REINTEGRATION OF SCIENCE AND ISLAM IN ISLAMIC EDUCATION LEARNING IN URBAN MUSLIM COMMUNITIES

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Abstract

Science and Islam were originally one in the realm of the unity of existence (al-wahidat al-wujud) Allah SWT. Still, when humans accepted them, they became multifragmented because of the capacity of each human mind. Islamic education, which originates from the Qur'an and Hadiths contributes to integrating Science and Islam. For this reason, this article aimed to explore the implementation of the reintegration of Science and Islam in postgraduate Islamic education learning at one of the Islamic tertiary institutions in Jambi province, Indonesia. This study used a qualitative approach to explore and understand the participants' experiences. The data were derived from the results of semi-structured interviews and free interviews, which explain and convey explicit or implied meanings or symbols from the collected data related to the steps for implementing three categories, namely the conception of knowledge, approaches to implementing the reintegration of Science and Islam in Islamic education learning, and materials used. The data were processed and analyzed using domain analysis to obtain an overview of the implementation of Science and Islamic reintegration in Islamic education. The study results explain that the strategic steps for implementing the reintegration of Science and Islam in Islamic education learning have three main aspects: The conception of science in the reintegration of Science and Islam in learning must be carried out to have one perception and one vision. That is, all knowledge comes from one source, namely Allah SWT. An approach to faith is based on a solid monotheism by combining and explaining signs found in nature (Kauniyah verses) with signs learned in the Qur'an and Hadith (Kauliyah verses). The Material comes from Science and Islam, the Qur'an, and Hadiths. Science as a social science is developed and linked to Islamic Science, the Qur'an, and Hadiths which form the basis of its development.

Keywords: Islam; Islamic Education; Reintegration; Science.

A. Introduction

Science and Islam are realized and believed to originate from one source, Allah SWT. Islam does not divide knowledge into religion and science separately because both come from Allah SWT only. Religious knowledge about Islam comes from God through revelation from the Prophet Muhammad. In general, also comes from God, which humans obtain through the work of reason and his natural creation (Nugroho, 2017). But when humans accept it, there is a difference in acceptance so that the knowledge becomes separate. When viewed from a different perspective, the truth of knowledge can be suitable for us and wrong for others because of the limitations and differences in the methods and measuring instruments used. However, it can yield similar results when viewed from the same perspective. Today, Science and Islam are increasingly divorced, and each has its form. Science is Science, and Islam is Islam. There are differences in each entity. The general public says that Science and Islam are two different entities that cannot even be put together. Both have scientific disciplines that are separate from each other in terms of formal Material objects, research methods, truth criteria, and user roles (Arifuddin, 2016). It is up to the organizers. In other words, Islam doesn't care about science, and Science doesn't care about Islam. Therefore, the assumption that there is a divorce (separation) between Science and Islam needs to be interpreted in an intergalactic-holistic way, not with a fragmentation formula. There is an assumption that this separation is infiltration exhaled by "secular" ideas (Jamaludin, 2012). The reason for the dichotomy between Science and Islam is more due to differences in source beliefs between religion and Science, where religious or Islam comes from God, while Science comes from human thought (Wulan et al., 2021; Das et al., 2016).

The history of the relationship between science and religion in the West records that church leaders rejected Galileo's Heliocentric Theory or Darwin's theory of Evolution. Church leaders make statements that are beyond their competence. On the other hand, Isaac Newton and other figures in the secular sciences put God only as a temporary cover to fill the gaps that were not solved and answered by their scientific theory until the time came for more complete data or a new idea that could answer the difficulties. -this trouble. Once the problem is resolved, God's intervention is automatically no longer needed. In the end, God is just like a watchmaker in the minds of "secular" scientists. That's how the universe was created; he no longer cares about the universe He created, and the universe runs on its own mechanically without any divine purpose (Abdullah, 2014; Nurcholis, 2021). Whereas in the Eastern (Islamic) world, Islamic religious knowledge is taught in a normative-textual and contextual way, inseparable from developments in science and technology, economics, politics, law, psychology, anthropology, sociology, and humanities in general. This distinction becomes clearer by showing each entity, such as an inverted geometric facet, and the result is uncomfortable for human life and well-being (Sururin et al., 2020). This bipolar-dichotomous thinking paradigm isolates humans from their ethical, moral, mental, and spiritual values. The true nature of oneself will be deprived of and separated from the family and surrounding community, alienated from the natural environment and biodiversity that sustain life, and alienated from the pulse of the surrounding socio-cultural environment. In short, there is a process of massive dehumanization, both at the level of scientific and religious life. Azra stated that Science had been separated from spiritual and ethical values. This situation is dangerous even for humans and the universe (Firmansyah et al., 2020; T. Hidayat et al., 2020). Science is a natural science that studies the phenomena of the universe and all its contents, including natural (Hidayatullah, 2019). Science is a fundamental science, also called pure Science, such as biology, chemistry, physics, and astronomy, in all its branches. The derivative of essential Science is applied science or applied science. Therefore, "knowledge" means the amount of information humans obtain using observation, experience, and thought (Oktar, 2021). The word Science in Indonesian is knowledge about a field systematically arranged according to specific methods that can be used to explain certain phenomena (Abdullah, 2014). In Arabic, that is '*ilm*,' a fictional word from the word *alima*. Raharjo notes the opinion of the orientalist Franz Rosenthal that the Arabic root '*a-l-m* has nothing in common with other Semitic words, even though Arabic belongs to the Semitic language family. The Semitic root '*a-l-m*' means 'sign' (verse). This suggests a connection between 'know' and 'sign' (verse) in Arabic. 'Knowledge of the sign' (verse) or 'knowing' the verse'. In the context of knowledge is a natural phenomenon with all its contents.

