

Integration of Science and Islamic Religious Education in Learning

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ABSTRACT

This article aims to determine the integration of science in Islamic Religious Education in learning. In particular, this explains how the model of integrating Science in Islamic Religious Education in learning. The article is in the form of library research by collecting data from books, journals and dictionaries, archives related to the problems the author is researching. This research is descriptive qualitative in nature to obtain data in the research process from various theories in the literature related to this research, namely about the Integration of Science and Islam in Learning because this research is qualitatively descriptive in nature, it contains descriptions of events or phenomena related to the research that the author conducted. The findings show that In the learning process, quality is something that absolutely must exist. Therefore, in the development of many models offered by several education experts, one of them is the integration of science and religion in the learning process. Learning Islamic religious education must be able to change something that is still cognitive into meaning and value and must be internalized within students. Science and religion in an Islamic perspective, namely having the same metaphysical basis, with the aim of knowledge that is revealed or sought is to reveal God's verses, the motivation behind the search for mathematical nature is an effort to know God's verses in the universe. With the integration of Islamic religious education with science and technology, it is expected that the learning carried out will be more meaningful and easier to understand. So that the aim of Islamic religious education is to direct students to know, understand, live, to have faith, piety, and have noble character in practicing the teachings of Islam from its main source, namely the holy book Al-Quran and Al-Hadith, through teaching guidance activities, training, as well as the use of experience can be implemented.

1. Introduction

Science and religion are a complete and interrelated science, knowledge cannot be separated from the knowledge of the Al-Quran and Hadith which there is no doubt in them. But there are some scientists who think that science and religion stand in their respective positions, because the field of science relies on empirically supported data to ascertain the truth of the science. Whereas religion, on the other hand, is ready to accept the abstract and uncertain based only on the tangible variables of belief. Religion and science must coexist independently of one another because both of them have similarities in their scientific mission, the fundamental difference between the two presents a conflict that will resonate at the core of each,

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so that the integration between science and religion is hardly suitable as a scientific criterion for identifying this assumption becomes real because it is confirmed that there is a process of cannibalization between the two.

Novan Ardy Wiyani (2012) in his view said that the problems surrounding the integration of knowledge nowadays are often used as the desire of most Muslims to improve and improve the quality of Islamic education which has so far been lagging behind because until now there is still a gap between the actual situation and what should be. The emergence of ambivalence and the disintegration of knowledge has led to a scientific dichotomy with all its aspects, such as what has been circulating in the mass media, television, radio, and the internet, reporting on child delinquency, from drug cases, alcohol to immoral acts. This indicates how low the morale of the nation's children

Education in Indonesia is currently still facing problems in its development process which is still not broad and abstract in nature and even far from real life, so that students experience difficulties in understanding the values that exist in learning. Education in Indonesia has a low ranking because it does not see the learning process but looks at the output so that when students apply it, they experience a discrepancy between theory and the world of work. Likewise, recent Religious Education has concentrated more on cognitive theoretical issues of religion, and less focused teaching on the issue of how to turn cognitive into meanings and values that need to be internalized in students through various means, media forums. PAI learning has the impression of being alone and lacking interaction with other educational activities resulting in less effectiveness for the purposes of planting a complex device

Mochtar Buchori Research conducted by Thowaf and Siti Malika found that the weaknesses of PAI in schools include (1) the approach still tends to be normative, in the sense that religious education presents norms which are often without illustrations of the socio-cultural context so that students do not fully appreciate religious values as a living value in everyday life (2) the PAI curriculum designed in schools actually offers more minimum competencies, but many teachers still don't understand it so the enthusiasm to enrich the curriculum with varied learning experiences is not growing (3) as an impact that accompanies this situation, then PAI teachers don't try to explore various other methods that might be used for religious education so that the implementation of PAI learning tends to be monotonous with limited facilities and infrastructure so that management tends to be sober. Religious education which is claimed as an important aspect is often given less priority in terms of facilities

Islamic Religious Education is one of the subject matter that can be used as a basis for value development, prevention and at the same time as the moral formation of students in particular. Contextual process in learning can be done with interactive learning. Interactive learning can be packaged with topics about a discourse discussed from various perspectives and interrelated disciplines. To improve education, interactive learning is carried out because with interactive learning students also get experience in doing so so that students can add strength to receive, store, and apply the concepts they have learned.

Science and Islam should have a balance in studying and applying it because the two sciences need each other and are mutually beneficial to face life today. Science and Religion have different material frameworks but are interrelated and related to religious values. Because, reality shows that science and technology experts (scientists) do not equip themselves with religious knowledge so that the knowledge obtained destroys itself. Science is increasingly sought after or studied, so there will be no end because science is a science that is always changing, following the pattern of life and following technological developments. In order for education to have good quality, PAI subjects are one of the subjects that can be used as the foundation of education to underlie and fortify moral matters for students who are still pursuing the world of education. Thus, PAI is expected to contribute to the formation of human beings who are faithful, pious, intelligent and skilled so that they can live in society, nation and state.

