Implementation of Integrating Islamic Religious Education with Science and Tehnology in Integrated Islamic Elementary Schools

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Abstract
This article discusses the implementation of integrating Islamic religious education with science and technology in integrated Islamic elementary schools. The focus of this research is how the implementation of integrating Islamic religious education with science and technology in integrated Islamic elementary schools and how the advantages and disadvantages. This needs to be discussed because Islam is a rahmatal lil 'alamin religion that can answer all the challenges of the times. This research includes qualitative research by describing the implementation and the advantages and disadvantages of integrating Islamic religious education with science and technology in integrated Islamic elementary schools. The type of research is field research. Data collection techniques are observation, interview, and documentation. Data analysis techniques using narrative after being tested for data validity by triangulation. The results of this study indicate that the application of integrating Islamic religious education in integrated Islamic elementary schools results in: 1) The use of technology in the learning process of Islamic religious education; 2) Students are invited to answer some Islamic religious education material with a natural approach; and 3) Maximizing P5 materials based on the integration of Islamic religious education with science and technology. The advantages of this application are that students, teachers, and school community elements can balance Islamic religious education and science and technology. The disadvantages are the unavailability of Islamic education laboratories and the lack of human resources and learning references.
Keyword: integration, Islamic religious education, science, technology, integrated Islamic elementary schools.

A. Introduction

The development of science and technology is increasingly rapid and necessary for humans. Modern humans are highly dependent on the products of science and technology. It is hard to imagine modern humans living without using science and technology products. The daily needs of modern humans ranging from eating, drinking, sleeping, shelter, work, transportation tools, to communication tools, entertainment tools, health and all aspects of human life are inseparable from using science and technology products. (Rusdiana, 2014)

The development of agriculture, livestock, fisheries and food and beverage processing technology has made it easier for humans to meet the needs of eating and drinking for all humans on this earth. (Khoiri et al., 2017) The development of information technology, with the existence of telephones, cell phones, facsimiles, the internet and others, has accelerated the delivery of information that used to take months, can now reach its destination in just a few

seconds, even at (almost) the same time. (Chanifudin & Nuriyati, 2020) Through TV, satellites and other advanced communication tools, events in one place on the earth's surface or in space near the earth's surface can be known by human beings around the world at the same time. (Ridwan Daulay & Salminawati, 2022)

Thus, it can be understood that science and technology have indeed played an important role in the development of human material civilization. The discoveries of science and technology have provided various conveniences to humans. Trips that used to take months can now be taken in just a few hours with airplanes, fast trains, and other inventions that greatly differentiate, facilitate and delight the way of life of humans today compared to the past. (Rusdiana, 2014)

Islam, a religion that is in accordance with human nature, so its sharia not only encourages humans to study science and technology, then build and foster civilization, even regulate its people in that direction in order to be safe and save both in the world moreover in the hereafter. (Khakim Ashari et al., 2023)

But until now, there is still a strong assumption in the wider community that religion and science are two entities that cannot be reconciled. Both have their own areas, separate from one another, both in terms of material objects, research methods, truth criteria, and the role played by scientists. (Musiyah et al., 2023) Another expression is that science does not care about religion and religion does not care about science. This is due to the assumption that science and religion have different ways of approaching, experiencing, and debating these differences. Science is closely related to sources of highly abstract experience, such as mathematics. Whereas religion is more closely related to the ordinary experiences of life. As an interpretation of experience, science is descriptive and religion is prescriptive. (Giantara & Amiliya, 2021)

There are also some groups who view that science and religion stand on their own ground, as the field of science relies on empirically supported data to ascertain what is real and what is not, while religion on the other hand is ready to accept the unseen and uncertain based only on the tangible variables of faith and belief. That religion and science must coexist independently of each other, because despite the similarities in their missions, the fundamental differences between the two present a conflict that will resonate at the core of each. (Khoeriyah, 2019) So integration between science and religion is hardly feasible, as a scientific criterion for identifying such assumptions to be real, as there is certainly a process of cannibalization between the two, while religion is essential for the well-being of individuals and aims at creating harmony for life.

The issue that arises now is how is the implementation of integration between science and religion through Islamic religious education, and the advantages and disadvantages of the integration process?