Based on the above understanding, science can be interpreted as science; namely, the collection of human knowledge about nature rationally concluded from the results of critical analysis of measurement data obtained through observation, thought, and reflection on phenomena. The character can be tested for truth so that it can be said that Science is an intellectual insight into natural phenomena or phenomena that are produced through the struggle of thought, appreciation, and analysis of humans, which are formed in the form of science, culture, technology, economics, politics, art and others. Science or knowledge in Islamic education is used as a principle for the development of scientific disciplines, of course, cannot be separated from Islamic values (Ramadanti, 2020). Therefore, teachers must understand and approach the Material they teach both normatively and epistemologically (Zein, 2014), which should be based on Islamic values contained in the holy texts of the Qur'an and Hadith of the Prophet Muhammad. Muslims believe in a complete guide to the life of this world and the hereafter contained in their holy Book.

The word Islam is understood in the *masdar* form. The verb *fi'il is aslama* (*madhy*/past tense) *yuslimu* (*mudhari*'/present tense or future tense), which means *inqada* and *kadha'a* which means submission, obedience, and surrender, and means embracing Islam. Islam is seen in terms of terminology (this term means submitting to warning orders (orders) and prohibitions without protesting or fighting. Meanwhile, Ibn Taimiyah defined Islam as surrendering oneself to Allah, not others (Nurcholis, 2021). The Islam is an obedient and obedient attitude to follow and makes the Qur'an a law source to be applied in all life. So, submission and obedience to someone can be said to be an Islamic attitude.

The essence of the editorial is still very close to its etymological meaning. This understanding is still profane, meaning it has not yet touched the prophetic side of *shari'ah*, which has a monotheistic core. Meanwhile, the interpretation put forward by Ibn Taimiyah had abandoned the former; why? Almighty One. Even so, this understanding is still more general when compared to the third meaning. Islam is the second meaning of the scope, comprehensive, including the Islam of the prophets and messengers before the Prophet Muhammad SAW. Society can even adopt an extreme attitude of "Islam" (submission) outside the people of Muhammad SAW. So, the nature of *tahdidi* (restrictions) is not yet firm, meaning that it still contains elements of inclusivity. This understanding can be understood because its essence is still parallel to the meaning of surrender contained in God's word, which states: similarly, they seek a religion other than Allah's religion, while to Him they surrender everything in the heavens and on earth, whether they like it or not, and to Allah, they will be returned (Surah Ali Imran/3: 83). Sayyid's expression is exceptional and exclusive. This can be achieved from its explicit editorial by mentioning it in legal provisions in the Qur'an.

Islam in this third sense is Islam (*shari'ah*) brought by the Prophet Muhammad. Why is that? Because the third meaning is the practice of the teachings of the Qur'an, where it is known that the Qur'an is the Book revealed by Allah to him, and as a guide and primary for Muslims, followers of Muhammad SAW. The red thread of the substance of the third understanding is what Allah SWT says. Meaning: Whoever seeks a religion other than Islam will be accepted by you, and he will be among the loser's hereafter. (Surah Ali Imran/3:85). It can be understood that what is meant by Islam is an attitude of surrender or sincere obedience to Allah by following the laws of the Qur'an and hadith to get a safe and prosperous life in this world and the hereafter. Islam is seen as a universal and broad value, including functional values, obedience, submission, and prosperity in this world and subsequently. Islam is a value system owned and believed by Muslims in their lives. Islam touches on material and immaterial dimensions.

Islam views that separate scientific entities in life, such as Science, society, economics, politics, and others, are branches of knowledge needed by every human being in his life. In the beginning, when Allah created it, all ability was related to Islamic values as the basis of values for every Science. However, now this Science increasingly has its own identity; it is even felt that it has left Islam. Science is Science, and Islam is Islam. This is, of course, the concern of Muslims to restore the two entities of Science and Islam into an inseparable whole. This anxiety is shown by the many Islamic thinkers who are trying to research, explore, and discuss how to re-embrace scientific entities into a single unit called reintegration or reconciliation (Syarif, 2020; T. Hidayat et al., 2020). Efforts to reunite Science and Islam through Islamic education originating from the Al-Qur'an and Hadith functionally have a process that can be realized in the implementation of education by teaching, guiding, training, leading, and familiarizing oneself towards a civilized and dignified humanity. Develop spiritual, intellectual, imaginative, physical, scientific, and language aspects both individually and communally, and provide stimulation for all of these aspects to develop to achieve goodness and perfection so that the ultimate goal of education is directed at realizing human piety to Allah SWT (Usman, 2022). Therefore, Islamic education is an Islamic-based education to improve human morale in a better direction using Islamic methods (Ramadanti, 2020).

