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# INTEGRATION OF SCIENCE IN ISLAMIC EDUCATIONAL INSTITUTIONS

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### KEYWORD

Integration of Science, Islamic Education

### ABSTRACT

The dichotomy of science is not new in the midst of the Indonesian people and nation, this issue has become a dialectic that continues to touch and adorn various studies and dialectics of intellectuals. Entities who consider religious knowledge and general knowledge as water and oil that cannot be combined, while other entities claim that knowledge is actually one because it is derived from one substance, it is Allah SWT from whom everything comes and from it everything will return.

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## INTRODUCTION

The dichotomy of science is an attitude or understanding that distinguishes, separates and contrasts between "religious sciences" and "non-religious sciences (general science)". Some of the terms in this course are "science of the afterlife" and "science of the world", some also call it "science of naqliyyah" and "science of aqliyyah. The separation (dichotomy) between religious knowledge and general science has been around for a long time. In fact, some Islamic communities still think that these two sciences have different entities that cannot be reconciled. They think that both have different areas, both in terms of formal and material objects, research methods, criteria of truth and the status of their respective theories.

Likewise, in the world of education in this nation, this dichotomy has long existed between schools and Islamic boarding schools. Public schools are only oriented towards general content because schools originate from a system built by the Dutch colonial so their style and content is very secular and excludes religion in them, as well as Islamic boarding

schools, the content of course is classical Islamic studies based on classical books written by the scholars. At the nadir of the clash between school and Islamic boarding school education, Madrasas emerged which aimed to mediate the two unbridgeable poles of school and Islamic boarding school education. So the birth of the madrasah is certainly an integration between the school and Islamic boarding school education models. So it is hoped that schools will not only teach secular sciences but also introduce the Islamic teachings of *Rahmatil Lil Alamin*.

Institutionally, the secularization of education in Indonesia has led to the formation of a dichotomy paradigm in education that has been running for decades, namely between religious education on the one hand and general education on the other. Religious education that takes place in Islamic boarding schools, madrasas and Islamic Religious Colleges (PTAIN) is managed and within the scope of responsibility of the Ministry of Religion. Meanwhile, general education provided in Elementary Schools (SD), Middle Schools, High Schools, Vocational Schools (SMP, SMA, SMK and so on), and General Universities is managed and under the responsibility of the Ministry of Education and Culture and the Ministry of Research and Technology. The educational process in religious education institutions is generally more focused on mastering Islamic knowledge alone, and can relatively well develop character and personality, however there is very little strengthening in the aspects of science and technology. And on the other hand, the educational process that takes place in general education institutions produces people who master science and technology, but fail to shape the personality and character of students. So the logical consequences of historical mistakes in the field of education tend to produce a secular, materialistic society in this country.

In Islam, there is actually no essential separation between religious knowledge and general knowledge. Because the various scientific disciplines and intellectual perspectives developed in Islam do contain a certain hierarchy, but this hierarchy ultimately boils down to knowledge of the "Single Nature" which is the substance of all knowledge. This is the reason why Muslim thinkers and scientists try to integrate science developed by non-Muslims into the hierarchy of science according to Islam.

Even further, Barizi stated that there is a disease of dichotomy and believes that religion is not science because religion is built on belief. As a result, a gap arises between revealed knowledge; namely knowledge that comes from revelation and scientific knowledge; such as social sciences, humanities, natural sciences and so on. Imam al-Ghazali in his work entitled *Misykat al-Anwar* explains the nature of knowledge, namely light, and then explains the nature of light and its relationship with Allah. In his explanation, Al-Ghazali stated that there are gradations or levels of knowledge, but in fact knowledge is one. *Wahdatul 'ulum* (*wahdad al 'ulum*) etymologically comes from the words *wahdad*, meaning

