



TRANSFORMATION OF EDUCATION: PATTERN OF INTEGRATION OF SCIENCE IN LEARNING AT UIN ANTASARI BANJARMASIN

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Abstract

This research aims to analyze the pattern of integrating knowledge in learning at UIN Antasari Banjarmasin. It has become a core issue at State Islamic Religious Higher Education Institutions (PTKIN), especially after the status change of several Islamic higher education institutions from STAIN or IAIN to UIN. This status change has had significant consequences on the shift in the fields of study at UIN, which were originally focused solely on Islamic sciences and have been expanded to include general sciences, both social and natural sciences. Many issues remain unresolved regarding the implementation of knowledge integration in the faculties at UIN Antasari, ranging from policies on knowledge integration in learning, the patterns of knowledge integration practiced by lecturers, and the extent to which lecturers respond to research on knowledge integration. The patterns of knowledge integration employed by some lecturers in the learning process include relating or presenting Quranic verses and Hadiths in the teaching of general subjects, and relating or presenting general knowledge in the teaching of Islamic studies. The integration models include informative and complementary approaches. The method used in this research is qualitative descriptive, which involves capturing the state of institutions, communities, and other entities based on the facts found. The research findings indicate that the pattern of knowledge integration involves lecturers relating Quranic verses and Hadiths in the teaching of general subjects, and integrating general knowledge in the teaching of Islamic studies, as well as using informative and complementary models.

Keywords: *Integration pattern, Knowledge integration, Learning process*

1. Introduction

Knowledge integration is an endeavor that goes beyond simply combining religious knowledge with worldly knowledge. It also includes the search for harmony between the two to achieve the benefit of the people. The concept of integration-interconnection or I-Kon initiated by M. Amin Abdullah offers an alternative in which various clumps of science greet each other and fill each other's shortcomings without feeling the most righteous themselves.¹ Integration between natural science (science) and Islamic science is considered a necessity that needs to be developed.² Integration of science is not only about combining science and religion, but also an effort to bring together the way of seeing, thinking, and acting between science and Islam.³ The paradigm of the unity of science, such as *Wahdat al-'Ulum*, is a scientific tradition in Islamic society that can be used as a model in the development of science and scientific integration.⁴ The process of integrating science and religion plays an important role in appreciating the theoretical results of knowledge and practical experience of divine attributes extracted from each personal experience.⁵ Thus, the integration of science is not just a merger, but also includes efforts to unite various perspectives, values, and understandings between science and religion in order to achieve the benefit of the people holistically.

The process of integrating science and religion plays a crucial role in appreciating both the theoretical results of knowledge and the practical experiences that reveal the divine qualities extracted from individual experiences. This integration is not just about merging two separate domains, but rather about uniting diverse perspectives, values, and understandings between science and religion to achieve the holistic welfare of humanity. The integration of science and religion is a complex and multifaceted endeavor that seeks to reconcile the empirical findings of science with the spiritual and ethical teachings of religion. By doing so, it opens up new pathways for understanding the universe and human existence, beyond what either domain could achieve independently.

At its core, the integration of science and religion is an attempt to bridge the gap between the material and spiritual realms. Science, grounded in observation, experimentation, and evidence, provides us with knowledge about the physical world. It helps explain the mechanisms that govern natural phenomena, from the formation of galaxies to the molecular structure of life itself. On the other hand, religion offers spiritual guidance, moral principles, and a deeper understanding of the purpose of life, emphasizing human connection to the divine and the ethical responsibilities we hold

¹ Naila Rif'ah and M. Husnaini, "Innovative Efforts of Lecturers Towards Harmony of Sciences: Building a Climate of Science Integration at the Faculty of Islamic Studies, Islamic University of Indonesia: Innovative Efforts of Lecturers Towards Harmony of Sciences: Building a Climate of Science Integration at the Faculty of Islamic Studies, Universitas Islam Indonesia," *At-Tullab: Journal of Islamic Studies Students* 6, no. 1 (May 26, 2024): 1510–27, <https://doi.org/10.20885/tullab.vol6.iss1.art4>.

