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## Improving Student Learning Outcomes with the Assistance of Artificial Intelligence in Islamic Education Learning

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**Abstract:** This research aims to improve student learning outcomes in Islamic religious education learning by using Artificial Intelligence. This research is classroom action research that uses four steps, namely planning, action, observation and reflection. The subjects of this research were elementary school students. This research data was obtained using test and observation techniques. Tests are used to measure learning outcomes and observations are used to analyze teacher and student learning activities. The data analysis technique used in this research is descriptive statistics by comparing the results obtained with indicators of research success. The research results show that Artificial Intelligence can improve student learning outcomes in Islamic religious education learning. This can be seen from the increase in the percentage of student learning completeness in each cycle with details of pre-cycle 44.49%, first cycle 56.77% and in the second cycle it increased to 87.22%. Thus, the use of videos can be used as an alternative to improve student learning outcomes in Islamic religious education learning.

**Keywords:** Learning outcomes, artificial intelligence, Islamic education.

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### INTRODUCTION

One of the important components in learning is learning outcomes. Learning outcomes are competencies that a person obtains through the learning process that can cause changes in students' knowledge, understanding, attitudes and skills so that they become better than before. One of the factors that can affect learning outcomes is the selection and application of the right learning models and methods in the learning process. A teacher must be able to apply learning models and methods that are in accordance with the material, classroom conditions and students. As Roestiya said, of course, there will be differences in the methods used to motivate students in applying their knowledge, to solve a problem they are facing, to answer a question with the method used to express their views on each problem.

This statement is in line with Government Regulation Number 19 of 2015 concerning National Education Standards in article 19, paragraph 1 mandates that; 1) The learning process for educational students is held in an interactive, inspiring, fun, challenging, motivating students to participate actively, and providing sufficient space for

initiative, creativity, and independence in accordance with the talents, interests and physical development as well as the psychology of students. Then in article 28 paragraph 1 mandates that; 1) What is meant by educators as learning agents in this provision is the role of educators as facilitators, motivators, spurs, and inspirational learners for students. Based on the citation of the education regulation, it can be clearly understood that the education and learning process in any educational unit, juridically formally required to be held actively, innovatively, creatively, dialogically, democratically and in an impressive and meaningful atmosphere for students. In other words, it can be concluded that the laws and regulations of education that apply in Indonesia, identify the importance of implementing learning strategies that deceive students. However, the reality is that the process of implementing education in Indonesia has not fully yielded satisfactory results. This thing can be seen from the quality of education that has not been able to compete at the international level.

One of the things that causes the low quality of education, according to researchers, is due to the selection and application of learning strategies carried out by teachers in accordance with classroom and student conditions. Until now, there are still many teachers who are dominant in using traditional methods such as the lecture method in teaching and learning activities, especially in the subject matter of Islamic Religious Education and Ethics where most of the material is descriptive. This causes students to position themselves more as listeners, but do not understand the whole of what is being conveyed by their teachers. In fact, in the 21st century education era, the educational process really needs skilled and professional personnel to realize students who are able to think critically, are able to solve problems, are creative, innovative, and have communication and collaboration skills. Therefore, every teacher must have adequate abilities and skills in choosing and using various learning models for each learning material that is in accordance with the conditions of the classroom and students. If there is a consideration of the compatibility aspect between the learning material and the conditions of the classroom and the students in choosing the right learning model, the enthusiasm of students in the learning process will be maximized.

The classroom atmosphere is conducive and fun and the learning objectives are well achieved. And vice versa, if there is an error in the selection of the learning model, it will result in not maximizing student understanding and finally the learning goals will not be achieved. Based on the results of initial observations made in grade IV of SDN 34 Kamang, on December 2, 2024, Kamang Baru District, Sijunjung Regency, the following facts were obtained: The learning methods that are often used by teachers are the lecture method, monotonous and assignment. So that students are less enthusiastic in the learning process and cause student learning outcomes to be relatively low, as evidenced by the results of the mid-semester summative assessment that only 35% of 14 students can achieve a minimum completeness score of 70. That means that out of 14 students, only 5 people managed to get a complete score With a total score of 835 and an average of 60, the ASTS I score data above is proof that the average PAIdBP score is in the lowest category in grade IV compared to the scores of other subjects such as IPAS, B.Indonesia, MTK etc. Even though learning Islamic religion is an important thing in daily life with the fact that SDN 34 students Kamang is the majority Muslim and lives in an environment of 99% Muslims.