2. Literature Review

2.1 The concept of Integration of Science and Islamic Religious education in learning

Muhammad In'am Esha (2009) Integration is a combine (parts) into a whole, join wits other group or race(s), namely combining separate parts into one unit. In other words, integration means whole or comprehensive. Integration is not just

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combining scientific and religious knowledge or providing provisions with very dominant religious norms. More than that, integration is an effort to bring together perspectives, ways of thinking and ways of acting between science and Islam, a new scientific paradigm that is intact and modern M. Safiq (1995)

Science is used in the field of science as a science that refers to objects that exist in nature that are general in nature and use certain laws that apply whenever and wherever. Science is a collection of knowledge and ways to obtain and use that knowledge. Science is a *product and process* that cannot be separated. then then put the failure / setback of Muslims due to deviation from the right path and Islamic groups against the foundation and emergence of modern secular scientific methods and science. *Reconstructionist and pragmatist* views are different from restrosynis because the position of the adherents of the pragmatist and reconstructionist reintegrates certain Islamic teachings to improve the relationship between modern civilization and Islam. John M. echols and hasan sadilli (2006). With regard to science, technology also has the most important role in carrying it out. The Qur'an instructs humans to continue to strive to improve their scientific abilities to continue to develop technology by utilizing existing things that Allah has bestowed and bestowed on them. Talking about nature and materials and existing phenomena so that humans know and make the best use of this nature. Samsul Nizar and Muhammad Syarifudin (2010)

2.2 The Importance of Integrating Science and Islamic Religious Education in learning

The dichotomy of Religion and Science is basically not a new thing in Islam, it has been known in classical works such as those written by al-Ghazali. The two figures did not deny the existence of differences between the two, but they acknowledged the validity and scientific status of each of these scholarships. Mulyadhi Kartanegara (2005) dichotomy which is well known in the Islamic world, modern western science often underestimates the scientific status of the religious sciences, this is shown when religious knowledge talks about unseen things, religious knowledge cannot be said to be scientific because according to the view of modern western science A science is said to be scientific if its object is empirical. Whereas religious knowledge, of course, cannot avoid discussing supernatural things such as gods, angels, etc.

2.3 Steps to Integrate Science and Islamic Religious Education in Learning

Imam Suprayogo (2006) Integration of Science is one of the efforts that can be made in realizing the integration of Islam and Science in the educational environment, especially in Islamic education by taking the following steps: (a) Making the Holy Quran the holy book as a basis or source (b) Expanding the boundaries of Islamic study material and avoiding dichotomies (c) Growing a person with the character of Ulil Albab (d) Tracing the verses in the Qur'an which speak of science that the truth of the Qur'an is a source relevant to science knowledge (science) which is currently very rapidly developing (e) Developing an educational curriculum in educational institutions.

2.4 Integrative Learning of Science and Islamic Religious Education

Muhammad Fathurrohman and Sulistyorini (2012) Learning is an effort that affects a person's emotional, intellectual, and spiritual so that he learns on his own. Through learning there will be a process of developing religious morals, activities, and creativity of students through various interactions and learning experiences. ²Learning as a complex process that runs in stages includes an introduction, closing core or abbreviations from apperception to evaluation. The learning process needs to be done gradually so that learning is systematic.

Abd. Rachman. Assegaf (2014) Learning as a complex process that runs in stages includes an introduction, closing core or abbreviation from apperception to evaluation. The learning process needs to be done gradually so that learning is systematic. in his paper details the integration of natural science learning as follows: (a) Philosophical Level Integration (b) Research Method and Approach Level Integration (c) Material Level Integration, namely (d) Strategy Level Integration (e) Evaluation Level Integration.

2.5 Implications of Science Integration on Islamic Religious Education (a direct consequence that occurs because of one thing)

M.Amin Abdullah (2000) The relationship between Islamic education is only good. in the realm of hadharat annash, hadharat al-ilm, and hadharat al-falsafah, it needs to be seen from the perspective of dialogue or even integration. Therefore, Islamic education must have a close relationship with the social practical dimension because it always has a social impact and is required to be responsive to social reality so that it is not limited to the scope of theoretical-conceptual thinking.