² Iflahathul Chasanah and Azmi Mustaqim, "Integration of Al-Jabiri Theory and Science: Analysis of Science Learning Model on Plant Breeding Material," *Indonesian Journal of Tadris IPA* 3, no. 3 (November 30, 2023): 336–47, <https://doi.org/10.21154/jtii.v3i3.2567>.

³ Muhammad Hafiz and Salminawati, "Implications of Integration of Science and Religion on the Development of Students' Morals," *Journal of Social Research* 1, no. 7 (June 22, 2022): 617–25, <https://doi.org/10.55324/josr.v1i7.125>.

⁴ Yuli Supriani, Nanat Fatah Natsir, and Erni Haryanti, "The Scientific Paradigm Underlying the Transformation Process of Walisongo State Islamic University Semarang | JIIP - Scientific Journal of Education Science," accessed July 16, 2024, <https://jiip.stkipyapisdompu.ac.id/jiip/index.php/JIIP/article/view/335>.

⁵ Irwan Muhammad Ridwan, "HARMONY, DISHARMONY, AND INTEGRATION BETWEEN SCIENCE AND AGE," *Indonesian Journal of Philosophy* 3, no. 1 (April 30, 2020): 8–13, <https://doi.org/10.23887/jfi.v3i1.22472>.

toward one another and the world around us. Integrating these two domains involves acknowledging the strengths and limitations of both science and religion, recognizing that each has its own unique contributions to human understanding.

One of the key aspects of this integration is the recognition that personal experience plays a significant role in both scientific inquiry and religious practice. For instance, the way individuals experience the world and perceive the divine can inform their scientific work, guiding them toward new insights or helping them to approach problems with a sense of ethical responsibility. Similarly, scientific discoveries can deepen one's sense of awe and appreciation for the complexity and beauty of creation, reinforcing religious convictions about the existence and majesty of a Creator. In this way, both science and religion become complementary forces in the quest for truth, with each informing and enriching the other.

Moreover, integrating science and religion is not simply about merging knowledge but about creating a unified framework that can guide human behavior and decision-making. In many ways, this integration is about applying both scientific knowledge and religious values to address the pressing issues facing society. Whether it is the ethical use of technology, the preservation of the environment, or the pursuit of social justice, science and religion can offer complementary perspectives on how to navigate these challenges. Science provides the tools and understanding needed to solve problems, while religion offers the ethical framework to ensure that these solutions align with the values of compassion, justice, and respect for life.

Furthermore, the integration of science and religion can lead to a more holistic view of human existence, one that recognizes the interconnectedness of the physical, mental, and spiritual dimensions of life. This holistic approach emphasizes the importance of nurturing all aspects of human well-being, including intellectual growth, emotional development, and spiritual fulfillment. By uniting science and religion, we are better equipped to understand the full scope of human experience and to address the complex needs of individuals and communities in a more comprehensive and compassionate manner.

The integration of religious science and other sciences can be done for all types of science through all integration paths, except for the natural sciences on the substance path, such as the theory of earth gravity as a natural law does not need and / or cannot be integrated with Islamic science, because this law is substantially a sunntullah that no longer needs to be integrated with any Islamic field.⁶

The integration of religious science with other scientific disciplines presents an opportunity to harmonize spiritual beliefs with empirical knowledge, yet it remains a topic of great debate, particularly when addressing the interaction between Islamic science and natural sciences. While various paths of integration, such as the theoretical, methodological, and ethical approaches, are commonly employed in bridging religious teachings with fields like psychology, sociology, and even economics, the situation becomes more complex when dealing with natural sciences, especially in areas where universal laws govern natural phenomena.

The integration of religious science into the natural sciences, therefore, may seem unnecessary and even counterproductive when dealing with natural laws like gravity.

⁶ Compilation Team, *Guidelines for the Implementation of Science Integration in Islamic Religious Universities* (Jakarta: Directorate of Islamic Higher Education Directorate General of Islamic Education Ministry of Religious Affairs of the Republic of Indonesia, 2019).

