

Critical Issues and  
**REFORM IN  
MUSLIM HIGHER  
EDUCATION**



STATE ISLAMIC UNIVERSITY  
SUNAN KALIJAGA  
YOGYAKARTA



Critical Issues and  
**REFORM IN  
MUSLIM HIGHER  
EDUCATION**

*Edited by*  
Rosnani Hashim  
Mina Hattori

STATE ISLAMIC UNIVERSITY  
SUNAN KALIJAGA  
YOGYAKARTA



**IUM  
Press**

Gombak • 2015

First Edition, 2015  
© IIUM Press, IIUM

IIUM Press is a member of the Majlis Penerbitan Ilmiah Malaysia - MAPIM  
(Malaysian Scholarly Publishing Council)

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without any prior written permission of the publisher.

Perpustakaan Negara Malaysia

Cataloguing-in-Publication Data

CRITICAL ISSUES AND REFORM IN MUSLIM HIGHER EDUCATION /  
EDITED BY ROSNANI HASHIM & MINA HATTORI

ISBN 978-967-418-381-3

1. Muslims--Education. 2. Islamic education. 3. Education, Higher.

I. Rosnani Hashim. II. Hattori, Mina.

378.0088297

Published by:  
IIUM Press  
International Islamic University Malaysia  
P.O. Box 10, 50728 Kuala Lumpur, Malaysia

Printed in Malaysia by :  
NAGA GLOBAL PRINT (M) Sdn. Bhd.  
No. 1, Jalan Industri Batu Caves 1/3  
Taman Perindustrian Batu Caves  
68100 Batu Caves, Selangor Darul Ehsan.  
Tel : 03-6188 1542

# Contents

---

	<i>Figures</i>	vii
	<i>Tables</i>	ix
	<i>Acknowledgements</i>	xi
	<i>Introduction</i>	xiii
CHAPTER 1	Privatisation of Arab Higher Education with Special Reference to Jordan <i>Aref Tawfiq al-Atari</i>	1
CHAPTER 2	Internationalisation of Contemporary Muslim Higher Education and Ummatic Development: A Case Study of the International Islamic University Malaysia <i>Rosnani Hashim</i>	20
CHAPTER 3	Pluralistic Co-Existence and the Role of Comparative Religion in Islamic Higher Education in the Context of Malaysia <i>Kamar Oniah Kamaruzzaman</i>	57
CHAPTER 4	Issues of Freedom and Creativity in Muslim Higher Education <i>Yedullah Kazmi</i>	63
CHAPTER 5	Academic Freedom in the Islamic Tradition: Can Islamic Higher Learning be Anything but Creative? <i>Saheed Ahmad Rufai</i>	85
CHAPTER 6	The Decline of Intellectualism in Higher Islamic Traditional Studies: Reforming the Curriculum <i>Rosnani Hashim</i>	110

## Contents

CHAPTER 7	The Role of Islamic Higher Education for Communities in Europe: A Case Study of the Islamic University of Rotterdam (IUR) <i>Ahmet Akgunduz</i>	140
CHAPTER 8	The Functions of Islamic Higher Education in Multicultural Societies: A Comparative Analysis of the United Kingdom and the Netherlands <i>Mina Hattori</i>	162
CHAPTER 9	Integrating Science and Islam: A Case Study of State Islamic University (UIN) Sunan Kalijaga, Yogyakarta, Indonesia <i>H. Sutrisno</i>	178
CHAPTER 10	The Role of Islamic Higher Education in Harmonising Religion and Sciences: A Case Study at UIN (State Islamic University) Syarif Hidayatullah, Jakarta, Indonesia <i>Bambang Suryadi</i>	198
CHAPTER 11	Harmonising Faith and Science in an Integrated Teacher Education Curriculum: A Case Study of Seri Begawan Religious Teachers University College <i>Ghazali Basri</i>	215
	<i>Contributors</i>	237
	<i>Index</i>	241

# Figures

---

Figure 2.1:	Internationalisation model: key performance categories	23
Figure 6.1:	The American liberal education curriculum model	128
Figure 6.2:	Al-Attas curriculum model of an Islamic university	128
Figure 6.3:	Rosnani's proposed curriculum model of an Islamic university	128
Figure 9.1:	The construction of the interconnected entities in UIN	181
Figure 9.2:	The development of the secular sciences	184
Figure 9.3:	The chronology of the development of the integrated sciences	185
Figure 11.1:	Apportionment of each knowledge domain	221
Figure 11.2:	The integration of knowledge in the curriculum structure	221
Figure 11.3:	Bridging the faith and the science realms	229



# Tables

---

Table 2.1:	Undergraduate students' enrolment by nationalities	30
Table 2.2:	Top 10 countries of international students origin	30
Table 2.3:	Students graduated with PhD from IIUM by nationality and disciplines as of 2011	31
Table 5.1:	Frequencies of response to the survey	105
Table 8.1:	Islamic studies students by age and sex (2005-2006)	168
Table 8.2:	Islamic studies' students by domicile (2005-2006)	169
Table 8.3:	Islamic studies students by ethnicity (2005-2006)	170
Table 11.1:	Hierarchy of knowledge	218



# Acknowledgements

---

The book is based on papers presented at the International Seminar on *Reforms in Islamic Higher Education in Meeting Contemporary Challenges* at the Graduate School of Education and Human Development, Nagoya University on 30<sup>th</sup>-31<sup>st</sup> July 2011. These papers were well-received and intensely debated by the Seminar participants and in this volume these papers have been further reviewed and revised. The challenges facing Muslim higher education in the present time are still formidable and this book is an attempt to understand and clarify these issues.

We would like to take this opportunity to express our gratitude to the Japan Society for the Promotion of Science (JSPS) for generously supporting the Seminar through Grants-in-Aid for Scientific Research (C) (KAKENHI) Grant Number 21530877 and also to the Ministry of Education, Culture, Sports, Science and Technology (MEXT) for its Grants-in-Aid for the Internationalisation Promotion Programme in Higher Education (Research category).

We would also like to thank all contributors of the various chapters of the book for their utmost cooperation in the production of this book.

We are thankful to the reviewer, who critically reviewed the various articles and provided insightful comments and criticism that helped the authors to improve their respective works.

Finally, we would like to thank the International Islamic University Malaysia (IIUM) Press, in particular its Director, Prof. Dr. Roosfa Hashim, for the publication of this book.

ROSNANI HASHIM  
MINA HATTORI

# Introduction

---

Rosnani Hashim  
Mina Hattori

There are various types of higher education institutions in Muslim societies. The first is the traditional Islamic university that offers only Islamic traditional sciences (or Islamic studies), namely Arabic, the Qur'an and Sunnah, and the other Shari'ah sciences. This is the legacy of the madrasah and the university of the 11<sup>th</sup> and 12<sup>th</sup> century Islamic civilisation. The second is the modern, secular university with curricula resembling the modern Western university in terms of programme structure and content. This is common among the countries that have been once colonised by a Western power such as the British, the French or the Dutch, and the university is the legacy of the colonial period. This type of university offers programme in the acquired sciences such as the social sciences, natural sciences, humanities and applied sciences. This category also includes universities that have specialized roles such as the agricultural, technical or medical universities. The third type, that is, a recent invention, is the modern Islamic universities that are formed through a marriage between the first and the second type. This kind of universities offers programme specialisation in the Shari'ah and also the acquired sciences. Between them, some are eclectic in which course contents are put up without any underlying care for epistemology and philosophy while others are more systematically designed with an underlying Islamic epistemology and philosophy of education running through all, or what is commonly called by some scholars as De-westernisation or "Islamisation" of contemporary knowledge.

