 2020). The principle in designing learning is to create effective and efficient learning so that learning objectives are achieved and well accepted by students. Effective teaching strategies can assist teachers in developing lesson plans tailored to the needs and characteristics of students and ensure the learning process is interactive and contextual. In this case, teacher innovation and creativity are needed to adapt the learning model to the material taught (Supriadi et al., 2020).

In this 4.0 era, teachers must be able to take advantage of existing technological advances, including in the use of learning media. The design of the learning design must consider the circumstances and perceptions of students (Yusuf & Rashid, 2019). Student learning motivation is the key to effective learning. Therefore, it is very important to design learning that increases student interest and engagement by introducing various models of game-based learning, simulations, meaningful discussions, and problem-based learning (Rubtsova et al., 2023). Several studies have also shown the feasibility and success of game-based learning in improving certain aspects of learning (Jay et al., 2019).

Team Game Tournament (TGT) is an effective and interesting game-based learning model. In this learning model, students are grouped in teams to solve a problem or achieve a goal. Students get interactive and collaborative learning experiences, as well as improve communication and teamwork skills (Hariyanto et al., 2022). Simanjuntak et al. (2021) in his findings revealed that the TGT learning model succeeded in improving students' critical thinking skills with indicators of flexible thinking, original thinking, and elaborative thinking. Supported by Sa & Mufidah (2024)'s findings which show the effectiveness of the TGT learning model compared to conventional learning models. The application of the TGT model engages students actively in learning and supports two-way communication that is important to achieve learning objectives.

Interactive learning media is needed to make students actively participate in learning. One of them is interactive Power Point (PPT) that can make the learning atmosphere in the classroom more fun (Harefa et al., 2023). Unlike ordinary PPT, interactive PPT utilizes the action feature so that it can only be run using buttons that have been created (Gu et al., 2022). Multimedia elements such as text, graphics, animation and video in PPT can create interesting, fun content, and eliminate boring elements (Osman & Hamzah, 2020). The simple menu display makes PPT easy for all people to understand, including school or college teachers (Osman et al., 2022).

Li & Wang (2024) said, by applying the TGT learning model, students will actively communicate, think further, and allow students to learn more relaxed and foster responsibility, cooperation, healthy competition, and involvement in learning. Meanwhile interactive PPT will direct the attention of students to stay focused on the material and interact directly with the learning process in class. Then it will be an interesting learning design alternative if the TGT learning model is combined with Interactive PPT.

Through interviews with teachers at Junior high school Islam As Sakinah Sidoarjo, problems were found in Islamic Education learning related to student interest s. Most students do not give much response during discussion or question and answer sessions in Islamic Education learning (Petrușe et al., 2024). There are two causes of students' lack of contribution to learning found in the field. First, the lack of interest in Islamic Education learning. Second, lack of focus in learning. The existence of this problem encourages new actions to increase students' interest in learning (Lagare et al., 2023). As mentioned by Yang et al. (2024), the renewal of the learning model is needed to foster students' interest in learning and explore their hidden potential. The action to be taken is to narrate the Interactive PPT-based TGT learning model in Islamic Education subject.

Several studies have shown the effectiveness of applying the TGT learning model to increase student interest in learning. Sanchez-Gonzalez & Terrell (2023) found that the application of TGT learning in mathematics subjects increased student activeness with a percentage of 50% activeness before action to 70.59% in cycle I and 83.95% in cycle II. In line with Sun et al. (2021)'s findings that the average student learning motivation was better than before the implementation of the TGT learning model. In contrast to Paquianadin et al. (2024)'s research which found differences in the level of influence of digital blooket-based TGT learning with non-digital blooket TGT. The learning motivation interval score in the experimental class was 94% (very high) and the control class was 54% (high).

Based on these studies, it can be assumed that the TGT learning model can increase learning interest, especially the TGT model collaborated with interesting media. After reviewing past studies, there has been no special attention to collaborating the TGT learning model with interactive media in increasing student interest in learning. Considering the problems in the field, the problems that arised in students include the inability to understand the subject matter easily, learning styles that were different from the teacher's teaching methods. These reasons reduced students' motivation, attention, and curiosity in learning. Then, the absence of studies implementing TGT learning using interactive PPT media, this study aimed to examine the implementation of the interactive PPT-based TGT learning model and the increase in student interest in learning with the application of this learning model.

