

Original Article

Islamic Religious Education Based on the Connectivism Paradigm as a Characteristic and Solution in Facing the Era of the Industrial Revolution 4.0

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Abstract

This article focuses on the crucial role and urgency of Islamic religious education based on the connectivism paradigm in facing the Industrial Revolution 4.0 Era. This research uses a literature study or content analysis method. The results of this study indicate that the industrial revolution, characterized by the rapid development of digital technology and automation, requires a new approach to education, including Islamic religious education. Within the connectivism paradigm, Islamic religious education must effectively integrate information and communication technology (ICT) into the learning process. This article will discuss the characteristics and solutions of Islamic religious education based on the connectivism paradigm in facing the Industrial Revolution 4.0 Era.

Keywords: Islamic Religious Education, Connectivism, Industrial Revolution 4.0

INTRODUCTION

Islamic religious education is a crucial component in developing individuals with noble character and based on Islamic values (Somad, 2021). In the rapidly evolving digital era, Islamic religious education must also adapt to these changes. In this article, we will discuss the role of Islamic religious education in the digital era and the challenges and opportunities it faces. In the digital era, information and communication technology plays a crucial role in everyday life. The internet, mobile devices, and other digital platforms have transformed the way we obtain and share information. This has also impacted Islamic religious education. On the one hand, technology allows easy access to sources of Islamic religious knowledge, such as the Quran, hadith, and other religious literature.

Students can access it quickly and easily through their devices. However, on the other hand, the digital era also brings new challenges for Islamic religious education (Munir, Syar'i and Muslimah, 2021). The abundance of information available online is not always verified and can be misleading. Content inconsistent with Islamic teachings is also easily found. Therefore, it is crucial for Islamic religious education in the digital era to ensure that the information sources accessed by students are authentic and compliant with religious teachings. Furthermore, Islamic religious education in the digital era also needs to utilize technology effectively to enhance the learning process. The use of mobile applications, online learning platforms, and social media can help expand the reach of Islamic religious education.



Religious education teachers can use this technology to deliver lesson materials in a more engaging and interactive way (Wahyuni, Rahmadhani, and Mandasari, 2020). They can also utilize features such as online discussion forums to facilitate discussions among students and strengthen their understanding. However, it is important to remember that while technology can be an effective tool, the role of religious education teachers, who act as facilitators and guides in the Islamic religious education process, is still necessary. Religious education teachers possess knowledge and experience that cannot be replaced by technology. Therefore, Islamic education in the digital era must wisely integrate technology with the role of religious education teachers.

Islamic religious education in the digital era offers new opportunities and challenges. Technology can facilitate access to sources of Islamic religious knowledge, but it also requires vigilance against inappropriate content (Adisantoso, 2021). Effective use of technology can enhance the learning process, but the role of religious teachers remains crucial. By utilizing technology wisely, Islamic religious education in the digital era can provide significant benefits for the younger generation in strengthening their understanding and practice of Islam. Islamic Religious Education in the Era of Connectivism: Challenges and Solutions.

The era of connectivism, characterized by technological advances and widespread connectivity, presents new challenges for Islamic religious education. Religious educators must confront various challenges arising from developments in information and communication technology. In this paragraph, we will discuss some of the key challenges facing Islamic religious education in the era of connectivism, as well as possible solutions to address them.

One of the main challenges facing Islamic religious education in the era of connectivity is the flood of unverified information and content inconsistent with religious teachings (Ubaisilfa, no date). With easy access to the internet, students can quickly search for and access various sources of religious information. However, not all of this information is reliable, and there is a risk of exposure to misconceptions or religious radicalism. The solution to this challenge lies in the importance of teaching students critical thinking skills and digital literacy. Religious educators need to equip them with the ability to select, analyze, and evaluate the information sources they encounter, as well as understand the criteria for validating authentic information (Maemunah, Azwar, and Rizal, 2022).