Reintegration is a form of reunification combining two or more things working together into one entity (Prastowo & Pambudi, 2021). The integration is the opposite of separation (Muhtifah et al., 2022). Reintegration is an attempt to reconnect with each other from their separateness and identity, namely Science and Islam which are then referred to and reunited in the *kaffah* Islamic unit. Reintegration is a significant effort made to regain the unity of knowledge. This can contribute significantly to maintaining the spirit of developing a more robust and dynamic integrative science to achieve human prosperity (Hidayatullah, 2019; Naim, 2018). For this reason, it is necessary to rethink Science which is considered to have been separated from Islam.

Several studies have been conducted to examine the reintegration of Science and Islam, such as (Chanifudin, & Nuriyati, 2020; Zein, 2014; W. Hidayat & Ibrahim, 2021; Hidayatullah, 2019; Oktar, 2021). Previous studies have not discussed aspects of the implementation of reintegration in learning, especially in Islamic education. Therefore, researchers try to fill this void. Based on the background of the issues raised for performance in learning, three themes are studied: the conception of Science, the basic Approach to learning Islamic education, and the Material being taught. From this theme, three research problems emerge: (1) How is the conception of knowledge built in implementing Science and Islam in Islamic education learning? (2) What is the approach to implement the reintegration of Science and Islam in Islamic education learning? How is the material for the reintegration of Science and Islam in Islamic education learning.

B. Method

1. Design Research

This research was a qualitative approach to investigating and understanding how to implement the reintegration of scans and Islam in Islamic education at the postgraduate level of one of the Islamic tertiary institutions in Jambi province. This Approach tries to answer research questions about individual or group phenomena, institutions, and communities in real-life contexts (Saldaña & Omasta, 2018). A qualitative approach seeks to use individuals as objects of study and to be able to share experiences about a theme or natural phenomenon that is explored through direct interviews with participants (Creswell, 2012b).

2. Participants

The participants in this study were male and female lecturers at the graduate school of one of the Islamic tertiary institutions in Jambi province. Based on the initial interviews, I found five lecturers willing to be interviewed. I used purposive sampling to obtain data on the theme of this research (Creswell, 2007). Here, the researcher selects individuals with stories or experiences implementing the reintegration of Science and Islam. After I confirmed again, two lecturers said they were unwilling to be interviewed because they had personal problems, so all three participants expressed their willingness to be interviewed. This small number of participants indicates that the nature of this qualitative research focuses on the quality of participants in providing indepth and broad information, not the number of participants (Creswell, 2012a). The required data can be fulfilled completely. All participants are lecturers who teach integrative Islamic studies courses at postgraduate courses in one of the Islamic higher education institutions in Jambi province, Indonesia, where we teach. The choice of this place is to help facilitate in-depth research to obtain information and experience related to the implementation of Science and Islam reintegration. Each participant has been marked, and the details can be shown in table l using a pseudonym.

Pseudonym	Participat Code	Gender	Age
Umar	P.1	male	50
Yanti	P.2	female	54
Indra	P.3	male	51

Table 1. Participants

3. Data Collection

Data were obtained through semi-structured and independent interviews. These data were conducted over four months, from June to September 2021. The interviews were conducted to collect relevant information and allow researchers to go deeper and in detail into the situation and experiences of the participants to obtain comprehensive data requirements. Interviews were conducted twice. The first interview was 30 minutes to get initial data about his willingness to become a participant and his initial experience implementing the reintegration of Science and Islam. The second interview of 45 minutes aims to follow up and ask for clarification about the initial data. Furthermore, to dig deeper and in detail about his experience in implementing the reintegration of Science and Islamic education. Semi-structured interviews were chosen as the type of interview relevant to this study's cases. Free

interviews were used to ask participants about this study to obtain more detailed and in-depth data. Interviews were recorded digitally, transcribed, and analyzed manually. All transcripts were read and coded carefully to ensure the identification of the required data. Because the combination of semi-structured and free interviews, including follow-up interviews, allows researchers to clearly understand and understand the problem. This interview also will enable a researcher to gather in-depth information about the phenomenon under study (Saldana, 2013).

Before conducting interviews with participants, researchers first explain to participants the purpose, objectives of the interview, and the data to be requested. Because researchers are responsible for protecting participants' personal information from confidentiality (Auerbach & Silverstein, 2003), the news that the researcher explained at the beginning was (1) the researcher asked for participants' willingness to be interviewed and provided data voluntarily, (2) the researcher asked for approval that the interview was audio recorded, and (3) the researcher allowed participants to improve the interview results. Then after completing the interview results, the researcher secured the confidentiality of the participants by changing them to pseudonyms. This way, participants can be protected so that this research can be trusted (Saldana, 2013).

4. Data Analysis

The researcher used qualitative data analysis approach of Saldaña and Omasta, where the focus point is on coding to select and define symbols and meanings that will be explained from data based on the implementation of the reintegration of Science and Islam in Islamic education. We understand and support the concept of Saldana's analysis to explore information and experiences conveyed by participants to researchers regarding data on the implementation of Science and Islam reintegration by using coding (Saldana, 2013). Researchers can take data and analyze it correctly and precisely to get answers to what was conveyed by participants from each of the questions the researcher has given. Researcher use coding to connect the code in terms of meaning and data that is determined (Saldaña & Omasta, 2018).

