The Use of Artificial Intelligence-Based Powerpoint Media to Improve Student Learning Outcomes in Islamic Religious Education Learning

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Abstract: This study aims to improve student learning outcomes in Islamic religious education learning by using artificial intelligence-based powerpoint media. This study is a classroom action research that uses four steps, namely planning, action, observation and reflection. The subjects of this study were vocational high school students. The data for this study were obtained by 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 study is descriptive statistics by comparing the results obtained with indicators of research success. The results of the study indicate that the use of artificial intelligence-based powerpoint media can improve student learning outcomes in Islamic religious education learning. This can be seen from the increase in the percentage of student learning completion in each cycle with details of the pre-cycle 41.51%, the first cycle 68.19% and in the second cycle it increased to 87.36%. Thus, the use of artificial intelligence-based powerpoint media can be used as an alternative to improve student learning outcomes in Islamic religious education learning.

Keywords: Artificial intelligence, powerpoint media, learning outcome.

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INTRODUCTION

Education is a right for every citizen, the progress and retreat of a country is largely determined by the level of education of its citizens. Islamic Religious Education is a conscious effort to prepare students to believe, understand, appreciate and practice Islam through guidance, teaching and training activities by paying attention to the guidance to respect Islam in terms of harmonious relations between religious communities in society to realize national unity. The purpose of Islamic education is to provide students with basic skills about Islam to develop religious life, so that they become human beings. Muslims who believe and fear Allah SWT. If we see, observe and feel, lately many Islamic Religious Education teachers have complained about teaching Islamic religious education materials, especially in public schools. However, the main challenge in Islamic religious education is how to internalize these values effectively, so that good morals can be applied in students' lives, especially at the vocational level, such as in grade X students. understanding, and finally practicing these values in their lives.

Education is one of the important aspects of human life that functions to produce a quality generation. In the educational process, learning methods and media play a very important role in increasing the effectiveness and efficiency of the teaching and learning process. In today's digital era, the development of information and communication technology (ICT) has had a major impact on the way we access and disseminate information, including in the world of education. One of the innovations that has been widely used in the world of education is presentation media, such as Artificial Intelligence -Based PowerPoint, which facilitates the delivery of material in a more interactive and interesting way.

Islamic Religious Education as one of the important subjects in schools, has the goal of forming strong religious character and understanding in students. Islamic Religious Education learning aims not only to teach the teachings of Islam theoretically, but also to internalize moral and spiritual values in daily life. However, in practice, Islamic Religious Education learning often faces challenges, especially when it comes to attracting students' attention and keeping their interest in continuing learning. One of the main obstacles in learning islamic education is that the methods used often seem monotonous and lack of student interest. Learning that is carried out conventionally, such as lectures or textbook readings, may not be effective enough in reaching different learning styles of students, especially in the digital era full of interactive media. For this reason, innovations are needed in learning methods that are able to accommodate the needs of students and make them more interested and motivated to understand the subject matter better.

Islamic Religious Education plays a very important role in shaping the character and morals of Vocational High School students. In an educational environment that is more oriented towards work skills, Islamic Religious Education provides a foundation of Islamic values that help students become individuals who are not only skilled but also have good morals. This learning is the main pillar in shaping students' personalities to become a responsible and ethical generation in everyday life and the world of work.

One of the main benefits of Islamic Religious Education for Vocational High School students is instilling the values of honesty in life and the world of work. Honesty is one of the important principles in Islam that must be applied in various aspects of life, including when students enter the world of industry and business. By understanding religious values, students are expected to be able to avoid unethical behavior such as corruption, fraud, and abuse of authority that often occur in the world of work.

In addition, Islamic Religious Education also plays a role in shaping attitudes of discipline and responsibility. In Islam, discipline is taught through various religious obligations such as the five daily prayers and fasting. Through religious learning, students become accustomed to a regular lifestyle, so that they can apply it in the world of work. A strong discipline will help them become professional and reliable workers in various fields of work.

