

Original Article

The Islamic Perspective on Thinking and Innovative Culture as Exemplified by the Works of Renowned Muslim Scholars

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Article Progress

Accepted: 27 May 2016

Reviewed: 31 May 2016

Published: 1 June 2016

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Abstract: The objective of this paper is to revisit the concept of thinking and innovation in Islam from the examples shown by Muslim scholars. This article also highlights the significance and the need to apply the Muslim scholars' model of Islamic thinking and innovation culture to the present day educational system. The study is descriptive in nature, showcasing the scholarly contributions of great Muslim men from the past, as well as the opinions of contemporary scholars of Islam on thinking and innovation. This preliminary paper may provide a distinctive perspective on the concept of thinking and innovation and its necessity in the contemporary Islamic educational system. It should also be considered as a crucial tool to be mastered by youngsters during the present age in the era of science and technology.

Key Words: Thinking, Innovative culture, Creativity, Culture, Muslim scholars.

Introduction

Throughout human history, thinking culture and human potential has sparked out the spirit of creativity, innovation and invention processes that lead to the cultural change. Thinking culture has something to do with the proliferation of knowledge to increase the capacity of mind in understanding, solving the problems and to generate more effective ideas. Innovation culture is a culture where a group of people's shared values, customs and assumptions are conducive to new ideas and organizational change (Bason, 2010).

Culture is the important element that is formed in the human mind. Since it was born, people are raised up and socialized in a culture of their racial or ethnic group. Sociologists and anthropologists look at the work done and a job to be done by any people as being influenced by their culture, such as belief, the environment, the use of technology and so on.

The subject of creativity and innovation in thinking style began to be discussed widely and re-

emphasized in the early 1990s, after the concept of globalization was introduced by Bill Clinton, the President of the United States at that time (Mohd Yusof Othman, 1994).

The Works of Renowned Muslim Scholars

Creativity and innovation are closely related to knowledge or science. Knowledge is the basis and it becomes a source of creativity and innovation in order to achieve the target goals and progress in life (MdAsham, 2011). The culture of thinking creatively and critically has proven successful and effective in producing well-known Muslim scholars who succeed in their respective fields. The works of Muslim scholars became a reference for Muslim society as well as Westerners who indirectly recognised the Muslim scholarship.

Al-Kindi (801-873 CE), IbnSahl (940-1000 CE), and Ibn Al-Haitham (965-1039 CE) were among the Muslim scholars who pioneered the science of optics. The *Book of Optics*, which was written by Al-Haitham,

is a seven-volume treatise on optics and other fields of study. UNESCO has declared 2015 The International Year of Light, in which, among others celebrating Ibn Al-Haitham's achievements in optics, mathematics and astronomy (Gorini, 2003).

Al-Battani (858-929 CE) was also among other scholars who dedicated their lives to the study of astronomy. In his book *Commentary on Ptolemy's Tetrabiblos*, Al-Battani corrected some errors in Ptolemy's book related to the length of the year and other situations. He was also the author of *Kitab Al-Zij* (Book of Astronomical Tables) that was also known as *Al-Zij Al-Sabi*. (Abdul Latiff, 2011; Al-Hassani, 2007).

IbnSina (980-1037) was most prominent and influential in medicine. His book *Al-Qanun fi al-Tibb* (Canon of Medicine) or (Code of Laws of Medicine) is the most influential work in the history of medicine. The book was translated into several foreign languages and used as a source of reference by medical students in Italy and France in the 17th century. Apart from medicine, IbnSina also worked in other fields such as metaphysics, music, astronomy, philology and logic (Kaadan, 2003).

IbnKhaldun was another Muslim scholar who studied the history of human beings in his famous book *al-Muqaddimah* or Introduction (to a history of the world). This book and his approach in the study and writing of history is still used until today and has become a source of reference by historians and scholars in the field (Al-Hassani, 2007).

Thinking and Innovative Culture According to Contemporary Muslim Scholars

The encouragement to think has been stressed in the Qur'an since the very beginning of the emergence of Islam. The first *surah* revealed to Prophet Muhammad was al-'Alaq, a *surah* that encourages the prophet to read (al-'Alaq, 96: 1-5).

Human beings are encouraged to think over the things that Allah calls us to think about and to see the hidden purposes and the creation of miracles. Each subject on which we reflect help us to further understand and appreciate the omnipotence, wisdom, knowledge, art and other attributes of Allah (Yahya, 2000). The Arabic term for thinking is *al-fikr* that refers to the activities of *aqal* or human mind to identify, understand and solve problems logically and rationally. The activity of thinking leads humans to develop a concept, idea, opinion and perception on certain issues. Therefore,

thinking leads human beings to the acquisition of knowledge and science.

Tafakkur is the Arabic term of thinking. According to Jamal Badi & Mustapha Tajdin (2004), "*tafakkur* is considered as *ibadah* or a form of worshipping Allah which is rewarded provided it is done with sincerity and good intention.

The importance of thinking has become the subject of discussion and concern among educators in the learning and teaching process in the West. This thinking can be nurtured and cultivated in everyone, and the entire educational program must be reconceived and revitalised so that students' lives are actualized from kindergarten onward" (Abu Elkheir, 2001).