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Table 2.	The Process	Coding	example

Transcript	Category
Umar: Explaining about the conception of science, that knowledge	
comes from one source, namely Allah SWT. but when accepted by	Concept
humans, a dichotomy occurs according to their respective	knowledge
understandings.	
Yanti: The strategy that I use in implementing the reintegration of	Implementation
science and Islam in lectures is (1) the first step; provide an	
introduction orientation and understanding of the position of the two	
sciences between science and Islam, (2) prepare source books that	
students can read and understand. (3) identify verses of the Koran	
which are sources of Islamic education to support the development of	
science.	
Indra: I understand now that science already feels that there is a	
dichotomy between science and Islam. These two disciplines have gone	Material
their separate ways. But in my opinion. This dichotomy should not be	
allowed to develop separately, because it will shallow the	
understanding of Islam itself, even though Islam is rahmatan lil alamin.	
Therefore, the material that I teach I adopt between Islamic knowledge	
and science.	

### C. Findings and Discussion

#### 1. Findings

# The Conception of Knowledge Built in the Reintegration of Science and Islam in Islamic Education Learning

Lecturers are people who have the authority and responsibility to be involved in providing understanding, understanding, and unifying the conception of knowledge. He carries out his duties as an education practitioner proportionally and professionally, conveying messages, including messages of knowledge, messages of values, behavior, morals, skills, and arts. Lecturers in learning the implementation of the reintegration of Science and Islam are responsible for bringing students into an integrated conception of science. He views knowledge as interrelated with one another. Participant Umar explained the concept of Science and Islam in Islamic education learning in class by explaining the origins of science. I believe and convey that all knowledge comes from Allah, both Science and Islam. However, when understood by humans, there is a different understanding according to their respective accounts. Because of that, I try to explain the unity of knowledge in a universal paradigm in the values of Islamic knowledge (Umar, Interview, 20 June 2021).

Yanti, a participant, also explained that she teaches dealing with students with different educational backgrounds. Some came from majoring in English, biology, economics, agriculture, and others. I convey that the various scientific disciplines, in essence, have a form of similarity; that is, they are the same from God. Then I gave assignments to students to collect verses of the Koran related to their respective majors and seek and explain the relationship of verses of the Koran with their disciplines. Then discusses and gives reinforcement that Science is a form of growth and development of Islamic knowledge, which is the result of human creation in education (Yanti, Interview, 25 July 2021). Indra also mentioned the concept of science as a participant that the conception of Science and Islam was understood as two separate disciplines. However, when studying, I try to explain the connection between the two disciplines to students. So far, it has been called general Science or Science; it is also an Islamic science because it brings goodness and safety to humans. Likewise, Islamic knowledge also leads to integrity and security. These two sciences lead to excellence and safety, so it is clear they are Islamic sciences (Indra, Interview, 20 August 2021).

From the interview results above, it can be understood that the conception of Science between Science and Islam is still a separate paradigm. Students assume that there is a dichotomy between Science and Islam. This is shown that students stated they had their majors, such as English, biology, agriculture, politics, law, social, and others. According to the participants, students have not been able to assemble and unite their knowledge with Islam; that is true. However, when studying on campus when learning took place in class, hearing the lecturer explain the position of two disciplines, namely Science and Islam, it turns out that the concept of science is one (*al-wahidah*). Classroom learning is an honorable place to integrate Science and Islam.

#### Basic Approach in the Implementation of Reintegration of Science and Islam

The basic Approach used in implementing the reintegration of Science and Islam is essential to be understood and mastered by lecturers. A proper and correct foundation is necessary because it is the first step hidden in the method. Therefore, a process that contains a strong basis will be significant in reintegrating Science and Islam. There is a saying: "the method is more critical than the Material". It is essential to know and approach the correct, effective, and efficient processes because it will make it easier to convey messages of knowledge, values, ethics, morals, and

spirituality to educational goals. Based on the results of interviews with participants, they said that the approaches and methods are very important to master for conveying material to get at the stated goals. They use the system by increasing (1) the intention of realizing the unity of knowledge between Sciences and Islam to become a form of unified Science. We believe and judge that knowledge is a form that comes from Allah SWT. to how to perceive, understand and evaluate in the form of one Islamic knowledge, (2) explanation, namely explaining by integrating Science and Islam. Science is used as the development of Science and Islam as the content and perfection of the product, (3) the implementation of reintegration is based on monotheism (Indra, Interview, 20 August 2021). Apart from that, the other participants also explained the Approach to implementing the reintegration of Science and Islam. Yanti, I explained to the students that initially, knowledge was a source from Allah SWT. but when humans understand it, it turns out that there are different views, so there is Science and Islam. To reunite into a single form in Islamic knowledge, I tried to implement learning to explain it by integrating that science grows and develops based on needs and cannot be separated from Islamic values, so I tried to explain Science by linking verses al-Qur'an as the essential source of its development (Yanti, Interview, 27 August 2021).

The explanations put forward by the participants above show that it is necessary to straighten out the intention to view and evaluate Science itself. In terms of implementation, he put the position of his choice towards knowledge in the form of one originating from Allah SWT. He develops understanding in one state. Science and Islam become one.