Today as we embark into the twenty first century which is also the Information Age (Toffler, 1980), we observe many challenges facing Muslim higher education institutions which have led them to reexamine their positions and programmes vis-à-vis others. These examinations and reviews are crucial for the survival of these institutions. Top on the list of the challenges is globalisation and its accompanying effects which are inevitable. It is affecting every state and community throughout the

world that has access to information and communication technologies. The presence of the e-mail, the internet, you-tube, blogs, facebook and twitters and other forms of social media has speeded up the pace of the dissemination of information. These same media have been partially responsible in the mobilisation of masses such that massive demonstrations that may even lead to revolutions could be galvanised easily as in the case of the Arab Spring and the change of guard in Thailand. These new technologies and their applications on a massive scale have definitely changed the landscape of the world.

This book deals with the issue emerging from globalisation and the nature of reforms undertaken by Muslim institutions of higher learning to meet up with the challenges. It highlights the attempts made by Muslim higher education institutions to deal with the issues emerging from globalisation. Specifically, the issues that will be discussed are privatisation of education, internationalisation of education, cultural diversity, academic freedom, Islamic higher education for Muslim minorities in Europe and the United Kingdom, and various attempts in formulating an integrated higher education. In addition to globalisation, there are other critical issues peculiar to the Muslim scholarly tradition. First, the issue of the dichotomy of Muslim educational institutions which offer either the Traditional Islamic Sciences in their curriculum or only the Modern Sciences. This imbalance focusing between the mind and the soul has probably led to the decline of the Muslim civilisation. Second, the issue of academic freedom; and finally, the issue of integration of curriculum and Islamisation of Knowledge. This book analyses each of these issues in depth with the hope to enlighten its readers. Awareness of the problems is the first important step. The solutions will hopefully be achieved through deliberations that emerge from it. The rest of this chapter provides a brief summary of all chapters presented in the book.

In Chapter One, Al-Atari discusses the issue of privatisation of education in higher education in the Middle eastern countries. Privatisation of higher education is one of the interventions that Arab countries introduced to encounter the globe-wide 'massification' of higher education. Due to pressing social and economic demand for higher education, in the last three decades, which coalesced with the shortage of finance, almost all Arab Governments legitimised

or encouraged privatisation of higher education so much so that public universities in Jordan for example have been out-numbered by private universities. Privatisation, which was till very recently a 'taboo', at least in some Arab countries, suddenly became a panacea. Much as this megatrend solved it, at the same time it allegedly caused many anomalies, *inter alia* deepening the center-periphery problem, jeopardising the position of the national identity and producing graduates with different value systems and life orientations. This chapter aims to come up with a model to make privatisation a success but with minimum side or adverse effects.

The pressure for higher education to internationalise is very strong. Internationalisation is defined as the process of integrating international dimensions into teaching, learning, research and service. Internationalisation means major changes in five dimensions – faculty involvement in international activities, an internationalised curriculum, study abroad, international students and scholars, and college leadership. The most important change is in student and faculty compositions, the internationalised curriculum out-look, the requirement of a second language which in most cases is English, and the desire to be ranked in world ranking as a demonstration of quality. These changes may have many repercussions to a society social structure such as an encounter with cultural diversity, education for fulfilling the needs of international markets and the dominance of English language. With the limited opportunity for English, it might create a cleavage in society or marginalise the local national language. The attempts to be ranked could lead to frustration because of the nature of the ranking system itself. But from another perspective, it will enhance the formation of the global village having a common language for discourse. In Chapter Two, Rosnani examines how internationalisation has impinged upon Muslim higher education, with the International Islamic University Malaysia (IIUM) as the case in point. It attempts to find out whether IIUM has been able to achieve its mission of Internationalisation through a survey conducted among its alumni and existing students.

Kamar Oniah, in Chapter Three, examines an important challenge of this century whose concern is the relationship between people, that is, how to accommodate differences and how to celebrate commonness.

This chapter discusses how the teachings of world religions can help students understand better other communities and therefore prepare them to relate to other people accordingly, without negotiating away their own identities, and yet be comfortable and appreciative of differences. In the context of Islamic scholarship, this is not a new enterprise. In fact, Western scholars in the field of Comparative Religion duly acknowledge that it was the Muslims who first started this field of discipline, who took serious interest in and made deep studies of religions other than their own, devising their own methodologies, from the objective and scientific to the critical and dialogical approaches. These methodologies need to be understood, analysed and expanded, to be made relevant to the needs of our time. Among these, perhaps the method devised by al-Biruni best fits contemporary needs, that is, textual, objective, scientific, understanding the religions as they are, and letting the adherents of the religions speak for themselves, an approach very close to the modern phenomenology of religion. In the context of pluralistic co-existence, such as Malaysia, this approach is surely more appropriate because it recognises the religions and communities as they are rather than “what they are supposed to be.” Teaching the religions properly will help students recognize similarities and differences among religions, and thus relate to other adherents and communities accordingly. Malaysia is one example of a multiracial and pluralistic coexistence – but the whole world also is moving towards this direction. The Malaysian experiences in general, and the curricula of Comparative Religion of the International Islamic University in particular, may be able to assist others who have similar aspirations.

Chapter Four examines the challenge of academic freedom and creativity. According to Fazlur Rahman (1982), one of the marks of a successful higher Islamic Studies is the ability of its graduates to be creative with ideas. It is not merely repetition. In this chapter, Kazmi makes the case that freedom and creativity are dialectically related; freedom is the condition for the possibility of creativity and creativity is an expression of freedom. Yet the case still has to be made as to how they are so related and what role, if any, does higher education play in this dialectic. The first part of the discussion addresses this issue. Having made the dialectical relationship between freedom and creativity credibly clear, the second half of the discussion brings Muslim higher education

into the picture by asking the question why these issues should be pressing for Muslim higher education. It is not just that higher education is more rigorous and makes more demands on students' intellect but rather as something qualitatively different from all previous levels of education. This view allows the issue of freedom and creativity in higher education to be properly made sense of. For that reason higher education is defined as the 'realm of freedom' and primary and secondary as the 'realm of necessity.' The realm of necessity is where students learn the skills and habits of mind that are needed to be creative at the level of higher education and learn to use freedom responsibly. This distinction is predicated on the assumption that freedom is not something given but learnt and comes with responsibility. The two realms, however, are not posited as mutually exclusive but thought of as what is emphasised in each. Freedom is defined as the freedom to create meaning in response to issues and problems and when they change to be free to create new meanings.