## RESEARCH METHOD

This research was qualitative with a (CAR) approach, which was scientific research conducted by teachers or researchers in the classroom by carrying out actions aimed at improving learning processes and outcomes. Classroom action research is also conducted to solve problems experienced by teachers and students in the learning process. Classroom Action Research (CAR) is important for teachers because it can improve teachers' reflective thinking skills in assessing learning (Beer, 2019). The subjects of the perpetrators of actions and observers in this study were Islamic Education teachers at Junior high school Islam As Sakinah Sidoarjo who collaborated with researchers. The research subjects were determined through *purposive sampling* technique which was

determined by the researcher subjectively based on certain criteria. The criteria set in this study were the subject's learning interest that has not been maximized and can be more improved. The subjects of this study were grade IX B students of the 2023-2024 school year consisting of 22 students. This class was chosen as a research subject because it showed a lower interest in Islamic Education learning than class IX A with the application of the same learning method. But according to Islamic Education teachers, this class has greater potential if the students' interest in learning can be increased. The study was conducted in May 2024. The first two weeks were for planning to implement actions and data collection in the field, the rest was for the preparation of articles.

The primary data collection method was carried out through the distribution of questionnaires and observations. The questionnaire was distributed using a Likert scale of 5. With details: a) score of 5 for "strongly agree"; b) a score of 4 to "agree"; c) a score of 3 for "undecided"; d) a score of 2 for "disagree"; and e) a score of 1 for "strongly disagree". In addition, observations are made to determine student learning activities. The collected data were analyzed qualitatively and statistically descriptively. This interview was conducted before the research to find problems and ensure the availability of facilities for the applied learning model. While the post-research interview was conducted to find out students' responses regarding the applied learning model. This was done to see if the results of the questionnaire distribution synchronized with the students' responses in the interview.

Qualitative analysis was used for action implementation data, namely the application of interactive PPT-based TGT models. The stages of analysis refer to Miles and Huberman, including data condensation, data presentation, and conclusion drawing. Meanwhile descriptive statistical analysis is in the form of percentage distribution to measure the comparison of pre-action and post-action learning interests. Measurement of students' level of learning interest using a five-interval scale as in table 1:

**Table 1. Student interest Categories**

Scale (%)	Category
<= 40	Very Low
41 - 60	Low
61 - 80	High
81 - 100	Very High

The target of increasing student interest in learning with the implementation of the interactive PPT-based TGT model is to reach a very high category. To measure student interest from questionnaire data collection, the following formula is used:

$$\text{Student interest} = \frac{\text{Student interest Score}}{\text{Amount of Student interest Score}} \times 100\%$$

## RESULT AND DISCUSSION

### Result

#### Classroom Action Research Framework

Han et al. (2024) said, there are two opinions about the number of CAR cycles. The first opinion stated that if in one cycle the goal of action was achieved, then there was no need to continue the second cycle. The second opinion established the number of CAR cycles at the beginning of research planning because it was oriented towards improving results in each cycle. This study applied one-cycle CAR because the first cycle showed targeted results. Supported by Abdulrahaman et al. (2020)'s statement that if in one cycle CAR has not shown improvement, then the second cycle continues. It is implicitly understood that CAR was simply implemented in one cycle if the expected improvement occurs in that cycle.

