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Integration Of Science In Education

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Abstract

Integration comes from ideas about the existence of a dichotomy, such as between the religious sciences and the general sciences. There are many factors that cause the existence of these sciences to be dichotomy or unfriendly/harmonious, due to the causes of differences at the ontological, epistemological and axiological levels of the two fields of science. The impact of a dichotomy like this eventually gives birth to educational outputs that are incomplete and have an imbalance between science and moral ethics, even though in a statement said by Albert Einstein "science without religion is blind, religion without science is lame" In order to give a spiritual touch to science This requires the integration of knowledge. The integration referred to here is to incorporate substantive values from Islam into scientific buildings, both at the epistemological, ontological, and axiological levels. In its implementation, there are two models of integration of knowledge carried out by experts, namely the first by means of Islamization of general sciences, and the second by way of choice if it can be integrated then integration is carried out, but if it cannot be integrated then dialogue or interconnection is carried out.

Keywords : Science Integration, Dichotomy, Islamization, Interaction

Integrasi Ilmu Dalam Pendidikan

Abstrak

Integrasi berasal dari sebuah pemikiran-pemikiran tentang adanya pemisahan (dikotomi), yakni seperti antara ilmu-ilmu agama maupun ilmu umum. Banyak fakto-faktor yang menyebabkan adanya ilmu-ilmu tersebut dikotomi atau tidak bersahabat/harmonis, dikarenakan adanya penyebab perbedaan pada tataran ontologis, epistemologis dan aksiologis kedua bidang ilmu pengetahuan tersebut. Dampak dari dikotomi seperti ini akhirnya melahirkan out put pendidikan yang tidak utuh dan memiliki ketimpangan antara sains dan moral etik, padahal dalam suatu statement yang dikatakan oleh Albert Einstein "ilmu tanpa agama buta, agama tanpa ilmu lumpuh" Dalam rangka untuk memberikan sentuhan spiritual terhadap sains ini maka yang diperlukan harus adanya integrasi ilmu. Integrasi dimaksud disini adalah memasukkan nilai yang substantif dari Islam ke dalam bangunan keilmuan baik itu pada leve-level epistemologi, ontologi, maupun aksiologi. Dalam pelaksanaannya terdapat dua model integrasi ilmu yang dilakukan oleh para pakar, yaitu yang pertama dengan cara islamisasi imu-ilmu umum, dan yang kedua dengan cara pilihan apabila dapat diintegrasikan maka dilakukan integrasi, akan tetapi jika tidak dapat diintegrasikan maka dilakukan dialog atau interkoneksi.

Kata Kunci: Integrasi Ilmu, Dikotomi, Islamisasi, Interaksi.

PRELIMINARY

The emergence of integration is caused by thoughts such as the existence of facts or the so-called separator (dichotomy) between religious and general sciences. There are so many things that cause this science to be dichotomous or said to be inharmonious, because it is caused by differences such as ontological, epistemological and axiological. It is also known that Islamic religious sciences are based on revelation which is absolutely true and assisted by reasoning which in the process of using it must not conflict with revelation. In addition, general science is the result of research and observations made by humans so that it becomes a science. Most of these sciences come from Western countries, most of which have an aesthetic, materialistic, secularistic, empiricistic, rationalistic, and even hedonistic philosophy that makes the two sciences have different characters, then dichotomization is born between the two sciences.

The wrong view or perception (misperception) and continues to grow in society about what they call religion, religious education, religious studies, and learning religion. Religion according to their view is nothing more than ritual activities, such as remembrance, prayer, fasting, zakat, hajj, weddings, funeral arrangements and others.

Likewise, the views above have an impact on the dichotomy of science. The lessons of monotheism, fiqh, tasawwuf, morals, dates and Arabic are called Islamic religious lessons. Then general lessons such as science, social studies, PPKN, and others. That is the view that develops and continues to grow in society. When someone wants to study religion, they come to religious education institutions such as madrasas, Islamic colleges, or Islamic boarding schools. Likewise, when they want to study in general, they come to general educational institutions such as primary and secondary schools or general higher education. The impact of a dichotomy like this eventually gives birth to educational outputs that are incomplete and have a gap between science and moral ethics, even though in a statement said by Albert Einstein "science without religion is blind, religion without science is lame" which shows how important religion is to guard science and how important science is in practicing religion. Therefore, it is very necessary to integrate knowledge so that Islam continues to develop.