This is not to suggest that religion lacks value in understanding the natural world but rather that the natural sciences have their own methodology and objectives, which are not influenced by religious interpretation. When religious perspectives are applied to areas like ethics, human behavior, or the environment, they can provide important guidance, but they do not alter the fundamental workings of natural laws.

One could argue that the integration of religious science with other fields outside the natural sciences may be more beneficial, particularly in addressing moral and ethical concerns. For example, in the fields of medicine, environmental science, or social science, religious principles can offer valuable insight into how humans should behave toward one another and the planet. Religious values such as compassion, justice, and respect for creation can guide scientific practice in ways that enhance human well-being and promote ethical decision-making. In these cases, religious science does not attempt to change the natural laws but provides a moral compass for their application.

Moreover, the challenge of integrating religious science with the natural sciences raises broader questions about the relationship between faith and reason. Historically, religious authorities and scientists have sometimes clashed over scientific discoveries, particularly in areas where empirical evidence seems to contradict religious teachings. However, a more nuanced approach is needed—one that recognizes the distinct roles that religion and science play in understanding the world. The integration of religious science with empirical sciences should not be about forcing them into a uniform narrative but rather acknowledging the value of both domains in their respective areas. While natural laws like gravity remain outside the scope of religious integration, their existence and operation can still inspire awe and appreciation of the Creator's wisdom.

Some universities have provided a philosophy regarding scientific integration which is unique to each university. For example, the integration of science at UIN Sunan Ampel is based on the IIT (Integrated Twin Tower) philosophy with the basis of three main pillars, namely, 1) strengthening pure but rare Islamic sciences, 2) integration of Islamic science and development with social humanities, 3) weighting science and technology with Islamic science.⁷ UIN Yogyakarta takes the analogy of integration of science with the Spider's Web, UIN Malang with the Tree of Knowledge, UIN Surabaya with the Integrated Twin Tower, UIN Bandung with the Pedati Wheel, UIN Makassar with the Cemara Tree and UIN Antasari with the River of Knowledge. UIN Antasari in its educational and teaching mission develops knowledge that is integrated with nationality, character-based and local wisdom and has a global outlook.⁸ There are four integrations developed by UIN Antasari, namely: (1). Nationality integration; (2). Integration of character-based Islam; (3) Integration of Islam and local; and (4). Integration of Islam and global. In its development, the integration has a slight change called the four pillars of UIN Antasari's integration philosophy, namely: (1). Dynamic integration; (2). Integration of Islam and Nationality; (3). Locally based; and (4). Global outlook. With the basis of different philosophies of science integration, the patterns, forms and models of science integration in learning and curriculum at each UIN are also different.⁹

⁷ Compilation Team, "Decree of the Director General, Pendis No. 2498," (Jakarta: Ministry of Religious Affairs of the Republic of Indonesia, 2019).

⁸ "PMA Number 29 of 2017 concerning the Statute of Antasari State Islamic University - IDR UIN Antasari Banjarmasin," accessed July 16, 2024, <https://idr.uin-antasari.ac.id/9404/>.

⁹ Compilation Team, "UIN Antasari Scientific Philosophy" (Antasari Press, 2020).

Higher education in Indonesia continues to experience significant developments in responding to the challenges of an increasingly complex era. One institution that plays an important role in this transformation is the State Islamic University (UIN) Antasari Banjarmasin. In its context, the integration of knowledge becomes the main foundation in building holistic and adaptive learning to changing times. Integration of knowledge is not just combining various disciplines, but rather an effort to produce graduates who are able to face global challenges with a variety of comprehensive scientific perspectives.

UIN Antasari Banjarmasin has adopted various curriculum innovations to realize an inclusive and integrated learning approach. This is in line with the university's mission to produce academic people who not only master the knowledge in their fields, but also have strong interdisciplinary skills.