# Material for the Implementation of Science and Islam Reintegration in Islamic Education Learning

Determining the Material towards the goal is very important because if the Material does not support the plan, the goal will not be obtained. Therefore, a lecturer must carefully determine the Material to be used in lectures so that the Material can dissolve and arrive at the desired destination. Participants are lecturers who teach integrative Islamic studies courses and have determined and planned the Material to be prepared for students. The Material has been compiled and defined in the semester lecture plan (RPS).

Based on the results of an interview with Umar as a participant, he explained: We already have the same RPS in postgraduate courses for each subject, including the Integrative Islamic studies course. We jointly compile and determine the RPS used in this course in doctoral studies as the basis for implementing the reintegration of Science and Islam. However. Even though I use the RPS as a guide material, I still develop it and build on that knowledge by linking it with the verses of the Qur'an. All knowledge, in principle, already exists in the Qur'an and Hadith as educational resources (Umar, Interview, 15 September 2021). Yanti and Indra also conveyed reintegration material that they were first guided by the syllabus that had been set at the postgraduate level. The Material in it is well prepared. However, when they provide Material, they always link it to the verses of the Koran and hadith as the basis for developing the Material. Even though they have different scientific disciplines such as economics, society, culture, politics, law, education, and others as a science of human creativity, however, this knowledge must be tied to religious knowledge (Divine Science) (Yanti, Interview, 21 September 2021).

From the results of the interviews with the participants above, it can be understood that the participants in providing lecture material in the implementation of the reintegration of Science and Islam combine the Material that has been determined in the semester learning plan (RPS). The Material has been compiled and selected as lecture material in the Integrative Islamic Studies course. This course aims to realize the integration between Science and Islam.

#### 2. Discussion

# The Conception of Knowledge Built in the Reintegration of Science and Islam in Islamic Education Learning

The concept of knowledge students possesses, as found in the interview results, states that there is still a dichotomy between science and Islam. They prioritize their knowledge in their respective majors without connecting it with Islamic knowledge. However, this conception needs to be fostered, developed, and integrated into a unity of knowledge embodied in each individual with one concept of science, namely Islamic science. Science grows and sets to answer the needs of individuals, groups, and their times, while Islamic knowledge is the value contained in science by referring to the matters contained in the Qur'an and hadith. Because of that, the integration of Science and Islam is a manifestation of individual or group piety so that a pious relationship is realized in a vertical relationship with Allah (hablun min Allah), horizontal relationships with fellow human beings (hablun min al-Nas), relationships with nature (hablun min alam), relationships with oneself (hablun min al-Nafs). Therefore, in the implementation of the reintegration of Science and Islam, instilling the paradigm of the conception of science into one creates an understanding and mastery of science that contains Islamic values. Differences in the development of science with various branches, such as biology, physics, mathematics, language, and others, must be seen as the development of Islamic Science because its substance also carries Islamic values.

The conception of knowledge in various fields is built with a source in the Science of Religion (*llahiyat*) which cannot be separated from science. The conception of knowledge in various fields is built with one vision in the science of religion (*llahiyat*). Science can be studied with a religious and social approach, having a relationship with one another (Jamaludin et al., 2012). Science and Islam are a single conception of science combined in a universal educational paradigm. Islam exists not only in the substance of values but also in the dimensions of the educational process and branches of science (Syarif, 2020).

Integrating science and Islam in learning is a must to unify the conception of science in its singleness, namely with universal Islamic knowledge. Unified perception, of course, can contribute to naming more strong values, ethics, morals and spirituality in the development of science (Ramadanti, 2020). The relationship between science and Islam, inherent in the Islamic view, is the basis for thinking as an alternative in explaining the proportions, characteristics and meeting points. The value of Islam may be the contents of the meeting between the two (Nugroho, 2017). Therefore, Islam and science can be integrated proportionally, especially regarding their functions and values. Thus, the unification is carried out in the required approach, methodology, and scope (Zaprulkhan, 2015; Ghofur et al., 2021). Both of them opened themselves to communicate by providing arguments to state that Islam and science are based on integration; that is, science requires strengthening with Islam, and Islam requires its development in science scientifically and can be proven. SHidayatullah argued that Islam and science are a unity that explains each other. This shows the existence of a new methodology and paradigm as the possibility of theological science, namely Islamic Science (Moch. C. Hidayat et al., t.t.; Ramly et al., 2018). The concept of integrating this knowledge becomes the basis and framework for integrating.

# Approaches to Implement Science and Islam Reintegration in Islamic Education Learning

The interviews with the participants showed that the approach used in the reintegration of Science and Islam is an approach of faith based on monotheism to Allah SWT. Participants explain Islam as a unitary value and Science as a science material that grows and develops. Therefore, he said Science is based on the verses of the Qur'an and Hadith. Then it was also stated that reading, understanding, and implementing reintegration are based on monotheism (W. Hidayat & Ibrahim, 2021). This means having a solid belief and awareness of Allah SWT. Monotheism exists not only in theology-practical worship, such as saying two sentences redho, prayer, zakat, fasting, and pilgrimage, but its existence is widespread. It exists in other sciences; the principle of monotheism in Islam is not only related to theological concepts but also includes the concepts of cosmology, anthropology, axiology, and epistemology. Monotheism since has the same root as number one, wahidah does not only refer to number one, but is more than that, but is also related to one substance and process. Single substance means undivided. It becomes the source of existing reality; It is contained in the whole. At the same time, the monotheism method above implies unity from the diversity that exists in the fact of life.

