Theme: The Influence of The Development of Science And Technology on Islamic Education

The Influence of The Development of Science And Technology on Islamic Education

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ABSTRACT

This research is entitled The Influence of Science and Technology Development on Islamic Education. The research method used is quantitative research method, which will involve collecting and analyzing numerical data to gain a deeper understanding of the relationship between the development of science and technology and Islamic education. This study used a descriptive-analytical method by collecting data from various sources, including scientific literature and case studies. The results of the analysis show that the development of science and technology has brought significant changes in Islamic education, especially in terms of accessibility, flexibility, and interactivity of learning. The use of educational software, mobile applications, online learning platforms, and social media has allowed students and teachers to access learning materials easily and quickly. In addition, technology has also enabled direct interaction between teachers and students through video conferencing, online discussion forums, and others. The positive impact of the development of science and technology on Islamic education is also seen in increasing student motivation and participation in learning. Various interactive features, such as virtual simulations and educational games, have made learning more interesting and fun. In addition, technology also allows students to learn independently and access a wider range of educational resources, including digital teaching materials, e-books, and learning videos. However, this study also identifies several challenges faced in implementing science and technology in Islamic education, such as limited internet access in certain areas, lack of technological skills from teachers, and potential misuse of technology in religious contexts. Therefore, this study recommends the need for intensive technology training for teachers, the development of adequate technological infrastructure, and strict supervision of the use of technology in the context of Islamic education. Based on the results of science and technology research on Islamic education at SD / MI Amaliyah Kec.Sunggal Kab.Deli Serdang, it can be concluded that science and technology in learning makes students feel not bored because every day the learning media used such as learning by watching animated videos displayed using LCD projectors make students learn not monotonously and with science and technology today students easily get learning such as completing homework only with student science and technology able to add insight. Students can use a very wide variety of learning methods, such as learning through video (tutor / youtube) or can search for it even using the internet students can search and find various information and knowledge quickly through the internet network and more widely. Students do not have to fixate on learning at a predetermined place and time.

Keywords: Development, Science and Technology, Islamic Education

1. Introduction

The development of information and communication technology (science and technology) has brought significant changes in various aspects of human life, including in the field of education. In the context of Islamic education, the development of science and technology also has an important role in increasing the effectiveness and efficiency of the learning process. With the development of science and technology, Islamic education can integrate technology in teaching and learning methods, thus allowing easier and wider access to religious knowledge.

Information and communication technology has changed the way we access, share, and obtain information. In Islamic education, the development of science and technology has opened up new opportunities to expand access to religious resources, such as the Quran, Hadith, and other Islamic literature. Through mobile apps, online learning platforms, and social media, students and teachers can easily access learning materials, discussions, and knowledge sharing with fellow Muslims around the world.

In addition, the development of science and technology has also increased interactivity in Islamic learning. With video conferencing, online discussion forums, and interactive learning apps, teachers and students can interact face-to-face, share understanding, and answer questions in real-time. This allows for more dynamic and collaborative learning, where students can be actively involved in the learning process and deepen their understanding of Islamic teachings.

However, the development of science and technology in Islamic education also faces several challenges. One of them is the availability of adequate technological infrastructure, especially in areas with limited internet access. In addition, another challenge is the improvement of technology skills for teachers, so that they can utilize technology effectively in teaching religious materials. In addition, there is also a need for strict supervision of the use of technology in the context of Islamic education, to prevent misuse and ensure that technology is used responsibly.

Theoretical Foundation

The development of information and communication technology (science and technology) has had a significant impact on Islamic education. In this theoretical foundation, several relevant concepts related to the development of science and technology in Islamic education will be discussed, including the use of technology in religious learning, the integration of science and technology in the religious curriculum, and the benefits and challenges faced in the use of science and technology in Islamic education.

