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Aligning Islamic education with the challenges of the Industrial Revolution 4.0: Opportunity or threat?

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ABSTRACT

This research aligned Islamic religious education with the challenges of the Industrial Revolution 4.0 to create an Islamic education environment following modernization. Today's industrial revolution has positively impacted all aspects of life, including education, but only some individuals can utilize it properly. Many deviations occur in the current generation, both in moral and social aspects. This research uses qualitative research with a literature study approach. Primary and secondary data sources used include books, scientific articles, and other literature relevant to the theme. To align Islamic education with the Industrial Revolution 4.0, it is necessary to modernize the Islamic education environment; to develop and implement Islamic education, there must be strong collaboration and joint responsibility between the school environment, family, government, and society. This is applied as a reference for the current generation to use the industrial revolution, which is developing significantly. With various challenges and solutions, instead of digitalization being a threat, it can be an opportunity to effectively align digitalization with education to achieve educational goals and Indonesia's sustainable development goals.

ABSTRAK

Penelitian ini dilakukan bertujuan guna menyelaraskan pendidikan agama islam dengan tantangan revolusi industri 4.0 demi menciptakan lingkungan pendidikan islam yang sesuai dengan modernisasi pada saat ini. Revolusi industri pada hari ini membawa banyak dampak positif bagi semua aspek kehidupan tidak terkecuali pendidikan, namun pada realitanya tidak banyak individu yang dapat memanfaatkan hal tersebut dengan baik. Banyak penyimpangan yang terjadi pada generasi saat ini, baik dalam aspek moral maupun sosial. Penelitian ini menggunakan penelitian kualitatif dengan pendekatan studi kepustakaan. Sumber data primer dan sekunder yang digunakan seperti, buku, artikel ilmiah, dan juga literatur lainya yang relevan dengan tema terkait. Guna menyelaraskan pendidikan islam dan revolusi industri 4.0 perlu dilakukan dengan modernisasi lingkungan pendidikan islam, demi mengembangkan dan menerapkan pendidikan islam dilingkungan harus terdapat suatu kolaborasi yang kuat dan menjadi tanggung jawab bersama, antara lingkungan sekolah, keluarga, pemerintah, dan juga masyarakat seperti pengembangan aplikasi. Hal ini diaplikasikan dengan tujuan dapat menjadi acuan bagi generasi saat ini dalam memanfaatkan revolusi industri yang berkembang secara signifikan. Dengan berbagai tantangan dan solusi yang ada, alih alih digitalisasi menjadi suatu ancaman tetapi dapat menjadi peluang dengan cara menyeleraskan digitalisasi terhadap pendidikan secara efektif hingga tercapainya tujuan pendidikan guna mewujudkan program tujuan pembangunan keberlanjutan di indonesia

Kata Kunci: *keselarasan; pendidikan agama Islam; revolusi industri 4.0*

INTRODUCTION

Education is an essential foundation to shape an individual to have quality and be able to face the demands and needs of human dynamics that continue to evolve. In line with the development of the times, of course, some obstacles and challenges are in line with existing changes, not least in the field of education (Parhan et al., 2022). Islamic Religious Education plays an essential role in shaping students' spirituality. Islamic Religious Education is not only limited to the transfer of theological knowledge but also the cultivation of morals, values, and social responsibility following religion and state. With the many changes in this era, the challenge for Islamic education is to think about maintaining the relevance of Islamic Education with the skills students need to compete in the modern world (Siregar et al., 2024). Thus, education, especially PAI, requires a strategic transformation that integrates aspects of spirituality, morals, and practical skills to remain relevant and effective in preparing individuals to face the challenges of the modern era.

