

History of Islamic Educational Institutions and Their Contribution to the Development of Science

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ABSTRACT

Islamic educational institutions have an important role in the process of transmission, development, and preservation of science throughout the history of Islamic civilization. This article aims to examine the development of Islamic educational institutions and their contribution to the advancement of science from classical to modern times. This research uses a qualitative approach with the library research method, by analyzing various relevant literature sources related to the history of Islamic education. The results of the study show that Islamic educational institutions such as kuttab, halaqah, madrasah, and pesantren have a strategic role in forming a systematic scientific tradition, both in the fields of religious science and rational science. In classical times, these institutions became centers for the development of various disciplines, such as philosophy, medicine, mathematics, and astronomy. Along with the times, Islamic educational institutions have undergone transformations in systems, curricula, and learning methods to adapt to the needs of society and the development of science. Thus, the history of Islamic educational institutions shows that these educational institutions not only function as a means of religious education, but also contribute significantly to the development of science and human civilization.

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1. INTRODUCTION

Education is one of the main pillars in the formation of human civilization, including in the Islamic intellectual tradition. Since the early days of Islamic development, educational activities have been an integral part of the process of transmitting knowledge, both from revelation and from the rational development of man. In this context, Islamic educational institutions emerged as a systematic means of transmitting scientific values, knowledge, and traditions to the next generation. This educational tradition developed along with the development of Muslim societies that placed science as an important part of social and religious life (Nasution, 2011); (Maqdisi, 1981). Historically, Islamic educational institutions have undergone significant development from a simple form to an organized educational institution. In

the early days of Islam, educational activities took place informally through the halaqah system in mosques or ulama's houses, which later developed into more formal institutions such as kuttabs and madrasas. Madrasas in classical times even became centers for the development of science that contributed to the development of various disciplines in the Islamic world. The existence of these institutions shows that Islamic education has a strong institutional structure in supporting the development of science (Maqdisi, 1981); (Stanton, 1990); (Al-Attas, 1999).

The development of Islamic educational institutions not only plays a role in the field of religious education, but also becomes the center of the development of wider science. During the heyday of Islamic civilization, various educational institutions became places for the development of rational sciences such as philosophy, medicine, mathematics, and astronomy. Muslim scientists born from this educational tradition contributed greatly to the development of science which then influenced the development of science in the Western world. This shows that Islamic educational institutions have a significant contribution to building a global intellectual tradition (Saliba, 2007); (Huff, 2003); (Berkey, 2007). In its development, Islamic educational institutions continue to undergo transformation in line with social, cultural, and societal changes. These changes can be seen in the increasingly complex aspects of the curriculum, learning methods, and institutional structures. In various regions of the Islamic world, including Indonesia, Islamic educational institutions have developed in various forms such as Islamic boarding schools, madrasas, and Islamic universities that integrate religious science and general science. This transformation shows the efforts of Islamic educational institutions to adapt to the development of science and the challenges of the times (Azra, 2012); (Hefner, 2009); (Rahman, 1982).

Although various studies have discussed the history of Islamic education, there is still a need for studies that specifically examine the relationship between the development of Islamic educational institutions and their contribution to the development of science. Understanding this historical aspect is important to see how Islamic intellectual traditions were formed and how educational institutions played a role in the process. Therefore, this article aims to examine the history of the development of Islamic educational institutions and analyze their contribution to the development of science in the perspective of the history of Islamic education (Nasution, 2011); (Azra, 2012); (Berkey, 2007).

2. METHOD

This study uses a qualitative approach with the type of literature research (*library research*). This approach was chosen because the study of the history of Islamic educational institutions and their contribution to the development of science requires analysis of various sources of literature, both in the form of books, scientific journal articles, and academic documents relevant to the research topic. Through a qualitative approach, the researcher seeks to understand in depth the historical phenomenon related to the development of Islamic educational institutions and the dynamics of their contribution to the Islamic scientific tradition. Literature research allows researchers to systematically examine various thoughts, concepts, and historical facts that have been put forward by previous experts (Creswell, 2014), (Zed, 2014)

The data sources in this study consist of primary data and secondary data obtained from various scientific literature related to the history of Islamic education. Primary data is in the form of scientific works that specifically discuss the development of Islamic educational institutions such as kuttab, halaqah, madrasah, and Islamic boarding schools. Meanwhile, secondary data include books, journal articles, and other scientific publications that support the analysis of the development of science in the Islamic educational tradition. The data collection technique is carried out through documentation studies by searching, identifying, and reviewing relevant literature to obtain comprehensive information on the research topic (Scott, 2019); (Nazir, 2014).

The data analysis technique in this study uses descriptive-qualitative analysis with the stages of data reduction, data presentation, and conclusion drawn. Data reduction is carried out by selecting and focusing information that is relevant to the research objectives. Furthermore, the data that has been collected is presented systematically to describe the development of Islamic educational institutions and their contribution to the development of science. The final stage is the drawing of conclusions through

the interpretation of the data that has been analyzed so as to produce a comprehensive understanding of the historical role of Islamic educational institutions in the development of scientific traditions (Miles et al., 2014); (Moleong, 2017).