B. Methods

This research uses qualitative research with the type of field research. Data collection techniques used observation, interviews, and documentation. (Rusdiana, 2014) The informants came from the principal, teacher of 5th grade student, Islamic religious education teacher, special characteristic subject teacher (MPCK), and students. The data collected was then processed with data analysis techniques, namely descriptive analysis by doing in depth. Data validity is measured by data triangulation techniques.

C. Results

Technology has crept into various lines, one of which is in the world of education. (Priyanto, 2014) The same thing is felt at SD IT Asyibyan Petarukan. According to Irfan Kurniawan,

Principal, said that the learning process at school is carried out with the help of technological props in the form of laptops and projectors. The introduction of these learning media to students in addition to helping in the teaching-learning process but also providing knowledge of science and technology to students. So that students are not clueless in accompanying the times.

In line with the above statement, Dian Abdurrahman said that the introduction of technology from an early age is very helpful in students' knowledge of technology. This was felt during the implementation of the Computer-Based National Assessment (ANBK) for grade 5. Students in answering the questions that have been provided use school laptops. If students are not introduced to the laptop device, it is felt that it will be difficult when implementing ANBK.

According to Yunita Griti, teacher of Special Characteristic Subjects (MPCK), the use of technology in this elementary school has been going on for a long time and is applied in all subjects. Students are shown videos of wudu, prayer movements with the help of a projector in fiqh learning. This presentation is very helpful for learning both for the teacher himself and the students. Students see and then model directly as the value of lesson practice.

Azka Nabila, a 6th grade student, stated that students are also introduced to the surrounding environment in the learning process. The implementation of dhuha prayers regularly before recess is carried out in the local mushola. This is intended to introduce the availability of places of worship that can be used by students. In the implementation, learners are also taught the cleanliness of the place. Before or after the implementation of dhuha prayers, students are required to look at the mushola environment. If there is dirt or garbage around, learners are required to clean it together.

Adding to the above statement, Dias Listiana as an Islamic religious education teacher said that in delivering Islamic religious education teaching materials, it is carried out in the surrounding environment. For example, in the delivery of material grateful to God. Learners are invited to explore the beauty of the surrounding nature. Students are taught to enjoy the conditions they experience and have. The availability of oxygen that never runs out to breathe, the regularity of the ecosystem processes of soil, plants. Learners practice and feel directly in being grateful for the blessings that Allah has given.

Pandoe, a 5th grade student said that in the implementation of the teaching-learning process, students are taught to be able to apply teaching materials in everyday life. Therefore, as a practice in the school environment, students are taught to utilize used goods for making furniture at school. Students are taught to make trash cans with unused bottle caps. The results of the trash cans can be enjoyed together in the school environment.

In addition to this, Dzakiatul Amiroh as the coordinator of P5 implementation said that the implementation of P5 in the school environment can also be seen with the Friday Market. Every Friday, students based on class level are required to sell creations that have been made ranging from food to crafts. The goods are exhibited for sale to all elements of the school community to the surrounding environment. This practice trains the courage of students in the process of introducing their products. Not only that, students are also trained in the process of buying and selling goods.

D. Discussion

Based on the results of research using qualitative methods in this study, all data that has been collected, then processed and analyzed in accordance with the methods and provisions that have been stated in the previous chapter, the following will analyze the problems encountered in this study in sequence regarding the application of the integration of Islamic religious education to science and technology in Asyibyan Petarukan integrated Islamic elementary school.

1. **Implementation of Integration of Islamic Religious Education with Science and Technology.**

   First, the use of technology in the learning process of Islamic religious education. (Mansir, 2020) The delivery of Islamic religious education teaching materials is carried out with laptop media and projectors. This can help the teacher in delivering the material. Teachers show material through laptops and projectors accompanied by teacher explanations. In addition, students' interest in learning increases with the existence of this learning media. Learners see and listen to the material carefully during learning. This is in accordance with the narrative of the informant in the previous chapter.

   In the regulation of the minister of education, culture, research and technology of the republic of Indonesia Number 47 of 2023 concerning management standards in early childhood education, basic education, and secondary education, (Kemendikbudristek, 2023) it is explained that technological aids are included in educational facilities and infrastructure. Where explained in Article 17 paragraph 1-3 the implementation of teaching and learning activities is allowed to utilize facilities and infrastructure as well as various learning resources efficiently and effectively according to learning needs. In this case, the use of technology in learning Islamic religious education is highly approved by the government itself.