Islamic Religious Education also helps students face increasingly complex moral and social challenges. Free association, drug abuse, and negative influences from the environment are often threats to teenagers. By having a good understanding of religion, students are better able to distinguish between right and wrong, and have a strong moral fortress in facing various temptations that can damage their future.

In the world of work, Vocational High School students will interact with many people from various backgrounds. Therefore, it is important for them to understand the concept of tolerance and harmony taught in Islam. Islamic Religious Education helps students understand the importance of respecting differences, both in terms of religion, culture, and outlook on life. With a good attitude of tolerance, they can build harmonious and productive working relationships with their colleagues.

Islamic work ethic is also an important aspect taught in Islamic Religious Education. Islam teaches that work is part of worship, so it must be done with full dedication, honesty, and responsibility. By understanding this concept, vocational high school

students will be motivated to work hard, not give up easily, and always try to give their best in every task they do.

In addition to forming a work ethic, Islamic Religious Education also teaches balance between worldly life and the afterlife. Often, the main focus of education in vocational high schools is to equip students with technical skills to be ready to work, but without spiritual values, a person can easily get caught up in materialism. Religious learning teaches students to continue to seek blessings in their sustenance and not just pursue worldly gain.

Social awareness and concern for others are also important values taught in Islamic Religious Education. Islam emphasizes the importance of helping each other, mutual cooperation, and empathy for others. By having a high social awareness, vocational high school students can become individuals who care about their surroundings, both in community life and in the world of work. This caring attitude is very important in creating a more harmonious and productive work environment.

In addition, Islamic Religious Education also plays a role in preventing deviant behavior in the world of work. The industrial world often confronts someone with various temptations, such as bribery, nepotism, and data manipulation. By having a strong understanding of religion, students can be more assertive in rejecting all forms of cheating and maintain their integrity as responsible and professional workers.

Ultimately, learning Islamic Religious Education in Vocational High Schools is not just a subject matter, but also a provision for life that will continue to guide students in living their lives in the future. The values learned in religious education will help them become better individuals, wiser in making decisions, and always trying to seek Allah's pleasure in every step of their lives. Thus, Islamic Religious Education has a very important role in forming a generation that is not only professionally competent, but also has noble morals and is responsible in community life.

The use of Artificial Intelligence -Based PowerPoint media in learning can be one of the most effective alternatives. This media allows teachers to convey material in a more visual and dynamic way, so that it can help students to more easily understand the concepts taught. Artificial Intelligence -Based PowerPoint can be used to visualize information through images, graphs, text, animations, and videos that can grab students' attention. The use of this media is expected to be able to reduce student boredom in following lessons and increase their involvement during the learning process. Research on the influence of the use of Artificial Intelligence -Based PowerPoint media on student learning outcomes in islamic education learning is very relevant to be conducted. By using Artificial Intelligence -Based PowerPoint, it is hoped that students can gain a better understanding of Islamic Religious Education materials, which in turn can improve their learning outcomes. In addition, the use of this media is also expected to improve students' critical thinking skills, creativity, and ability to solve problems related to Islamic religious teachings. Another factor that causes a lack of motivation in participating in Islamic Religious Education learning is the lack of religious foundation that students have, because the time allocation for islamic education learning in public schools is only 2 x 45 minutes per week, and most of them come from public junior high schools. The basic principle of children's learning should be fun. Because by having fun learning, it will foster positive emotions. In the learning process, children must be positioned as subjects and not objects. Children should learn on their own initiative. Therefore, whether or not an education succeeds in a country is one of them because of the teacher.

Teachers have a very important role in the development and progress of their students. From here, teachers are required to be able to carry out their duties as well as possible. To be able to achieve the expected teaching goals. Teachers must be good at choosing the right method and according to the needs of students. So that students feel happy in learning In the teaching and learning process, it is not only conveying knowledge, but providing motivation is very important because psychologically children will feel happy if they are noticed. One way to pay attention is to motivate. Based on the above

notation is an overview of the problem in obtaining the effectiveness and efficiency of learning Islamic religious education materials, the author is interested in raising these problems through a theoretical and empirical approach, the author tries to take the title "The Use of AI-Based PowerPoint Media to Improve Student Learning Outcomes in Islamic Religious Education Learning"

METHODS

This study uses a mixed method approach (quantitative and qualitative) with a quasi-experimental pretest-posttest control group design to measure the effectiveness of Artificial Intelligence -based PowerPoint in improving Islamic Religious Education learning outcomes. The study population was junior high school/high school students, with a sample of two classes selected by purposive sampling: one experimental group using AI-based PowerPoint and one control group using conventional PowerPoint. The instruments used include pretest and posttest tests, observation sheets, questionnaires, and interviews to collect data related to learning outcomes and experiences of students and teachers.