In this era of Industrial Revolution 4.0, there are many significant changes, so not everyone can keep up with these developments, such as information technology and digitalization. To anticipate the negative impact of industrial progress and the rapid flow of modernization, one should improve the quality of education based on the cultivation of *akhlaqul karimah* or noble character values. It is hoped that individuals can still maintain their moral integrity and spirituality despite being in a rapid flow of change. Character education is the key so that technology and modernization do not shift the noble values that should still be upheld in everyday life. So that an individual can continue to defend the realm of *akhlaqul karimah* (Mushfi & Banati, 2020). Digitalization is a critical aspect of the industrial revolution, which plays an essential role in teaching and learning. On the one hand, digitalization brings positive impacts such as AI, learning media, and online libraries so that students can easily access the knowledge that has been made available. On the other hand, digitalization also brings challenges to education, such as dependence on digital media, which can potentially hinder the achievement of educational goals (Nurfatimah et al., 2022). The era of the Industrial Revolution 4.0 poses both challenges and opportunities for education (Fricticarani, 2023). Cultivating noble moral values through character education is key to maintaining a balance between using technology and preserving moral integrity. With a holistic approach, digitalization can catalyze progress without sacrificing the noble values essential for community life.

The Industrial Revolution 4.0 demands technical competence, adaptability, problem-solving, and critical thinking. With the right approach, Islamic Religious Education can help equip students with these skills. For example, religious education can provide an ethical foundation in the use of technology, emphasize the importance of moral responsibility, and encourage strong character development during rapid technological change. Thus, instead of seeing the Industrial Revolution 4.0 as a threat, PAI can utilize it to enrich the teaching of Islamic values relevant to the context of the times (Rahman & Akbar, 2021). Instead of seeing the Industrial Revolution 4.0 as a threat, Islamic Education can utilize it as an opportunity to enrich the teaching of Islamic values relevant to the times. By integrating moral principles, technological ethics, and 21st-century skills, Islamic Education can play a key role in equipping students to become individuals who are not only technically competent but also have strong character and responsibility in facing an ever-changing world. Based on these conditions, the author will conduct an in-depth study of Islamic Religious Education (PAI) learning strategies in the context of the Industrial Revolution 4.0 era, including the challenges and solutions needed to face significant changes due to modernization. Therefore, the study of efforts to align Islamic Religious Education with the challenges of the Industrial Revolution 4.0 becomes significant in understanding whether this presents an opportunity that can be utilized or instead becomes a threat that needs to be anticipated.

LITERATURE REVIEW

Education 4.0

Education 4.0 is a concept used by education experts to explain the various ways of integrating cyber technology, both physical and virtual, into the learning process (Puspita, 2018). The Education 4.0 era emerged as a response to the demands of the Industrial Revolution 4.0, where humans and machines are expected to work harmoniously to solve problems and create innovations. Education 4.0's learning process is no longer limited to physical classrooms. Online learning provides various facilities and diverse learning methods. Education today is no longer seen as a classroom-orientated activity but rather a lifelong learning process. Education is not only the first step to entering the professional world but also a means for educators and learners to continue to seek and define various ways so that the learning process can impact their lives (Susilowati, 2022; Svari & Arlinayanti, 2024).

Education 4.0 has now become part of the development of the times. Of course, it is expected to provide opportunities rather than threats for governments, schools, and stakeholders to prepare themselves for the future. In this era, with the rapid development of information technology, it is necessary to accelerate production innovations, primarily to support transformation in the world of education (Siregar et al., 2024). Education 4.0 is an educational approach that integrates cyber technology, both physical and virtual, into the learning process in response to the demands of the Industrial Revolution 4.0 (Puspita, 2018). This concept emphasizes the collaboration of humans and machines to solve problems and encourage innovation, which has immediately become a demand of this century (Saputra, 2020). Learning transcends traditional classroom boundaries in the Education 4.0 framework using flexible and diverse online methods. Education is no longer seen as a structured activity that ends in the classroom but rather as a lifelong learning process that focuses on developing skills for life. This makes education an ongoing means for educators and learners to create a real positive impact professionally and in everyday life.

Digitalization

School digitalization is an innovation in education that aims to adapt to Information and Communication Technology (ICT) advances in all aspects of school teaching. Through this digitalization, teaching and learning activities become more practical as students can access learning materials and exams through the network. School digitization is designed to improve the quality of education by making optimal use of technology while maintaining the essence of direct interaction that supports the development of character and social values. This approach ensures that technology is used as a tool, not a substitute, to create a more dynamic and diverse learning experience (Firmansyah et al., 2023; Hadid, 2024).

