Integration of Islamic Education Renewal with Science and Technology in Realizing Tri Dharma Perguruan Tinggi (Three Principles of Higher Education)

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Abstract

The digital era has opened wide in front of eyes. Many opportunities and challenges have increasingly pointed, especially for the existence of Islamic colleges must have a resolution that bridged the various challenges. One of them renewed the integration of Islamic education with science and technology. It is also as an ikhtiar in order to realize the Tri Dharma Perguruan Tinggi (Three Principles of Higher Education), that includes education and teaching, research and development as well as community service. In order for the college does not end up as an ivory tower, Tri Dharma present as the ideals of Indonesian universities in an effort to educate the nation. The reality of Islamic education in Islamic universities, especially, spend a lot of time to discuss the dogmatic religion problem that caused many debated that led to khilafiyah. It is neglected over the growing phenomenon of science and technology that grew rapidly. Besides preoccupied with khilafiyah aspects, Islamic education teaching tends to be esoteric. In his commentary, Al-Jawahir, Shaykh Thanthawi writes that the Qur’an in it contains more than 750 verses kauniyah, verses about the universe and 150 verses about jurisprudence. This showed that the verses of the universe are more dominant than the dogmatic verses that contain the teachings as well as being a reproach to human beings to use their minds as optimally as possible. Islamic education is not only transfer of knowledge and developing of knowledge but also an education of Islam which integrated science and technology so that can contribute to society.

Keywords: Integration, Islamic education, Science and technology, Tri Dharma Perguruan Tinggi.

Introduction

The existence of Islamic education in the development of the Indonesian nation has a very strong position, whether viewed from historical, sociological and juridical angles. From a historical point of view, Islamic education in Indonesia has a long root in building a civilization of the nation, especially since Islamic education has been going on since a long time, ie since the entry of Islam into the archipelago. Initially, education in Indonesia runs simply informal. Some who originally grew from the centers of study then developed into Islamic boarding schools, madrassas, and colleges. From a sociological point of view, it appears that the existence of Islamic education in Indonesia has become a necessity in society. Today, from a juridical standpoint, Islamic educational institutions have a solid position in the education system in Indonesia because Islamic education has become an integral part of the national education system. In Law No. 20 of 2003, the position of madrasah has the same position as the school (Hidayat, 2009).

Although Islamic education has a strong position, the growing era demanding progress and renewal of Islamic education. In order for Islamic education to exist in this millenial era, it takes an Islamic education which is integrated with science and technology in order to realized Tri Dharma Perguruan Tinggi. In order for Islamic education not only become a creed that leads to debate in the classes of lectures.

The new scientific paradigm that unifies, not merely incorporates God’s revelation and the discovery of the human mind (holistic-integralistic sciences), it will not result in downplaying the role of God (secularism) or excluding human beings from the surrounding community and the surrounding environment. It is hoped that the concept of integralism and the reintegration of scientific epistemology will also be able to resolve the conflict between extreme secularism and negative fundamentalism of rigid and radical religions in many ways (Abdullah, 2012).

Currently, the number of lecturer in Indonesia is approximately 265,817 lecturers. 5200 of the professors and there are 31,000 heads of lectures. While the professors are actively working with about
3,200 people. The rest, lecturers/professors assigned to government and private agencies. Indonesia has the potential to give birth to the great researchers. Unfortunately, the potential is not yet optimized. Apparently, many gait of civilitas academic which is less than optimal to run Tri Dharma Perguruan Tinggi. One effort to realize the university is to develop and disseminate science through scientific work. Transforming science is not always in the form of teaching and learning processes in the classroom, but also in the form of research over time, reversed changes. Indonesia, formerly known as Soko guru slowly began to fade. Malaysia who had studied in Indonesia actually has a lecturer who is more productive than Indonesia. Malaysia's scientific paper index is ranked 37th, with a total of 125,084 works. While Indonesia was ranked 61st with 25,481 works. Seeing the phenomenon is the reason for the need of integration aspects of Islamic education with science and technology in realizing Tri Dharma Perguruan Tinggi in the research and development aspect. According to Marwan Saridjo, every emerging "ijithad" and "new opinion" that affects the change of a "doctrine" or "creed" necessarily lead to the controversy that often leads to negative things. In context, the idea of a paradigm renewal of the Islamic education system, in the event of controversy or dissent, should not lead one to apologetic stance and to mutually negate the other's opinion. Differences of opinion must be the encouragement of all parties to share and conduct self-assessment on their opinions or concepts that have been released so as not to stop at the level of "discourse and discourse". A 'concept' or idea is judged worthy and practicable if it can be practiced and accompanied by the belief that the new changes and paradigms can provide maslahat and in line with the demands of the supra-system and the aspirations of the people (Hidayat, 2009).