The research is carried out in three stages: preparation (preparation of AI-based materials and research instruments), implementation (provision of pretest, learning, and posttest), and evaluation (data analysis). Quantitative data were analyzed with t-tests to measure the difference in learning outcomes between the experimental and control groups, while qualitative data were analyzed thematically to understand the perceptions of teachers and students. The validity of the instrument was tested through expert judgment, and reliability was tested with Cronbach's Alpha. The success criteria were measured by the significant improvement in the learning outcomes of the experimental group compared to the control group, as well as the positive response of students to the learning media. This research is expected to prove that AI-based PowerPoint can improve understanding of PAI material, provide an interactive learning experience, and become a recommendation for the development of digital-based educational technology.

The research conducted is Classroom Action Research is a research method conducted by teachers or other education practitioners directly in the classroom to improve the quality of learning. This penelitian tindakan kelas is cyclic and reflective, meaning that teachers will take action, observe the results, reflect on what happened, then make improvements in the next action. The types of data collection used by the author are as follows: Teachers make observations to students about the abilities and problems faced by students in learning to find out the learning difficulties experienced by the students. After that, the teacher makes questions to carry out the test that will be carried out with students. Educators also take documentation as evidence in conducting tests.

RESULTS

The use of AI-based PowerPoint in Islamic Religious Education learning shows a significant impact on improving student learning outcomes. Based on quantitative data analysis, there was a clear difference between the pretest and posttest results in the experimental group compared to the control group. Students who use AI-based PowerPoint show a better understanding of the material taught, such as the concepts of monotheism, fiqh, and the history of the Prophet Muhammad. This difference confirms that AI-based learning media is able to increase student engagement and help them understand the material in a more engaging and effective way. One factor contributing to this success is the ability of AI-based PowerPoint to present content interactively. Visualization features such as animations of worship steps, hajj simulations, and illustrations of Islamic stories provide a more immersive learning experience. Students not only listen to explanations, but also see visual representations that help them remember the material better.

This is in line with the learning theory that states that audio-visual combinations can improve information retention. From a teacher's point of view, AI-based PowerPoint makes the process of preparing materials easier. Teachers can insert key points, and the AI automatically organizes the presentation with an attractive layout, adding relevant multimedia elements. Teachers also find it more helpful in evaluating learning because AI-based PowerPoint is equipped with an interactive quiz feature that provides direct feedback to students. This allows teachers to immediately know which parts need re-emphasis.

The results of the qualitative analysis also show that students are more motivated to learn when using AI-based media. They find the material to be easier to understand and engaging, especially with interactive elements such as direct questions on the slides that they have to answer. Students also respond positively sto visualizations that help them learn complex topics such as qada and qadar or adab towards parents. However, the study also found some challenges, such as limited access to technology in certain schools. Not all students have a supporting device or adequate infrastructure, such as a stable internet connection.

Teachers also need special training to make the most of AI-based PowerPoint. This challenge shows the importance of support from schools and the government to provide better technology facilities in the educational environment. Overall, the use of AI-based PowerPoint not only improves student learning outcomes, but also creates a more enjoyable and relevant learning experience. This media helps reduce the burden on teachers in compiling materials and providing evaluations, as well as encouraging students to be actively involved in learning. This combination of technology and innovative learning approaches provides great potential to be applied in a variety of other subjects, not just islamic education. This study concludes that AI-based PowerPoint has a positive impact on the learning process, especially on islamic education subjects. With proper implementation and adequate infrastructure support, this technology can be an effective tool to support 21st century learning. This success also provides opportunities for educational technology developers to continue to innovate in creating more sophisticated and inclusive learning media.