The School Digitalization Program launched by the Ministry of Education and Culture is a breakthrough in utilizing ICT advances to facilitate learning. With this program, teachers and students are expected to be able to access learning materials and exams easily. In addition, the teacher community is also encouraged to collaborate in developing digital teaching materials and test questions, both offline and online (Nasrullah & Rahman, 2023). School digitization is an educational innovation designed to integrate ICT into all school teaching, making teaching and learning more efficient and accessible (Aliyah, 2024; Idris & Lambogo, 2024). The program allows learners to access learning and evaluation materials online, facilitating the distribution of educational information. However, Minister of Education and Culture Muhadjir Effendy affirmed that digitization partially supplements conventional learning methods. Face-to-face interaction between teachers and students remains essential, especially in character-building and developing students' moral values. In addition, school digitization encourages collaboration among the teacher community to develop digital-based teaching materials and test questions, both online and offline, making it a relevant breakthrough to face the challenges of the modern era.

METHODS

This research uses a qualitative approach method, with a type of literature study research. The library research process, or study research, begins with collecting library data, understanding it, and processing it to become research material. The data were selected from books and literature relevant to the author's research. The research stage of this literature study includes several essential steps that support the credibility and depth of the paper's content (Susanto & Jailani, 2023). The first step is to determine and search for various types of relevant literature. This research used secondary data sources such as internet media, books, journals, and a combination of some of them. Reading and Analyzing the Selected Literature Once the literature was determined, the researcher read and analyzed the information contained in these sources. The aim is to ensure that the data obtained follows the research topic: school digitalization as a learning method in the education 4.0 era. A literature review is conducted based on the literature read in the previous stage. The result can be a summary, the number and scope of which depends on the needs and information obtained from the sources.

The final stage is to present the summary results in written form. Presentation can be in the form of quotes, citations, or paraphrases of the data that has been collected. In addition, this stage is completed with the researcher's analysis to explain that the literature used can answer various research problems. Each stage in this literature study is crucial so that the research has a strong foundation, is credible, and provides an in-depth explanation of the topic raised. As for primary data, the author uses books relevant to the challenges of educating the current generation and Muslims in the era of the Industrial Revolution 4.0. Secondary data in articles, the web, and other similar literature enhance it. In addition, the author uses content analysis to obtain a conclusion that is used as a reference and to use actual data.

RESULTS AND DISCUSSION

Islamic Religious Education in the Digital Age 4.0

The main objective of teaching Islamic Religious Education (PAI) in schools is to shape learners into individuals with faith and noble character who can practice Islamic values daily. In formal education, PAI should act as an integral means to build the character and morals of learners in line with the religious values that form the basis of social life (Zamzami & Putri, 2024). religious education is continuously a marker of religious autonomy for individuals and increasingly for schools, and its curricular use stems from this (Fancourt, 2021). However, reality shows that the limited time allocation of two hours per week hampers the optimization of this goal, especially in developing learners' affective and psychomotor aspects. Schools implementing compulsory education must also provide religious education as part of other mandatory education programs. In the current era, it can be seen that the purpose of teaching Islam in schools has yet to be fully achieved. The content taught through the Islamic Education curriculum in schools should be a source of forming Muslim personalities who believe and practice Islamic values (Khair et al., 2024). However, PAI lessons are only given two hours per week. Currently, PAI subjects cover an extensive range of topics, so the discussion becomes more dense and focused on the cognitive aspect (Alfaien et al., 2023). In addition, this lack of time allocation reflects the need for more priority given to religious education in the context of formal learning, even though religious education is a compulsory part of the national education program. This phenomenon indicates a gap between the idealism of the purpose of religious education and the practice of its implementation in the field. To overcome this challenge, it is necessary to strengthen PAI learning strategies based on transferring knowledge and forming students' attitudes and behavior. An integrated learning approach, such as the integrated moral education model, can be a solution to overcome time constraints while ensuring the achievement of religious education goals.