In addition, citing the opinion of Agus Purwanto The reject and neglect of science in the Islamic world occurred widely and covered all walks of life including its elite. This phenomenon continues, this is in line with Shakykh Thanthawi because scholars and Muslims are still struggling and spend much time, energy and funds for the case of fiqh. Poems and their meaning, such as al-fiqh anfusu sya'irin, fiqh is everything or fiqh is the most valuable knowledge; idza ma'a tazza dzu ilmin bi ilmin fa ilmul fiqhi hall bi'liza'azin, if the noble knowledgeable people because of their knowledge, the science of fiqh make it more noble, still very dominant in society (Agus, 2015).

The legal passage only amounts to one-fifth of the verses kauniyah, but has sucked almost all the energy of scholars and Muslims. On the contrary, the large number of kauniyah verses is not much attention and even neglected. Science as the normative manifestation of the verses kauniyah seems unrelated and does not bring Muslims to heaven or hell so never discussed, both in the area of science and recitations. The concerns and claims of Shaykh Thanthawi have been raised about seven decades ago, but the state of science among Muslims and the Islamic world has not changed significantly. The people remain ignorant of the verses kauniyah and natural phenomena (Agus, 2015). From the above explanation can be drawn the conclusion of the first Tri Dharma, education and teaching aspect no longer need dichotomy of Islamic education with science and technology. According to Tilaar quoted by Ahmad Tafsir that there are three things that stand out in education today, namely; rigid system, corrupt practices and not oriented to community empowerment. First, seeing the education system today is still rigid. A system caught in authoritarian power is bound to be rigid. The visible features are centralism and rigid bureaucracy. Second, the national education system has been poisoned by corrupt practices, collusion, and nepotism. Third, the education system is not oriented towards community empowerment. The educational goal of educating the people has changed with practices that incriminate the people to obtain a good quality education (Hidayat, 2009). In Higher Education, there is Tri Dharma Perguruan Tinggi covering; education and teaching, research and development and community service. To make it happen requires a lot of effort especially in Islamic Higher Education by taking the values of integration of Islamic education and science and technology that is outdated, then brought back.

**Method**

This paper used a literature research. In the book Mestika zed Biblical Research Method, there is four steps of library research: First, equipment preparation, the tools that used in literature research is pencil (pen) and note paper. Second, compose bibliography-work, bibliography work is a note from the main source material that will be used for research. Most bibliographic sources come from library collections that are on display or not displayed. Third, time set, in this case, depending on the person who takes the available time, for example on planning a couple hours a day, a month, it depends on the person who involved. Fourth, reading and making a notes research, meaning that what is necessary for the research can be recorded, so can be more practical in searching for books (Khatibah, 2011).

**Discussion**

*Renewal of the Integration of Islamic Education with Science and Technology in Achieving Tri Dharma Perguruan Tinggi*

1. Definition of Renewal and Integration
In KBBI online mentioned renewal that 1 process, ways, deed of renewal: have been much discussed about - way of thinking society; 2 the process of developing culture, especially in technology and economy; - social Pol general motion or special outcome to eliminate the errors of the functioning of the social system or its parts (KBBI online, 2012). Integration comes from the word integrate which is a verb that has the meaning of 'combine something so that it becomes fully part of something else, or mix/be together as one group' (Bull, 2008). So that is meant integration renewal is a business or movement to revive the integration.

2. Understanding Islamic Education

Education in Arabic is derived from the word tarbiyah defined as education and murobbi as an educator. Origin of the word robba, yurobbi, tarbiyahatan. Robbun has at least three meanings that need to be understood; (1) caring for or developing the potential of students (digging), (2) caring for or in Islam known as the meaning of caring of the fitri so as not to deviate (taking care of something sacred so as not to dirty), (3) protecting the students so as to avoid something which is dangerous. Islamic education takes to watch the individual and social arrangements that bring adherents to the embrace and application of Islam in a comprehensive way. In order to be able to bear the mandate desired by Allah, Islamic education must be interpreted in detail. Therefore, the existence of reference or source of Islamic education should be the main source of Islam itself, namely the Qur’an and as-Sunnah (An-Nahlawi, 2004).

Islamic education is the development of mind, the arrangement of behavior and emotional, the relationship of human role with this world and how humans are able to utilize the world so as to achieve the goals of life as well as strive for its embodiment. The whole idea has been illustrated integratively (intact) in a solid basic concept. Islam also has offered the concept of ageedah that must be believed in the human embedded feeling that pushed it to the normative behavior that refers to the Islamic Shari'a. The behavior in question is human servitude based on an understanding of the purpose of the creation of man himself, whether done individually or collectively (An-Nahlawi, 2004).