The integration of knowledge at the State Islamic University (UIN) Antasari Banjarmasin is the main foundation in building holistic and adaptive learning to changing times. The integration of science at UIN Antasari Banjarmasin is not only as far as combining various disciplines, but rather an effort to produce graduates who are able to face global challenges with a variety of comprehensive scientific perspectives. The concept of integration-interconnection that combines hadharah al-nash, hadharah al-Ilm, and hadharah al-Falsafah is the basis for scientific development in higher education, as is done at UIN Sunan Kalijaga Yogyakarta.¹⁰

In this context, the importance of the role of lecturers in creating a climate of integration of knowledge in higher education is crucial. Lecturers in higher education have a leading role in the higher education process and play an important role in building harmony of knowledge, which in turn will create a learning environment that supports the integration of knowledge.¹¹ In addition, the integration of knowledge at UIN Antasari Banjarmasin also includes the implementation of national standards of higher education to ensure the quality of education provided. The analysis of the implementation of national standard management in the S2 PAI postgraduate program at UIN Antasari Banjarmasin shows the institution's commitment in improving the quality of education.¹²

In the face of increasingly advanced times, the integration of knowledge between religion and science is key in exploring the impact of active learning technology in educational institutions. The integration of active learning technologies in secondary vocational education requires a holistic approach, effective lecturer training, adaptive curriculum, and adequate infrastructure to maximize the potential of education with technology.¹³

Some researchers such as Suprpto **and** Sumarni that the integration of science in education and teaching will run effectively if followed by the competence of lecturers against adequate cross-discipline, students have sufficient religious knowledge and general science, and lecturers and students between faculties or study programs can

¹⁰ Nurwastuti Setyowati, "Interconnection of Religion, Social and Culture in Islamic Education," *Journal of Islamic Education and Innovation*, 2022, 56-63, <https://doi.org/10.26555/jiei.v3i1.6086>.

¹¹ Rif'ah and Husnaini, "Innovative Efforts of Lecturers Towards Harmony of Knowledge."

¹² Jejen Musfah and Budi Mulia, "Analysis of National Higher Education Standards: A Case Study at Uin Antasari Banjarmasin," *Al-Tanzim: Journal of Islamic Education Management* 4, no. 2 (September 28, 2020): 224–35, <https://doi.org/10.33650/al-tanzim.v4i2.1052>.

¹³ Mochamad Wahyudi et al., "Exploring the Impact of Active Learning Technology in Secondary Vocational Education Institutions," *MENTARI Journal: Management, Education and Information Technology* 2, no. 2 (February 11, 2024), <https://doi.org/10.33050/mentari.v2i2.458>.

collaborate.¹⁴ Dewi Masyitoh, et al. argued that what was discussed by Amin Abdullah regarding the idea of the Integration-Interconnection paradigm was to reunite or make these two sciences interrelated to each other not stand alone. Amin Abdullah's thinking is strongly influenced by M. Abid al-Jabiri who created a trilogy of epistemology, namely: Bayani epistemology, 'Irfani epistemology, and Burhani epistemology.¹⁵ Meanwhile, Fahri Hidayat said that Islamic education is built on an integrative scientific epistemology; which not only juxtaposes religion with science, but actually makes science one of the pillars of Islamic education. Instead, it makes science as one of the pillars in religion.¹⁶

Thus, the integration of knowledge at UIN Antasari Banjarmasin not only includes aspects of combining disciplines, but also involves the role of lecturers, the application of national standards, and the utilization of active learning technology as an effort to create a learning environment that is holistic, adaptive, and responsive to changing times.

Although efforts to integrate the sciences at UIN Antasari Banjarmasin have progressed, in-depth research that identifies concrete challenges and effective implementation strategies is limited. A thorough study of the impact of integration of disciplines on learning quality, student perceptions, and the challenges faced by lecturers in implementing this approach needs to be expanded. With a deeper understanding, we can formulate more measurable recommendations to strengthen the practice of science integration in higher education.