Another challenge is the changes in how humans interact and communicate due to technological developments (Setiawan, 2018). Social media and other digital platforms have changed patterns of social interaction, and this has also impacted Islamic religious education. Sometimes, students are more likely to obtain religious information and understanding from unverified sources on social media, rather than from religious teachers or formal educational institutions. The solution to this challenge involves the active role of religious educators in using technology wisely. They need to be part of the broader digital environment and actively present on social media. By being a trusted source of information and providing accurate religious understanding, religious educators can ensure that students receive a true and appropriate Islamic religious education.

Furthermore, the era of connectivism also presents challenges in integrating technology into existing Islamic religious education curricula. Some educational institutions may struggle to keep up with technological developments and utilize them effectively in religious instruction. The solution lies in providing adequate training and support to religious educators.

They need to be provided with the understanding and skills necessary to integrate technology into Islamic religious learning. This could include the use of mobile applications, online learning platforms, or project-based learning involving technology. Thus, Islamic religious education can harness the potential of technology to improve the quality of learning and student engagement. Overall, Islamic religious education in the era of connectivism faces significant challenges. Facing the flood of information, changing patterns of social interaction, and the integration of technology into the curriculum, religious educators need to take appropriate steps (Fatimah et al., 2020). Teaching students critical thinking skills and digital literacy, becoming a trusted source of information in the digital environment, and providing training and support to religious educators are some possible solutions. By addressing these challenges, Islamic religious education in the era of connectivism can remain relevant and provide significant benefits to the younger generation of Muslims in strengthening their understanding and practice of Islam.

LITERATURE REVIEW

The Industrial Revolution 4.0 era has brought about major changes in various aspects of life, including education. Digital transformation, automation, artificial intelligence, and big data require education systems to adapt rapidly to increasingly complex global dynamics. In this context, Islamic religious education (PAI) faces a major challenge: how to remain relevant, adaptive, and effective in shaping students' character and spirituality amidst the rapid flow of digitalization and technological disruption.

The connectivism paradigm, introduced by George Siemens (2005) and Stephen Downes (2007), is a relevant contemporary approach to addressing this challenge. Connectivism holds that learning occurs not only individually but also through knowledge networks built from connections between people, technology, and digital information sources. Within this framework, connectivism-based Islamic education (PAI) assumes that the instillation of Islamic values is no longer limited to conventional classrooms but can be distributed through various digital platforms, social media, and online communities that are part of the modern learning ecosystem.

Several recent studies have shown that a connectivist approach to religious education can strengthen the internalization of spiritual values in a more contextual and participatory manner. For example, research by Rahman (2020) confirms that implementing a connectivist paradigm in Islamic Religious Education (PAI) learning can enhance students' learning independence and expand access to global Islamic resources through the use of digital media. Meanwhile, Hidayat and Fathurrahman (2021) found that connectivism can create a collaborative and dynamic learning environment, where students become not only recipients of information but also producers of knowledge engaged in discussions and reflections on Islamic values.

However, previous literature has largely focused on the implementation of information technology in Islamic education, rather than on the epistemological aspects of connectivism as a new learning paradigm. For example, research by Sutrisno (2019) and Azra (2020) focuses more on the integration of technology in Islamic education as a teaching aid, rather than as a new way of thinking underlying the construction of Islamic science and knowledge in the digital era. Thus, studies on connectivism-based Islamic education (PAI) are still relatively limited and require further development to explain

how this paradigm can transform learning patterns, teacher-student interactions, and the transfer of spiritual values through digital networks.

Unlike previous studies, which tended to be technical and pragmatic, this research positions connectivism as a new epistemological and pedagogical framework for Islamic Religious Education. This paradigm goes beyond simply utilizing digital technology as a learning medium, but rather positions it as an epistemic space where Islamic values can be dynamically connected, exchanged, and internalized within a global network. With this approach, Islamic Religious Education is no longer static and textual, but rather interactive, collaborative, and adaptive to the needs of the digital generation.