In continuing the discourse, Saheed, in Chapter Five, asserts that academic freedom was a notable characteristic feature of Islamic scholarship during the golden age of Islam which encouraged critical thinking and creative contribution among Muslim scholars. However, most of the institutions of higher learning that sprang up in quick succession in various parts of the Muslim world, within the last three decades, have given little or no attention to this important aspect of scholarship. Saheed assesses the degree of faithfulness of dominant institutes of higher learning to such a practice of freedom of inquiry. It seeks to expose the effects of such a deficiency on the products of such institutes by analysing the degree of academic freedom in the scholarship of both students and graduates. Through the use of a questionnaire and interview, Saheed collects data on the degree of creativity of the students and graduates of two dominant Islamic institutes of higher learning as evidence for his assertion. The chapter concludes that there is a need to embrace the culture of freedom of inquiry in order to produce the kind of critical and creative scholars that are associated with the Islamic tradition.

The issue of the waning intellectualism in Islamic higher education is the subject of Chapter Six. It is evident that the number of higher education institutions offering Islamic traditional sciences or studies has gradually

increased over the past decades. However the Islamic community has not felt their graduates' impact other than as teachers. If the criteria used to assess Islamic education is the growth of a genuine, original and adequate Islamic thought or intellectualism, then most of these institutions have not succeeded to provide such form of education. The author examines the goals and curriculum of higher Islamic education and the conditions conducive for the growth of intellectualism. She argues that poor pedagogy, which does not offer teaching methods, that encourage critical and ethical thinking, contributed to the state of affairs. Further, she argues that the basic problem is the inadequate conceptualisation of knowledge as to Islamic epistemology, curriculum and the lack of academic freedom. The author asserts that the issue of what knowledge is most valuable for today's intellectual and ethical Muslims has not been resolved and that this affects the curriculum structure and inevitably, the programme and inevitably, the progress of the Islamic traditional sciences.

Akgunduz argues in Chapter Seven that at a more concrete level, higher education has been more and more viewed as "a socio-intellectual necessity for Muslims and non-Muslims in the Western society." Through academic education and research, higher education can do something at contributing to the concretisation of an anthological synthesis: "Live as a Muslim and as a responsible citizen of the Western society." He argues that eradicating all misconceptions and misunderstandings about Islam and Muslims is possible only via higher education through the creation of Muslim elites.

In Chapter Eight, Hattori analyses the functions of Islamic higher education in multicultural societies through the example of the United Kingdom (UK) and the Netherlands. She focuses on Islamic higher education because the education of Islamic leaders (*imam* and Islamic scholars) and the formation and interpretation of Islamic knowledge depend on it. These two countries were chosen on account of their long history of higher Islamic studies spanning several centuries. In contrast to Islamic countries, Islamic studies in the UK and the Netherlands are taught by non-faith-based higher institutions, a characteristic sometimes determined by colonial policy. However, in the last several decades, Muslim minorities and Islamic organisations have begun to establish their own Islamic higher institutions of learning. Consequently, Islamic

studies are promoted by two types of higher institutions with different functions, namely non-faith-based and Islamic faith-based higher institutions. Furthermore, after September 11, 2001, a new approach to educating *imam* was introduced in the government policy. Thus, in this Chapter she examines how these two countries have struggled to create Islamic knowledge and studies in a multicultural society.

Chapters Nine to Eleven examine three different curriculum approaches taken by three Islamic higher education institutions in meeting the challenge of the dichotomy between the Islamic traditional sciences and the acquired sciences respectively. It is an attempt at integration of the sciences and to a certain extent include elements of Islamisation of Knowledge. These approaches are attempts to anchor education in faith and also to actualise the Islamic epistemology.

Sutrisno explains in Chapter Nine that up to now, the separation between science and religion, or specifically science and Islam is not over yet. Many people still hold the view that “religion” and “science” are two separate entities, either in terms of formal-material object, method of research or criteria of truth. However, this does not necessarily mean that there is no effort to end this dichotomy. The Universitas Islam Negeri (State Islamic University) (UIN), Sunan Kalijaga, Indonesia has taken a serious effort to end this dichotomy through promoting “integrative and interconnective approach” to the study of science and religion. Through a comprehensive study this UIN has developed nine models of integrative and interconnective approach. These nine models are the informative model, the confirmative model, the corrective model, the similarity model, the parallelisation model, the complementation model, the comparison model, the induction model and the verification model. This chapter argues for the necessity of the integrated-interconnected approach in the study of science and religion and describes the nine models and their application in depth.

In Chapter Ten, Bambang Suryadi of the UIN Sharif Hidayatullah, the first and largest Islamic university in Indonesia, presents the second model of harmonising the religion and sciences. The chapter is divided into five sections, namely the concept of harmonisation of religion and sciences, the role of UIN Jakarta in the process of this harmonisation, the unique model of the harmonisation, the constraints faced in the

implementation of the concept of harmonisation and the recommended solutions. The terms harmonisation and integration is used interchangeably in this chapter. The study applied both the qualitative and quantitative methods. Qualitatively, the data are gathered through in-depth analysis of related documents, observation and interviews. Quantitatively, a survey was conducted among 267 students of UIN Jakarta to gauge their opinions about the concept of integration of knowledge. The findings indicate that UIN Jakarta plays a significant role in harmonising religion and the sciences. The unique model of harmonising the religion and sciences at UIN Jakarta is seen in three aspects, namely institution, language and curricular development. The curricular content consists of the historical content, theoretical content, case content, practical content and Islamic content. The output of this study is a model for harmonisation that could be a reference for other Islamic institutions of learning.

Finally, the practice of harmonisation of religion and sciences was observed in Seri Begawan Religious Teachers University College (SBRTUC), Brunei. The College's principal objective is to prepare graduating teachers with contemporary knowledge and skills to enable them face the ever changing challenges in their teaching profession. By apportioning 23.7% of fundamental knowledge (*al-'ulum al-asasiyyat*) component, it was asserted that an integrated concept of curriculum of teacher education was introduced. Out of those fundamental knowledge, three subjects/courses were specifically designed purported to bridge religious subjects (faith realms) such as *shari'ah* (jurisprudence) and *usul al-din* (theology) with contemporary knowledge (sciences). Three courses were introduced, namely: Islamic Philosophy of Education, Comparative Study of Religions and the Islamic World-view. Chapter Eleven examines each of the above courses and deliberates on the cognitive processes as to how the learners ultimately could be enlightened with the 'new knowledge' (sciences). Of prime importance is the concept of integrated curriculum which will also be given due attention. The author contends that, albeit the so called *ulum al-din* (religious sciences) that are commonly considered to be in the realms of faith, but in reality it is not so, at least from an Islamic perspective. In this respect, it merits epistemological deliberations as to what constitutes faith in relation to *ulum al-din*.