one, and 'ulum meaning sciences, the plural form of the word 'ilm. Wahdad Al-'Ulum's thesis according to Imam Al-Ghazali by Abdul Muhaya explains that the concept of wahdad al-'ulum basically cannot be separated from the concept of wahdad al-wujud. Being in Ibn Arabi's view means one, namely Allah. This means that, in essence, knowledge is one, but knowledge seems to exist in large quantities. According to Imam Al-Ghazali, knowledge is knowing something according to the thing itself. That is, knowledge is the knowledge that a person has about an object (knowledge itself) correctly. Abdul Muhaya concluded his research that the reason Imam Al-Ghazali had the concept of the unity of knowledge (wahdat al-'ulum) was because of two important things. First, Al-Ghazali's doubts about groups who claim to be experts in the truth (mutakalimun, Shi'ah Isma'iliyyah and philosophers), who find that the truth of their teachings is only logical, speculative and have not yet reached the essence of the truth; namely the truth he discovered when he became a Sufi. Second, there is motivation to restore the correct position of science; As something holy (light) comes from the Most Holy Substance (Allah), therefore it must be used with purity (sincere intention) for the Most Holy Substance (Allah).

In the Islamic concept of knowledge that humans continue to develop through research, its essence only comes from the revelation of Allah SWT as contained in the Al-Qur'an. However, recently the Qur'an, which is believed to be a source of knowledge, has shifted its position due to the secular outlook that has developed in the West which has released and separated religious values from science, resulting in the loss of the role of religion as a foundation in the development of science. and the ideology of secularism emerged.

The integration of religious and general knowledge will actually add to the treasures of human knowledge, so that problems that arise in life can be answered from two points of view, both religious and general, to borrow a term that is often used as "German brain but the heart of the Kaaba". This shows that general knowledge must continue to be pursued, but on the other hand, religious knowledge must continue to be sought so that harmony between this world and the hereafter can run hand in hand. For this reason, the study in this paper tries to explain the issue of integrating science in educational institutions, so that in the future it is hoped that the next generation of this nation will no longer divide religious and general knowledge, but will be able to integrate the two as pillars in living life.

## **RESULT AND DISCUSSION**

### **The Concept of Science According to Experts**

1. Muhammad Amin Abdullah



The idea of scientific integration was also presented by Imam Suprayogo, who is famous for his tree of knowledge approach. He is someone who is known for his expertise in the ideas of reforming Islamic education. He is Prof. DR. H. Imam Suprayogo Born in Trenggalek 2 January 1951. He is a Professor at the Tarbiyah Faculty of the State Islamic University of Malang and was once the Chancellor of the State Islamic University (UIN) Malang.

The tree of knowledge approach created by Imam Suprayogo along with changes in science is described as being like a tree. It consists of roots (which are not directly visible to the eye, especially the supporting roots in a tree), trunk, branches, twigs, leaves, flowers, bark, and so on. Science is also described as a building which consists of a foundation (which is not directly visible to the eye), pillars, roof, and so on. Science is also described as a structure in which there are elements or elements, each element of which is a related part that cannot be separated between the elements and functions to strengthen each other in a scientific system.

**The description of the meaning of the tree of knowledge above is:**

- [1] The roots that are firmly rooted in the earth are used to describe the ability to speak foreign languages (Arabic and English), logic and philosophy, natural sciences and social sciences. Foreign languages, namely Arabic and English, must be mastered by every student. Arabic is used as a tool to deepen knowledge that comes from the Koran and the Prophet's hadith and other Arabic books. The use of English is considered important as the language of science and technology and the language of international communication. Furthermore, deepening of Pancasila as the nation's way of life, logical/philosophical abilities, natural sciences and social sciences need to be mastered by every student so that they can be used as provisions and instruments in analyzing and understanding the contents of the Koran, hadith and natural and social phenomena that are used as objects. his studies. If this is mastered well, students will be able to take part in further scientific studies easily.
- [2] Strong stems are used to describe sciences that are related and sourced directly from the Koran and the hadith of the Prophet. Namely, study of the Koran, study of hadith, Islamic thought, and Nabawiyah sirah. This kind of knowledge can only be studied and understood properly by those who already have proficiency in Arabic, logic, natural sciences and social sciences.
- [3] The branches and twigs of this strong and shady tree are used to illustrate the modern scientific discipline chosen by each student. This discipline aims to develop

aspects of expertise and professionalism. Modern scientific disciplines include, for example, medicine, philosophy, psychology, economics, sociology, engineering and other branches of science.