   The use of technology in learning Islamic religious education does not make imbalances. Instead, the use of it can go hand in hand in the search for knowledge. Efforts in seeking knowledge have been explained in the Qur'an letter al-Alaq verses 1-5:

   > Read by (mentioning) the name of your Lord Who Created, He has created man from a clot of blood. Read, and your Lord is the Most Gracious, Who teaches (man) by the medium of the kalam. He teaches man what he does not know. (Asy-Suyuthi & Al-Mahali, 2001)

   The Quran explicitly commands Muslims to develop knowledge through the process of reading based on a sense of faith in the Giver of Knowledge. This demand to read is not only limited to explicit objects (the Quran), but also to implied objects (the universe). Not only investigating the universe but also examining man himself. As well as utilizing technology according to his day.

   Second, learners are invited to answer some Islamic religious education material with a natural approach. (Adawiah, 2016) Learners are invited to explore the reading of kauniyah verses in the surrounding environment. The reality of reading is not only fixated on seeing, but including it must also contemplate and think (tafakkur) about what is read. Reading as a process of achieving knowledge certainly requires reading material and a place to collect reading material. In this context, the entire cosmos, both micro and macro nature, are all reading spaces, and giant libraries full of knowledge.

   The command to be intidhar towards the universe, both living and non-living things, as in QS. al-Ghasiyah/88:17-20, (Asy-Suyuthi & Al-Mahali, 2001) the assurance that the laws of nature that control the universe do not change, contains a promise that if man follows Allah's command to intidhar, man will discover some of the laws that He has established, and man will master science and will be able to develop technology for the happiness of mankind.

   Third, maximizing the material of the Pancasila Teaching Profile Strengthening Project (P5) based on the integration of Islamic religious education with technology and science. This is adjusted to the decision of the minister of education, culture, research and technology of the republic of Indonesia Number 56/M/2022 concerning Guidelines for Curriculum Implementation in the Framework of Learning Recovery. (Kemendikbudristek, 2022) The decision explains that the loading of the project to strengthen the profile of Pancasila students

(P5) is allocated around 20% of the learning load per year. P5 is carried out flexibly both in content and implementation time. In terms of content, the project must refer to the achievements of the Pancasila learner profile according to the phase of the learners and does not have to be associated with learning outcomes in the subject. In terms of implementation time management, the project is carried out by adding up the allocation of lesson hours for the project to strengthen the profile of Pancasila students from all subjects and must be the same. ('Inayah, 2021)

The application of P5 in Islamic Religious Education learning as described above is a new step in Indonesian education not only for students but for all school members. The immersion of teaching material through projects is felt to be more actual and effective. (Farhan et al., 2021) Learners and school members take part in the implementation. Implementation integrated with science and technology of the current era helps answer the challenges of the times in the world of education. Where morals remain at the forefront but not left behind by science and technology itself. (Khoiri et al., 2017)

2. Pros and Cons of Implementing the Integration of Islamic Religious Education with Science and Technology.

The advantages of this application are that students, teachers, and elements of school residents can balance between Islamic religious education and science and technology. (Indarwati et al., 2021) Both do not experience social imbalance, instead they go hand in hand in answering the challenges of the times in the world of education. Learners and elements of school citizens do not only get moral education or vice versa. Students do not only get science and technology learning. Learners and elements of school citizens get moral education and knowledge of science and technology. They are able to carry out both without any significant separation.

While the shortcomings are the unavailability of Islamic education laboratories and the lack of human resources and learning references. (Rusdiana, 2014) This is due to the young age of the school which still needs adequate supporting materials for the teaching and learning process.

E. Conclusion

The implementation of the integration of Islamic religious education with science and technology is one of the real actions in reuniting religious education and science. Both are connected to each other. There is no need for separation between the two. Because when the two become one unit, it will foster positive things for the implementer itself and the surrounding environment. Good integration will bring up adequate knowledge in answering the challenges of the times. But on the contrary, poor integration will cause confusion in the implementation of the learning process. So that the input from learning is not maximally achieved.

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