The basis for implementing reintegration based on the Qur'an and Hadiths requires a methodology that allows this insight to be actualized concretely in the realities of life. QS. Al-'Alaq/96: 1-5 emphasizes how to read the truth in the name of God who created it or to read with awareness of God's presence in the object of reality. In this case, operationally, QS. Ali Imran/3 190-191 explains: Verily in creating the heavens and the earth. There are signs in the alternation of day and night for people who understand, namely those who remember Allah while standing or sitting or lying down and think about the creation of the heavens and the earth. This verse explains that it is necessary to use a process of monotheism in the process of knowing because, historically, monotheism is the basis of Islam which must be applied in practice.

Various branches and disciplines, for example, technology, Science, botany, botanical Science, politics, economics, agriculture, commerce, religion, and other humanities, are built based on monotheism. Monotheism is the root of the epistemological building of reintegration implementation. Monotheism is the ethicalmoral foundation in social reintegration implementation so that the growth and development of the diversity of knowledge are under a strong umbrella, namely monotheism. In addition, the principle of this process is to worship Allah SWT. They are not just looking for a wealth of knowledge (knowledge) only. This principle is selfapproach to Allah SWT. Therefore, the partitioned sciences must be referred to and put back together in a monotheistic frame and process. Because historically, monotheism is the basis of Islam which must be applied in life practice (Suyatno et al., 2019). Therefore, the basis for the development of Science in tertiary institutions must function as an effort to (1) integrate all sciences in a unified Islamic science, (2) link all disciplines, (3) connect all disciplines to achieve national goals, (4) connecting the virtues of knowledge conveyed based on the signs found in nature (Kauniyah verses) with signs learned in the Qur'an and Hadith (Kauliyah verses) as a basis for a view of life that can unite one breath of Islamic knowledge, (5) integrating the unity of knowledge that is processed scientifically, (6) integrating Islamic insight into academic scientific specifications (W. Hidayat & Ibrahim, 2021; (Nasiruddin, 2016); (Anas dkk., 2013). Islam has an open and universal nature to accept science regardless of its type and source. Science must be realized as a legacy of knowledge that God created through human work because it must be restored to its position as a universal Islamic

value. The attitude of integration towards science is an important capital that has been exemplified by Muslim thinkers in the golden era of Islam when interacting with Greek philosophy, which, although covered with speculative elements, has been able to encourage them to uncover empirical natural knowledge as mentioned in the Qur'an (Taqiyuddin, 2021); (Nurcholis, 2021); (Parmin dkk., 2019). Integrating science and Islam for Muslims is to strengthen and expand Islamic values in this dimension of nature, such as enhancing the dogmas of teachings that develop in science. Because of that, science is needed to prove that every science integrates with Islamic values.

# Material for the Implementation of Science and Islam Reintegration in Islamic Education Learning

Several scientific disciplines are discussed and explained with the content of values that exist in Islamic Science by associating scientific Material with the verses of the Koran and hadith as the basis for their explanation. Such as the Qur'an as a guide (Q.S. Al-Kahf: 54), the creation of the earth and the sky (Q.S. Ali 'Imran: 190-191; Ar-Ra'd: 2; Q.S. An-Nuur: 43), the result of humans (Q.S. Al-Mu'minuun: 12-14), practice (Q.S. Al-'Ashr: 2-3), the Qur'an contains and guides all phenomena in this world and the hereafter. Thus, Islamic education material based on the Qur'an can be a priority for lecture material that can help produce Science, technology, health, politics, economics, social, and other professionals with Islamic values. Islamic educational institutions also want to realize that a generation emerges that not only grows and develops expertise in the worldly field (ilmu kauniyah), but also grows and develops monotheism, ethics, morals, morals, mental and spiritual within itself. There is no more dichotomy between Science and Islam. Knowledge is believed to be a universal value that does not need to be labeled normatively (T. Hidayat et al., 2020). Besides that, worldly wisdom needs to be integrated with Islamic values in science learning (Khoiri et al., 2017; Miskiah et al., 2019).

The Material for the reintegration of Science and Islam is universal Material used in the epistemology of reintegration to become an interactive unit and reinforce one another. This condition certainly encourages students to think comprehensively in various disciplines. Students are given understanding an understanding of the Material uniting Science and Islam in the bond of Divine knowledge. The perfection of wisdom in Islam is when the inside can be filled and assessed in Islam. Therefore, the reference sources used to explore and find Material must follow the implemented objectives of the reintegration of Science and Islam. To strengthen this subject, the primary source of the Qur'an must be expanded and developed in scientific Material. So, there is no scientific dichotomy because Islamic teachings are universal. Islam covers various disciplines. This can be understood in the following figure:



Figure 1. Stage of Development of Materials Reintegration Science and Islam base Islamic Education

Based on Figure 1, it shows the unity of science, namely between reason, feeling, and faith, between faith, science, and charity, cognitive, affective, psychomotor, creativity, feeling, and intention, as well as between the brain, heart, and muscles. All of that is contained in *addien*, science and technology, and technology that originates from the Al-Qur'an and As-Sunnah. So, the basic material for building reintegration epistemology comes from the Al-Qur'an and hadith. All these sources infiltrate and enter all the fragmentation of scientific knowledge. It is a source of basic material in many ethical, moral, and spiritual approaches so that there is no longer any distance between science and Islam. Like robots, robots are science, and their energy is Islam. Knowledge of his body and Islam about his soul.