Explanation of Immanent and Transcendent Finality (2006) The integrative paradigm in the scientific context between transmitted knowledge and acquired knowledge is expected to create a holistic and non-partial academic atmosphere. So that the specialization of certain fields of knowledge does not result in the formation of myopic-narcissistic insights, and the range of knowledge also does not limit itself to facts or the introduction of immanent finality, where everything is only seen in its "pragmatic" meaning, but also the existence of meaning or finality of knowledge. knowledge that is transcendent, namely something that is outside of science which is the significance and direction of something in its "teleological" sense. With the existence of an integrative paradigm in the scientific context between transmitted knowledge and acquired knowledge, it is hoped that a holistic and non-partial academic atmosphere will be created. However, there is also the meaning or financial existence of knowledge that is transcendent, that is, something that is outside of science which is theological significance and direction.

3. Results and Discussion

Science comes from the Kauniyah verses which mean sayings or sayings that are presented through evidence, science responds to 3 advances, namely Restorationists trying to seek renewal of the past then laying down the failures/setbacks of Muslims due to deviations from the right path and Islamic groups opposing the foundation and emergence modern secular scientific methods and science. Reconstructionist and pragmatist views are different from restrosynis because the position of the adherents of the pragmatist and reconstructionist reintegrates certain Islamic teachings to improve the relationship between modern civilization and Islam.

The integration of Science and Islam is carrying out an extraordinary mission in equipping students to obtain a complete knowledge between intellectual knowledge and religious knowledge in developing an Islamic personality. With regard to science, technology also has the most important role in carrying it out. The Qur'an instructs humans to continue to strive to improve their scientific abilities to continue to develop technology by utilizing existing things that Allah has bestowed and bestowed on them. The Islamic view of science and nature is a balance with religion, this relationship implies a sacred aspect for the pursuit of scientific knowledge by Muslims, because nature itself is seen in the Qur'an as a collection of signs pointing to God, a means of proving oneness and power. God is with existing technology.

The dichotomy of Religion and Science is basically not a new thing in Islam, it has been known in classic works such as those written by Al-Ghazali and Ibn Khaldun. The two figures do not deny that there are differences between the two , however they acknowledged the validity and scientific status of each of these disciplines. The movement for the integration of Islam and science must be pursued in earnest. Al-Qur'an in the integration of knowledge is positioned as the main source or basic foundation for the achievement of general knowledge which is obtained from the results of observation, experimentation, and logical reasoning whose position is as a supporting source in order to increase belief in Allah. The truth of the Qur'an is a source that is relevant to science (science) which is currently very rapidly developing. To realize people who have spiritual depth, noble morals, intellectual breadth and professional maturity, this can be achieved in its entirety if science and Islam are integrated in the learning process.

Integration of science in learning, namely (a) Integration of the philosophy level which has fundamental values in humanistic science (b) Integration of the level of research methods and approaches, the knowledge needed by using approaches (c) Integration of the material level, is a process of integrating values - universal truth values in general with

Islamic studies, especially in social sciences (d) Integration at the strategic level is the stage of implementing learning by applying various models and learning methods (e) Integration of the evaluation level is carried out after the entire learning process is completed, so that it is known how much success and failures, strengths and weaknesses, and which parts need remedial.

The level of integration must be carried out simultaneously and synergistically so that each level experiences integration in all learning universally so that in the end the scientific dichotomy which tends to damage the balance of civilization must be based on an accurate and reliable basis so that in understanding and conveying it back there are no irregularities that can damage science itself. The integrative paradigm in the scientific context between transmitted knowledge and acquired knowledge is expected to create a holistic and non-partial academic atmosphere. So that the specialization of certain fields of knowledge does not result in the formation of myopic-narcissistic insights, and the scope of knowledge also does not limit itself to facts or recognition of immanent finality, where everything is only seen in its "pragmatic" meaning. But also the existence of meaning or finality of science that is transcendent, namely something that is outside of science which is the significance and direction of something in its "teleological" sense.

The context of Islamic education in the paradigm of integration of faith and learning should not be something new, because all aspects related to Islam are bound by a dictum of monotheistic ideology. From this concept the principle of integration is built, in which epistemologically there is no dichotomy between the rational domain and the empirical domain. The implication in the aspect of socio - religious education with an integrative paradigm is that students are invited to think holistically and not be partial in living a plurality of beliefs and religions. The educational process plays a decisive role in the process of integration of science and religion, something that will appreciate the results of theoretical knowledge and practical experience of divine nature extracted from each other's personal experiences.

4. Conclusion

The Al-Quran was revealed to humans, apart from being a differentiator between right and wrong, it also guides people to demand and develop knowledge. With the integration of Islamic religious education with science and technology, it is expected that the learning carried out will be more meaningful and easy to understand. So that the aim of Islamic religious education is to direct students to know, understand, live, to have faith, piety, and have noble character in practicing the teachings of Islam from its main source, namely the holy book Al-Quran and Al-Hadith, through teaching guidance activities, training, as well as the use of experience can be implemented.