In this regard, teachers must be able to choose and present effective learning strategies, media and approaches. The teacher's task is to apply a method and media that provides high assurance to achieve the goals of teaching and learning activities. With the selection of interesting learning methods and media, learning outcomes will increase. This problem can be overcome by making a breakthrough in learning Islamic Religious Education and Ethics so that student learning outcomes are improved, teachers must choose effective learning methods and media. One of them is the application of digital-based media. In the application of digital-based media, there are advantages in its implementation. One of them can improve students' memory and learning outcomes. Based on the fact that student learning outcomes are low in PAIdBP learning, the author is

interested in conducting a classroom action research entitled "Improving Student Learning Outcomes through the Application of Digital-Based Media in PAI Learning at SDN 34 Kamang".

## **METHODS**

This research is a Classroom Action Research (PTK) using qualitative descriptive and quantitative descriptive research designs, According to Susilo Herawati, et al. (2009:2) Classroom Action Research (PTK) is research that is carried out in a cyclical manner (berdaur) by teachers or prospective teachers in the classroom during the teaching and learning process. It is said that this is because the PTK process begins and the stages of planning, action, and observation. and reflection to solve problems and try new things to improve the quality of learning or student learning outcomes. In accordance with the class action research design, the research objectives are; 1) Improving the quality of learning or education. the overall quality of the school program in a rapidly changing society and to improve and enhance the professional services of teachers in dealing with the learning process that can be achieved by conducting reflection to diagnose the situation; 2) Develop teachers' abilities to face actual learning problems in the classroom or at school; 3) Improving and improving the quality of teaching through appropriate teaching techniques in accordance with the problems and level of development of students; 4) As a way to deceive teachers and improve teachers' ability to make the right decisions for students and the class taught (Susilo, et al., 2009:8). So it can be concluded that the purpose of PTK is to improve various real and practical problems in improving the quality of learning in the classroom that are directly experienced in the interaction between teachers and students who are learning. According to Kemmis and Taggart (in Arikunto. 2006:93) that the PTK model describes several steps (and repetition), namely; 1) Planning stage; 2) Implementation stage and observation stage; 3) Reflection stage. Research Variables, in the research process, the researcher only wants to describe a situation by using descriptive research in its own way and the difference in question is to determine student learning outcomes to be dependent variables and the application of digital-based media to be free variables.

The results of this study will be explained descriptively by using quantitative measures in the form of min, percentage, or the number of respondents and others. Population and Samples, in this study, the researcher took all students in grade IV in the population, thus the study in this study did not use samples, but used the population as can be said to be the target population or target population. Where all students in grade IV SD 34 Kamang totaled 14 people. According to Abdul Fatah and Mohd Majid, good research is one that uses population as a study sample. Apart from that, the author uses the target population because the number of grade IV students at SDN 34 Kamang which is the location of the research is still in small quantity and will also benefit from the research, the benefits in question are; 1) There is no sampling error. In the analysis of variable relationships, there is no need to use inferential statistics, because each relationship described in the form of a schedule is a relationship that occurs in the population, while if this sample is not a total sample, then the picture obtained by the schedule used later needs to be estimated in advance whether the variables are closely related or not? In other words, it can be explained by whether or not the relationship between variables is closely related to the decision criteria used by the researcher. In the sense that what percentage of researchers take the risk of error saying that the variable is related when in fact there is no relationship.

This error in statistics is usually written with the symbol  $\alpha$  (alpha). Types of Sources and Data Collection Techniques; 1) Type of data, the type of data used in this study is quantitative data. According to Sugiyono, quantitative data is a type of data that can be measured or calculated directly in the form of information or explanations

expressed in numbers or in the form of numbers. In this case, the quantitative data needed is an overview of student learning motivation, which is obtained using observation; 2) Data Source, in this study, data was obtained from two sources, namely qualitative data and quantitative data; 1) Qualitative data: the results of observation of student learning activities; 2) Quantitative data: student worksheet results and student test scores at the end of each cycle. Collection Techniques Data, data collection techniques in this study are; 1) Test, which is a test to see student learning outcomes, both in the form of pretest and posttest to measure the improvement of student learning outcomes before and after the application of digital-based media which will later be in the form of objective questions or descriptions related to the material; 2) Teacher observation in the learning process, data is obtained from the teacher's observation sheet on the learning process filled by the class teacher who acts as an observer by observing the researcher who acts as an Islamic Religious Education teacher who teaches in the classroom by checking each aspect assessed at each meeting. The data that has been collected, then discussed and analyzed by the researcher for action planning in the next cycle.