Figure 1 shows the unity of science, namely between reason, feeling, and faith, between faith, Science, and charity, cognitive, affective, psychomotor, creativity, sense, and intention, as well as between the brain, heart, and muscles. All of that is contained in *addien*, Science and technology, and technology that originates from the Al-Qur'an and As-Sunna. So, the primary Material for building reintegration epistemology comes from the Qur'an and hadiths. All these sources infiltrate and enter the fragmentation of scientific knowledge. It is a source of primary Material in many ethical, moral, and spiritual approaches so that there is no longer any distance between Science and Islam. Like robots, robots are Science, and their energy is Islam. Knowledge of his body and Islam about his soul. Therefore, science is studied and developed by referring to Islamic values and exploring the verses of the Koran and Hadith as a basis and reference related to science.

### D. Conclusion

The results of this study concluded that the reintegration of Science and Islam in learning is a must because the paradigms of Science and Islam today have separated from one another. Participant has tried to implement reintegration by explaining that all knowledge comes from one source, Allah SWT. Both Science and Islam. Because it is necessary to unify the conception of science into a single unit in universal Islamic Science. Epistemology of reintegration by returning to Islamic education learning as an approach and process. Qualified lecturers with a strong foundation of faith based on monotheism in Allah and Islamic sciences try to explain that Science and Islam are under the auspices of a single conception of one source from Allah. Islamic values define Science. The integration material used combines scientific Material (verses of Kauniyah) with verses of Kauliyah from Islamic sciences originating from the Qur'an and hadith to become a single unit. Science is the development of science, and Islam is the value and ethics of science. The implication is to reinvent the separate scientific disciplines between Science and Islam in a universal conception of Islamic Science. Both were reunited in a scientific form integrated with approaches and methods in Islamic education – Science as the development of Science and Islam as its values and contents.

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#### F. Author Contributions Statement

As the two authors of this manuscript, all processes starting from data collection, analysis, display, narrative delivery, and conclusions, are fully carried out by the authors.

## G. References

- Abdullah, M. A. (2014). *Religion, Science and Culture an Integrated, Interconnected Paradigm of Science*. 175–203. <u>https://doi.org/10.14421/ajis.2014.521.175-203</u>.
- Anas, N., Alwi, E. A. Z. E., Razali, Mohd. H. H., Subki, R. N., & Bakar, N. A. A. (2013). *The Integration of Knowledge in Islam: Concept and Challenges*. 13 (10).
- Arifuddin, I. (2016). Integrasi Sains dan Agama serta Implikasinya terhadap Pendidikan Islam. 1 (1), 161–179. <u>https://doi.org/10.28918/jei.v1i1</u>.
- Auerbach, C., & Silverstein, L. B. (2003). *Qualitative Data: An Introduction to Coding and Analysis.*
- Chanifudin, C., & Nuriyati, T. (2020). Integrasi Sains dan Islam dalam Pembelajaran. 1 (2), 212–229.
- Creswell, J. W. (2007). Second Editon: Qualitatve Inquiry & Research Design Choosing Among Five Approaches. Sage Publication.
- Creswell, J. W. (2012a). Educational Research Planning, Conducting, and Evaluating Quantitative and Qualitative Research.
- Creswell, J. W. (2012b). Educational Research:Planning, Conducting, and Evaluating Quantitative and Qualitative Research Fourth Edition.
- Das, St. W. H., Halik, A., & Amaluddin, A. (2016). *Paradigm of Islamic Education in the Future: The Integration of Islamic Boarding School and Favorite School.* 08 (04), 24–34.
- Firmansyah, E. K., Mamun, T. N., & Kosasih, A. (2020). The Establishment of Character for the Millennial Generation Through Moral Therapy: A Study of the Nazam Azkiya' Manuscript, Jurnal Humanities & Social Sciences Reviews, 8 (4), 972–989.
- Ghofur, A., Kuipers, J. C., & Askuri, A. (2021). Instructional Design: Multi-Site Study of the Integration of Islam in Science Teaching in Java, Indonesia. 4 (1), 70–84. <u>https://doi.org/10.33367/ijies.v4i1.1652</u>.
- Hidayat, Moch. C., Arifin, S., Asrori, A., & Rusman, R. (t.t.). Integration Science Technology with Islamic Values: Empowering Education Model. 456, 966–970.
- Hidayat, T., Rizal, A. S., Abdussalam, A., & Fawwaz, A. G. (2020). Designing Islamic Values Integration Into Sociology Learning. 6 (1), 37–56. <u>https://doi.org/10.15575/jpi.v6i1.8119</u>.
- Hidayat, W., & Ibrahim, T. (2021). *Implementing Science, Social Integration in Islamic Education Learning*. 7 (1), 1–16. <u>https://doi.org/10.15575/jpi.v7i1.12515</u>.
- Hidayatullah, S. (2019). *Agama dan Sains: Sebuah Kajian tentang Relasi dan Metodologi*. 29 (1), 102-133, <u>https://doi.org/10.22146/jf.30246</u>.
- Jamaludin, Mohammad Aizat, Ramli, M. A., Hashim, D. M., & Rahman, S. A. (2012). Fiqh Istihalah: Integration of Science and Islamic Law. 02 (02), 117–123.
- Khoiri, A., Agussuryani, Q., & Hartini, P. (2017). *Penumbuhan Karakter Islami melalui Pembelajaran Fisika Berbasis Integrasi Sains-Islam.* 02 (1), 19–31. <u>https://doi.org/10.24042/tadris.v2i1.1735</u>.
- Miskiah, M., Suryono, Y., & Sudrajat, A. (2019). Integration of Information and Comunication Technology Into Islamic Religious Education Teacher Training. 38 (1), Cakrawala Pendidikan, Vol. 38, No. 1, February 2019. <u>https://doi.org/10.21831/cp.v38i1.23439</u>.