Conceptually, connectivism-based Islamic education (PAI) is a progressive model of Islamic education—bridging the text-based tradition of Islamic scholarship and the authority of ulama (Islamic scholars) with open and participatory digital learning models. This is where this approach becomes significant as a strategic solution in facing the Industrial Revolution 4.0 era, as it maintains the spirit of Islamic spirituality amidst global digital transformation without losing the essence of its transcendental values.

Thus, the literature shows that the connectivism paradigm offers significant opportunities for Islamic religious education to transform into a learning system that is more relevant, inclusive, and responsive to technological developments. This study fills the gap in previous literature, which still emphasizes the instrumental aspects of technology, by offering a new philosophical and epistemological approach that unites Islamic values, technology, and knowledge networks into a unified learning paradigm.

RESEARCH METHODS

Literature review is a method used to collect and analyze literature relevant to a research topic. In this study, we use the literature review method to explain Islamic religious education based on the connectivism paradigm as a characteristic and solution for facing the industrial revolution era.

4.0. First, we conducted a literature search related to Islamic religious education and the connectivism paradigm. We used academic databases and digital libraries to collect articles, books, journals, and other relevant sources. After collecting relevant literature, we analyzed the content and findings contained therein. We sought information on how Islamic religious education can be implemented using the connectivism paradigm. We also explored the solutions offered by the connectivism paradigm in facing the challenges of the Industrial Revolution 4.0 era. By using a literature study research method, we hope this article can provide better insight and understanding of Islamic religious education based on the connectivism paradigm as a pattern and solution in facing the Industrial Revolution 4.0 era.

RESULTS AND DISCUSSION

Various Concepts of Islamic Education According to Experts: Islamic religious education is an educational process aimed at developing an individual's understanding, knowledge, and values of Islam (Firmansyah, 2019). Experts have contributed to understanding and discussing the importance of Islamic religious education in the lives of Muslims. The following is a discussion of Islamic religious education according to experts:

One of the experts who expressed his views was Dr. Syed Muhammad Naquib al-Attas. He argued that Islamic religious education should include the formation of good morals,

the cultivation of an understanding of monotheism, and the mastery of useful knowledge. According to him, Islamic religious education should pay attention to spiritual, intellectual, and moral aspects.

Ismail Raji al-Faruqi, an Islamic education expert, emphasized the importance of holistic Islamic religious education. According to him, this education must include an understanding of the Quran, Hadith, Islamic history, and Islamic thought. Dr. al-Faruqi also emphasized the importance of integrating Islamic religious education with modern science and technology. Mohammad Natsir, a prominent figure in Islamic education in Indonesia, viewed Islamic religious education as a means to shape a generation with noble character and a deep love for religion. He emphasized the need for Islamic religious education to be integrated with general education to meet the challenges of the times and prepare a quality generation.

Tariq Ramadan, a prominent Muslim scholar, proposes an inclusive and contextual approach to Islamic religious education. According to him, Islamic religious education must foster a critical and contextual understanding of religious teachings (Fitri, 2020). This is crucial so that students can face social change and the challenges of the times with a solid and relevant understanding. These experts emphasize the importance of Islamic religious education encompassing aspects of morality, religious understanding, integration with modern science, and contextualization. They view Islamic religious education as a means to produce individuals with noble character, a solid understanding of religion, and readiness to face changing times. In the context of globalization and the industrial revolution 4.0, Islamic religious education must also be able to integrate modern technology and knowledge to convey religious messages in a relevant and effective manner.