## **RESULTS**

This research was carried out at SDN 34 Kamang which is located in Jorong Kamang Bakti, Nagari Kamang, Kamang Baru District, Sijunjung Regency, SDN 34 Kamang is one of the elementary schools under the auspices of the Ministry of Education and Culture of the Republic of Indonesia located in a rural area. SDN 34 Kamang is supported by human resources that are quite adequate and professional, where SDN 34 Kamang has; 1) Have 1 Principal with S1 Education qualification and have been certified as educators; 2) Have 6 ASN teachers with S1 qualifications in Elementary Education and 1 Islamic Religious Education teacher (6 people have been certified educators); 3) Have 1 honorary teacher with S1 educational qualifications; 3) Have 1 school operator with S1 educational qualifications; 4) Have 1 school guard. 34 Kamang State Elementary School has 6 classrooms, 1 room for the principal's and teachers' offices, 1 prayer room, and 4 washrooms for teachers and students, 2 healthy canteens, 1 computer labor and 1 gazebo. This research will be focused on grade IV students of SDN 34 Kamang which totals 14 people (5 male students and 9 female students) when participating in the learning process activities – teaching Islamic Religious Education and Ethics subjects. Researchers try to apply media that are considered capable of overcoming problems in overcoming learning outcomes.

One of the teaching methods is to apply digital-based media. Research Results; 1) Description of Cycle I Data In this first cycle, the material provided was reading Q.S At-Tin and determining the law of breadfruit or tanwin, which was held on Monday, December 16, 2024 in grade IV of SDN 34 Kamang, Sijunjung Regency, with a total of 14 students. Cycle I is carried out in 1 meeting. Planning, at the planning stage there are several things that have been done by the researcher, namely; 1) Prepare learning materials; 2) The learning material prepared is about the Qur'an Hadith Material (CHAPTER 6. Let's recite and study Q.S At-Tin and Hadith about Silaturrahmi, SUB CHAPTER 1 Reading Q.S At-Tin and determining the Law of Nun Sukun or Tanwin); 3) Developing teaching modules that are in accordance with the Qur'an Hadith Material (CHAPTER 6. Let's recite and study Q.S At-Tin and Hadith about Silaturrahmi, SUB CHAPTER 1 Reading Q.S At-Tin and determining the Law of Nun Sukun or Tanwin); 4) Preparing learning media; 5) Compiling LKPD; 6) Creating research instruments that include assessment instruments for the written test questions of the first cycle. Implementation, at this stage of implementation, the researcher acts as a teacher, conducts PAIdBP learning on the Qur'an Hadith material (reading Q.S At-Tin and determining the law of breadfruit or tanwin in Q.S At-Tin) by applying the use of digital-based media. The researcher carried out activities as berikut; 1) Carry out the learning process as designed; 2) Implementing teaching modules that have been designed with sequential stages, there are preliminary stages, core stages and closing

stages; 3) Using digital-based media that has been made, namely in the form of showing learning videos that the researcher displays in the core stage; 4) Applying the PBL learning model with discussion and question and answer methods; 5) Providing LKPD to students. The data on student learning outcomes in Cycle I indicates that the learning process by using digital-based media in the Qur'an Hadith material (reading Q.S At-Tin and determining the law of breadfruit or tanwin in Q.S At-Tin) can be explained that the learning outcomes of students show students with bad scores (0-60) there are 7 people with a percentage of 50%, There are 5 people with a percentage of 35% for a low score (61-70), a good score (71-80) for 2 people with a percentage of 14%, while for good and very good scores there is not a single person who has succeeded. Observation.