- Muhtifah, L., Mahrus, E., & Rahmiani, N. (2022). E-Learning Flipped Classroom: Instituting An Integrated Islamic Education Paradigm for Character Building. 5 2022. 244–260. https://doi.org/org/10.31538/nzh.v5i1.2038.
- Naim, N. (2018). *Mystico-Philosophy: The Integration Epistemologies of Mulyadhi Kartanegara*. 13 (2). <u>https://doi.org/10.21274/epis.2018.13.2.361-379</u>.
- Nasiruddin. (2016). Integrasi Sains dan Agama dalam Pendidikan Islam. *Literasi (Jurnal Ilmu Pendidikan)*, 4 (2), 171-188. https://doi.org/10.21927/literasi.2013.4(2).
- Nugroho, B. T. A. (2017). Integration of Islamic education with science and technology in Islamic junior high school. 9 (1), 1–27. <u>https://doi.org/10.18326/mudarrisa.v9i1</u>.
- Nurcholis, M. (2021). Integrasi Islam dan Sains: Sebuah Telaah Epistemologi. 12(1), 116-134.
- OKTAR, S. (2021). Islam and Integration of Religion and Science to Build a Second Islamic Golden Age. 1–25. <u>https://doi.org/10.53427/katre.1012996</u>.
- Parmin, P., Nuangchalerm, P., & EL Islami. Ahmad Zaky. (2019). Exploring the Indigenous Knowledge of Java North Coast Community (Pantura) Using the Science Integrated Learning (SIL) Model for Science Content Development. 7(1), 71–83. <u>http://dx.doi.org/10.17478/jegys.46646</u>.
- Prastowo, A., & Pambudi, S. (2021). The Integration of Islam and Science Concept of Mehdi Golshaani's Perspective and Its Relevance to Islamic Education in The 4.0 Era. Proceedings of the 2nd International Conference on Islamic Studies, ICIS 2020, 27-28 October 2020, Ponorogo, Indonesia. <u>https://doi.org/10.4108/eai.27-10-2020.2304175</u>.
- Ramadanti, E. C. (2020). Integrasi Nilai-Nilai Islam dalam Pembelajaran IPA. Jurnal Tawadhu, 4 (1), Article 1.
- Ramly, F., Walidin, W., & Idris, S. (2018). A Contemporary Discourse on Integrated Islamic Education. 24 (10), 7124–7127. <u>https://doi.org/10.1166/asl.2018.12423</u>.
- Saldana, J. (2013). *The Coding Manual For Qualitative Reseachers* (This second edition published). SAGE Publications Ltd.
- Saldaña, J., & Omasta, M. (2018). Qualitative Research Analyzing Life. SAGE Publications.
- Sururin, S., Jaenuddin, J., Sanjaya, E., & Muslim, M. (2020). Ideological Path of Science and Islam Integration in The Context of University Management. Proceedings of the Proceedings of the 5th International Conference on Education in Muslim Society, ICEMS 2019, 30 September sampai 01 October 2019, Jakarta, Indonesia. https://doi.org/10.4108/eai.30-9-2019.2291196.
- Suyatno, S., Pambudi, D. I. P., Mardati, A., Wantini, W., Nuraini, E., & Yoyo, Y. (2019). The Education Values of Indonesian Teachers: Origin, Importance, and Its Impact on Their Teaching. 12 (3), 633–650.
- Syarif, F. (2020). Reintegration of Religious Knowledge and General Knowledge (Criticism of the Discourse of Science Dichotomy). Jurnal Transformatif (Islamic Studies), 4 (1), Article 1. <u>https://doi.org/10.23971/tf.v4i1.1850</u>.
- Taqiyuddin, M. (2021). Hubungan Islam dan Sains: Tawaran Syed Muhammad Naquib Al-Attas. 22 (1), 81–104. https://doi.org/10.30595/islamadina.v%vi%i.6816.
- Usman, U. (2022). Penguatan Pendidikan Karakter: Mengungkap Hasil Riset Tentang Guru dan Murid dalam Tarekat Naqsyabandiyah. Rajawali Pers.
- Wulan, E. R., Gunawan, H., Fauziah, W., & Kratz, F. (2021). Integration of Science, Technology, and Islamic Values to Enhance Expected Learning Outcomes in French Higher Education. 7 (195–108).
- Zaprulkhan, Z. (2015). Membangun Relasi Agama dan Ilmu Pengetahuan. 7 (2), 259–272.
- Zein, M. (2014). *Axiology on the Integration of K. 21* (2), 154–160. http://dx.doi.org/10.15548/jt.v21i2.93.

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