2. Literature Review

Islamization is the liberation of human beings, first from magical traditions, myths, animism and pre-Islamic nationalism and culture, then from secular control over reason and language.¹⁷ Unlike Fazlur Rahman, Al Attas and Ismail Al Faruqi attempted to integrate science by integrating the two.¹⁸ All knowledge is Islamic as long as it is within the limits outlined by Allah SWT to us. Islam contains both natural and social sciences, as well as humanities.¹⁹

The integration of science at UIN Sunan Ampel is based on the ITT (Integrated Twin Tower) philosophy with the basis of three main pillars, namely, 1) strengthening pure but rare Islamic sciences, 2) integration of Islamic science and development with social humanities, 3) weighting science and technology with Islamic science (Decree of the Director General, Pendis No. 2498, 2019: 155).

The integration of religious science and other sciences can be done for all types of science through all integration paths, except for the natural sciences on the substance path, such as the theory of earth gravity as a natural law does not need and / or cannot

¹⁴ Suprpto Suprpto and Sumarni Sumarni, "Implementation of Science Integration in PTKI: Integration in the Tridarma of Higher Education," *EDUKASI: Journal of Religious Education Research* 20, no. 2 (October 14, 2022): 119–32, <https://doi.org/10.32729/edukasi.v20i2.1246>.

¹⁵ Dewi Masyitoh, "Amin Abdullah and the Integration-Interconnection Paradigm," *JSSH (Journal of Social Science and Humanities)* 4, no. 1 (October 9, 2020): 81, <https://doi.org/10.30595/jssh.v4i1.5973>.

¹⁶ Fahri Hidayat, "Development of Science Integration Paradigm: Harmonizing Islam and Science in Education," *Journal of Islamic Education* 4, no. 2 (December 1, 2015): 299, <https://doi.org/10.14421/jpi.2015.42.299-318>.

¹⁷ Syed Muhammad Naquib Al Attas, *The Concept of Education in Islam* (Bandung: Mizan, 1988), p. 90.

¹⁸ Hidayat, "Development of Science Integration Paradigm."

¹⁹ Nur Azizah Larasati, "Integration of Science and Religion," *Journal of Religious Research* 21, no. 1 (June 30, 2020): 113-24.

be integrated with Islamic science, because this law is substantially a sunntullah that no longer needs to be integrated with any Islamic field.²⁰

The integration of religious science with other scientific disciplines has become an essential topic in various academic and intellectual discussions. Many scholars argue that this integration can occur across all scientific domains through various paths, aiming to create a harmonious relationship between faith and reason. However, the extent and manner of this integration depend on the nature and substance of each field of study. It is important to note that such integration is not always feasible in every scientific area, especially when it comes to the natural sciences.

In particular, natural sciences such as physics, chemistry, and biology often deal with laws of nature that are considered universal and immutable. For instance, the theory of gravity is a fundamental law in physics that explains the attraction between masses. This law, being part of the natural order, operates independently of human belief systems and is not contingent upon religious perspectives. As such, the theory of earth gravity or other natural laws fall into the category of sunnatullah, a term in Islamic thought referring to the divine laws or decrees that govern the universe. These laws are seen as inherent to the natural world, and their existence is not subject to change or modification based on religious interpretations. The sunnatullah is understood to represent the will of God in the natural order, and, as such, does not require integration with Islamic science or any religious framework, as it is considered a self-sufficient and universally applicable principle.

From a theological perspective, many scholars argue that religious science and natural science operate in distinct realms, each with its own methodology and purpose. While religious science deals with spiritual matters, ethical guidelines, and the relationship between humans and the divine, natural science focuses on understanding the physical universe through observation, experimentation, and empirical evidence. The integration of religious science with fields like sociology, psychology, or even economics may be more fruitful, as these areas often intersect with ethical, moral, and spiritual concerns that align with religious teachings. In contrast, the natural sciences are often perceived as providing objective truths about the physical world that do not require religious interpretation.

Furthermore, the integration of religious science and other fields of study is seen as a way to foster a more comprehensive understanding of both the world and the human experience. This integration is not about blending religious dogma with empirical science but rather finding ways in which religious insights can guide the ethical application of scientific discoveries. For example, in medicine or environmental science, religious values may influence how practitioners approach issues related to life, health, and the preservation of nature. In these fields, the integration of religious principles can offer a moral framework that helps navigate complex ethical dilemmas.

