

The Integration Model of Islamic Education and Science to Improve Students' Competence at MTsN 1 Kota Palu

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ARTICLE INFO	ABSTRACT
Volume: 4 ISSN: 2963-5489 KEYWORD Islamic education, science integration, student competence, MTsN 1 Kota Palu, holistic learning	This study aims to describe the integration model of Islamic education and science in improving students' competence at MTsN 1 Kota Palu. Using a qualitative descriptive approach, data were collected through observation, interviews, and documentation to understand how Islamic and scientific values are interconnected in classroom practices. The findings reveal that teachers integrate scientific concepts with relevant Qur'anic verses and Hadiths, creating a holistic learning environment that unites rational and spiritual dimensions of knowledge. This integration significantly enhances students' cognitive, affective, and psychomotor competencies, while also fostering religious character, critical thinking skills, and spiritual awareness. The collaboration between Islamic education and science teachers, supported by school policy and curriculum design, contributes to the success of this model. The study concludes that the integration of Islamic education and science serves as a strategic innovation in developing a holistic Islamic educational framework that aligns with 21st-century learning challenges, preparing students to become intellectually competent, ethically grounded, and spiritually aware individuals.

1. Introduction

Islamic education does not only focus on the mastery of religious knowledge but also encourages the development of general knowledge and life skills. In the modern context, Islamic education is expected to integrate religious sciences with scientific knowledge to produce students who are faithful, knowledgeable, and of noble character. As noted by Triyono and Izzah, the integration of Islam and science must be grounded in a theocentric paradigm to avoid the dichotomy of knowledge. MTsN 1 Kota Palu is one of the madrasahs implementing this concept through integrated learning activities that combine Islamic values with scientific understanding.

2. Literature Review

The integration of Islamic education and science has become a significant discourse in the effort to develop holistic learning models that foster both intellectual and spiritual competence among students. Previous studies, such as those by Al-Attas and Nasr, emphasize that true education in Islam must unite rational knowledge ('ilm) with moral and spiritual values derived from the Qur'an and Hadith to produce well-balanced individuals. In the context of MTsN 1 Kota Palu, this integration model is realized through the connection of scientific concepts with Islamic values, allowing students to perceive science as part of divine

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knowledge rather than a secular discipline. Such an approach aligns with the paradigm of integrated Islamic education proposed by Syed Naquib al-Attas and Ziauddin Sardar, which encourages the harmonization of revelation and reason. Empirical findings show that this model enhances students' competencies across cognitive, affective, and psychomotor domains, while also nurturing religious character, critical thinking skills, and spiritual awareness. Consequently, integrating Islamic education and science not only supports character-based education but also equips students with holistic competencies required to navigate the complexities of 21st-century life.

3. Methodology

This study employed a qualitative descriptive methodology to explore the integration model of Islamic education and science in improving students' competence at MTsN 1 Kota Palu. The qualitative approach was chosen because it allows for an in-depth understanding of the natural context in which the integration process occurs. Data were collected through observations, interviews, and documentation. Observations were conducted to examine how teachers integrate scientific and Islamic values in classroom learning activities. Interviews were carried out with the principal, Islamic education teachers, science teachers, and students to gain diverse perspectives on the implementation and impact of the integration model. Documentation techniques were used to collect relevant materials such as lesson plans, teaching media, school programs, and institutional documents that support the integration of Islamic and scientific content. The collected data were analyzed using Miles and Huberman's interactive model, which involves three stages: data reduction, data display, and conclusion drawing/verification. To ensure data validity, the study applied triangulation of sources and methods, confirming the consistency of findings from multiple data sources. This methodological approach enabled the researcher to comprehensively describe how the integration model operates in practice and how it contributes to enhancing students' cognitive, affective, and psychomotor competencies.

3.1 Qualitative Descriptive Approach

This study employed a qualitative descriptive approach to explore the integration model of Islamic education and science in improving students' competence at MTsN 1 Kota Palu. The research was conducted in the natural setting of the school, involving the principal, Islamic education teachers, science teachers, and students, who were selected through purposive sampling based on their involvement in integrative learning activities. Data were collected through observations, semi-structured interviews, and documentation of lesson plans, teaching materials, and school programs. Observations focused on classroom practices and the implementation of scientific concepts linked to Islamic values, while interviews explored participants' perceptions of the integration model and its impact on student development. Documentation served to complement and validate field data. The collected data were analyzed using Miles and Huberman's interactive model, which includes data reduction, data display, and conclusion drawing or verification. To ensure data validity and credibility, triangulation of sources and methods was applied, comparing information from different participants and instruments. This methodological approach enabled a comprehensive and reliable description of how the integration of Islamic education and science enhances students' cognitive, affective, and psychomotor competencies.