The CAR procedure referred to Kurt Lewin's model which contains four stages as follows:

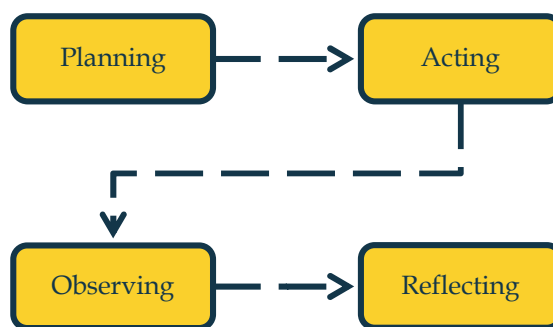


Figure 1. Kurt Lewin's CAR Model

The planning stage contained research on educational research literature to find the right learning model. Until the Interactive PPT-based TGT learning model was decided as the action to be carried out. This decision is based on previous research that shows the success of interactive TGT and PPT learning models in increasing student interest in learning. These two studies showed that the application of the TGT learning model and the use of Interactive PPT media have an effect on increasing student interest.

The TGT learning model was first proposed by David de Vries and Keith Edward. Here are the components or stages of TGT in learning:

Table 2. Stages of the TGT Learning Model

Syntax	Description
Class Presentation	Adjusting the time the research was conducted, the material discussed was the history of the Shafawi and Mughal Sultanates. The teacher delivered the material with the help of PPT.
Teams	Students with groups that have been divided with an even cognitive distribution explore further the material through learning media that have been provided by the teacher.
Games	Each group plays with other groups to earn points by answering questions that have been listed in the interactive PPT.
Tournament	Each group member played with other group members with similar cognitive levels to answer questions. Students who answer correctly get

	additional points. At this stage and the previous stage, interactive media became a game medium replacing question cards.
Team Recognition	The group and students who have the highest point totals are rewarded by the teacher.

At the planning stage, the development of learning media was also carried out, namely interactive PPT. Interactive PPT is developed with game-like looks and functions to attract students' attention. As revealed by Budasi that PPT games gave students the experience of playing games with good instruction because they involved variations in design and animation that can stimulate students' interest in learning (Budasi et al., 2020). Two Microsoft PowerPoint features that played an important role in making interactive PPT are action and animation features. The action feature is used to enable objects or buttons just like button operations in applications. While animation was used to give animation effects to objects so that the PPT display becomes more attractive. A study also makes optimal use of Microsoft PowerPoint features and packages it into an educational game.

To create interactive PPT that suits learning needs, a flowchart is designed that functions to show every process in the developed PPT. Here's an interactive PPT flowchart:

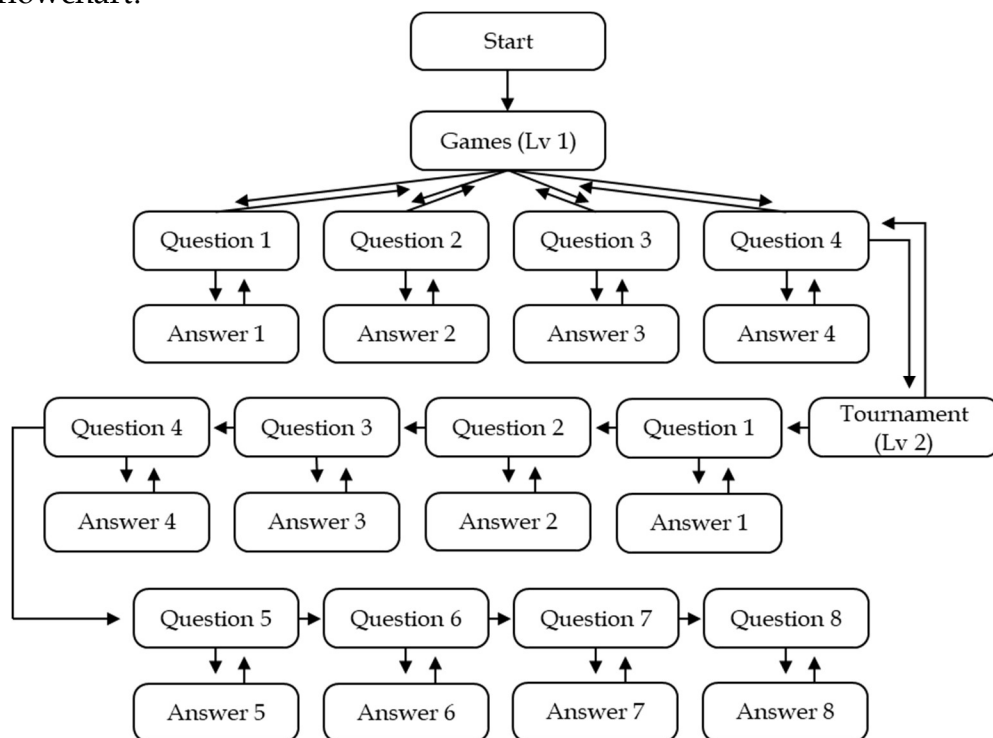


Figure 2. Interactive PPT Flowchart

The flowchart showed that the PPT will be made with three main menu pages. The first menu contained a button to start the game. If the button was pressed, it will be directed to the level 1 menu. In this menu there was a button leading to 4 questions. In the question page, there are 2 buttons that can be used, namely the answer button and the back button. So on the question page, in addition to the questions that must be answered, there was also an answer button that can be used to check the correct answer. While the back button

directed to the level 1 page. The third main menu was the level 2 front page which has a start button to start the level challenge. In level 2, the questions were displayed sequentially. So there was no choice of question number like in level 1. The buttons available on each question page were the answer button and the next button. The next button on the last question page of this level led to the finish page.

### Implementation of Interactive PPT-Based TGT Learning Model

In accordance with the learning timeline in the Promissory Note (semester program), the material taught is the History of the Shafawi State in Persia and the Mughal State in India. The implementation of the interactive PPT-based TGT learning model was carried out at the first of two meetings to learn the material. Precisely at the meeting that studied the history of the establishment and the timeline of the development of civilization during the time of the Shafawi State and the Mughal State. The duration of learning time was in accordance with the core learning activity plan that has been set out in the module, which is 55 minutes.

Before discussing the implementation of the interactive PPT-based TGT learning model, here was the observation data of pre-action student activities:

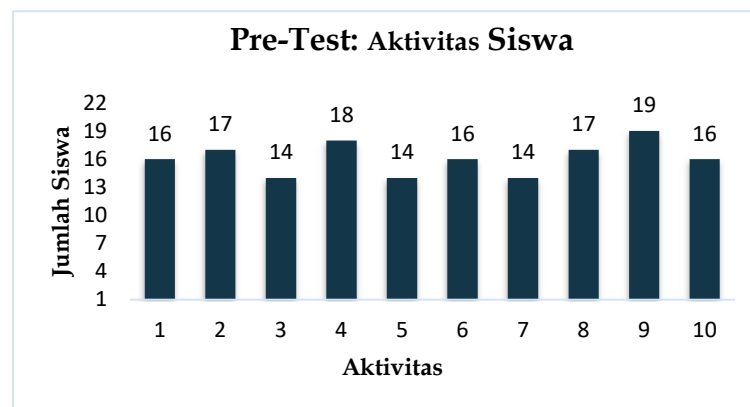


Figure 3. Pre-Action Student Activities

Learning begins with an introductory activity. The teacher explained the learning model to be applied and divides students into four groups. Then proceed to the implementation of TGT which began with an explanation of the material by the teacher. The teacher only briefly explained the material to give students the opportunity to learn actively. Students with groups that have been divided at the beginning of learning resume material from textbooks and teaching materials provided by the teacher. This was the second stage of the TGT learning model, namely teamwork. The purpose of this activity was for students to better understand the material and not passively. As Syafril & Kurniawati (2021) said, the lecture method was sometimes boring and requires teacher improvisation to keep attracting students' attention. Likewise, Fu (2023) proposed collaborating the lecture method with other methods such as discussion to improve student learning outcomes. Students had different understandings and memories of the material in the teaching materials prepared



by the teacher and the textbook. In this resume activity, students understood part of the material supported by other students in their group who understood other parts of the material.