However, when it comes to the natural sciences, the role of religion is more peripheral. The laws governing the physical world, such as the law of gravity, do not require religious interpretation or integration because they function according to their own set of rules that are observable and repeatable, regardless of one's religious beliefs. The distinction between the natural sciences and religious science is crucial in

²⁰ Directorate General of Islamic Education, "Decree of the Directorate General of Islamic Education Number 2498 of 2019 concerning Guidelines for the Implementation of Science Integration in Islamic Religious Universities," n.d..

maintaining the integrity of both fields. While the natural sciences provide valuable insights into the workings of the universe, religious science offers moral and spiritual guidance that can enrich human life.

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With the basis of different philosophies of science integration, the patterns, forms and models of science integration in learning and curriculum at each UIN are also different. The integration of religious science with other disciplines can be a valuable endeavor, particularly in areas where human values and ethical considerations play a significant role. However, when it comes to the natural sciences, certain natural laws such as gravity do not require integration with religious science, as they operate independently as part of the divine will or sunnatullah. Recognizing the boundaries between these different domains allows for a more nuanced understanding of both science and religion, fostering a relationship of mutual respect and coexistence.

3. Research Method

The method used in this research is descriptive qualitative, which portrays the state of the institution, society and so on based on the facts found. The subjects of this research are the rector or vice rector 1, dean or vice dean 1, Quality Assurance Agency (LPM), Curriculum and Learning Assessment Center (PPKP), Institute for Research and Community Service (LP2M), head of study programs, lecturers and students. While the object of this research is the philosophy of science integration, integration policy in learning, implementation of integration in learning and policy implications on lecturer research and learning. Data were extracted through documentation, observation, interviews, and focus group discussions (FGDs). While data analysis uses the Miles and Huberman model through three stages of analysis, namely data reduction, data display and conclusion.

4. Finding and Discussion

There are several patterns of science integration carried out by some lecturers in the learning process. This can be seen from the explanation of lecturers who link the material with verses of the Qur'an and other sciences.

In discussing the material, the lecturer relates or conveys the verses of the Qur'an and hadith in general course learning. In the context of learning at the State Islamic University (UIN) Antasari Banjarmasin, an approach that integrates verses of the Qur'an

²¹ "PMA Number 29 of 2017 concerning the Statute of Antasari State Islamic University - IDR UIN Antasari Banjarmasin."

²² Compilation Team, "UIN Antasari Scientific Philosophy."

and hadith in general course learning becomes a profound and inspiring practice. Lecturers at UIN Antasari not only deliver academic content in a conventional manner, but also relate Islamic teachings to the material being taught. This is not simply a merging of two different disciplines, but an attempt to provide students with a holistic perspective.

By linking Quranic verses and hadith in the context of general course learning, lecturers help students to understand how Islamic religious values can be applied in daily life and in their understanding of various disciplines. This approach not only enriches students' learning experiences intellectually, but also spiritually, creating a space for deep and relevant discussions between scholarship and religion. This practice also reinforces the university's Islamic identity as an educational institution that not only prioritizes academic excellence, but also respects and integrates Islamic values in every aspect of education and teaching that they do. This can be seen from the description of straight motion in physics. The lecturer explained it by quoting Q.S. al-Fatihah/1: 6 which states:

اهْدِنَا الصِّرَاطَ الْمُسْتَقِيمَ

Meaning: Guide us to the straight path.