What is evident from the discussion in the various chapters of the present work is that major issues affecting Muslim higher education are critical. These issues revolve around the philosophy and aim of education, the content or knowledge, the curriculum and also the human personality that is desired. Globalisation has posed great challenges to the Muslim societies and has definitely affected their higher education institutions. Privatisation of education, internationalisation of students and staffs, commodification of knowledge and cultural diversity are all elements of globalisation that are having impacts on curriculum and content. It is clear that the identity of the Muslims has also been challenged and education reforms especially in the form of formulating an integrated education is one way of overcoming this issue. From the ranking of universities has emerged the issue of performance and quality and the concern for the decline in the educational quality and intellectualism. The debates between the various groups – the nationalists and the liberals, between the religious and the secularists, the public and the private education champions will continue. What is important is that the issues are debated and deliberated in a matured and democratic manner so that in the end the Final good will triumph for the sake of all.



STATE ISLAMIC UNIVERSITY  
SUNAN KALIJAGA  
YOGYAKARTA

# Chapter 9

---

## Integrating Science and Islam: A Case Study of State Islamic University (UIN) Sunan Kalijaga, Yogyakarta, Indonesia

H. Sutrisno

### Introduction

There is a reciprocal relationship between human civilisation and science. Human civilisation is always influenced by science. Likewise, science is always influenced by human civilisation. The progress of the Muslims' civilisation from the seventh to the twelfth centuries was inseparable from advances in science. Likewise, their decline since the fourteenth century could not be separated from the decline of science. The progress or the decline of modern civilisation is also influenced by science. The progress achieved by the West right now could not be separated from its advances in science. The sciences developed in the West can be classified into three types, namely natural sciences, social sciences and humanities. Meanwhile in Muslim Indonesia, Islamic Sciences grew into five categories, namely *Adab* (Literature), *Da'wah* (Propagation), *Shari'ah* (Islamic Law), *Tarbiyah* (Education) and *Usuluddin* (Theology). In the case of Indonesia, the study and curriculum of the general sciences, such as the natural sciences, social sciences and humanities are managed and developed by the Ministry of National Education (MONE), whereas those of the Islamic Traditional Sciences are managed and developed by the Ministry of Religious Affairs (MORA).

The glory of Islamic civilisation in the seventh to the twelfth century began with the teachings of Islam which has a high regards for

science. For instance, the Prophet of Islam, Muhammad (peace be upon him), urged every Muslim to seek knowledge even as far as China, a great distance to travel during that period. This shows that the Prophet Muhammad was very much concerned with science, arguing that there are a lot of verses in the Qur'an that call for people to reflect on the creation of the universe. Without having knowledge of the physical or natural sciences, it is almost impossible to grasp the meaning of these verses. Another evidence of the Prophet's concern with science was his appointment of the skillful and talented people on reading and writing to be the writers of revelation. Badr prisoners of war were released after they have taught Muslims to read and write. In the Qur'an (*al-Mujadillah*: 11), it is stated that God raised the degree of people who believe and have knowledge. Even in the situation of war, a group of Muslims are obliged to deepen and sharpen their religious knowledge and understanding (*al-Qur'an surah Al-Taubah*: 122). The Qur'an (*Az-Zumar*: 9) asserts that the people who know and those who do not know are not equal. Muslims are commanded (*al-Qur'an surah al-'Alaq*: 1-5) to read, which does not mean literally to read but also includes research and exploration. The Qur'an (*an-Nahl*: 78) teaches that humans are born in a state of not knowing anything, but God equips them with the senses of hearing, sight and hearts for many reasons.

The teachings of Islam, derived especially from the Qur'an and the sunnah of the Prophet Muhammad (pbuh) motivated Muslims to make observations, perform *ijtihad*, conduct research and experimentation. These activities have been ongoing and has become their culture. This culture eventually led to great progress in the various sciences, such as the sciences of the Qur'an (Interpretation), *Hadith*, *Fiqh* (Islamic Law), *Usul Fiqh*, *Kalam*, Mysticism, Philosophy, *Mantiq*, Algebra, Astronomy, Medicine, Botany, Optics, language and Arabic literature.

As a result of their triumph in the various fields of sciences, the condition of the Muslim life improved tremendously. All needs were met, in fact abundantly. This condition leads some scholars to think that the people have been dazzled by the worldly life, and reduced their seriousness in the field of religion. Al-Ghazali wrote a book entitled *Ihya al-Ulum al-Din*, to remind the people of the importance of reviving the religious sciences. Since then, the term *ulum al-din* (Islamic Sciences)

and *ulum al-dunya* (Common Sciences) appeared in the midst of Muslim life. Belonging to the category of Islamic Sciences are the sciences of the Qur'an, the sciences of *Hadith* (the Prophet's Tradition), *Mantiq* (logic), *Kalam* (theology), *Usul Fiqh*, *Fiqh* (jurisprudence), Sufism, Arabic Language and Literature. While those included in the Common Sciences are Logic, Philosophy, Algebra, Astronomy, Optics, Botany and Medicine. The division of sciences is accompanied by a legal term; *fardhu 'ayn* for Islamic Traditional Sciences, and *fardhu kifayah* for the Common Sciences.

## The Indonesian Muslims' Dilemma of Choice between the Two Sciences

As a consequence of the division according to legal terms, Muslims are busy in studying Islamic Sciences, while ignoring the Common Sciences. As a result of neglecting these sciences, the Muslims were left behind by others in their life in this world. This not only created the dichotomy of sciences in the life of Muslims but has resulted in dualism in the system of education as well. In the context of Indonesia, the curriculum of the Common Sciences is developed by the Ministry of National Education (MONE), starting from kindergarten to the university (PTU), while that of the Islamic Sciences from Islamic kindergarten (RA) to the Islamic University (PTAI) by the Ministry of Religious Affairs (MORA).

One of the original objectives of converting Sunan Kalijaga State Institute of Islamic Studies (IAIN) to a State Islamic University (UIN) is to seek an alternative solution to the problem of the dichotomy of sciences and the dualism of the education system as discussed above. In other words, UIN Sunan Kalijaga's role is to interconnect Natural Sciences, Social Sciences and the Humanities which are managed by the MONE with Islamic sciences *Adab* (Literature), *Da'wah* (Propagation), *Shari'ah* (Islamic Law), *Tarbiyah* (Education) and *Usuluddin* (Theology) which are managed by the MORA. In more concrete terms, UIN reformulates the names of its faculties by combining an Islamic and a general nomenclature, such as the Faculty of Adab and Literature, the Faculty of Shariah and Law, and the Faculty of Tarbiya and Teaching. So, if the

sciences are constructed to interconnect between the Common Sciences and the Islamic Sciences, then it is no longer existed as a single entity, nor are they isolated entities, but now both are interconnected entities and inseparable, as shown in Figure 9.1.

The above scheme would lead to an interconnection between general education (supervised by MONE) and Islamic education (supervised by MONA) under the roof the State Islamic University (UIN). In the case of the Faculty of Tarbiya and Education, the curriculum that would be developed in this faculty is a combination of theories that are derived from Islamic education and also general education. By combining the theories from two disciplines, it is hoped that it would contribute to strengthening and improving the quality of education in Indonesia and to end the problem of the dichotomy of the sciences and religion.