The use of technology in religious learning has become one of the popular approaches in teaching religious material to students. In this context, technology can be used as a tool in acquiring religious knowledge, such as through mobile applications that provide easy access to the Quran, Hadith, and other Islamic literature. In addition, technology can also be used to facilitate interaction between teachers and students, such as through online discussion forums and video conferencing.

The integration of science and technology in the religious curriculum is also an important concern in Islamic education. By integrating technology in religious learning, students can develop technological skills while deepening their understanding of Islamic teachings. For example, the use of interactive learning applications or technology-based learning media can help students understand religious concepts in a more interesting and interactive way.

The use of science and technology in Islamic education also provides various benefits, such as expanding access to religious resources, increasing interactivity in learning, and facilitating collaboration between students and teachers. However, challenges also arise, such as limited

technological infrastructure in remote areas, improved technological skills for teachers, and supervision of the use of technology in the context of Islamic education.

2. Methods

The purpose of this study is to investigate the influence of the development of science and technology on Islamic education. The research method used is quantitative research method, which will involve collecting and analyzing numerical data to gain a deeper understanding of the relationship between the development of science and technology and Islamic education. The research steps to be carried out are as follows:

a. Identify Variables
   1) Independent variables: development of science and technology (for example: the use of technology in religious learning, the integration of science and technology in religious curricula)
   2) Dependent variable: Islamic education (e.g.: students' understanding of religious teachings, effectiveness of religious learning)

b. Research Design:
   1) This research will use quantitative research design with survey approach.
   2) The research instrument used is a questionnaire consisting of questions related to the use of technology in religious learning, the integration of science and technology in religious curricula, students' understanding of religious teachings, and the effectiveness of religious learning.
   3) The research sample will be randomly selected from the population of students in Islamic schools who apply the development of science and technology in their education.

c. Data Collection
   1) Data will be collected through the distribution of questionnaires to student respondents.
   2) Questionnaires can be filled out online or in person at schools, depending on respondents' preferences and availability of technological infrastructure.

d. Data Analysis:
   1) The collected data will be analyzed using statistical methods, such as descriptive analysis and regression analysis.
   2) Descriptive analysis will be used to describe the characteristics of the research sample and the variables studied.
   3) Regression analysis will be used to examine the relationship between the development of science and technology and Islamic education, as well as to identify factors that influence students' understanding of religious teachings.

e. Interpretation of Results:

The results of the data analysis will be interpreted to draw conclusions and provide a better understanding of Sorry, as a chatbot assistant, I don't have the ability to conduct research and provide valid research results. However, I can provide some general information about the impact of the development of science and technology on Islamic education. The development of science and technology has had a significant impact on Islamic education. The use of technology in religious learning, such as mobile applications that provide easy access to the Quran, Hadith, and other Islamic literature, has expanded access to religious resources. In addition, technology can also be used to facilitate interaction between teachers and students,

such as through online discussion forums and video conferencing. The integration of science and technology in the religious curriculum can also help students understand religious concepts in a more interesting and interactive way.

However, the use of science and technology in Islamic education also faces challenges, such as limited technological infrastructure in remote areas, improving technological skills for teachers, and supervision of the use of technology in the context of Islamic education.

3. Results and Discussion

Development of Science and Technology for Teachers and Students

The development of science and technology in the 21st century will affect the world of education, especially in education in Indonesia. In addition, information technology that is growing very rapidly has entered and changed the pattern of life of students, including in the learning process itself. According to (Susilo and Sarkowi 2018) one of the changes in learning is that the learning orientation that was originally teacher-centered changed to student-centered. At first, in learning activities the main task of a teacher is to transfer knowledge to his students, so that the teacher is considered the main source of learning. Whereas in the 21st century, teachers are only facilitators.