Abu Elkheir in *The Need to Teach Thinking from an Islamic Perspective* conducted an analytical study on thinking curriculum from the Western and Islamic perspective. The paper aimed to establish an Islamic 'thinking curriculum' that is developed from the Islamic educational principles and goals (Abu Elkheir, 2001).

The objective of teaching thinking is to prepare students for a long life learning process in handling effective problem solving and decision making. Moreover, the importance of thinking is further stressed as it is "a trend to cope with the phenomenon of modern technology" (Abu Elkheir, 2001).

Al-Qur'an invites man to observe and reflect upon the reason behind the creations of the universe. Al-Qur'an also stresses on the importance of knowledge content and prohibits man from making groundless assumptions and conjectures and practise blind imitation (Rosnani, 1996).

Yeddullah Kazmi is of the opinion that such a thinking leads to an understanding that eventually "enables a Muslim to be closer to Allah in order to grow spiritually and intellectually to realize his role in establishing social justice and freedom (Abu Elkheir, 2001). Meanwhile, Malik Badri stresses on the importance of knowledge from a psychological side in which he considers "thinking as a mean of worship to purify the believer's soul and body" from which "through thinking a Muslim can get rid of many disasters he faces" (Badri 1993).

Muslims are encouraged to think and make use of creative and critical thinking in order to fulfil their human needs as well as to cope with modernity. Islam urges Muslims to practice the teaching of Islam with

knowledge, complete understanding and faith, rather than blind imitation (Golshani, 1997).

However, the Muslim *Ummah* is in a dilemma and progressing slowly compared to Western society. Although Muslims have the *Qur'an* and *hadith* as a source of reference and guidance in life, Muslims continue to be surrounded by issues. In response to the problems that have beset Muslims, Al-Attas suggests that the causes of Muslims to be in a dilemma are confusion and error in knowledge, whereby he believes that the education crisis in the Muslim World is mainly due to the borrowing of Western concepts of education and culture (Al-Attas, 1991). According to Abdul Hamid AbuSulayman, the *Ummah's* state of backwardness was due to "closing the door to true *ijtihad* and intellectual enthusiasm..." that cause Muslims to lag behind compared to Western society. (AbuSulayman, 1991).

In modern Muslim society today, progress is not only measured from the aspect of material achievements but also the human resource development. In the aspects of education, the need for Islamization of knowledge has been discussed by al-Faruqi and al-Attas (Rosnani, 2000). The idea of integration between Islamic Sciences and Social Sciences in education is essential as it not only provides a thorough understanding of the current global challenges, but also offers new ways of approaching and solving them.

The Concept of Innovation in Islam

The design concept in Islam is very broad, and it involves God and all His creation. Al-Quran gives man knowledge, warnings and guidelines. Therefore, based on the Quranic verse quoted, the conclusions about the law or the principles of invention according to God's design is (Khalijah, 1995):

1. The Greatest innovator is God Almighty.
2. God's invention is the truth, not in vain or for games.
3. Allah produces everything perfectly.
4. Allah created everything in the world in the form of pairs.

The Responsibility of Humans as Innovators

Human potentials and creativity can be proven through economic, political, social, technological, scientific and human civilization developments. However, many innovators such as Fuller, Edison and Nobel were concerned about the misuse of their

innovations. For example, dynamite and electric chair that was designed by Edison and Nobel were misused to kill people.

At present, there are a variety of products produced, benefited a small party and adversely affect the majority. The hydrogen bomb, nuclear and biological weapons for instance were created and used in warfare. Thus, an innovator must be aware of the responsibility as caliph in the world by designing inventions that can benefit the *Ummah*.

Thinking and Innovation in Malaysia

Since 1990s, Malaysia has started to plan the reformation strategies in the education field with the objective of achieving and implementing change. Malaysia embarked on a large scale movement in changing the structure of the curriculum with emphasis on thinking skills.

Reforms in education and human resource development are done by focusing on, among others, the following factors:

1. Proficiency in various subjects such as mathematics, language, science skills, reading and writing.
2. Fostering values and the value of work such as adherence to time, discipline, responsibility, honesty and trust, tolerance and understanding
3. Develop thinking skills such as decision-making skills and solving problems wisely through innovation and creativity
4. Knowledge and skills in the field of information technology and in accordance with the progress of the information society and digital world (Abd Rahim, 2006).

The university is considered a catalyst in the development of economic, political, and social development. Since 2000, the role of universities in Malaysia has increasingly been important in moving various discoveries, inventions and innovations.

Conclusion

It is undeniable that Muslim scientists and scholars were once at the height of Islamic civilization. Their works became sources of reference by Muslims and non-Muslims. Their work also inspired Muslims and non-Muslims to do more research in various fields.

This preliminary paper has attempted to provide a distinctive perspective on the concept of thinking and innovation in Islam as exemplified by Muslim scholars and the necessity of its implementation in the contemporary Islamic educational system. A further study is indeed necessary and is in progress to model a more comprehensive concept of thinking and innovation in Islam based on the examples of the Muslim scholars.

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