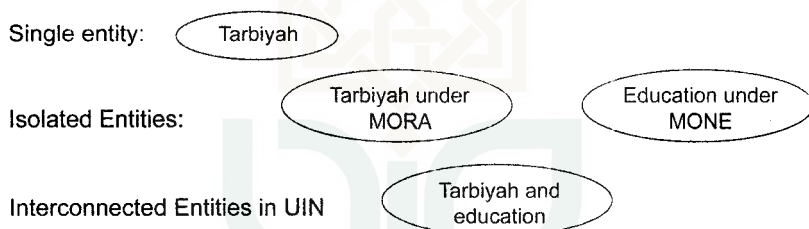


Figure 9.1: The construction of the interconnected entities in UIN

## Efforts in the Integration of Sciences and Islamic Studies

Al-Faruqi (1982), a Palestinian American scholar attempted to integrate the Islamic sciences by promoting Islamisation of knowledge. The International Institute of Islamic Thought (IIIT) was established in Virginia, USA in 1982. This Institute collaborated with the International Islamic University, Islamabad, Pakistan and the International Islamic University Malaysia in achieving its mission. In both universities, the efforts of Islamisation of knowledge were spearheaded. With the full support of Anwar Ibrahim, the then Malaysian Minister of Education, S.M. Naquib al-Attas, following the footstep of al-Faruqi, established the

Institute of Islamic Thought and Civilisation (ISTAC), Malaysia. Later, the Islamic Institute of Social Science was set up at Herndon, Virginia, and it has graduated scholars of Islamic social sciences (Raharjo, 2001).

Al-Attas (in Raharjo, 2001) criticised Muslims who prefer to adopt and use foreign language to express Islamic concepts or Islamic thought, arguing that this would lead to a process of secularisation. Al-Attas himself used the semantic methods of Arabic and Islam to capture the conceptual world-view of the people who use the language, that is, not only in speaking and thinking, but also in capturing the minds and interpreting the world that surrounds it. By applying the semantic analysis method, al-Attas preserved the world-view, in the developing terms of the realm in Islam. The implication is that knowledge originates from a different world-view and, thus it contains different meaning as well.

One of the real outcomes from the process of Islamisation of science initiated by al-Faruqi and al-Attas is in the area of economics, a field of study that has been developed, studied, understood and mastered in the West. Similarly, the legacy of Islamic traditions related to economy, both from al-Qur'an and al-Hadith as the primary sources and historically from the seventh until the 20<sup>th</sup> century is also rich. Islamisation of knowledge would mean securing materials from both sciences, then the relevance between them would be examined. A critical assessment of both is performed, followed by the analysis and synthesis of both so that eventually the so-called science of Islamic economy emerged. The findings on the form of Islamic economy is then disseminated to all corners, especially through Islamic higher education institutions.

The impact of al-Faruqi's thinking through IIIT can also be felt in Indonesia. The idea of Islamic economics, especially in the form of Islamic financial institutions began to take root in Indonesia since the beginning of the 1990s. In 1993, the first Muamalah Bank was opened. The importance of Islamic higher education institutions that focused seriously on Islamic economics, was not realised until in 1997 when the College of Islamic Sciences was established in Yogyakarta. After that, the number of higher education institutions offering Islamic economics and Shari'ah financial institutions grew rapidly and are doing well until today. In addition, a branch of IIIT was founded in Indonesia and headed by Prof. Dawam Raharjo.

Although the method of Islamisation of knowledge offered by al-Faruqi and al-Attas has shown encouraging results, it is very difficult to operate, simply because it requires dual competences. The requirements are the mastery of modern science as developed in the West and the mastery of the Islamic heritage, both normative and historical as well. Scientists who possess and master such multiple competencies are very rare. Although this method sounds good, it is very difficult to apply in Indonesia. To overcome this serious problem, Kuntowijoyo offers the solution through the theory of *Pengilmuan Islam* [Islamic-enriched Knowledge].

Kuntowijoyo put forward a theory called, *Pengilmuan Islam* (Islamic-enriched Knowledge). This theory is recommended to replace the theory of 'Islamisation of knowledge,' and to encourage the Islamic intellectual movement to progress further. Consequently, Muslim intellectuals are expected no longer to be as reactive, but to be proactive. Kuntowijoyo (2004) distinguished three expressions that seem to be confusing, these are *Pengilmuan Islam*, Islamic Paradigm, and Islam as a science. *Pengilmuan Islam* is a process, Islamic Paradigm, is the result, and Islam as a science is the process and outcome as well.

According to Kuntowijoyo (2004), Muslims should see through the reality of Islam, and the existence of humanities in the Qur'an. Islam as a text (al-Qur'an and al-Sunnah) is faced with reality; in other words, from text to context. Why do Muslims have to look at reality through Islam? According to the science of culture and sociology of knowledge, reality is not seen directly by the people, but through the veil (words, concepts, symbols, culture, community consent). In the Javanese people they saw the king through the symbols: *the myth Nyi Lara Kidul, ritual of labuhan, literature Babad Tanah Jawi*, procedures for worship and prohibitions. The officials of the Sukarno government saw the people of Masyumi, PSI and Murba through the concept of 'counter-revolution.' The New Order officials saw people who criticized its policies through the concept of 'anti-Pancasila,' and the people of Islam are 'extreme-right.' The Western world saw the Islamic world through the veil of culture: polygamy, veil, beard and radicalism.

Kuntowijoyo (2004) argues that the secular sciences are not all objective, like what it is supposed to be. Many Muslims themselves

doubt that Islam is a system, because they learn from Western secular sciences, that religion (including Islam) extends beyond the individual. Moreover they learn to be 'scientific' through Marxism which sees religion as the opiate. Human thought (science and philosophy) has become a 'guide for those who believe' in it, in place of true religion. So naturally, if Muslims had done the exact opposite, that is, creating Islam as a science, then Islamic *pengilmuan* Islam is meant to make the subjective nature of Islam turned into the nature of objective science; the subjective nature is hidden, while the objective nature comes to the fore.

He further explains that there are two methods used in the process of enriching Islam, namely integralisation and objectification. First, integralisation is integrating human science with revelation (guidance of Allah in the Qur'an and its implementation in the Sunnah of the Prophet). Second, objectification, that is making *pengilmuan Islam* [Islamic-enriched knowledge] as a mercy for all people.

According to Kuntowijoyo (2004), Thomas Kuhn considers the secular sciences as normal sciences, while the integrative sciences are being piloted as a revolution. The position of the new paradigm of integrative science would be similar to the position of the Marxist social sciences that are considered to be capitalistic. Secular sciences are a joint product of all human beings, while the integrative sciences are the product of the entire human being faithful to all men. Integrative sciences do not despise the secular sciences, but instead wanted to honour it by critiquing and continuing its journey. The integrative sciences do not want to replace the secular sciences, but just want to be in harmony. The integrative sciences also want to work to support the survival and future of mankind. The chronology of the development of the secular sciences according to Kuntowijoyo (2004) is illustrated in Figure 9.2.

