Science Integration Model Project in Islamic Studies Learning (Research at Islamic Junior High School Bani Hasyim Singosari Malang)

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Received: June 11, 2023 | Accepted: Dec 16, 2023

Abstract
At Bani Hasyim Singosari Islamic Junior High School, integration is emphasized as an essential quality for practicing learning. The aim of integrated learning is for students to have a holistic understanding and always instill faith in God, the Creator, in everyday life. The author intends to conduct in-depth, systematic and objective research on the topic of how Islamic Religious Education in this school integrates science and religion in education. This research is qualitative in nature and uses a case study approach, descriptive methods, observation, interviews, documentation and triangulation for data collection. Qualitative field research is the term for this type of research. The data analysis method uses data reduction, data presentation, and drawing conclusions. Research findings show: (1) In this school, learning Islamic subjects combines the idea of science integration by applying Islamic principles to science. Making the Qur'an the main basis or source of knowledge; b) Cultivate problems in Islamic Studies material and stay away from information barriers; c) Developing the Character of Ulil Albab; d) Following the verses of the Koran that discuss science; e) Creating school curricula in educational institutions. (2) Scientific integration in this school uses an integration pattern in learning, where a teacher takes one of the major themes of Islamic Religious Education and its uniqueness, then integrates or strengthens it with scientific knowledge.
Abstrak

Keywords
Science, Islamic religious education, and integration of knowledge

Introduction
One of the subjects chosen for development is science; employing a scientific learning paradigm can also build student character. Science is a subject that explores life and the various characteristics of living things. Researchers at Bani Hasim Singosari Middle School were interested in the pupils' enthusiasm for studying based on observations. Because teachers may design very fascinating learning models both within and outside the classroom, students are tremendously invested in the learning process (Julaeha, 2019). One of them makes advantage of an already established integration project at SMPI Bani Hasyim Singosari.
The integrated learning paradigm can help pupils enhance their capacity to correlate multiple things (Faujiah et al., 2018). The Unity of Knowledge Integrative Learning Model was used to develop students at SMPI Bani Hasyim Singosari Malang. In terms of science disciplines, SMPI Bani Hasyim Singosari differs slightly from other schools. Science is recognised by SMPI Bani Hasyim Singosari as a subject that can be integrated or related with other subjects. These subjects may be connected to the ones described here, such as PPKN, Mathematics, Social Sciences, Languages, or Islamic Studies.

The learning model in this study emphasises students' active participation and involves students' mental processes in assimilation of concepts through observation, digestion, understanding, classification, speculation, analysis, and reasoning, resulting in the development of this integrated learning model (Hakim & Herlina, 2018). The learning model was developed in order to complete the discovery model (Arumawan & Yasri, 2021). As a result, it can be utilised to enhance cognitive-based academic concepts that incorporate Islamic ideals in the intention of assisting students in developing personal religious views (Husni, 2020).

According to preliminary findings, Islamic values and material conceptions are not covered in secondary scientific education in Singosari Regency. Aside from that, combining the scientific notions we acquire with other knowledge concepts remains tough. The SMPI science teacher is a change agent; his role is to assist kids in learning at school. Teachers' educational backgrounds are mostly from public institutions that must explore how scientific principles might be integrated with Islamic concepts.

The Ministry of Religion-affiliated educational setting should be able to provide pupils with more space to create better and more flexible integrated science conceptions (Sodik et al., 2019; Thoyyibah & Setiawan, 2018). Science teachers at SMPI Bani Hasyim Singosari and neighbouring areas are well-versed in the concept of knowledge unification, which underpins the concept of character development and the integration of Islamic principles.

Based on the foregoing, the researcher has developed the following problem formulation: 1) How is the science integration project in Islamic studies learning planned? 2) How is the Student Islamic Studies Project progressing? 3) How did the Islamic Studies Science Integration Project fare? The researcher implemented the research objective, which was to implement a science integration project while studying Islamic studies, based on the problem formulation. In addition to seeing the results of the science integration project in Islamic studies and learning from students.
This study is intended to yield practical and theoretical benefits. The explanation is as follows. Theoretically, the benefit of this research is increased understanding. As a source of ideas and input when learning for teachers.

In fact, this study is input for PAI teachers to further develop their abilities. Contribution to schools to improve the Islamic Studies learning process in order to improve the quality of education. As a reference for other researchers who want to study the same topic. In the end, it will become material for further academic research so that it can be used as a reference for learning and implementation to improve academic abilities. Useful for researchers and can complement the author's knowledge and insight in research and teaching, especially regarding teaching strategies and methods in Islamic religious education subjects. Become a source of accurate and up-to-date information for all class IX students of SMPI Bani Hasyim Singosari Malang.

