World Journal of Islamic Learning and Teaching
Volume.1 No.1 March 2024
e-ISSN :3047-2946 ; p-ISSN :3047-2954, Page: 18-22
DOI: https://doi.org/10.61132/wjilt.v1i1.99
Available online at: https://international.aripafi.or.id/index.php/WJILT

Integrating Islamic Values In Science Education: A Case Study In Indonesian Islamic Schools

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Abstract. *This study explores the integration of Islamic values in the science curriculum in selected Islamic schools in Indonesia. Using a qualitative case study approach, this study investigates teachers' strategies, challenges, and perceptions in integrating Islamic teachings into science lessons. Findings suggest that the integration of Islamic values in science education not only enhances students' spiritual development but also promotes critical thinking skills that are in line with ethical perspectives. The paper concludes by proposing a framework to support educators in achieving a holistic approach in Islamic education.*

Keywords: *Islamic values, Science education, Indonesia, Islamic schools, Educational integration.*

1. INTRODUCTION

Education in Indonesia, especially in Islamic schools, has unique challenges and opportunities in integrating Islamic values into the science curriculum. In this context, it is important to understand how spiritual and ethical values can be integrated with science to shape the character of students who are not only academically intelligent but also have strong morals. According to data from the Indonesian Ministry of Education and Culture, there are more than 25,000 Islamic schools throughout Indonesia, indicating great potential for implementing this integration (Ministry of Education and Culture, 2020).

The integration of Islamic values in science education can be seen as an effort to create a generation that is able to think critically and responsibly. For example, in a study conducted by Rahman (2021), it was found that students who received science education with an Islamic values-based approach showed a better understanding of environmental issues and ethics in science. This shows that science education is not only about technical knowledge, but also about forming strong character and moral values.

The importance of this integration is also supported by research showing that students who learn with an approach that combines religious values tend to be more motivated and have a positive attitude towards learning (Sari, 2022). In this context, this study aims to explore how teachers in Islamic schools in Indonesia implement teaching strategies that integrate Islamic values in science lessons.

Through a qualitative approach, this study will collect data from teacher interviews and classroom observations to understand how they overcome challenges and utilize opportunities in this integration. Thus, this study is expected to contribute to the development of a more holistic and relevant curriculum in Islamic education in Indonesia.

2. METHODOLOGY

This study uses a qualitative case study approach to explore the integration of Islamic values in science education in Islamic schools in Indonesia. The selection of research locations was carried out in several schools that have a good reputation in implementing Islamic values in their curriculum. Data collection methods involve in-depth interviews with science teachers, classroom observations, and analysis of curriculum documents.

Interviews were conducted with 10 science teachers from five different Islamic schools. Interview questions were designed to explore the strategies they use in integrating Islamic values, the challenges they face, and their perceptions of the benefits of this integration for students. Classroom observations were conducted to see firsthand how the learning process takes place and how Islamic values are applied in the context of science learning.

The data obtained from interviews and observations were then analyzed using a thematic analysis approach. This process involves identifying key themes that emerge from the data, which are then grouped to provide a deeper understanding of the practice of integrating Islamic values in science education.

The results of this study are expected to provide valuable insights for educators, policy makers, and other researchers interested in the field of Islamic education and science. By understanding the best practices and challenges faced, it is hoped that more effective strategies can be developed to integrate Islamic values into the science curriculum in the future.

3. FINDINGS

The results of the study showed that many teachers in Islamic schools tried to integrate Islamic values into science lessons in various ways . One common strategy used is to link science concepts with Islamic teachings. For example, in biology lessons, teachers often link learning about ecosystems with teachings about protecting the environment and human responsibility as caliphs on earth (Hasan, 2022).

In addition, teachers also use interactive and project-based learning methods to encourage students to think critically. In one case, students were invited to conduct a research project on the impact of pollution on the local environment, which not only taught scientific concepts but also developed students' ethical and spiritual awareness of the environment (Yusuf, 2023).

However, this study also identified several challenges faced by teachers in integrating Islamic values in science education. One of the main challenges is the lack of supporting

resources and teaching materials. Many teachers find it difficult to find textbooks or teaching materials that effectively combine science with Islamic values (Zainal, 2021).

Another challenge is the lack of training for teachers in implementing this approach. Some teachers expressed that they did not have sufficient skills to teach science with an Islamic values-based approach, which could hinder the learning process (Nugroho, 2022).

Nevertheless, the findings show that when Islamic values are successfully integrated, students not only gain better science knowledge, but also develop more positive attitudes towards learning and life in general. This shows the great potential of integrating Islamic values in science education to shape a better generation.

4. DISCUSSION

The integration of Islamic values in science education has significant implications for the development of students' character. In the context of Islamic education, the main goal is not only to produce academically intelligent individuals but also to form individuals who have strong morals and ethics. This study shows that when students learn science with an approach that integrates Islamic values, they not only understand scientific concepts but also realize their responsibilities towards the environment and society (Hidayah, 2023).

The importance of this integration is also reflected in the development of critical thinking skills. Students who engage in science learning that links Islamic values tend to be better able to analyze and evaluate information critically. For example, in a study conducted by Prasetyo (2022), students who participated in a science education program based on Islamic values showed significant improvements in their critical thinking skills compared to students who participated in a conventional program.

However, to achieve effective integration, greater support from schools and the government is needed. This includes better curriculum development, adequate resource provision, and training for teachers to improve their skills in teaching science with an Islamic values-based approach.

From the results of this study, it can be concluded that the integration of Islamic values in science education is not only an option, but a necessity to create a generation that is not only intelligent but also has good character. Therefore, it is important for all parties to work together in developing and implementing effective strategies to achieve this goal.

5. CONCLUSION

This study emphasizes the importance of integrating Islamic values into science education in Islamic schools in Indonesia. The findings suggest that by linking scientific concepts to Islamic teachings, teachers can help students not only understand science but also develop ethical and spiritual attitudes that are important in everyday life.

Although there are challenges in implementing this integration, such as lack of resources and training for teachers, the potential benefits are enormous. Therefore, a joint effort is needed from various parties to overcome these challenges and create a learning environment that supports the integration of Islamic values in science education.

As a next step, this study recommends the development of a framework that can be used by educators to support the integration of Islamic values in the science curriculum. This framework is expected to provide clear and practical guidance for teachers in designing and implementing holistic and relevant learning.

Thus, this study not only provides insight into the practice of integrating Islamic values in science education, but also contributes to the development of better Islamic education in Indonesia. This effort is expected to produce a generation that is not only knowledgeable but also has a strong character, ready to face future challenges.

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