RESEARCH METHODS

The method used by the author is library research. The data sources used are entirely from libraries or documentation. Namely reviewing sources consisting of several literatures related to the theme of the integration of science in education. Through an analytical approach to decision studies, it can be used as a basis for developing Islamic religious education. In the theoretical aspect, it can be used as a reference in dealing with the times that continue to develop, especially in the world of Islamic religious education which can change the way people think in integrating knowledge in education.

DISCUSSION OF RESEARCH RESULTS

Integration comes from the English language, namely "integration" which means the whole. The term integration has the meaning of renewal or what is called the unification of different elements so that there is a complete or unified whole. This integration is literally the opposite of separation, an attitude that puts each field in different boxes. The term integration can also be used in many contexts relating to matters relating and unifying between two or more elements that are considered different, both in terms of properties, species names and so on.

Educational integration is an effort or unification, a process of changing the attitudes and behavior of a person or group in an effort to mature humans through learning. With the integration of education, it is hoped that it will give birth to productive humans, producing real works for the progress of themselves, the nation and the State. Integration is expected to produce high-quality education, namely education that provides knowledge. Based on this explanation, integration is the unification of all the different elements into a unified whole. While the integration of education is a human effort that combines learning in a unified whole, to shape the attitudes and behavior of students.

Then M. Amir Ali gave an understanding of scientific integration: Integration of sciences means the recognition that all true knowledge is from Allah and all sciences should be treated with equal respect whether it is scientific or revealed. The keyword conception of scientific integration departs from the premise that all true knowledge is from Allah (all true knowledge is from Allah). In another sense, M. Amir Ali also uses the term all correct theories are from Allah and false theories are from men themselves or inspired by Satan.

Among the most popular ones used in the context of the integration of the religious sciences and the general sciences is the word Islamization which means to bring within Islam. The broader meaning is referring to the process of Islamization, where the object is people or humans, not science or other objects. In the context of the Islamization of science, the one who must relate himself to the principle of monotheism is the seeker of knowledge (*thâlib al-ilm*), not knowledge itself. Likewise, those who must admit that humans are in an atmosphere of metaphysical and axiological domination of God's provisions are humans as seekers of knowledge, not science.

Islamization of science, according to Ismail al-Faruqi, requires a reciprocal relationship between reality and the aspect of revelation. Although there are differences in the pattern of concept mapping about the Islamization of science offered by the two figures, the spirit offered regarding the Islamization of science is the same, namely how the application of science as the basis for human progress cannot be separated from the spiritual aspect which is based on the normative side. *al-Quran* and *al-Sunnah*. On the other hand, to understand the values of revelation, Muslims must make use of science. Without utilizing science in an effort to understand revelation, Muslims will continue to be left behind by other people. Because of the reality, science is currently very instrumental in determining the level of progress of mankind. From the definition of Islamization of knowledge above, there are several models of Islamization of knowledge that can be developed in facing the era of

globalization, including: the purification model, the Islamic modernization model, and the neo-modernism model.

By looking at the various approaches used by Al-Faruqi in the idea of Islamization of science, such as: (1) mastery of Muslim scientific treasures, (2) mastery of contemporary scientific treasures, (3) identification of scientific deficiencies in relation to Islamic ideals, and (4) reconstruction of the sciences so that they become a blend that is in harmony with Islamic heritage and ideals, so the idea of Islamization can be categorized into a purification model.

While the neo-modernism model seeks to understand the basic teachings and values contained in the Qur'an and al-Sunnah by considering the intellectual treasures of classical Muslims and observing the difficulties and conveniences offered by the world of science and technology.