The results of observations in the learning process in cycle I can be found that; 1) The application of digital-based media with the display of learning videos on the Qur'an Hadith material (reading Q.S At-Tin and determining the law of breadfruit or tanwin in Q.S At-Tin) the implementation can run in accordance with the teaching module; 2) The researcher displays digital-based media according to the stages in the teaching module; 3) Students become more active and participatory in learning; 4) Students are very enthusiastic in discussing subject matter with their fellow group members. This can be seen in each individual who expresses opinions with each other; 5) Students do the LKPD given by the teacher well; 6) Students do the assessment with enthusiasm; 7) Students with the application of digital-based media still have a few obstacles and are not perfect; 8) There are still students who do not understand the material of the Qur'an Hadith (reading Q.S At-Tin and determining the law of breadfruit or tanwin in Q.S At-Tin); 9) Students are still confused and embarrassed in presenting the results of the discussion in front of the class; 10) At the time of the learning video delivery, there are still some students who do not pay attention. Reflection, based on the results of the observation of the learning process and the results of the test in the first cycle that the application of digital-based media to the Qur'an Hadith material (reading Q.S At-Tin and determining the law of breadfruit or tanwin in Q.S At-Tin) to determine the success and failure of the implementation of the first cycle action, the researcher carried out reflection. The results of the reflection are obtained as follows; 1) Teachers cannot do much when faced with their own difficulties and moreover overcoming the difficulties of students when meeting learning demands; 2) Students are also confused, when they have to try to keep up with the demands of learning; 3) Based on the test results, there has been no significant improvement in the ability of each student. On that basis, in cycle II, both teachers and students need to follow the following recommendations; 1) Teachers must try to understand more about learning management based on the demands of the Problem Based Learning model with discussion and question and answer methods. As well as the use of this digital-based media; 2) Teachers must try to focus students' attention on the airing of digital-based media in the form of learning videos; 3) Teachers must motivate students so that they are motivated to learn better, of course by giving rewards; 4) Before carrying out the second cycle of actions, teachers and students must deliberate to understand each other's duties, so that the expected behavior can occur.

Description of Cycle II Data. Planning, at the planning stage there are several things that have been done by the researcher, namely; 1) Prepare learning materials; 2) The learning material prepared is about the Qur'an Hadith Material (CHAPTER 6. Let's recite and study Q.S At-Tin and Hadith about Gathering, SUB CHAPTER 2 Understanding the main messages of Q.S At-Tin); 3) Prepare teaching modules that are in accordance with the Qur'an Hadith Material (CHAPTER 6. Let's recite and study Q.S At-Tin and Hadith about Gathering, SUB CHAPTER 2 Understanding the main messages of Q.S At-Tin); 4) Preparing learning media; 5) Compiling LKPD; 6) Create research instruments that include assessment instruments for cycle II written test questions. Implementation, at this stage of implementation, the researcher acts as a teacher, learning PAIdBP on the Qur'an Hadith material (SUB CHAPTER 2 Understanding the main messages of Q.S At-Tin) by applying the use of digital-based media. The researcher carried out the following activities; 1) Carry

out the learning process as designed; 2) Implement the teaching module that has been designed with sequential stages, there is a preliminary stage, a core stage and a closing stage; 3) Using digital-based media that has been made, namely in the form of showing learning videos that the researcher displays in the core stage; 4) Implementing the PJBL learning model with discussion and question and answer methods; 5) Providing LKPD to students.

The data on student learning outcomes in Cycle II is that student learning outcomes show that there is an increase in student learning outcomes with bad scores (0-60) which was 7 people with a percentage of 50% now to 3 people with a percentage of 21%, poor scores (61-70) which were previously 5 people with a percentage of 35% now to 1 orang dengan persentase 7% , the score is sufficient (71-80) which was previously 2 people with a percentage of 14% now it is 6 people with a percentage of 43%, while for good scores in cycle I there are no now in cycle II there is 1 person and very good there are also 3 people who succeeded. The average score that was 60 in the first cycle now reaches a value of 80 in the second cycle. If the number of students who completed their learning results in the second cycle is 10 students with a percentage of 71%. Observation, the results of observations in the learning process in cycle II can be found that; 1) The application of digital-based media with the publisher of learning videos on the Qur'an Hadith material (SUB CHAPTER 2 Understanding the main messages of Q.S At-Tin) the implementation can run in accordance with the teaching module; 2) The researcher displays digital-based media according to the stages and steps according to the provisions in the PJBL teaching module; 3) Students become more active and participatory in learning; 4) Students are very enthusiastic in discussing subject matter with their fellow group members. This can be seen in each individual who expresses opinions with each other; 5) Students do the LKPD given by the teacher well; 6) Students do the assessment with enthusiasm; 7) Students with the application of digital-based media still have a few obstacles and are not perfect; 8) Students like to make posters about the main messages of Q.S At-Tin; 9) A small number of students still do not understand the material of the Qur'an Hadith (SUB CHAPTER 2 Understanding the main messages of Q.S At-Tin); 10) Students are still confused and embarrassed in presenting the results of the discussion in front of the class; 11) At the time of the learning video release, there are still some students who do not pay attention.