Methods

The methodology employed in this study is qualitative project-based research. Qualitative research refers to the process of examining, exploring, and comprehending the significance of persons or groups who are associated with social issues. It has the capacity to analyse, explore, or acquire a more profound comprehension of specific facets of human beliefs, attitudes, or behaviour. The primary goal of this research is to examine the perceptions, experiences, and cognitive frameworks of students in relation to their knowledge of life. Conversely, data analysis progresses logically from a particular problem to a more general problem. Researchers should prioritise considering this aspect and possess the ability to interpret it, given the intricate nature of the problem.

This study employs an experimental approach, utilising interviews and observations as research methods. Experimental research is a type of research that seeks to forecast and elucidate the occurrences or future occurrences between specific variables by the manipulation or control of these variables or their interrelationship. Its objective is to uncover a connection, impact, or disparity within one of these variables, or an increased number of variables. The interviewer and the interviewee engage in a face-to-face interaction to gather information for research objectives, ensuring the effectiveness of the interview. The process consists of multiple stages, namely: self-introduction, clarification of the visit's objective, presentation of interview material, and inquiry into desired information. In addition to interviews, observation is a widely used data gathering approach in qualitative research. It involves witnessing and analysing the condition and actions of the subject under study.
The data gathered in this study encompasses information regarding the planning, execution, and outcomes of the Science integration project in Islamic Studies education for students at SMPI Bani Hasyim Singosari. The data was acquired by firsthand observation of the research objectives utilising multiple instruments throughout the study. The attributes of this research data are empirical, congruent with field observations, and presented in explanatory format. The participants in this study were individuals who resided in the school and were actively involved in the research. Specifically, they included students in the ninth grade, as well as teachers of religion and science. Informants will undergo interviews employing a diverse range of questions, without any restrictions on the number of queries. Informants must possess a comprehensive understanding of the research being undertaken, encompassing the strategy, execution, and anticipated outcomes. Data sources were acquired through practical experience in the field and input from multiple informants. The accuracy of the acquired information must also be verified and the integrity of the data preserved.

The data obtained from this research employs various methodologies, specifically: 1) Observation or several observations. Observation, as per several experts, is a technique employed to get precise and reliable facts. Since this activity involves the researcher directly observing and collecting data firsthand. Observation activities involve the direct observation and recording of significant elements in each research-related activity, conducted on-site. The generated data is presented in the form of written descriptions and photo or video documentation to provide additional support. 2) Job interview. An interview is a dialogue between two individuals, in which they are solicited for their thoughts or verification of information pertaining to the study discussion that will be observed by the researcher. Interviews are conducted by multiple individuals with the objective of gathering information or data to substantiate findings in the respective domain. A comprehensive and detailed conversation about the integration projects implemented at SMPI Bani Hasyim Singosari. The data collected from interviews will be presented in a descriptive manner. The researchers will meticulously transcribe the interview, including detailed descriptions of the video and voice recordings capturing the entirety of the scenario. Informant interviews were conducted at each stage of the research process, including planning, implementation, and obtaining data. 3) Experimenting is a process that involves both observation and experimenting. This process is vital in research as it enables researchers to comprehend the original conditions and establish the cause and effect relationship between two variables. The experiment was conducted during the period of research execution (Thursday, September 1, 2022). The experiment involved the practical application of slaughtering chickens and bunnies in accordance with Islamic law, followed by the analysis of the
names and functions of the animals' internal organs. Acquiring research data by means of descriptive narratives, films, and images during the process of conducting research.

**Results and Discussion**

The learning process necessitates high quality, with several advancements in educational models proposed by various educational professionals. One such model is the Integration of Science and Islamic Religious Education in the Islamic studies learning process. Acquiring knowledge or skills through study, practice, or experience. The integration of science and Islamic religious education enables the transformation of cognitive knowledge into internalised meaning and values inside students. Science and Islamic Religious Education share a common metaphysical foundation from an Islamic standpoint (Aminuddin, 2010). The objective is to ascertain the implementation plan for integrating science into the Islamic studies curriculum for ninth-grade students at SMPI Bani Hasyim Singosari Malang.

The integration of Islamic studies with science aims to imbue the learning process with significant and comprehensible principles (Nurulloh, 2019). The objective of Islamic religious education is to guide students in acquiring knowledge, comprehension, appreciation, faith, devotion, and virtuous conduct, enabling them to effectively apply the principles of the Islamic faith (Hendayani, 2019). The teachers at SMPI Bani Hasyim implemented the integration of science into the teaching of Islamic studies. This was achieved by applying the concept of Science Integration, which aims to combine the subjects of Islamic studies and science. As an example, the students were given the opportunity to observe and participate in the process of slaughtering chickens and rabbits at SMPI Bani Hasyim.