3.2 The Accuracy and Depth of Findings

The research process was carried out systematically to ensure the accuracy and depth of findings. During the observation phase, the researcher attended several teaching sessions in Islamic education and science subjects to examine how teachers connected scientific principles with relevant Qur'anic verses and Hadiths. The interviews provided qualitative insights into teachers' pedagogical creativity, students' responses to integrative learning, and the school's policy support in promoting a holistic curriculum. Documentation analysis strengthened the understanding of how lesson plans (RPP), syllabi, and instructional materials were designed to reflect the integration of Islamic and scientific knowledge. The analysis process was iterative and interpretive, allowing the researcher to identify emerging patterns and themes related to students' competence development. Throughout the study, ethical considerations were prioritized by obtaining informed consent from participants, maintaining confidentiality, and ensuring that the research procedures adhered to academic integrity standards. This rigorous methodological framework ensured that the results genuinely represented the real practices and experiences of teachers and students at MTsN 1 Kota Palu, thus providing a credible and comprehensive understanding of the integration model's implementation and its contribution to improving students' cognitive, affective, and psychomotor competencies within the framework of Islamic education.

4. Results and Discussion

The results of this study reveal that the integration model of Islamic education and science at MTsN 1 Kota Palu is implemented through a systematic approach that connects scientific concepts with Islamic values, resulting in a holistic learning experience for students. Teachers intentionally relate scientific topics such as environmental balance, the human body, or natural phenomena to relevant Qur'anic verses and Hadiths, fostering students' understanding that science and religion are not contradictory but complementary sources of knowledge. For instance, lessons on the water cycle are integrated with Qur'anic teachings about the creation of rain as a sign of God's mercy, while biology lessons on human anatomy are connected to verses that emphasize human creation as evidence of divine wisdom. This pedagogical integration has been observed to enhance students' cognitive abilities by deepening conceptual understanding and encouraging analytical thinking, as students are guided to explore scientific phenomena through both empirical and spiritual lenses.

Interviews with teachers and students indicate that this model also strengthens affective and psychomotor competencies. Teachers reported that students became more motivated, disciplined, and reflective in their learning, demonstrating improved respect toward both science and religious teachings. The integration also nurtures students' religious character, promoting values such as responsibility, gratitude, and environmental awareness, which are reflected in their daily behavior at school. Moreover, this approach encourages critical thinking and problem-solving skills, as students are trained to analyze real-life issues such as climate change or health from scientific and ethical perspectives rooted in Islamic teachings. The findings are consistent with the views of Nasr and Al-Attas, who argue that integrating revelation and reason contributes to balanced human development, uniting intellectual competence with spiritual awareness.

In practice, the success of this integration is supported by school policies that promote interdisciplinary collaboration between Islamic education and science teachers. The administration encourages regular curriculum alignment meetings where teachers design lesson plans that harmonize scientific material with religious content. Documentation analysis confirmed that lesson plans (RPP) and instructional media were designed to include both Qur'anic references and scientific explanations, creating coherence in learning outcomes. This aligns with the concept of *ta'dib* (ethical education) in Islamic thought, emphasizing that true knowledge should lead to moral refinement and closer awareness of God. As a result, the integration model at MTsN 1 Kota Palu not only enhances academic performance but also fosters spiritual intelligence and moral reasoning, preparing students to face 21st-century challenges with ethical sensitivity and scientific literacy.

The discussion indicates that the integration of Islamic education and science serves as an effective strategy to develop holistic learners who are intellectually competent, emotionally balanced, and spiritually grounded. It bridges the gap between religious and secular knowledge, enabling students to view science as part of divine revelation rather than an independent discipline. Thus, this integration model can be regarded as a sustainable and strategic innovation in Islamic education, offering a framework that supports both national education goals and the vision of cultivating students with faith (*iman*), knowledge (*ilmu*), and good character (*akhlak karimah*).

5. Conclusion

The findings of this study conclude that the integration model of Islamic education and science at MTsN 1 Kota Palu has been effectively implemented through a learning approach that connects scientific concepts with Islamic values derived from the Qur'an and Hadith. This integration promotes a holistic understanding of knowledge, allowing students to perceive science as part of divine revelation rather than a purely empirical discipline. The model significantly contributes to the enhancement of students' competencies across cognitive, affective, and psychomotor domains, as it not only strengthens intellectual capacity but also cultivates spiritual awareness, moral character, and reflective thinking. Teachers play a pivotal role as facilitators who creatively relate scientific materials to Islamic teachings, fostering critical, analytical, and ethical reasoning among students. Furthermore, institutional support through curriculum alignment, teacher collaboration, and contextualized lesson planning reinforces the success of this integration practice. Overall, the integration of Islamic education and science serves as a strategic and sustainable model for realizing the goals of holistic Islamic education producing students who are knowledgeable, faithful, and morally upright, and who possess the intellectual and spiritual resilience needed to meet the challenges of the 21st century.

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