The teacher began to explain the rules of team-based games after all groups have completed resumes and gone deep into the material. The game was divided into two sessions, namely the game session and the tournament. In the game session, each group answers questions for their group. This first session gives students the opportunity to work together with their group to find the right answer. If the answer was correct then it is counted as a group score and also an individual score for the students representing the group to answer. Meanwhile, interactive PPT acted as a game medium replacing question cards. Here was what the interactive PPT looks like:

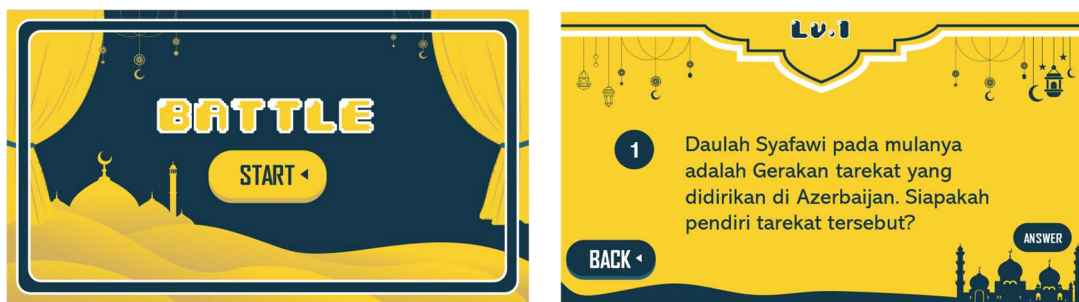


Figure 4. Interactive PPT Display

Figure 4 on the left was the front view of the interactive PPT, while the right image is the view of one of the group questions. As you can see, PPT is designed with several drawing objects. The goal is to make the PPT display more attractive. Received advice from a team of media experts to add animated images to the developed PPT. These objects were also given animation effects, and there is a background sound (backsound) to make the feel of the game feel more real. No less important feature was the button to check the answers. When the button was clicked, it will be directly directed to the answer page. This made the game more effective and avoids obstacles in correcting answers.

In the game session, each group came to the front of the class to choose the number of questions they would answer. Students had the opportunity to interact directly with the PPT made by the teacher. They also obeyed the rule of not pressing the answer button before the teacher gave instructions. There were no obstacles during this session. In fact, the students were so enthusiastic and tried to make their respective groups answer correctly.

After the game session was over, proceed to the tournament session. In this session, two groups face each other by delegating their members who have the same cognitive level as delegates from the opposing group. Each Islamic Education of competing groups gets a four-question section to scramble to answer. So, there will be four delegates from each group coming forward to compete to answer the questions correctly. In this session, the teacher's role was to ensure that students who have not contributed to the answer in the first session, participate in this second session. This was done to make learning



evenly distributed and all students actively participate in it. Unlike in the game session, in this tournament session students could not help their group members who came forward to answer questions. So they cheered on their group mates who became their group delegates. In addition, because the tournament system was designed on a “first come, first served” basis, the whole class was more excited than the first session.

The closing activity of the TGT learning model series was calculating scores and giving rewards to groups and students with the highest scores. This last step was important to appreciate students’ participation in learning so that they feel valued and encourage more enthusiasm for learning. In Maslow’s hierarchy theory of needs, rewards are fourth after physiological needs, security, love and belonging. Only after the need for appreciation is met is one driven to self-actualize (Santrock, 2018). In the research findings, it was also revealed that rewards can increase student motivation and enthusiasm for learning.

The results of teacher observations showed differences in student activities during learning between before the implementation of the interactive PPT-based TGT model and after the learning model was applied. Here are the post-test results of student activities:

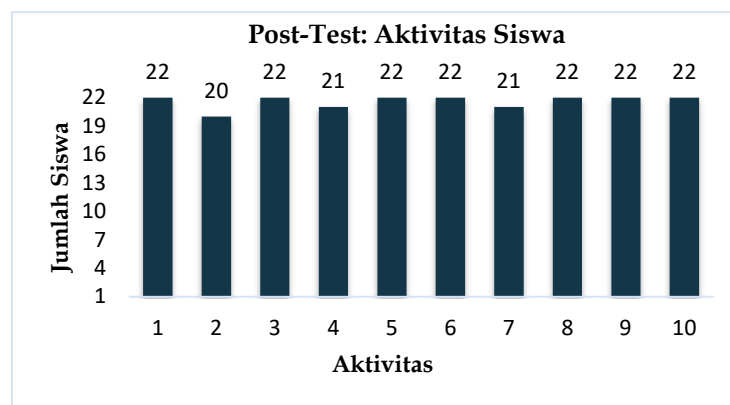


Figure 5. Post-Action Student Activities

From the pre-action and post-action student activity tables, there was a significant difference in the average number of students in 10 types of activities. Before the action was taken, the average number of active students was 16 students, while after the action the average number of active students was 22 students which was the total number of students in class B. This finding was in This showed an increase in the learning activity of grade XI students in biology subjects with an initial average learning activity of 11,53 to 19,83. However, in that study, TGT learning was not combined with interactive media.

### Increase in Student Interest

The distribution of questionnaires on the level of student interest in learning was carried out twice, namely before class-based actions, and after actions. The purpose of distributing this questionnaire is to determine students’ learning interests before being given class actions and after actions are taken. Its function is to measure the extent of increased student interest in learning when

an interactive PPT-based TGT learning model is applied. The data presented is the percentage score of all indicators of learning interest of all students in the classroom. Because the questionnaire used is a Likert scale of 5, the highest score of each indicator =  $5 \times 22 = 110$ . So, to calculate the percentage of the score first calculate  $\frac{\text{Student interest Score}}{110} \times 100\%$ . The following was data on student interest in pre-test and post-test:

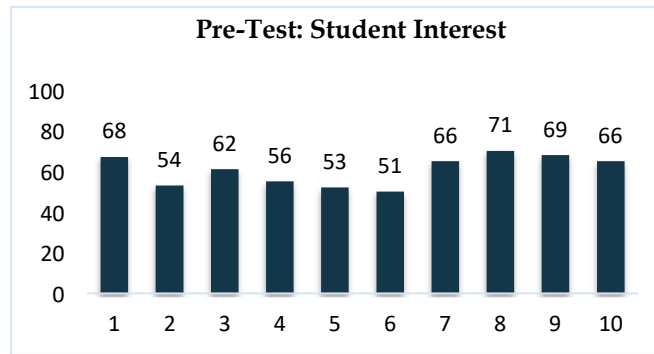


Figure 6. Pre-Test Student Interest

Based on the diagram in figure 7, the average learning rate of class IX B was 62% which meant it is in the high category. But this figure was almost in the low category. That's why action was taken to maximize students' interest in learning with a target of entering the high category. The following was data on the level of student interest in learning after the action:

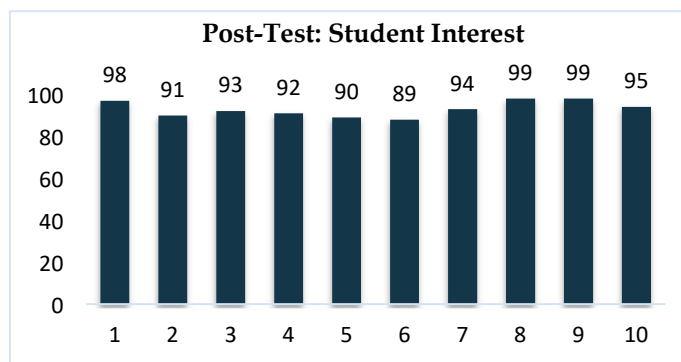


Figure 7. Post-Test Student Interest

The average interest in learning students after the action was 94%. This figure was included in the very high category. This showed the positive implications of the interactive PPT-based TGT learning model on student interest s. Thus, the target of increasing interest in learning has been met, so there is no need for the next class action cycle. To compare students' learning interests before and after the action, saw figure 8:

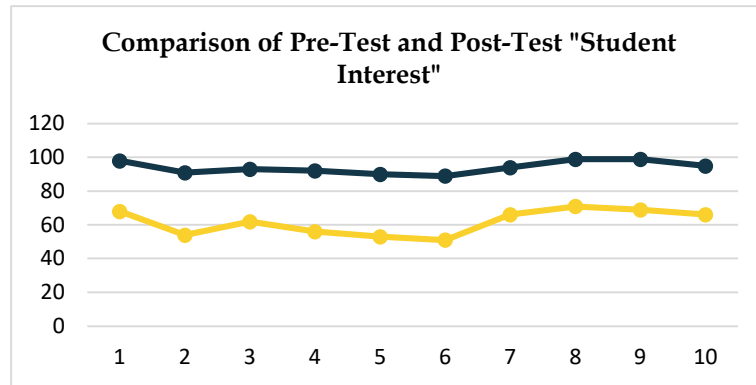


Figure 8. Comparison Of Pre-Test And Post-Test Student Interest

The observations also showed differences in the number of students in certain learning activities between before and after the action. The following was a comparison of student activities during the pre-test and post-test:

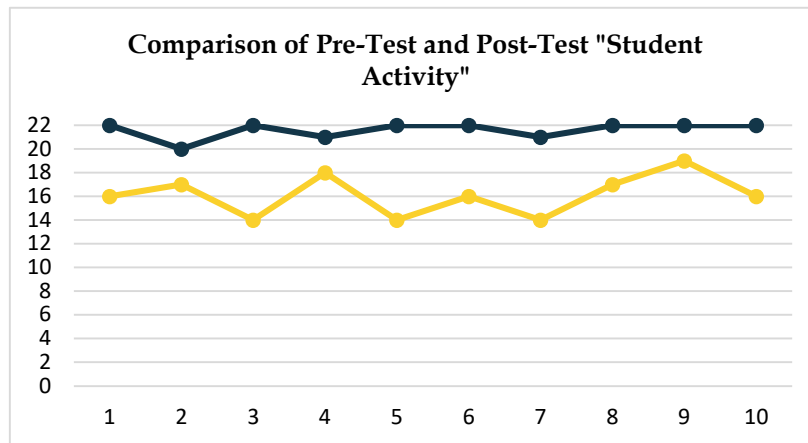


Figure 9. Comparison of Pre-Test and Post-Test Student Activities

Figure 9 showed that the number of students participating in certain activities has increased after implementing the interactive PPT-based TGT learning model. The results of this observation strengthen the increase in student interest by applying the interactive PPT-based TGT learning model. Strengthened which showed a positive relationship between students' interests and learning activities.

In this one-cycle Classroom Action Research, there was an increase in student interest after action by 32% from a pre-action score of 62% to 94% after the action. The interest of students who originally belonged to the high category, became very high. The observations also showed an increase in the number of students participating in certain activities in learning. Before the action, the average participating student was 16 students, to 22 students which is the total number of students in class IX B.

Through random interviews with several students in the action class, the average answer showed a positive response. A student with the initials RNH when asked about his impression of learning said "That was very exciting, like playing a real game. My group almost won earlier. Even though I knew the

answer, it was a shame that I didn't come forward." RNH's answer showed her enthusiasm for the learning model applied. A student named NSR also revealed, "The game made me understand better the material explained by the teacher and resumed per group. Moreover, we were very excited to win, so yes, every child participated in thinking. Not just the kids who are usually diligent." A student named LK also gave a positive response, He said "It was really fun, especially when my group won. My group of friends were all supportive, when the resume was not thinking alone. Everyone contributed to the material that was resumed. During the game, we also helped each other find the right answer." The responses from these students show that the learning model and media used made them more enthusiastic. Even students who are usually inactive become active because they are driven by a competitive mind to win the game. These findings show that the interactive PPT-based TGT learning model can increase student learning interest in Islamic Education subjects.

### **Discussion**

The TGT learning model was carried out properly including material presentation activities by teachers, teamwork, group games, individual tournaments, and awarding. Interactive PPT acts as a game medium that contains questions replacing card media in the original TGT model design. With the implementation of this interactive PPT-based TGT learning model, there has been an increase in student interest. Before the action, student interest in learning was 62% and was included in the high category. Interest in learning reached 94% and was included in the very high category after the action. The observation results also showed an average number of students who were active in learning as many as 16 students, becoming 22 students (all students) in class IX B after the action. These findings showed that the application of interactive PPT-based TGT learning methods can increase students' learning interest in Islamic Education learning.