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Some factors influence the less-than-optimal implementation of PAI learning in public schools, including external factors. Firstly, many parents need to be aware of the importance of religious education at school and in the community. Second, the school environment does not support the application of PAI values in the affective aspect, such as schools located close to markets, slums, cinemas, gambling venues, or communities that are far from religious values. Third, the advancement of science and technology (Science and Technology) also affects the view of religion, widening the gap between traditional values and technological rationality (Hazin & Laila, 2022). Internal factors affecting PAI in schools are caused by, among others, the following. First, implementing PAI learning in public schools is not optimal, mainly because educators need to have adequate competence. Many teachers teach PAI only because of the task's demands rather than because they feel they have a profound responsibility. Further studies and training are conducted as a formality of work, without any sense of calling. Second, the relationship between students and educators is limited to formal interactions in the classroom, with no informal communication outside the classroom environment. Third, teachers' teaching methods are still oriented towards the traditional approach, so Islamic education learning is less interesting and unpleasant for students, which makes Islamic education classes dull. Fourthly, PAI in schools still needs to focus more on the cognitive aspect (Hazin & Laila, 2022). Schools must provide more facilities or encouragement to help students understand PAI in the affective and psychomotor domains. For example, students who get high scores in the cognitive aspect are only necessarily successful if PAI values are reflected in their daily attitudes and behavior. Many high school students still cannot read the Quran properly, have not performed the five daily prayers correctly, have not memorized the prayers after prayers, and are involved in behaviors that do not follow religious teachings.

Education has an ideal picture to be achieved or realized in learners after the education process takes place. Therefore, this goal must be the foundation of the implementation of education. Undang-undang Republik Indonesia Nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional states "*Pendidikan Nasional bertujuan untuk berkembangnya potensi peserta didik agar menjadi manusia yang beriman dan bertakwa kepada Tuhan Yang Maha Esa, berakhlak mulia, sehat, berilmu, cakap, kreatif, mandiri, dan menjadi warga negara yang demokratis serta bertanggung jawab*". Regarding the purpose of Islamic education, Islamic education leaders in the formulation of the 2nd World Islamic Conference in Islamabad, Islamic education aims to develop human personality holistically by training the soul, mind, feelings, and physical. This education is focused on advancing all aspects of human life, including spiritual, intellectual, imaginative, physical, scientific, and linguistic, both at the individual and group levels, with the ultimate goal of directing all these aspects to goodness and perfection and facilitating human devotion to God, both individually and collectively (Wahyudi, 2023). From the explanation above, it can be concluded that education has the main task of making people knowledgeable and pious by integrating Islamic values and science into students to become competent individuals from scientific and religious aspects. Of course, this goal will be achieved if accompanied in the right way.

Industrial Revolution 4.0

From its inception in the 18th century to the current era of Industrial Revolution 4.0, the Industrial Revolution aims to improve efficiency, productivity, and quality of human life through technological innovation. Each phase of this revolution changed how humans work and interact, from using steam engines to artificial intelligence-based digitalization. The Industrial Revolution 4.0, which focuses on digital systems and global connectivity, aims to create a transformation that combines physical, digital, and biological technologies in various sectors of life. The Industrial Revolution brought about profound changes in human life, including how to work and apply its principles. The ever-growing advances in technology and information further reinforce these changes. In his book The Fourth Industrial Revolution, Schwab explains that this revolution impacted daily life and various disciplines. The Industrial Revolution began in

the 18th century, marking the beginning of a massive transformation in human civilization (Putra, 2022). The benefits of the Industrial Revolution 4.0 include increased accessibility of information, automation of work processes, and resource efficiency that support the development of the industrial, education, and healthcare sectors. In addition, this technology opens up new opportunities for creating innovative solutions to global challenges, such as climate change, health, and urbanization. However, to optimally utilize this potential, the role of human resources (HR) remains key. Adaptability, creativity, and mastery of technology are essential competencies that must be developed to ensure that these developments have a sustainable positive impact on individuals and organizations. Thus, the Industrial Revolution 4.0 symbolizes technological advancement and catalyzes a more inclusive future (Sawitri, 2019).