Middle Eastern scholars have rich and diverse perspectives on Islamic religious education. They have made significant contributions to understanding and discussing the role and purpose of Islamic religious education in Muslim societies. The following is a discussion of Islamic religious education according to Middle Eastern scholars:

Fethullah Gülen, a Turkish Muslim scholar and educational figure, proposes an approach to Islamic religious education that combines Islamic traditions with science, technology, and the social changes occurring in the modern world. He emphasizes the importance of teaching universal Islamic values, such as love, tolerance, and peace, with the aim of developing individuals with noble character and contributing positively to society. Reza Aslan, an Iranian-American Muslim scholar, highlights the importance of Islamic religious education that encourages critical and contextual understanding. He argues that Islamic religious education must involve an analysis of history, culture, and social contexts in order to comprehensively understand Islamic teachings. According to him, good Islamic religious education will produce individuals who are open-minded, respect diversity, and ready to adapt to changing times.

Seyyed Hossein Nasr, an Iranian Muslim scholar, emphasized the importance of Islamic religious education that focuses on the spiritual dimension and inner life (Muhammad, 2023). He argued that Islamic religious education should help individuals develop a deeper relationship with God and understand their purpose in life from an Islamic perspective. According to him, good Islamic religious education will provide a strong spiritual foundation for individuals to face life's challenges. These Middle Eastern scholars have made important contributions to enriching the understanding of Islamic religious education. They emphasize the importance of a holistic, contextual, critical, and

inclusive Islamic religious education. These approaches aim to shape individuals with noble character, a comprehensive understanding of Islamic teachings, respect for diversity, and a solid spiritual foundation. In the context of modern social and technological change, Islamic religious education must also be able to integrate Islamic values with science and technology to address the challenges of the times in a relevant manner.

Islamic Education in the Era of Connectivism

Islamic education in the era of connectivism offers a new approach that connects technology, the internet, and social networks with Islamic religious learning (Jaenudin, 2023). In this context, connectivism refers to a learning paradigm that recognizes the crucial role of technology and interpersonal interaction in the educational process. This approach has significant implications for Islamic teaching and learning, enabling easier access to religious resources, broader communication within Muslim communities, and the development of skills relevant to the digital age.

In Islamic education in the era of connectivism, technology has become a crucial tool for facilitating Islamic religious learning. Through the use of the internet and digital devices, students can access various learning resources such as digital Qurans, hadith apps, and other religious literature. This allows students to study religious teachings more easily and flexibly. Furthermore, technology allows students to interact directly with ulama, scholars, and other Muslim communities through social media platforms, online discussion forums, and webinars. This can broaden the reach of learning and enable students to engage in broader discussions and exchange of ideas. Furthermore, Islamic education in the era of connectivism also involves collaborative and globally connected learning. Within the connectivism paradigm, students are encouraged to work together on group projects, share knowledge, and collaborate in finding solutions to complex religious issues. Through involvement in social networks and online communities, students can interact with individuals from different cultural backgrounds, countries, and Islamic traditions. This allows them to gain a broader understanding of Islam and appreciate the diversity within the Muslim community.

Islamic education in the era of connectivism also presents ethical challenges and questions that require attention (Ramadhan, 2022). Students need to be trained to be responsible users of technology, understand the ethics of online communication and interaction, and be critical of the information they encounter. Furthermore, it is crucial to maintain a balance between technology and other religious activities, so that Islamic education continues to address spiritual aspects and religious values. In conclusion, Islamic education in the era of connectivism offers significant opportunities and potential for enriching Islamic religious learning. The use of technology, the internet, and social networks can increase accessibility, interaction, and collaboration in Islamic religious learning. However, it is crucial to maintain a balance between ethics, information quality, and technology and religious values. With the right approach, Islamic education in the era of connectivism can help students develop broad understanding and relevant skills, allowing them to face the challenges of the digital age with solid confidence and knowledge.

Islamic Religious Education Based on the Connectivism Paradigm as a Solution to Facing the 4.0 Era

Islamic religious education based on the connectivism paradigm is a relevant solution for facing Era 4.0 (Choli, 2020). The connectivism paradigm emphasizes the importance of interaction and interconnectedness between individuals in the learning process. In the context of Islamic religious education, this paradigm enables students to connect with extensive sources of Islamic knowledge, including through information and communication technology. Through digital connectivity, students can access various sources of information, discuss, and collaborate with other Muslims around the world.