The tree of knowledge does not explicitly state that the fruit is people who are ready to work or immediately find work, either in government or private agencies. Work is recognized as important, but the fruit of the tree of knowledge is not limited to that. As a person who has noble qualities, Ulul Albab always aspires and is capable, so that his existence always benefits others. Apart from that, an ulul al bab is never self-oriented. His mind and soul always reach far beyond himself, namely for the benefit of others. They are said to be successful or successful when they have benefited other people. The orientation of a person's life as a fruit of the tree of knowledge is always to be a giver and positioned at the top, and not vice versa, as a recipient or at the bottom.

### **Forms of integration of knowledge in educational institutions**

The integration of knowledge in formal educational institutions is still dominantly a discourse that is quite interesting to study. The practice turns out to be as complex as the discourse developed. Operationalization in the curriculum context still leaves many problems, which sometimes gives rise to skepticism.

When integration experiments only occur at the tertiary level, it is very late because the students already have the secularity virus in their minds. The integration of knowledge should start at the pre-school level, then continue to the next level. This can take advantage of the existing momentum in formal and non-formal Early Childhood Education (PAUD) as well as benefit from the implementation of the 2013 Curriculum in Elementary Schools/Madrasah Ibtida'iyah (SD/MI). This level of education applies a thematic learning model. This model makes it easier to integrate Islam and science than the next level of education. An even better opportunity can be used when several schools assisted by the Ministry of Education and Culture and Madrasahs assisted by the Ministry of Religion are still using the 2013 Curriculum where elementary and MI use thematic learning.

Meanwhile, it is a tough task for Islamic universities to be able to experiment with thematic learning by using the principles of thematic interpretation in preparing prospective teachers and conducting experiments in schools/madrasahs. Madrasah Ibtida'iyah Teacher Education and Raudlatul Athfal Teacher Education (PGMI and PGRA) can start by developing SD/MI teaching materials which so far separate Islamic Religious Education (PAI) lessons from thematic books in SD/MI by completely revising them.

The implementation of knowledge integration in educational institutions can be seen from several activities and forms, namely:

a. During flag ceremony activities:

The flag ceremony activity is a form of moral learning that is very valuable because there is discipline, order and various other moral messages. Flag ceremonies have so far been identified with public or secular activities, but madrassas or Islamic higher education have included the reading of the holy verses of the Koran in flag ceremony activities. Reading the holy verses of the Al-Qur'an is not only a transmission but also a means of internalizing the content contained in the Al-Qur'an so that the delivery of the message in the flag ceremony has clear values and references in the Al-Qur'an.

b. On Extracurricular Activities

In extracurricular activities, both in the fields of arts, sports and agility, integration practices can be seen in various activities. For example, in scout extracurricular activities the values of faith, worship and morals can be integrated, namely in persami activities which include the five daily prayers in congregation, reciting basmallah before scout activities or training begins, reading prayers before and after activities, cults, spiritual showers, nature activities. , social service and others, the result of the internalization of Islamic values is the realization of noble morals and character.

c. In curriculum content

The integration of knowledge can be seen in the curriculum content at the school or madrasah level, where in the thematic subject books each learning theme has been integrated with the content of verses from the Qur'an and hadiths related to the theme in question. For example, in elementary/MI thematic books, integrative learning that is included in the curriculum is integrated with the Al-Qur'an and Sunnah. It can be seen from the overview of SD/MI thematic books with themes.

## CONCLUSION

From the discussion presented, science integration is the development of real integration between religious values (in this case Islam) and science in general. There are two major concepts of knowledge integration put forward in Islamic religious knowledge, namely, 1. Muhammad Amin Abdullah with his spider web horizon theory, 2) Imam Suprayogo with the Tree of Knowledge theory. Both theories agree that knowledge is basically one *wahdah* as stated by Imam Al Ghazali that knowledge is essentially one from Allah SWT which is known as the concept of the unity of knowledge (*wahdat al-'ulum*).

This concept is also interesting because it is a concept that was also developed at UIN North Sumatra under the name Wahdatul 'ulum, a big concept by Prof. Syahrin as Chancellor of UIN North Sumatra to bring UIN North Sumatra to become a center for implementing the integration of general science and religious knowledge as an effort to develop Islamic civilization to advance the nation and state.