The learning process at SMPI Bani Hasyim involves the execution of pre-determined plans. The execution of this learning process is typically similar to other forms of learning, with the exception being the variations in the stages of activity that demonstrate integration.

When conducting integration activities, the initial step is to establish an environment conducive to learning for students who are prepared to engage in the learning process (Beane, 1997). The implementation of this learning activity involves three steps. Firstly, provide a basic explanation of the learning material to be used. Secondly, outline the objectives that need to be reached and describe the corresponding activities. Lastly, inform the participants about the specific topics that will be covered during the learning process (Curren, 2018).

At SMPI Bani Hasyim, the learning process involves several stages. Firstly, students are presented with stimuli related to the theme to encourage their active participation. Secondly, the material is delivered in a
sequence that aligns with the students' cognitive processes. Thirdly, clarification is provided to help students generate ideas during the learning process, and their responses are encouraged. Lastly, there is an emphasis on integration, aiming to unify students' understanding of material concepts through integration. During the concluding phase of integrated learning activities at SMPI Bani Hasyim, students dedicate their attention to acquiring, retaining, and utilising the concepts they have acquired. Integrative learning facilitates a comprehensive and practical approach to student learning. It goes beyond just comprehension and memorization, allowing students to apply their information in real-life situations.

*Science Integration Project Planning in Islamic Studies Learning for Class IX Students at SMPI Bani Hasyim Singosari Malang*

Based on the aforementioned research findings, the researcher will elucidate the planning undertaken by students and teachers during the Integration project planning activities, utilising methods such as observation, experimentation, and interviews. Planning, as defined by Sondang P. Siagian, is a comprehensive cognitive process that involves thoughtful deliberation and meticulous decision-making on future actions in order to accomplish pre-established objectives. The researcher examined the project planning process from the viewpoint of both students and teachers (Abdullah, 2020).

The paramount factor in cultivating well-rounded and exemplary Indonesian individuals is in the cultivation of unwavering faith and devout piety. According to Sauri (2006), spiritual values are given priority over other components in terms of development. From the student's standpoint, the planning of this integration project involves identifying the requirements, such as the need for literacy before engaging in the learning process, seeking inspiration for the final assignment, and maintaining constant communication with the class instructor. Effective coordination between teachers and students is crucial for ensuring that students have the necessary tools and materials for their educational needs (Ifendi, 2021). This includes determining what is required, distributing the goods, and emphasising the importance of literacy in providing students with foundational knowledge for the integration project. Regular coordination is necessary to minimise errors that could hinder the implementation process (Syukri et al., 2019).

From the teacher's perspective, this integration effort undoubtedly stems from a longstanding concept and necessitates meticulous planning. This research highlights the importance of educators in integration projects to establish initial cooperation with other subject instructors involved in the integration process. The project under examination necessitates coordination among instructors of Islamic Studies, science, PKN (Civic Education), crafts, Indonesian language,
and Arabic language (Arumawan & Yasri, 2021). By fostering meticulous collaboration among teachers, the planning process will become more structured, encompassing decisions regarding the educational resources to be provided to students and the potential integration of these resources with other disciplines. Subsequently, the teacher will ascertain the requirements of the students, elucidating what materials they should bring and outlining a methodical approach for their distribution. If students encounter challenges in identifying these requirements, a remedy is pursued with the objective of streamlining tasks to eliminate any hindrances. Subsequently, the teacher provides a concise overview of the activity to ensure the seamless execution of all specified tasks, resulting in assignments or work that can be organised systematically according to the predetermined stages.

Implementation of the Science Integration Project in Islamic Studies Learning for Class IX Students at SMPI Bani Hasyim Singosari Malang

The integration hypothesis of the science and religion interaction encompasses four typologies: conflict, independence, dialogue, and integration, as proposed by Ian G. Barbour in 1997. In this theory, He G. Barbour elucidated his approach to investigating issues pertaining to the amalgamation of science and Islam in PAI education at Andalusia Islamic High School. Ian G. Barbour categorised his research into two perspectives: dialogue and integration. It is particularly inclined towards theological unification. Barbour suggests that integration can be pursued by either commencing with the scientific perspective (Natural Theology) or the religious perspective (Theology of Nature).

According to the findings of study conducted through careful observation and well-designed tests by field researchers, the implementation process will be seamless and error-free. This integration study was conducted with multiple participants and focused on certain research subjects, specifically three classrooms of ninth-grade pupils. To facilitate implementation, the teacher partitions them into multiple groups.