Islamic religious education based on the connectivism paradigm also broadens the scope of learning. Students are not limited to information presented by teachers in the classroom but can also utilize various online resources such as learning videos, mobile applications, and social media platforms that align with Islamic values. Thus, students can develop a more comprehensive understanding of Islam and broaden their Islamic horizons. Furthermore, the connectivism paradigm encourages students to actively participate in learning. They can share their knowledge, experiences, and understanding of Islam with fellow students through online forums, discussion groups, or collaborative projects. This not only strengthens students' understanding but also helps them develop social, collaborative, and problem-solving skills, essential for facing the challenges of Era 4.0. However, in implementing Islamic religious education based on the connectivism paradigm, careful monitoring and selection of information sources is essential. The quality of information sources must be maintained to prevent the spread of misinformation or information inconsistent with Islamic teachings. Teachers and educators must also play an active role in providing guidance and coaching to students in selecting and utilizing accurate and high-quality information sources. Overall, Islamic religious education based on the connectivism paradigm can be an effective solution in facing Era 4.0. Through digital connectivity and collaboration, students can develop understanding and skills relevant to the demands of the times, while remaining grounded in Islamic values and teachings.

Islamic religious education based on the connectivism paradigm in the 4.0 Era offers several significant benefits. First, the connectivism paradigm allows broader and easier access to sources of Islamic information and knowledge. Through digital connectivity, students can access various sources of information, engage in discussions, and collaborate with other Muslims around the world. This enriches students' understanding of Islam and helps them develop a more comprehensive Islamic perspective.

Second, Islamic education based on the connectivism paradigm encourages students to actively participate in learning (Sa'adah and Azizah, 2021). Through online forums, discussion groups, or collaborative projects, students can share their knowledge, experiences, and understanding of Islam with fellow students. This not only strengthens students' understanding but also helps them develop social, collaborative, and problem-solving skills, which are essential for facing the challenges of Era 4.0. Furthermore, Islamic education based on the connectivism paradigm also helps students develop information and communication technology (ICT) skills. In Era 4.0, dominated by digital technology, the ability to utilize technology is crucial. By utilizing various online resources such as learning videos, mobile applications, and social media platforms that align with Islamic values, students will be skilled in using technology effectively and responsibly. Furthermore, Islamic education based on the connectivism paradigm also helps students develop critical and analytical thinking. With broad access to various

sources of information, students are taught to sort, critique, and evaluate the truth and accuracy of the information they receive. This is crucial in facing Era 4.0, which is filled with diverse and often invalid information. Therefore, Islamic religious education based on the connectivism paradigm in Era 4.0 provides benefits in terms of increased access to Islamic knowledge, development of social skills, collaboration and problem-solving, mastery of information and communication technology, and development of critical and analytical thinking. All of these are essential provisions for students to face and contribute to the increasingly connected and complex society of Era 4.0.

CONCLUSION

In facing the Industrial Revolution 4.0 Era, Islamic education based on the connectivism paradigm is a relevant pattern and an effective solution. The connectivism paradigm allows broad access to sources of Islamic information and knowledge through digital connectivity. Through collaboration and active participation, students can enrich their understanding and insight into Islam, as well as develop social, collaborative, and problem-solving skills that are essential in facing the challenges of the 4.0 Era. Islamic education based on the connectivism paradigm also helps students develop information and communication technology skills that are essential in the 4.0 Era dominated by digital technology. In addition, students are also taught to have critical and analytical thinking in sorting, critiquing, and evaluating the information they receive. Overall, Islamic education based on the connectivism paradigm provides benefits in terms of increasing access to Islamic knowledge, developing social, collaborative, and problem-solving skills, mastery of information and communication technology, and developing critical and analytical thinking. Thus, Islamic education based on the connectivism paradigm is a relevant and effective solution in facing the Industrial Revolution 4.0 Era, preparing students to contribute to an increasingly connected and complex society.

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