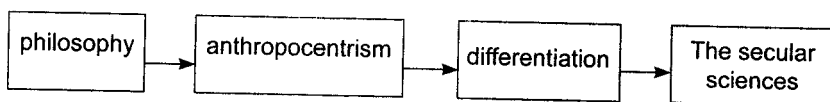


Figure 9.2: The development of the secular sciences

## Description

**Philosophy:** Philosophical rationalism that emerged later in the century rejected theocentrism of the 15<sup>th</sup>/16<sup>th</sup> century Middle Ages. *Ratio* and the revelation of God were exalted and man was humiliated.

**Anthropocentrism:** Human rationalism occupies a high position. Human being became the centre of truth, ethics, wisdom and knowledge.

**Differentiation:** Humans were regarded as the centre, there was differentiation (separation). Ethics, wisdom and knowledge are no longer based on the revelation of God. Because of this economic activity, politics, law, and science should be separated from religion. The secular sciences claimed to be objective, free of value and free of other purposes.

The chronology of the development of the integrative sciences is shown in Figure 9.3.



Figure 9.3: The chronology of the development of the integrated sciences

## Description

**Religion.** The Qur'an is the revelation of God that governs the relationship between humans with God, then govern itself, and the environment (physical, social, cultural). The Holy book that was sent down is an indication of ethics, wisdom, and can be at least a Grand Theory (eg, economic systems, education and politics). Revelation never claimed to be science *qua* science.

**Theo-anthropocentrism.** Religion claims to be the source of truth, ethics, law and wisdom. Religion has never made the revelation of God as the only source of knowledge and neglected the human intelligence, or vice versa, where it considers the human mind as the only source of knowledge and neglecting God.

**De-differentiation.** Modernism which requires differentiation is no longer appropriate with the spirit of the times. In the post-modern civilisation, what is needed is to shift to **de-differentiation (reconciliation)**. If differentiation requires the separation between religion and other sectors of life, then the de-differentiation tries to reunite religion with other sectors of life, including religion and science.

Kuntowijoyo (2004) explains that religion provides indicators of the truth of science, the scientific products and the goals of science. The science that is born from religion becomes objective science. Objectification of science is the science of the believers and it is for all mankind, not for believers only. For example, the objectification of the bee's sting without having to believe in the Quran praising the bees, and the shari'ah banking without having to believe in the ethics of Islam about the economy. Therefore, the objectification of science is open to all people. It can be transmitted openly and without secrecy (e.g., magic, charismaic, given).

**Integral science** is science that unites the divine revelations and findings of the human mind. Science is not going to exclude the existence of God (secularism) or exclude people. Integralism will resolve the conflict between extreme secularism and radical religions in many sectors. For example, secular Western thought is successful in producing the economic sciences. But then it enters the norms of God's revelation when it moves into the economics of shari'ah from which emerged financial institutions like Indonesia Muamalah Bank, BNI Syari'ah, Bank Mandiri shari'ah, and BMT. In addition, Kuntowijoyo also gives examples of the applications of Islam in politics and social prophecy which has enriched both.

The theory that Kuntowijoyo offered is fundamental and broad because it seeks to change the paradigm of modern Western secular thought of denying Divine revelation. Modern secular science is rooted in philosophy and from there ends at the ratio of mere truth alone, then trying to be converted from religion with attention to the truth of revelation and ended on integrative science. Although Kuntowijoyo's theory is very difficult to implement, he has managed to give a concrete example in the field of politics and social prophetic science. Although

this theory has had its own ethos and it has been applied by its founder, it is still very difficult for other scientists to emulate and apply.

Abdullah (2004) offers an interconnection of the scientific method with Islamic sciences. He tried to capture scientific activities at the State Institute of Islamic Studies (IAIN). Scholarly activity at IAIN only focused on Theology (*Kalam*), Philosophy, Mysticism (*Tasawwuf*), Tradition (*Hadith*), History (*Tarikh*), Exegesis (*Tafsir*) and Language (*Lughah*). IAIN has not been able to bring into it the discussion of the contemporary social sciences and humanities such as Anthropology, Sociology, Psychology and Philosophy. As a result, Islamic knowledge has an unbridgeable gap between classical Islamic sciences and modern one that used newer analysis of the social sciences and humanities, and even the natural sciences. Social, political, economic, religious, military, gender and environmental issues are rarely touched by the social sciences and Islamic studies at IAIN. Statements such as “to be religious today is to be inter-religious” is still considered absurd and unthinkable, even impossible, even though the era of globalisation of information force the religious people in this era to think so.

In the future this difficulty will be compounded by the reality on the ground that the Islamic religious sciences are not designed to be integrated with technology, is an important tool and skill for living today. General sciences are separated from the religious sciences of Islam. Each is separated, without any contact and collaboration. Of course, this phenomenon is a disadvantage for the nation because, from the beginning, Islamic ideas have always integrates the general sciences and Islamic religious sciences.

It is certainly necessary to associate the epistemology of Muhammad Abid al-Jabiri's model with Jurgen Habermas's thinking about three media in order to meet basic fundamental human needs, namely employment, communication and ethics. All of these have mission, advocacy and skill in performing the process of freeing themselves from all sorts of forces in history and society through the process of continuous education and enlightenment.

## Integration of Sciences and Islamic Studies at UIN Sunan Kalijaga

The effort in integrating sciences and Islamic studies at UIN Sunan Kalijaga has completely been documented in a book entitled *Kerangka Dasar Keilmuan dan Pengembangan Kurikulum* [Framework for Knowledge Policy and Curriculum Extension]. The content of the book is briefly explained here. This chapter aims to describe the efforts in integrating sciences and Islamic studies at UIN Sunan Kalijaga which encompassed the basis of scientific integration-interconnection, the basic framework of scientific integration-interconnection, the scientific integration-interconnection sphere, and the models of scientific integration-interconnection study based on this book.

### The Basis of Scientific Integration-Interconnection

The basic of scientific integration-interconnection can be categorised into five aspects. The five aspects are the theological, philosophical, cultural, sociological and psychological basics.

**Theological basis** means that Islamic education has drifted into modern and secular way of thinking, which unconsciously separates faith education with scientific education and moral education. The consequence of this is the backwardness of Muslim societies in every level of scientific fields. Modern education develops strict specialisation in every scientific discipline, eliminating integration among different disciplines and implementing dichotomy of Islamic sciences on one side and secular sciences on the other. The dichotomy implies the formation of different Muslim society's attitude toward both sciences, in that Islamic sciences are regarded and treated as divine sciences that are sacred and obligatory to be learned; on the contrary, secular sciences (natural sciences, social sciences and humanities) are regarded as profane and non-obligatory to be learned. The impact is reduction on Islamic and secular sciences. This situation leads Islamic sciences to become less attractive because it is separated from the reality, while secular sciences develop without the touch of ethics and religious spirituality that causes it to lose its meaning and become destructive.