This model of Islamization of knowledge emerged in the 19th and 20th centuries AD. According to Imam Suprayogo, the methodological basis for the Islamization of knowledge is as follows: First, the contemporary problems of Muslims must be explained from the traditions and results of ijthad of the scholars which are the result of interpretation of the Qur'an. Second, if the tradition does not find an answer that is in accordance with contemporary conditions, it is necessary to examine the socio-historical context of the verses of the Qur'an which are the basis for the ijthad of these scholars. Third, through a historical study, the true moral message of the Koran will be revealed, which is the social ethics of the Koran. Fourth, after that only examine it in the context of today's Muslims with the help of the results of a careful study of science on evaluative and legitimacy issues so as to provide a moral basis and direction for the problems to be overcome.

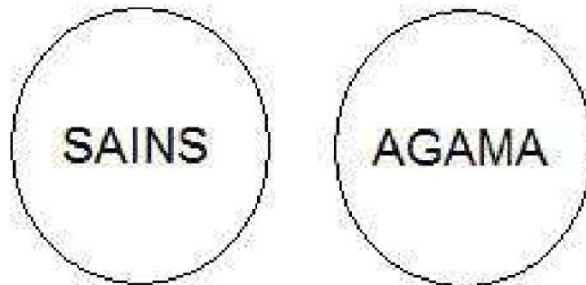
From the various definitions and models of Islamization of knowledge above, it can be concluded that Islamization is carried out in an effort to rebuild the spirit of Muslims in developing science through freedom of intellectual reasoning and rational-empirical and philosophical studies while still referring to the contents of the Qur'an and Sunnah. prophet so that the Islamic ummah will rise and advance following its backwardness from other ummah, especially the West.

In contrast to the above view, which tends to integrate science and religion with an Islamization model approach, Armahedi Mahzar in his writings, first describes several integration models which then offer models and methodologies of integralism of science and Islam. Mahzar classifies the models of integration between science and religion into five models, based on the number of basic concepts that are the main components of the model. If there is only one basic concept that is the main component of the model, it is called a monadic model, if two are called dyadic models, if three are called triadic models, if four are called tetradic models, and if five are called pentadic models.

The first model is monadic. This model is adopted by fundamentalists, religious, or secular. Religious circles claim that religion as a whole contains all branches of culture, while secular circles consider religion as a branch of culture. Meanwhile, in the view of religious fundamentalism, religion is the only truth and science is only one branch of culture, while in the view of secular fundamentalism,

culture is considered as a human expression in realizing a life based on science as the only truth. An overview of this model can be seen in Fig.

Picture
Independent Learning Model



The first variant of this dyadic model is called the complementary dyadic model, which can be described as a Taoist symbol in Chinese tradition. In this model, science and religion are considered as an inseparable unit. This model can be described as in the figure.

Picture
Dialogic Dyadic Model



This model is a correction of the independent dyadic model. This model raises philosophy as the third element that can bridge science and religion. This model can also be modified by replacing philosophy with the humanities or cultural sciences, so that it is culture that bridges science and religion. This model can be described as in the figure.

Picture

Dyadic Model



The third variant can be described by two circles of equal size that intersect each other. If one of the circles is science, and the other circle is religion, then it can be said that the similarities between the two circles are the material for dialogue between science and religion. This variant is called the dialogic dyadic model, which can be seen in the figure.

CONCLUSION

From various opinions expressed by several experts, that the concept of integrating science and religion can be divided into two major groups, namely, the first group, which integrates by means of Islamization of the general sciences (science, social and humanities), with the principle that the application of Knowledge as the basis for human progress cannot be separated from the spiritual aspect which is based on the normative side of the Qur'an and al-Sunnah. On the other hand, to understand the values of revelation, Muslims must make use of science. Islamization is carried out in an effort to rebuild the spirit of Muslims in developing science through freedom of intellectual reasoning and rational-empirical and philosophical studies while still referring to the content of the Qur'an and the sunnah of the prophet so that the Ummah of Islam will rise and advance following the backwardness of the Ummah. others, especially the West. The concept of Islamization began to emerge in the 19th and 20th centuries, driven by Isma'il al-Faruqi, M. Amir Ali. Etc.

The second group offers several integration models as did Mahzar, which classifies the integration models between science and religion into five models, with the basic concept that is the main component of the model, only one is called a monadic model, if two are called dyadic models, If three are called triadic models, if four are called tetradic models, and if five are called pentadic models.

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