However, this did mean that similar actions can have the same impact on student interest, because the type of student learning and the psychological development of the students also determine the success of the action. So, it was necessary to analyze the needs of each class that will be implemented similar actions. In addition, the only aspect of learning that was improved in this study was students' interest in learning, so if other aspects could not necessarily get the same results. This research also only focused on classroom action. There was still a gap to conduct R&D (Research & Development) on interactive PPT media.

Interest in learning was one of the main factors that can encourage the achievement of learning objectives. Interest in learning was associated with increased student engagement, greater effort, productive learning behaviors, and better learning outcomes (Krawitz et al., 2024). Interest in learning has an impact on student learning outcomes or achievements. Meanwhile, interest in learning is influenced by the methods used by teachers in learning. Then methods that are not suitable or not interesting, will have an impact on decreasing student interest in learning. This will negatively affect student learning outcomes (Fu, 2023).

In line with the findings of this study, in several studies, the TGT learning model has proven effective and has positive implications for increasing learning interest, learning effectiveness and learning outcomes. The TGT model encourages students to compete with each other and work together in teams. This learning model also stimulates students' curiosity which is an indicator of effective learning (Abdulrahman et al., 2020). In line with what Syafril & Kurniawati (2021) said that the TGT model is learning designed in the form of games without distinguishing status so as to make students more challenged, eager to learn, and compete academically.

Learning models become more effective if collaborated with the right learning media. As stated by Han et al. (2024), the learning model is closely related to learning media. The findings of Harahap and Ritonga who combined the Project Based Learning model with AutoPlay Media Studio 8 as learning media showed effective results in improving student understanding (Harahap & Ritonga, 2023). In Sun et al. (2021)'s research, it was found that the application of the TGT learning model using Ludo interactive game media can improve the learning outcomes of high school students in Geography subjects in terms of individual student completeness, teacher and student activities, learning organization skills, and student responses. In Sanchez-Gonzalez & Terrell (2023) research also found that the implementation of TGT learning model using mentimeter interactive media influenced the IPAS learning outcomes of fourth grade elementary school students from the pre-test average score of 41, 26 to 83,80. The findings show that the application of TGT learning by utilizing interactive media has positive implications for learning aspects including student activity, student interest, student understanding, and student learning outcomes.

The use of interactive PPT as a medium in TGT learning, because this media is easy to create and practical to use. As Osman said, PowerPoint has a menu display that is simple and easy for all people to understand (Osman et al., 2022). PPT also contained multimedia elements that are reflected in its features which include text, graphics and tables, video, animation, sound, and can be integrated with other Microsoft applications.

This research used almost all the mentioned features to design PPT to be like a game. When displayed, PPT was like a video game with animated features, backsound, and clickable buttons. Some research findings also showed the effectiveness of the TGT learning model in collaboration with certain media. This can be an inspiration for teachers to synergize relevant learning models and media so as to make learning more effective.

## CONCLUSION

The TGT learning model was carried out properly including material presentation activities by teachers, teamwork, group games, individual tournaments, and awarding. Interactive PPT acts as a game medium that contains questions replacing card media in the original TGT model design. With the implementation of this interactive PPT-based TGT learning model, there has been an increase in student interest. Before the action, student interest in

learning was 62% and was included in the high category. Interest in learning reached 94% and was included in the very high category after the action. The observation results also showed an average number of students who were active in learning as many as 16 students, becoming 22 students (all students) in class IX B after the action. These findings showed that the application of interactive PPT-based TGT learning methods can increase students' learning interest in Islamic Education learning.

Teachers who encounter similar problems can implement the same measures in their classrooms. However, the things that needed to be considered are the availability of facilities such as projectors, laptops or computers, and a conducive seating layout. In addition, this study can be a reference for further researchers who want to examine the implementation of TGT learning or interactive PPT media in learning. Future research can also further review the collaboration between certain learning models and media. Especially IT-based media to optimize the use of developing technology and follow learning trends that are in accordance with the characteristics of the current generation.

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