**Philosophical basis** means that human life is very complex and multi-dimensional. The existence of various sciences, namely Islamic traditional or religious sciences, natural, social sciences or humanities, is actually human effort to understand the complexity of human life dimensions. Every discipline tries to penetrate certain dimension of human life. It is underlined by the assumption that one scientific discipline is enough to solve the human problems under any conditions. But this can be regarded as an unwise attitude. It is a manifestation of exclusive-arrogance, because one discipline only represents one side of human complexities.

Based on this perspective, UIN Sunan Kalijaga needs to construct a new scientific paradigm which is not satisfied with only mastering one discipline, but also understanding various other disciplines. The new paradigm intends to formulate integration and interconnection among disciplines as a bridge to understand the complexity of human life in order to increase the quality of life materially, morally, and spiritually.

**Cultural basis** means that the locus of UIN Sunan Kalijaga is Indonesia which has a different culture from the Arabic culture where Islam was born, and is also different from the Western culture where science developed. The majority of audience of UIN are local Indonesians, whereas Islam is universal although it was born in an Islamic context. A similar condition applies to science where natural sciences or social sciences are universal although they developed in the Western context. UIN of Sunan Kalijaga as an institution of higher learning must face the problem of the cultural gap, that is the gap between local culture and global culture of religion and science. Therefore, it is impossible to neglect local culture as the cultural basis in an education process, in interpreting Islam and developing science. When the Indonesian cultural basis is not applied to be the basis of religion and sciences, elitism will result in the process of religion and science. Religion and science will not be functional in real life.

Interpretation of the basic values of Islam has produced an extraordinary civilisation with the Qur'an and hadith as the axis, while the non-religious, scientific civilisation also developed significantly. However, if UIN Sunan Kalijaga only studies those two fields, it will never be able to produce graduates who could really contribute to the environment and societies of which they are member. That is why it is

the important to establish a dialogue between the two sciences above with a philosophy that is concerned with praxis-contextual and local culture ethics in Indonesian societies. With this dialogue, it is expected that the scientific paradigm in UIN can bridge the universality of both *hadharah* through *hadharah al-falsafah*, that new and genuine scientific culture will be born.

**Sociological basis** means that sociologically, Indonesia consists of various ethnic groups, cultures and religions. This variety often causes various conflicts endangering national integration. Theologically and normatively, there is no religion or culture that justifies aggressive acts to other people; it even stresses on how to live peacefully and harmoniously. However, the harmony and peace that are yearned for are often threatened by truth claim that encourages the emergence of social prejudice to other social groups.

The existence of truth claim and social prejudices, disturbing the harmonious relationship among religious believers and social groups, often begins with the scriptural way of interpreting religious texts and teachings, away from contemporary context. UIN Sunan Kalijaga needs to reorganise its scientific structures to be more integrated and interconnected in accordance with the diverse context and dynamics of the society. Scientific integration-interconnection paradigm offered by UIN Sunan Kalijaga basically tries to create social awareness that the religious, natural, social and humanities spheres have their own significance, and if each horizon is read in an integrated and interconnected context, it will produce holistic readings that are beneficial for our civilisation.

**Psychological basis** that consists of three spheres: belief, knowledge and activity are intended to read integrally and are interrelated as the main faculties in human life. Fragmentary, partial and exclusive reading of the three spheres will psychologically be dangerous. Belief should not be different from what is cognitively right, and what is cognitively right should not be contrary to the factual reality. Therefore, reading the three spheres integrally and inter-relatedly will give significant psychological benefits. Inconsistency between the three spheres can cause personality disorder due to the conflict between what is to believe in and the thought and the reality.

## The Framework of Scientific Integration-interconnection

Basically, Islam develops universal science and never recognises dichotomy between texts of religious knowledge and sciences. In general, sciences can be called Islamic sciences when they epistemologically come from Islamic values and ethics which are basically objective. Therefore, objectification process of Islamic ethics into Islamic sciences occurs in Islam. The objective of Islam is to be beneficial for human life regardless of religion, group, ethnic and race.

The scope of study in UIN Sunan Kalijaga includes the sciences develop through the texts of religion, sciences and philosophy which are studied not partially but in an integrated – interconnected manner. Historically, those fields had been studied and developed by Muslims scholars during the classical and Medieval Age, yet they got less attention from subsequent generations. Therefore, all scientific fields can be regarded as Islamic sciences as long as they ontologically, epistemologically and axiologically come from or are in parallel, with Islamic humanistic, ethical values and norms. This shows the difference between Islamic subjects and secular ones which, although is claimed to be value free, but are in reality full of epistemological and axiological interests. This resulted in the emergence of critics of the secular sciences who regarded their proponents as supporting the de-humanisation process.

Islamic and general sciences included in the field of studies in UIN basically come from the humanistic-ethics paradigm with scientific integration – interconnection in its curriculum pattern. The sciences to be taught in UIN, based on the scientific nomenclature, consist of humanities, social sciences and natural sciences, added with basic sciences which place Al-Qur'an and Hadith as the primary study.

Scientific dialogues in UIN Sunan Kalijaga, besides being integrative and interconnected with the internal Islamic fields, are also developed through the integration and interconnection between Islamic sciences and general sciences in the fields of humanities, social sciences and natural sciences as well.

## The Scientific Integration-Interconnection Sphere

The scientific integration-interconnection sphere is not only a concept but it is also the framework of the academic atmosphere which must be applicable. To answer the problem, at least, there are four spheres that must be understood. They are the philosophical, material, methodological and strategical spheres.

**Philosophical sphere.** The present era is different from Medieval and Modern ages. In Medieval age, science was dominated by the church, in which religious teaching was above rational thought. Rational thinking was developed inside the border of religious dogmas. In the modern age, the domination shifts from domination of religion over ratio into domination of ratio over religion. The slogan “science for science” is the symbol of scientific revolution that marginalised religion.

Learning from the periods of history above, science needs to be cleansed up of every domination, whether religion over ratio or vice versa. In contemporary era, the tendency to appreciate every scientific construction is very strong. Therefore, to assemble an interconnection paradigm between religion and science is the major human needs today. The scientific interconnection paradigm is more appropriate because it has the implication of appreciating and empowering society, culture, nation, ethnics and religious tradition.

Integration and interconnection at the philosophical sphere on teaching means that every subject has to be given existential, fundamental values related to other scientific disciplines and in accordance with humanistic values. In teaching *fiqh*, for example, besides its fundamental meaning as the philosophy of constructing relationship between human being, nature and God in the light of the Islamic teaching, the students should be convinced that the existence of *fiqh* does not stand alone or is self sufficient, but develop together with other disciplines, such as sociology. Sociology as a scientific discipline studying social interaction among human being will be well empowered if the lecturer asks the student to review social interaction theories existing in cultural and religious traditions. This interconnection will empower sociology on the one hand and cultural and religious traditions on the other.

Integration-interconnection in the philosophical sphere, then, is in the form of existential awareness that a scientific discipline always depends on other science.

**Material sphere.** Integration and interconnection in the material sphere is a process of integrating the values of universal truth in general and Islamic truth in particular into the teaching of general subjects such as philosophy, anthropology, sociology, law, psychology and education, and vice versa. Besides, there should be a relationship between one scientific discipline with the other in an epistemological and axiological unity.