The responses of Muslim scholars regarding the relationship between Islamic and general science are 3 typologies, namely: Restorationist, Reconstructionist, and Reintegrationist. The unification between the Islamic sciences and the general sciences is more inclined towards integration-interconnectivity and refers to an ontological, epistemological and axiological perspective. There are three areas of integration-interconnection between science and religion, namely:

1. Integrative - Interdependent, that is, ontologically the relationship between science and religion, in which the existence of science and religion is interdependent on one another.
2. Integrative - Complementary, namely the epistemological relationship between science and religion, in which all the methods applied in science and religion complement one another.
3. Integrative - Qualification, namely the relationship between science and religion axiologically, where all the values of science and religion mutually qualify one another. That is, the truth value of science is justified by religion, so science is not value-free, but must be illumined by divine (religious) values (a) Selecting a theme or topic to be studied (b) Determining the concepts to be developed and then making a list (c) Determine the activities to be carried out in order to investigate the concepts that have been registered (d) Determine which fields of study or subjects are related to a particular concept (e) Review activities and related fields of study with integrated learning (f) Arranging material to make it easier to distribute or use it in activities to be carried out both (g) individually and in groups (h) Determine the sequence of activities in class implementation, preferably starting from the easiest or most simple or already accustomed to by students (i) Holding follow-up discussions. This is done to improve the ability of students to describe what they have done and draw conclusions from these activities.

Based on the above steps, what is prepared by teachers of religious material clusters (Quran hadith, fiqh, moral beliefs) in planning the learning process that integrates science material is the preparation of lesson plans, teaching materials/materials, and learning media. The prepared lesson plan is not yet an integrated lesson plan with science material. To prepare an integrated RPP, it is necessary to determine the theme of the science class subjects to be integrated. With religious material (Quran hadith, fiqh, moral beliefs), then determine the indicators and goals to be achieved. Learning

modules used for religion have integrated science material. Learning in the process has been integrated between religious family material and science material. Integration is generally carried out incidentally, and the nature of the main subjects is maintained. So that the integration of religious material into science subjects can be classified into a correlated model (connectedness model).

REFERENCES

- Ardy Novan Wiyani (2012). *Manajemen Pendidikan Karakter Konsep dan implementasinya di Sekolah*, (Yogyakarta: Insan Madani)
- Assegaf, Abd. Rachman (2014) *Integrasi Sains Sosial dalam Pembelajaran Pendidikan Agama Islam*. Pada Seminar Nasional tanggal 15-16 Oktober 2014 oleh PPs UIN Sunan Kalijaga Yogyakarta Prodi PI.
- Abdullah, M. Amin (2000) *“Epistemologi Pendidikan Islam: Mempertegas Arah Pendidikan Nilai dalam Visi dan Misi Pendidikan Islam dalam Era Pluralitas Budaya dan Agama”*, Makalah disampaikan dalam Forum Seminar dan Lokakarya Ilmu Pendidikan Islam, Fakultas Tarbiyah IAIN Sunan Kalijaga, (21 Februari 2000), h. 1.
- Buchori, Mochtar Ilmu Pendidikan dan Praktek Pendidikan., h.13
- Fathurrohman Muhammad dkk (2012) *Belajar dan Pembelajaran: Meningkatkan Mutu Pembelajaran Sesuai Standar Nasional*. Yogyakarta: Teras
- Hasan sadilli dan John M. echols (2006) *Kamus inggris–Indonesia* . Jakarta. PT Gramedia Pustaka Utama
- Kartanegara Mulyadhi (2005) *Integrasi Ilmu Sebuah Rekontruksi Holistik*, Jakarta: Arasy
- Kartanegara Mulyadhi (2007) *Mengislamkan Nalar Sebuah Respons terhadap Modernitas*. Jakarta: PT. Gelora Aksara Pratama
- Muhammad Syarifudin dan Samsul Nizar dan (2010). *Isu-Isu Kontemporer entang Pendidikan Islam*. Jakarta: Kalam Mulia
- Muhammad In’am Esha (2009). *Institutional Transformation*, Malang: UIN Maliki Press
- M. Safiq (1995) *“Islamizations of Knowledge. Philosophy and Methodology and Analysis of the Views and Ideals of Ismail Raji Al-Faruqi, Hosein Nasr and Fazlur Rahman”* (dalam Hamdard Islamicus, vol XVIII, no.3), h.70
- Penjelasan mengenai Finalitas Imanen dan Transenden (2006) *lihat Louis Leahy, Jika Sains Mencari Makna*, Yogyakarta: Kanisius
- Suprayogo Imam (2006) *Paradigma Pengembangan Keilmuan Islam Perspektif UIN Malang*. Malang: UIN-Malang Press