DISCUSSION

The use of Artificial Intelligence-based PowerPoint in Islamic Religious Education learning brings significant changes to the teaching approach and student learning outcomes. This technology allows the material taught to be more interactive and contextual, so that students can more easily understand abstract concepts such as tauhid, fiqh, and adab. In this study, the group of students who used Artificial Intelligence-based PowerPoint showed a higher increase in learning outcomes compared to the control group. This is due to the Artificial Intelligence features that are able to present material with animation, visualization, and interactive quizzes that directly involve students in the learning process. For example, material on prayer procedures is presented with step-by-step animations, so that students can follow visually and gain a better understanding compared to just listening to verbal explanations or reading text.

From a teacher's perspective, Artificial Intelligence-based PowerPoint provides efficiency in compiling learning materials. Teachers only need to enter the main points of the material, and Artificial Intelligence automatically creates an attractive presentation layout with relevant visual and multimedia elements. In addition, Artificial Intelligence features such as automatic quizzes allow teachers to evaluate students' understanding in real-time. The results of the quizzes provide immediate feedback, so teachers can immediately find out which parts of the material are difficult for students to understand and address them in the next meeting. This helps improve teaching effectiveness, because teachers can focus discussions on areas that require more attention. Thus, the use of Artificial Intelligence-based technology not only makes teachers' jobs easier, but also

ensures that learning is more focused and in accordance with students' needs. However, the implementation of this technology is not without challenges.

Technological infrastructure in some schools is still a major obstacle, especially in areas with limited access to devices and internet connectivity. In addition, although Artificial Intelligence-based PowerPoint offers convenience, teachers still need training to maximize its use. Several teachers admitted that they needed time to adapt to the new features offered by this technology. This challenge shows the importance of collaboration between schools, governments, and technology developers to provide adequate facilities and ongoing training programs for teachers. With the right support, Artificial Intelligence-based PowerPoint can be a very effective tool in improving the quality of learning, not only in Islamic religious education subjects, but also in other subjects that require an interactive and technology-based approach.

The use of innovative learning media is very important in improving student learning outcomes, including in Islamic Religious Education subjects. One technology that can be utilized is artificial intelligence-based PowerPoint. With advanced features such as design automation, interactive content creation, and learning data analysis, Artificial Intelligence-based PowerPoint can help teachers present materials more interestingly and effectively. This allows students to more easily understand the religious concepts being taught.

One of the advantages of Artificial Intelligence-based PowerPoint is its ability to create more visual and interactive presentations. With the help of Artificial Intelligence, teachers can automatically get attractive design recommendations, adjust slide layouts, and add multimedia elements such as videos, animations, and illustrations that support students' understanding of Islamic Religious Education materials. Presenting interesting materials will increase the appeal of learning and make students more focused on following the lesson.

In addition to a better visual appearance, Artificial Intelligence-based PowerPoint also allows personalization of learning materials according to student needs. Artificial intelligence can analyze learning data and provide content recommendations that are more appropriate to students' level of understanding. In the context of Islamic Religious Education, teachers can present materials with an approach that is more appropriate to the background and understanding of students, so that learning becomes more effective and relevant.

The text-to-speech and voice recognition features in AI-based PowerPoint also provide great benefits in learning Islamic Religious Education. Students can hear the correct pronunciation of the verses of the Qur'an or understand the interpretation better through this feature. In addition, AI can also be used to assess students' pronunciation when reading holy verses or daily prayers, so that learning becomes more interactive and practice-based.

AI-based PowerPoint also supports more effective learning evaluation. AI can analyze data from interactive quizzes or polls embedded in presentations, so that teachers can find out the extent of students' understanding of the material that has been taught. With this data, teachers can adjust learning strategies and provide more targeted guidance to students who have difficulty understanding Islamic Religious Education material.