"Why are we taught to be shown the straight path and not the circular, zig zag, parabolic and other paths? This is because a straight line is the shortest line to connect the two points, namely between the point of the servant and his god.²³ Straight line motion has an acceleration to reach the destination in a short time. While moving in a straight line with constant speed at every position and acceleration equal to zero, it will take a long time to reach a destination.²⁴

In discussing the material, lecturers relate or convey general sciences in learning Islamic religion courses. In discussing the material at UIN Antasari Banjarmasin, lecturers not only relate the verses of the Qur'an and hadith in general courses, but also connect general sciences with the learning of Islamic religion courses. This approach shows an effort to harmonize the teachings of Islam with the context of real life faced by students. This can be seen from the explanation of the law of marriage and the status of adulterous children in fiqh and comparing it with the Marriage Law and the legal provisions in KHI (Compilation of Islamic Law). Likewise, in the discussion of purification or thaharah, wudhu, janabah bathing, menstruation, postpartum and good and halal food and drink are associated with health science. An example can be seen when the lecturer explains the law of marriage and the status of adulterous children in fiqh, then compares it with the Marriage Law and the legal provisions contained in the Compilation of Islamic Law (KHI). Through this comparison, students not only understand the legal aspects in Islam theoretically, but also see how the law is implemented in the context of national law.

In addition, in the discussion of thaharah (purification), lecturers not only teach the ritualistic procedures of ablution, bathing janabah, menstruation, and nifas, but also relate them to health science. For example, the explanation of good and halal food and drink is not only based on religious aspects, but also juxtaposed with health knowledge to strengthen students' understanding of the relationship between religious practices and body health. This approach adds value to learning at UIN Antasari Banjarmasin, allowing

²³ Compilation Team, p. 39.

²⁴ Compilation Team, p. 39.

students to develop a broader and more integrated understanding of the role of religion in daily life and its relationship with various aspects of modern life.

Complementary informative model. The explanation of the verse or the theory of motion in physics can provide a practical explanation of the meaning of straight in the Qur'an even though when viewed from the mufassirs, the word 'mustaqim' is interpreted as not deviating from the truth and turning away from guidance. Mufassir interprets it with the approach of science tafsir while from the angle of physical science interprets 'mustaqim' with scientific phenomena.²⁵ Both models of understanding can complement each other. This is what is called complementary informative.

The complementary informative model applied in the context of learning at UIN Antasari Banjarmasin presents a unique and comprehensive approach in understanding Quranic verses and the theory of motion in physical science. This approach does not only rely on one point of view, but integrates two different but complementary perspectives. In this model, when explaining verses or theories of motion in physics, lecturers do not only provide practical explanations of the literal meaning of Quranic verses, such as 'straight' in the context of 'mustaqim', which according to mufassir means not deviating from the truth and guidance. However, from the point of view of physical science, the concept of 'mustaqim' can be interpreted in the context of scientific phenomena related to straight motion or trajectories that do not bend.

The combination of interpretation from tafsir and physical science shows that the two models of understanding can complement each other. In other words, the understanding of Quranic verses can be enriched with modern scientific concepts, such as in physical science, which provide a more in-depth and contextual explanation. This not only broadens students' scientific horizons, but also strengthens the relevance of religious teachings to contemporary knowledge. By applying this complementary informative model, UIN Antasari Banjarmasin not only promotes dialogue between religion and science, but also creates a space for critical and integrative thinking in understanding the complexity of Quranic verses and their applications in modern life.

5. Conclusion

There are several patterns of integration of knowledge carried out by some lecturers in the learning process, namely in discussing the material lecturers relate or convey verses of the Koran and hadith in general course learning, lecturers relate or convey general sciences in learning Islamic religion courses. The integration model is informative complementary. The integration of science at UIN Antasari Banjarmasin has an impact in learning and research, which influences the understanding of students and lecturers on the learning model of science integration at UIN Antasari with the existence of the Introduction to Science Integration course, although some lecturers in learning are only limited to mentioning verses or hadith related to the topic of discussion. Another impact is a number of lecturers' works in the form of journals and books in which their research integrates science. The integration of science developed by UIN Antasari is the integration of science and culture in the form of a collection of works by Banjar and Malay scholars with the establishment of Banjar Corner.

²⁵ Tesa Fitria Mawarti, "Scientific Interpretation," *Tafsire Journal* 10, no. 1 (June 1, 2022): 10–29, <https://doi.org/10.24252/jt.v10i1.35547>.

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