Reflection. Based on the results of the observation of the learning process and the results of the test in cycle II that the application of digital-based media to the material of the Qur'an Hadith (SUB CHAPTER 2 Understanding the main messages of Q.S At-Tin) to determine the success and failure of the implementation of the second cycle of actions, the researcher reflected. The results of the reflection are obtained as follows; 1) Teachers still look panicked when faced with their own difficulties and especially overcome students' difficulties when meeting learning demands; 2) Students are also confused, they look confused when they have to try to follow the demands of learning; 3) It can be seen that some students in working on the project are not actively involved and help their groups. On that basis, in cycle III, both teachers and students need to follow the following recommendations; 1) Teachers should try to understand better about learning management based on the demands of the Project Based Learning model with discussion and question and answer methods. As well as the use of this digital-based media; 2) Teachers must try to focus students' attention on the airing of digital-based media in the form of learning videos; 3) Even though digital media has been used in the form of learning videos, teachers must guide students to be more active in asking and responding; 4) Teachers must motivate students so that they are motivated to learn better, of course by giving rewards; 5) Before carrying out the third cycle of actions, teachers and students must deliberate to understand each other's duties, so that the expected behavior can occur. Description of Cycle III Data; 1) Planning, the initial stage, namely: study of PAI learning with learning materials for Studying and Reciting Q.S At-Tin and Hadith about

Friendship (writing and memorizing Q.S At-Tiin) Class IV SDN 34 Kamang, in grade IV Semester II.

Identify problems that include materials, student characteristics and classroom atmosphere, learning methods/approaches, media, student worksheets and evaluations, as well as compiling teaching modules and preparing observation sheets. At the planning stage, there are several things that have been done by researchers, namely; 1) Prepare learning materials; 2) The learning material prepared is about the Qur'an Hadith Material (CHAPTER 6. Let's recite and study Q.S At-Tin and Hadith about Gathering, SUB CHAPTER 3 Writing and Memorizing Q.S At-Tin); 3) Developing teaching modules that are in accordance with the Qur'an Hadith Material (CHAPTER 6. Let's recite and study Q.S At-Tin and Hadith about Silaturrahmi, SUB CHAPTER 3 Writing and memorizing Q.S At-Tin); 4) Preparing learning media; 5) Compiling LKPD; 6) Create research instruments that include assessment instruments for the written test questions of cycle III. Implementation. In this stage, the researcher carries out differentiated learning using Digital Media, learning in this cycle can be described as follows; 1) This meeting lasted 105 minutes. The research conducted by researchers at the third meeting was carried out on Monday, January 6, 2025 at 08.00-10.15. which discusses about; 1) Writing and Memorizing Q.S At-Tiin. The implementation of cycle III was carried out in one meeting, which consisted of preliminary activities, core activities, and closing activities. The data on student learning outcomes in Cycle III is, students show that there is a significant increase in the learning outcomes of students with bad scores (0-60) which was 3 people with a percentage of 21% now to 0 people with a percentage of 0%, a low score (61-70) which was previously 1 person with a percentage of 7% is now fixed, a sufficient score (71-80) which was previously 6 people with a percentage of 43% is now 2 people with a percentage of 14%, while for a good score in cycle II there is 1 person now becomes 3 people with a percentage of 21% and very good has also increased far there are 8 people with a percentage of 57% who succeeded. The average score that was 80 in the second cycle now reaches a score of 92 in the third cycle. If calculated, the number of students who completed their learning results in cycle III was 13 students with a percentage of 92%. Observation. Based on the actions that have been given, research data from cycle III is obtained in the form of data derived from observation results and student learning outcome tests.