The implementation spanned a duration of 24 hours. Initially, the students engaged in Arabic language acquisition under the guidance of Mr. Alawi. Subsequently, the students were tasked with identifying and translating various animal organs into Arabic. Furthermore, Mr. Firman, the instructor of Islamic Studies, presented information pertaining to the ritualistic killing of animals in accordance with Islamic principles and legislation. Slaughter refers to the act of terminating an animal’s life by severing the respiratory tract, feeding tubes, and the primary artery located in the animal’s neck (Yudi Yansyah, 2021). The supply of this information aims to guarantee that the consumption of killed animals adheres to halal standards and will be accompanied by a demonstration of animal slaughter. The objective of this demonstration is for the teacher to provide students with an illustration of how to do an animal slaughter in
compliance with Islamic regulations, followed by allowing the students to practise the act of slaughtering the animal themselves. By actively engaging in the task rather than passively observing and envisioning, students' comprehension will be more enduring. Subsequently, once the pupils have culled the animal, they are collectively offered the chance to present the murdered specimen, which will then be dissected by the science instructor. The participants will be queried regarding the organs and their respective functions, as well as the detrimental effects on human health when these organs are consumed. Following the discussion of organs, students are entrusted with the complete task of preparing meat. They are provided with only fundamental seasonings, and the cooking procedure is subsequently executed by the group. In this scenario, students are expected to demonstrate a disposition of accountability, collaboration, and assistance both within and across groups during the final session. In addition, children will utilise animal byproducts, including feathers from chickens and rabbits that are not used for consumption. They will be guided by a craft teacher to create crafts based on their own creative ideas.

Results of the Science Integration Project in Islamic Studies Learning for Class IX Students at SMPI Bani Hasyim Singosari Malang

In the design of Science and Religion, the definition of integration in general is an effort to combine science and religion. J. Sudarminta, SJ., once asked a question about what is meant by proper and accurate integration. But on other occasions, he also criticized that integration is something common and natural (a term usually used to refer to the preference for superficial matching of scientific findings with verses of the holy book), (Baqir et. al, 2005: 9 and Sudarminta, 2003).

The results of the science integration project in the learning of Islamic studies for class IX students at SMPI Bani Hasyim Singosari Malang, namely, after the planning and implementation process carried out by class IX students at SMPI Bani Hasyim, students will be given a portfolio sheet per group which includes any reports that students have done this in the integration project, so in the final results of this integration project, students have results in the form of assignments and work.

Conclusion

After analysing the description and discussion of the research on the science and Islamic studies integration project for class IX students at SMPI Bani Hasyim Singosari, it can be inferred that the project was executed successfully. The integration model employed was informational integration, wherein the Islamic Studies curriculum was enhanced and reinforced with Natural Science content. Integration initiatives are implemented across multiple topics, including Islamic studies, science, Arabic, Indonesian, PKN (Civic Education), and crafts.
A project was launched at SMPI Bani Hasyim Singosari to incorporate religious themes with general subjects for class IX pupils, with a focus on Islamic study material. Simultaneously, the incorporation of religious topics with general topics affirms the strong interconnectedness of all subjects, highlighting their inseparability. Additionally, the implementation of the integration project technique in extracurricular teaching and learning necessitates the expertise of educators who possess the capacity to generate inventive and original methods of instruction. The integration of science and Islamic studies at SMPI Bani Hasyim Singosari has positively influenced attitudes of justice, tolerance, and unity among individuals and groups. This integration promotes freedom of creative thinking and encourages increased productivity. As a result, all aspects of the SMPI Bani Hasyim Singosari institution actively engage in exploration, collaboration, communication, and teamwork. Overall, the integration of science and Islamic studies at SMPI Bani Hasyim Singosari has significantly contributed to the instillation of Islamic values. The primary objective of the science and Islamic studies integration project at SMPI Bani Hasyim Singosari for class IX students is to cultivate family values and foster character development. The integrated project-based learning approach at SMPI Bani Hasyim Singosari emphasises the incorporation of values through the teaching of science and Islamic studies by subject teachers. This is achieved through the utilisation of diverse learning methods such as observation, experiments, and interviews. This is intended for the cultivation of Islamic moral and ethical qualities in individuals.

Confession

We as authors would like to thank our academic colleagues, lecturers and faculty leaders who were willing to provide facilities for writing this article.

Conflict of Interest

We do not have any conflict of interest that would cause us to be dishonest, either in research, writing articles, or in the process of submitting manuscripts. We declare that this article has never been submitted to any journal.

Ethical Considerations

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