The implementation of integration and interconnection in the material sphere can be formulated in three models. First is a model of integrating into the curriculum package. It is only a matter of equally placing subjects representing Islamic sciences and general sciences. The interconnection process of the sciences will be focused on the student's creativity to understand and connect both sides.

Second is the model of naming the subjects to show that there is a relationship between two scientific disciplines of general sciences and Islamic sciences. This model requires every term of subjects to include the word Islam, such as Islamic economy, Islamic education, Islamic sociology, Islamic anthropology, Islamic literature, Islamic philosophy, etc, as the reflection of a complete scientific integration.

Third is the model of integrating themes of subjects. This model requires every teaching of Islamic and religious subjects to be injected with the related general scientific theories as the form of interconnectivity between both sides and, on the other hand, in the teaching of general sciences. There should also be given Islamic and religious theoretic discourse as the form of the interconnectivity between both sides, without placing Islamic term in the subjects.

**Methodological sphere.** Every science has its own unique methodology that is usually applied in the development of the science. For example, psychology has distinguished methods such as introspection, extrospection and retrospection besides other general methods such as questionnaire, interview, observation, etc. This methodology can also be in a wider definition, in the form of approach. For example, there is what is called phenomenological, contemplative or even normative

approaches. When a scientific discipline is integrated or interconnected with other disciplines, for example psychology with Islamic values, then methodologically, the interconnected sciences must apply the safer approach and methods. Phenomenological approach, for example, that gives emphatic appreciation for the person who undergoes experience, is considered safer than other approaches, containing anti-religious bias such as psycho-analysis.

**Strategical sphere** is the application sphere or praxis from integrative-interconnective learning process of sciences. In this context, scientific quality and teaching skill of the lecture is the key to the success of a study based on interconnective paradigm. Active learning strategy in lecturing becomes an obligation. The weaknesses of the lecturer can be overcome by team teaching. In this paradigm, the more scientific disciplines are integrated and interconnected in a subject, the more is the need of a teaching – learning strategy involving more lecturers related with the examined knowledge.

## The Models of Scientific Integration – Interconnection Study

Scientific integration-interconnection can be manifested in three models:

1. **Informative**, meaning that a scientific discipline needs to be enriched with information from other scientific disciplines to broaden the insight of the academic activity. For example, the normative religious science needs to be enriched with historical social science and vice-versa.
2. **Confirmative**, meaning that a certain scientific discipline, in order to construct a firm theory, needs to get clarification from other scientific disciplines. For example, the binary opposition theory in anthropology will be much clearer when there is a confirmation or clarification from social and political history, and from the religious science of the rich-the poor, believer-infidel, heaven-hell, etc.
3. **Corrective**, meaning that a certain scientific theory needs to be confronted with religious sciences and vice versa, so that one side

can correct the other. Therefore, the development of scientific discipline will be more dynamic.

Besides the models above, there are six more detailed models that can be applied, namely similarity, parallelisation, complementation, comparison, induction, and verification. The *Similarity model*, that is, to treat scientific and religious concepts similarly, although they are not always the same. The *Parallelisation model*, that is, to make a parallel between concepts taken from the Qur'an and the scientific concepts. The *Complementation model*, that is, to make complementary between science and religion, arguing both of them could strengthening one another without losing their identity. The *Comparison model* is comparing scientific theories with religious concepts on the same indication. For example, the theory of motivation from psychology is compared to motivational concept carried out in the Qur'an. The *Induction model* is the thought of basic assumptions from scientific theories supported by empirical findings, continued with the formulation of abstract theory to the direction of metaphysic/supernatural thought, then linked with the religious and the Qur'anic principles on that matter. For example, the theory of "unmoving source of movement" from Aristotle is an example of induction process of scientific thought into religious thought. Another example is the incredible regularity and balance in the universe showing that there is Great Law that rules. The *Verification model* reveals the results of scientific research that support and prove the correctness or accuracy of the Qur'an. For example, the research on the potential of honey as medicine is linked with *surah an-Nahl*, particularly verse 69 'Then to eat all the produce (of the earth), and find with skill the spacious paths of its Lord: there issues from within their bodies a drink of varying colors, wherein is healing for men: verily in this is a sign for those who give thought.'

## Conclusion

Muslims have problem with the separation between science and religion or science and Islam. Sunan Kalijaga State Islamic University (UIN) seeks an alternative solution to the dichotomy of the sciences and the

dualism of the education system. UIN tries to interconnect between the Natural Sciences, Social Sciences and the Humanities which are managed by the MONE with the Islamic sciences *Adab* (Literature), *Da'wah* (Propagation), *Shari'ah* (Islamic Law), *Tarbiyah* (Education), and *Usuluddin* (Theology)) which are managed by the MORA. UIN reformulates the names of its faculties by combining an Islamic and a general nomenclature, such as the Faculty of Adab and Literature, the Faculty of Sharia and Law, and the Faculty of Tarbiyah and Teaching.

The above formulation would lead to an inter-connection between general education (supervised by MONE) and Islamic education (supervised by MONA) under the roof of the State Islamic University (UIN). In the case of the Faculty of *Tarbiyah* and Education, the curriculum that would be developed in this faculty is the combination of theories that are derived from Islamic education and also general education. By combining the theories from two disciplines, it is hoped that it would contribute to strengthening and improving the quality of education in Indonesia and to end the problem of the dichotomy of the sciences and religion.

## References

- Abdullah, M. A. (2004). *Etika Tauhidi sebagai dasar kesatuan epistemologi keilmuan umum dan agama: Dari paradigm positivistik-sekularistik ke arah teoantroposentrik-integralistik*. In J. Wahyudi (Ed.), *Menyatukan kembali ilmu-ilmu agama dan umum, upaya mempertemukan epistemologi Islam dan umum*. Yogyakarta: Suka Press IAIN Sunan Kalijaga.
- Al-Attas, S. M. N. (1980). *The concept of education in Islam: A framework for an Islamic philosophy of education*. Kuala Lumpur: Muslim Youth Movement of Malaysia (ABIM).
- Al-Faruqi, I. R. (1982). *Islamisation of knowledge: General principles and workplan*. Islamabad: National Hijrah Centenary Committee of Pakistan.
- Al-Faruqi, I. R. (1982). *Islamisation of knowledge: General principles and work plan*. Herndon, VA: The International Institute of Islamic Thoughts.

- Kuntowijoyo. (2004). *Islam sebagai ilmu: Epistemologi, metodologi, dan etika*.
- Raharjo, M.D. (2001). IAIN Dengan Mandat Diperluas [IAIN with a greater Mandate]. *Perta: Jurnal Komunikasi Perguruan Tinggi Islam*, IV: 1.
- UIN Sunan Kalijaga. (n.d.) Desain Pengembangan Akademik IAIN Menuju UIN Sunan Kalijaga: dari Pola Pendekatan Dikotomik-Atomistik ke Arah Integratif-Interdisiplinary. Yogyakarta.