Then the integration of knowledge in educational institutions can be seen through several applications in madrasas and universities, for example 1. In flag ceremony activities, 2). In extracurricular activities such as scouting, there are scouting activities which are accompanied by gatherings with congregational prayers, cults, etc. 3) In the SD/MI curriculum, for each theme there is an integration of the theme with the Qur'an and Hadith, at the middle level there is also content inserted in each mapel. Religious integration, such as the moral Aqidah content in KD, can include anti-corruption teachings, in the science mapel, verses from the Qur'an can also be inserted which contain the greatness of Allah SWT's creation. 4) At the tertiary level, this integration can be seen from the change of IAIN/STAIN to UIN where which initially only managed Islamic departments, changed to UIN, then general departments have been opened.

## REFERENCES

Al-Qur'an DEPAG Surat al-An'am: 97

Barizi, Ahmad, *Pendidikan Integratif: Akar Tradisi dan Integrasi Keilmuan Pendidikan Islam*, Malang: UIN Maliki Press, 2011

Baharuddin dkk, *Dikotomi Pendidikan Islam: Historisatas dan Implikasi pada Masyarakat Islam*, (Bandung: PT Remaja Rosdakarya, 2011)

<http://download.garuda.ristekdikti.go.id/article.php>, *Integrasi Sains dan Agama di Perguruan Tinggi Sebagai Upaya Mengikis dikotomi Ilmu, Istikomah Fakultas Agama Islam Universitas Muhammadiyah Sidoarjo Indonesia*, diunggah tanggal 06 Oktober 2021, pukul 10:26

Habib, M., & Nadira, D. (2024). THE ROLE OF THE FAMILY IN CHARACTER EDUCATION FOR CHILDREN. *ONTOLOGI: JURNAL PEMBELAJARAN DAN ILMIAH PENDIDIKAN*, 2(1), 27-36.

Imam Suprayogo. *Paradigma Pengembangan Keilmuan Perspektif UIN Malang*. Malang: UIN Malang Press.2006

John M. Echlos dan Hassan Shadily, *Kamus Inggris-Indonesia*, (Jakarta: PT. Gramedia Pustaka Utama, 2003)

Junaidi, J. (2023). ENHANCING STUDENTS'ABILITY IN READING BY WATCHING MOVIE. *JELT: Journal of English Education, Teaching and Literature*, 1(1), 1-5.

Kusyani, D., & Pasaribu, G. R. (2024). THE FUNCTION OF INDONESIAN LANGUAGE AS A MASS MEDIA. *ONTOLOGI: JURNAL PEMBELAJARAN DAN ILMIAH PENDIDIKAN*, 2(1),

24 Mardhiyah <https://jurnal.rahiscendekiaindonesia.co.id/index.php/attakillah>

16-26.

[Kitab Misykatul Anwar dan Terjemah Indonesia \[pdf\] | Shiny.ane \(el'poesya\) \(wordpress.com\)](#), diunggah 05 Oktober 2021, pukul 09:36

M. Amin Abdullah, "*Etika Tauhid Sebagai Dasar Kesatuan Epistemologi Keilmuan Umum dan Agama* (Yogyakarta: Pilar Relegia Press 2004)

[membangun Integrasi Ilmu Dan Agama: Pengalaman Uin Maulana Malik Ibrahim Malang - PDF Free Download \(adoc.pub\)](#), di download 05 Oktober 2021 pukul 5:12

M. Amin Abdullah - Wikipedia bahasa Indonesia, ensiklopedia bebas, diunggah 07/10/2021, pukul 04:38

Mujjiburrahman dkk, *Pendidikan Berbasis Syari'at Islam*, (Banda Aceh: Dinas Syariat Islam, 2011

Parluhutan Siregar "*Integrasi Ilmu-ilmu Keislaman dalam Perspektif M. Amin Abdullah*, hal. 344

[Wahdatul 'Ulum dalam Harapan UIN SU - Portal Berita UIN SU \(lpmdinamika.com\)](#), diunggah 05 Oktober 2021, pukul 09:39

Zaenuddin, M, "*Paradigma Pendidikan Islam Holistik*" dalam *Jurnal Ulumuna*, Vol. XV, No. 1, 2011