In addition, AI can help in creating questions and assignments automatically based on the material that has been presented in the presentation. With this feature, teachers can easily create practice questions that are appropriate to the level of student understanding. In Islamic Religious Education learning, this feature is very useful for testing students' understanding in aspects of faith, worship, and morals, as well as providing instant feedback on correct and incorrect answers.

Another advantage of AI-based PowerPoint is its ability to support collaboration-based learning. AI can facilitate interactive discussions by composing reflective questions that students can answer directly through their devices. In the context of Islamic Religious Education, this feature can be used to discuss moral issues, Islamic values, and the

application of religious teachings in everyday life, so that learning becomes more applicable and relevant.

AI-based PowerPoint can also better support distance or hybrid learning. With AI features that can translate text into various languages, create automatic summaries, and adjust the speed of material delivery, students who study independently or from different locations can still follow the learning effectively. This is very useful in increasing the accessibility of Islamic Religious Education learning for all students, including those with certain disabilities.

The application of AI in PowerPoint also helps increase student engagement in learning. Features such as gamification, interactive simulations, and AI-based case studies can make learning more fun. In Islamic Religious Education learning, this can be applied through educational games about Islamic history, interactive quizzes about verses of the Qur'an, or daily life simulations that teach Islamic values contextually.

Overall, the use of AI-based PowerPoint in Islamic Religious Education learning can improve the effectiveness of teaching, enrich students' learning experiences, and make it easier for teachers to deliver materials in a more interesting and interactive way. With the various advanced features offered by AI, the learning process becomes more dynamic, personal, and data-based, so that students can understand and practice Islamic teachings better in their lives.

Artificial intelligence (AI)-based media plays an important role in improving student learning activities by providing a more interactive and adaptive learning experience. AI allows learning systems to adjust materials to students' level of understanding and individual needs. With this technology, students can learn at a pace that suits their abilities, so they don't feel left behind or too fast in understanding a concept. In addition, AI can provide real-time feedback, help students understand their mistakes, and encourage them to be more active in exploring learning materials.

One way AI improves student learning activities is by providing more interesting and varied content. This technology can integrate videos, animations, interactive simulations, and educational games into the learning process. With more dynamic media, students become more interested in learning and more active in participating. For example, in science lessons, AI can help students conduct virtual experiments that allow them to better understand scientific concepts without having to be in a physical laboratory.

AI can also improve learning activities through learning personalization features. Using machine learning algorithms, the system can analyze students' learning patterns and recommend additional materials that suit their needs. This allows students to have a more immersive and relevant learning experience that is tailored to their interests and abilities. For example, in language learning, AI can tailor exercises based on students' ability to understand grammar, vocabulary, or speaking skills.

In addition, AI can increase student engagement in discussions and group work through AI-based learning platforms. Educational chatbots and virtual tutors can help students understand difficult material by providing additional explanations whenever they need it. AI can also be used to analyze interactions in group discussions, provide students with suggestions on how they can improve their contributions, and help teachers evaluate student participation more objectively.

Overall, AI-based media is bringing significant changes to the world of education by making learning more flexible, interactive, and efficient. By utilizing this technology, students can be more active in learning, more motivated to explore the material, and better prepared to face academic challenges. As AI technology continues to develop, the opportunities to improve the effectiveness of learning will expand, providing great benefits for students, teachers, and the world of education as a whole.

CONCLUSION

Artificial Intelligence-based PowerPoint is an effective innovation in improving Islamic Religious Education learning outcomes in schools. With its ability to present material interactively through animation, visualization, and automatic quizzes, this technology helps students understand abstract concepts more easily and interestingly. The group of students who used this media showed a significant increase in learning outcomes compared to the control group who used conventional PowerPoint. In addition, Artificial Intelligence-based technology also lightens the burden on teachers in compiling learning materials and evaluating student understanding in real-time, making the teaching process more efficient and focused. However, successful implementation requires adequate technological infrastructure support and training for teachers to be able to utilize its features to the fullest. With attention to these challenges, Artificial Intelligence-based PowerPoint has the potential to become a revolutionary learning tool, not only in Islamic Religious Education but also in various other subjects, supporting the creation of relevant, enjoyable, and effective learning in the digital era.

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