The data derived from observations are the results of observations of teacher activities and student activities during learning. The results of observations in the learning process in cycle III can be found that; 1) The application of digital-based media with the publisher of learning videos on the Qur'an Hadith material (SUB CHAPTER 3 writing and memorizing Q.S At-Tin) the implementation can run in accordance with the teaching module; 2) The researcher displays digital-based media according to the stages and steps according to the provisions in the DBL teaching module; 3) Students become more active and participatory in learning; 4) Students are very enthusiastic in discussing subject matter with their fellow group members. This can be seen in each individual who expresses opinions with each other; 5) Students do the LKPD given by the teacher well; 6) Students work on the assessment with enthusiasm; 7) Students with the application of digital-based media still have a few obstacles and are not perfect; 8) Students are happy in writing and memorizing Q.S At-Tin according to their respective learning styles; 9) A small number of students still do not understand the material of the Qur'an Hadith (SUB CHAPTER 3 writes and memorizes Q.S At-Tin). Reflection. Based on the results of the observation of the learning process and the results of the test in cycle III that the application of digital-based media to the Qur'an Hadith material (SUB CHAPTER 3 writing and memorizing Q.S At-Tin) to determine the success and failure of the implementation of cycle III actions, the researcher reflected. The results of the reflection are obtained as follows; 1) Teachers have begun to be proficient and accustomed to the application of digital-based media; 4) Students also enjoy participating in learning using digital-based media; 5) It can be seen that students are happy with the use of digital-based media because it can support and facilitate their respective learning styles However, in this

fourth cycle, teachers and students need to follow the following; 1) Teachers must try to do better in penerapan model diferensiasi based learning; 2) Even though they have used digital media in the form of learning videos, teachers must guide students to be more active in asking and responding; 3) Teachers must motivate students so that they are motivated to learn better; 4) Before carrying out the IV cycle action, teachers and students must deliberate to understand each other's tasks, so that the expected behavior can occur. Success. In Cycle III, 13 students (97%) achieved completeness, there was still 1% who had not completed, with an average of 92 above KKM (70). Differentiation Based Learning (DBL) using digital-based media has been proven to be effective by seeing an increase in the percentage of completeness. Challenge. The learning speed varies, some students need more time to understand the material. Students' motivation and focus are not evenly distributed, some students still need extra encouragement. Development. Strengthening differentiated learning with Digital Media requires a good signal and more variety in difficulty levels and time flexibility. Students are more interested in using digital media. Optimize time management for differentiated activities. Increase cooperation with parents to support learning at home. Description of Cycle IV Data. Planning. The initial stage is: study of PAI learning with learning materials Studying and Reciting Q.S At-Tin and Hadith about Silaturahmi (writing and memorizing Q.S At-Tiin) Class IV SDN 34 Kamang, in grade IV Semester II.

## **DISCUSSION**

Identify problems that include materials, student characteristics and classroom atmosphere, learning methods/approaches, media, student worksheets and evaluations, as well as compiling teaching modules and preparing observation sheets. At the planning stage, there are several things that have been done by researchers, namely; 1) Prepare learning materials; 2) The learning material prepared is about the Qur'an Hadith Material (CHAPTER 6. Let's recite and study Q.S At-Tin and Hadith about Silaturrahmi, SUB CHAPTER 4 Understanding Hadith about Silaturrahmi; 3) Developing teaching modules that are in accordance with the Qur'an Hadith Material (CHAPTER 6. Let's recite and study Q.S At-Tin and Hadith about Silaturrahmi, SUB CHAPTER 4 Understanding Hadith about Silaturrahmi; 4) Preparing learning media; 5) Compiling LKPD; 6) Create research instruments that include assessment instruments for cycle IV written test questions. Application. In this stage, the researcher carried out learning with a TPACK-based Problem Based Learning learning model using Digital Media and role-playing methods. Learning in this cycle can be described following as; 1) This meeting lasted 105 minutes. The research conducted by researchers at the fourth meeting was carried out on Monday, January 13, 2025 at 08.00-10.15. which discusses about; 1) Understanding the Hadith about Friendship. The implementation of cycle IV was carried out in one meeting, which consisted of preliminary activities, core activities, and closing activities. The data on student learning outcomes in Cycle III is that students show a significant increase and all students reach KKM. In the learning results, there were no students with bad scores (0-60), there were no poor student scores (61-70), but there were still enough student scores (71-80) which were 2 people with a percentage of 14% now to 3 people with a percentage of 21%, while for good grades in cycle IV there are still 3 people with a percentage of 21% and very good and also a fixed fate, namely there are 8 people with a percentage of 57% who succeed. The average score that was in cycle III was 92 now in cycle IV reaches a score of 93. If the number of students who completed their learning results in cycle IV is 14 students with a percentage of 99%.