3. Definition of Science and Technology

The word 'knowledge' or 'science' in Indonesian has several equivalents in foreign languages, among others; science (in English), wissenschaft (German) or wetenschap (Dutch). While the definition of science without any further information is natural sciences. Natural sciences are the sciences that studied the phenomena of the universe with all its contents. Included in natural sciences (hereinafter referred to as science) are 'basic sciences', also referred to as 'pure sciences', such as biology, chemistry, physics, and astronomy with all its branches. Derivation of basic sciences is applied sciences, i.e pharmacy, medicine, agriculture, dentistry and so forth (Abdullah, 2004). In Arabic, the word 'ilm can be defined as 'knowledge of the sign' (verse) or 'knowing the verse'. In this context, the sign or verse in the context of knowledge is 'natural phenomena with all its contents' (Abdullah, 2004).

Based on definition above, some definitions of science and technology can be given as follows: According to Baiquni, the definition of knowledge or science is "a collection of human knowledge about nature that is rationally concluded from the results of critical analysis of the measurement data obtained through observation on natural phenomena". While technology has a sense of "the set of human knowledge about natural utilization processes derived from the application of science, within the framework of productive-economic activities" (Abdullah, 2004).

4. Values of Integration of Islamic Education with Science and Technology in Achieving Tri Dharma Perguruan Tinggi According to Prof. Amin Abdullah

Ruse clarifies the relationship between religion and science that there are four possible connections between science and religion: (1) war, (2) independent, (3) dialogue, (4) integration (Agus, 2013). In this case, the research study focus on aspects of its integration. Amin Abdullah’s approach of integration-interconnection includes 3 (three) dimensions of science development namely al-nas, al-ilim and al-falsafah is a reconciliation between the Islamic sciences with the general sciences (modern sciences). The hope is the achievement of integrative and interconnected science unity. This process is expected to be the solution of the various crises that plague humans and nature today as a result of the ignorance of a science to another science (CDSD Team, 2013). Here are some way in realizing Tri Dharma Perguruan Tinggi:

a. Education and Teaching

The need to integrate the hadith al-nas, hadarah al-ilim and hadarah al-falsafah in a lecture as an act of transfer and developing of knowledge. Lecturers and students need synergies of mutual development and revive the integration of Islamic education with science and technology. Student exchange programs abroad are also very interesting to continue proclaimed for the improvement of the quality of education in college.

b. Research and development

Building awareness and interest in research among the academic community in a college is not an easy matter. This is because the world of research involves many aspects; ethos and
academic culture among the academic community, academic policies and demands of institutions that can raise the research ethos, the environment that nurtures academically the supporting infrastructure, and the politics of academic policies of the state that are able to give appreciation and incentives to the achievers in the work scientific (Hilmy, 2016). Islamic education is indispensable in research. Through journal articles or thesis, student trained to paradigm integrate \( al\text{-}nas \text{ hadarah}, \text{ hadarah } al\text{-}ilm \) and \( al\text{-}falsafah \) in his research.

Third, the Dharma of Community Service in this case the integration of the lower aspects. That is an activity that has become a habit of Indonesian students namely KKN (Community Service Course Program). The division of KKN group members consists of various faculties. With the existence of various disciplines can train students' analytical and critical power. In addition, an up-to-date learning plan in lectures is needed so students are ready to enter the community to balance theory and practice.

c. Community service
KKN (Kuliah Kerja Nyata/Community Service Course Program) is a mandatory activity for every Indonesian student. The division of KKN group members consists of various faculties. With the existence of various disciplines can train students' analytical and critical power. In addition, an up-to-date learning plan in lectures is needed so students are ready to enter the community to balance theory and practice.

Conclusions
Renewal in integration is an effort to revive the values of integration that has been conducted by one of scientists, namely Prof. Amin Abdullah. He integrates \( \text{hadarah } al\text{-}nas, \text{ hadarah } al\text{-}ilm \) and \( al\text{-}falsafah \) between Islamic education with science and technology in realizing Tri Dharma Perguruan Tinggi. First, the Dharma of Education and Teaching through mutual synergy and revive the integration of Islamic education with science and technology especially between lecturers and students. Student exchange programs abroad are also interesting and beneficial for improving the quality of education in college. Second, Dharma Research and Development by promoting research-based Islamic education. Through journal articles or thesis, students trained to paradigm integrate \( al\text{-}nas \text{ hadarah}, \text{ hadarah } al\text{-}ilm \) and \( al\text{-}falsafah \) in his research.

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