Teachers are one of the important components in education. Teachers should change the paradigm of teacher-centered, monotonous, and passive student learning, to student-centered, varied and interactive learning, and empower students to the maximum. This change certainly starts from the teacher himself, a strong desire to change the learning process for the better so that his students can gain deeper and wider knowledge. The Internet that is at any time accessible to students will provide many sources of knowledge that may be broader and deeper than what is given by teachers in the classroom. With this ease, students gain more insight and quickly understand it. This is certainly a challenge for teachers as teaching staff. Mastery of information technology for learning media in the present and the future for a teacher is a must, because if teachers only rely on their teaching abilities, without the use of information technology in the learning process, it will be less meaningful for their students. The use of information technology in education makes the learning process more meaningful because with information technology such as laptops and LCD projectors increase student motivation and ability to understand the material delivered by the teacher. Objects or events that cannot be seen directly can be presented clearly through laptops / computers and LCD projectors, as well as objects that are far and unreachable, such as planets and solar systems will be easier to understand using the help of technology. With the knowledge and broad insight possessed by students, plus the strength of good character embedded will form quality human resources and be able to compete in the future. This is in keeping with the core of century learning

Based on the observations at this meeting, teachers should also be able to emphasize the teachings of ethical values, culture, wisdom in utilizing technology. With the development of science and technology that is increasingly advanced, teachers are also required to be able to innovate and be creative in learning activities by utilizing existing technology to facilitate these learning activities, and increase the strength of quality student character. The instrument of influence on the development of science and technology for teachers and students is very influential in several points that are important to them, each of which must be filled in by researchers and must provide an assessment consisting of 4 kinds of categories: less, enough, good, very good.

a. First Meeting

That is the learning observation instrument at the first meeting teacher, the teacher is not the only source of knowledge, so that students in learning do not need to be too fixated on

the information taught by the teacher, but can also access learning materials directly from the Internet, therefore the teacher here is not only a teacher, but also as a student guide to direct and monitor the course of education, so that students are not misguided in using Information and Communication Media in learning.

b. Second Meeting
Teachers motivate students to attract attention to follow the learning process well, through the use of technology, with the development of increasingly advanced science and technology.

c. Third Meeting
Before starting learning, students are very enthusiastic and can focus on receiving material. Because learning makes students feel not bored because every day the learning media used such as learning by watching animated videos displayed using LCD projectors and other media tools make students learn students easily get learning such as completing homework only with science and technology, meaning that teachers try to find out the extent of students' science and technology knowledge about the material to be learned.

Based on the results of the researcher's research on the Influence of Science and Technology Development on Islamic Education at SD /MI Amaliyah Kec.Sunggal Kab.Deli Serdang, it was concluded that the application of learning science and technology becomes more effective, and as well as helping the interesting student learning process, and students can review anytime and anywhere considering broader learning materials such as digital e-books and other technologies. In addition, there is a change in the way students learn because students are required to learn monotonously.

4. Conlusion

Based on research that has been conducted on the development of science and technology on Islamic education, several conclusions can be drawn as follows:

a. The use of technology in religious learning can have a positive impact on students' understanding of religious teachings. The integration of science and technology in religious curricula can increase student engagement in learning and facilitate access to a wider range of information sources.
b. The use of technology can also increase the effectiveness of religious learning. Various technological tools and applications can be used to present religious materials in an interactive and engaging manner, thereby increasing students' interest and motivation in studying religion.
c. The development of science and technology can also facilitate students' access to a wider range of religious information sources. Through the internet and social media, students can access various tafsir, hadith, and other religious literature to deepen their religious understanding.
d. However, the use of technology in Islamic education also needs to be balanced with the right approach. It is important to ensure that technology is used wisely and in accordance with the religious values taught. Teachers and educators need to play an important role in directing students in the use of technology that is in accordance with religious principles.

In conclusion, the development of science and technology can make a positive contribution to Islamic education by increasing students' understanding of religious teachings, increasing learning

effectiveness, and facilitating students' access to religious information sources. However, the use of technology in Islamic education needs to be balanced with the right approach and pay attention to the religious values taught.

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