Observation, based on the actions that have been given, research data from cycle IV was obtained in the form of data derived from observation results and student learning outcome tests. The data derived from observations are the results of observations of teacher activities and student activities during learning. The results of observations in the learning process in cycle IV can be found that; 1) The application of digital-based media



with the publisher of learning videos on the Qur'an Hadith material (SUB CHAPTER Understanding Hadith about Silaturrahmi) the implementation can run in accordance with the teaching module; 2) The researcher displays digital-based media according to the stages and steps according to the provisions in the TPACK teaching module; 3) Students become more active and participatory in learning; 4) Students are very enthusiastic in discussing subject matter with their fellow group members. This can be seen in each individual who expresses opinions with each other; 5) Students do the LKPD given by the teacher well; 6) Students do the assessment with enthusiasm; 7) Students with the application of digital-based media still have a few obstacles and are not perfect; 8) Students are happy in writing and memorizing Q.S At-Tin according to their respective learning styles; 9) A small number of students still do not understand the material of the Qur'an Hadith (SUB CHAPTER 3 writes and memorizes Q.S At-Tin); 10) Completeness Learn. Based on the table, 14 students were declared complete in cycle IV.

This success indicates that there is no need for additional cycles, because the learning targets have been achieved comprehensively. This shows that the learning strategy of the TPACK model using Digital-based media in cycle IV has succeeded in helping all students achieve learning goals and improve learning outcomes. The data in the fourth cycle showed positive results, namely 100% completeness. This improvement can be used as a reference that the strategy applied to silus IV is effective in improving student learning outcomes, because it has achieved satisfactory results with 100% completeness, so there is no need for further research. Reflection, Based on the results of the observation of the learning process and the results of the test in cycle IV that the application of digital-based media to the material of the Qur'an Hadith (SUB CHAPTER 4 understands the Hadith about friendship) to determine the success and failure of the implementation of cycle IV actions, the researcher reflected.

The results of the reflection are obtained as follows; 1) Teachers have begun to be proficient and accustomed to the application of digital-based media or TPACK; 2) Students also enjoy participating in learning using TPACK digital-based media; 3) It can be seen that students are happy with the use of digital-based media because it can support and facilitate their respective learning styles. It is very evident that the use of technology in the learning of the 4th meeting; 4) Success. In Cycle IV, 14 students (100%) achieved good completion with an average of 93 above KKM (70). Learning based on Technological Pedagogical and Content Knowledge (TPACK) using the Digital method has been proven to be effective by looking at an increase in the percentage of completeness; 5) Learning Speed Challenge looks successful with TPACK, all students master more to understand the material; 6) Students' motivation and focus are evenly distributed, so as to get satisfactory learning outcomes. In addition, the initial and final assessments using google forms and quizzes. Development; 1) Strengthening TPACK Learning with Digital Media needs a good signal and internet quota; 2) Students are more interested in using the gamification version of digital media because it is fun; 3) In order to be able to take advantage of the croom book; 4) Increase cooperation with parents to support learning at home.

## **CONCLUSION**

In conclusion, the integration of Artificial Intelligence (AI) in Islamic education at SD Negeri 34 Kamang has the potential to significantly enhance student learning outcomes by providing personalized learning experiences, interactive content, and real-time feedback. AI-powered tools can assist in improving Quranic recitation, understanding of Islamic concepts, and moral education through adaptive learning platforms and intelligent tutoring systems. Despite challenges such as technological infrastructure and teacher training, the benefits of AI such as increased student engagement, accessibility, and efficiency in learning make it a valuable innovation in modern Islamic education. By combining AI with traditional teaching methods and ensuring ethical implementation,

schools can create a more dynamic, effective, and inclusive learning environment that fosters both academic and spiritual growth.

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