3. FINDINGS AND DISCUSSION

Early Development of Islamic Education Institutions

The history of Islamic educational institutions began in the early days of Islamic development when educational activities took place simply and informally. At this time, the learning process is usually carried out in the homes of scholars, in mosques, or through the halaqah system that brings together teachers and students in scientific discussions. The halaqah system is an important means of transmitting Islamic sciences such as tafsir, hadith, and fiqh to the next generation. This pattern of education shows that the scientific tradition in Islam has developed since its inception as part of the social and religious life of the Muslim community (Maqdisi, 1981); (Stanton, 1990); (Berkey, 2007). Along with the development of Muslim society, more structured educational institutions such as kuttab have emerged that function as basic educational institutions. Kuttab is a place for children to learn reading, writing, and the basics of Islamic teachings such as the Qur'an and religious science. This institution played an important role in increasing the literacy level of the Muslim community in the early days of Islamic civilization. In addition, the kuttab education system is also the foundation for the development of more complex Islamic educational institutions in the future (Nasution, 2011); (Halstead, 2004); (Al-Attas, 1999).

The development of Islamic educational institutions became more rapid when madrassas began to develop in the 10th to 11th centuries. Madrasah is a formal educational institution that has a curriculum system, teaching staff, and funding support from waqf. One famous example is the Nizamiyah Madrasah which was founded during the Seljuk Dynasty and became the center of scientific development at that time. The existence of madrassas shows that Islamic education has undergone strong institutionalization and has become an important part of the development of Islamic civilization (Maqdisi, 1981); (Huff, 2003); (Saliba, 2007).

The Role of Islamic Educational Institutions in the Development of Scientific Traditions

Islamic educational institutions play an important role in building a strong intellectual tradition in Islamic civilization. Through the developed educational system in mosques, madrasas, and other scientific institutions, Muslim scholars and scientists were able to develop various disciplines that were not only limited to religious science but also included rational science. This scientific tradition encouraged the emergence of various scientific works in the fields of philosophy, logic, mathematics, and natural sciences that made a great contribution to the development of world science ((Saliba, 2007); (Huff, 2003); (Berkey, 2007). In addition to being a learning center, Islamic educational institutions also function as a place for scientific discussion and the development of critical thinking. The education system that is implemented allows for intellectual dialogue between teachers and students that encourages the emergence of various new ideas in the field of science. The tradition of scientific discussion shows that Islamic educational institutions have an important role in shaping a productive and dynamic academic culture in the history of Islamic civilization (Maqdisi, 1981); (Rahman, 1982). Furthermore, the contribution of Islamic educational institutions to the development of science can also be seen from the emergence of many Muslim scientists who had a great influence on the history of science. Figures such as Al-Farabi, Ibn Sina, and Al-Khawarizmi are examples of scientists who were born from the tradition of Islamic education and made important contributions in various fields of science. Their scientific thinking and work not only developed in the Islamic world but also influenced the development of science in Europe in the following period (Huff, 2003); (Saliba, 2007); (Nasution, 2011).

The Transformation of Islamic Educational Institutions in the Modern Era

In its development, Islamic educational institutions have undergone various transformations in response to social, cultural, and scientific changes. These changes can be seen in the institutional system,

curriculum, and learning methods that are increasingly developing and integrated with the modern education system. This transformation shows that Islamic educational institutions have high adaptability in facing the challenges of the times (Azra, 2012); (Hefner, 2009); (Rahman, 1982). In various Muslim countries, including Indonesia, Islamic educational institutions have developed in various forms such as Islamic boarding schools, madrasas, and Islamic universities. These institutions not only teach religious sciences but also integrate modern science in the learning curriculum. The integration aims to create an education system that is able to produce human resources who have religious and scientific competence ((Azra, 2012); (Hefner, 2009);

The transformation of Islamic educational institutions also reflects efforts to maintain Islamic scientific traditions while adapting them to the needs of modern society. In this context, Islamic educational institutions are expected to be able to become centers for the development of science that is not only oriented to religious education but also to the development of science more broadly. Thus, Islamic educational institutions continue to have a strategic role in building intellectual traditions and human civilization in the future (Nasution, 2011); (Azra, 2012); (Berkey, 2007)).

4. CONCLUSION

This study concludes that Islamic educational institutions have an important role in the development of science throughout the history of Islamic civilization. Since the early days of Islam, educational activities that began through the halaqah system then developed into more structured institutions such as kuttabs and madrasas, which functioned as centers for the transmission and development of knowledge, both in the fields of religion and rational science. The intellectual tradition that developed in these educational institutions has given birth to various Muslim thinkers and scientists who have made significant contributions to the development of world science. In its development, Islamic educational institutions have also undergone transformation through the integration of religious science and modern science, so that they remain relevant to the needs of contemporary society. Therefore, strengthening an adaptive and integrative Islamic education system is important to support the development of science in the future, while further research needs to examine more empirically the dynamics and innovation of Islamic educational institutions in facing the challenges of globalization and technological development.

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