The Industrial Revolution is a significant technological advance that can affect changes in various other sectors (Boiliu, 2024). The Industrial Revolution first emerged around 1750 with the invention of the steam engine, known as Industrial Revolution 1.0. Subsequently, there was a transition from using steam engines to electric power, known as the Industrial Revolution 2.0. Along with the rapid development of technology came the incorporation of controllable mobile machines, such as simple robots and computers, leading to the Industrial Revolution 3.0. Finally, the Industrial Revolution 4.0 emerged, focusing on digital-based system transformation (Parhan et al., 2022). The Industrial Revolution 4.0 has eliminated boundaries in various aspects, with the development of science and technology making it increasingly infinite (Lina et al., 2021). However, although technology continues to develop rapidly, the role of Human Resources (HR) remains a significant factor. The important thing to underline is how these developments can be optimally utilized and directed to support individual and organizational progress. The Industrial Revolution 4.0 accelerates the development of science and technology and creates new opportunities and challenges. Digital-based transformation enables better connectivity and higher efficiency in various sectors. However, success in this era is determined by technology and the quality of HR (Ellitan, 2020). Human resources with mastery of technology, adaptability, and problem-solving are key factors in ensuring optimal technology utilization. Thus, the Industrial Revolution 4.0 demands a balance between technological development and strengthening human capacity to achieve sustainable and inclusive progress.

The Industrial Revolution 4.0 is a phenomenon of great interest to many for various reasons. Renald Khasali, in his book, reveals four main factors contributing to its popularity. First, straightforward, where the development of science and technology today makes everything easier and simpler. Second, faster or speed, where existing technology helps get the job done faster. Third, cheap or affordable prices, many technologies now offer cheaper prices, so various groups of people can access them. Fourth, accessible or ease of access, where this technology can be accessed anytime and anywhere, according to the needs and conditions of its user (Ifadah & Utomo, 2019). Reviewing the explanation above, the Industrial Revolution 4.0 appeals to the current generation with the ease and efficiency of time, energy, and finance. It is only right that the digitalization of education can take the opportunity to make optimal use of it to impact education positively.

Aligning PAI with the Industrial Revolution 4.0

The Prophet's Companion, Ali bin Abi Talib r.a., once said, '*Educate your children to be ready for their time because they were created for a different time than you*' (Wahyudi, 2023). This advice is even more relevant today (Kahfi et al., 2024). The changes taking place today are significant in various aspects of people's lives, triggered by the rapid development of technology, which for many people is considered one of the main characteristics of the current era. Therefore, it is essential to make adjustments in the education process to form a young generation that is knowledgeable, pious, and resilient. The flow of change in the Industrial Revolution 4.0 is so fast that it encourages education to be broad and meaningful. This is due to the Industrial Revolution 4.0, which significantly impacted education's existence, image, and dignity

(Parhan et al., 2022). Educated millennials show a change in mindset, where digital activities, information flow, and technology from the Industry 4.0 era become an essential part of life and influence their perspective (Musthafa & Meliani, 2021). Character Education through Islamic education has a significant contribution to the ideals of national education as a form of educational investment in creating a golden generation in the era of the global arena by establishing a balance of hard skills and soft skills, which in turn will create a community culture of learning (learning society) (Taufik, 2020). Teachers must work before becoming effective leaders of the robust, competitive, and professional teachers and bold religious education that a multicultural and multifaith society requires (Kailani, 2021; Lovat, 2022). Therefore, education in this era must adapt to these needs, namely developing young people who are academically intelligent and resilient in the face of ever-evolving social and technological changes. Thus, adjustments in the education process are key to equipping future generations with skills and values relevant to the times' challenges.

In education, digitalization is a product of the Industrial Revolution 4.0 that can transform various educational processes and perspectives into digital forms (Mahdi et al., 2024). In addition, technology has the potential to bring positive changes to humans, become a means for learners to be creative, encourage them to think critically and contribute to improving the quality and education system while providing facilities to achieve a smooth learning process. In the Industrial Revolution 4.0 era, we see the development of various applications that present learning more interestingly; this is undoubtedly an opportunity for education. Learners use smartphones to support access to learning applications. Only by using smartphones can learners acquire knowledge easily, quickly, concisely, and more efficiently (Nugraha, 2020). They are also more flexible in learning because they can determine the time and place according to their wishes. This is certainly different from learning in schools or classrooms, which are still often dominated by books that are used with limited time and place and that present less interesting material (Prayogo & Suyadi, 2019).

As educational applications evolve, they must be based on sound theory and systematic research, accompanied by appropriate pedagogical approaches to increase effectiveness and minimize potential problems. When new technologies are applied to learning, the first thing to consider is their usefulness, followed by development in education to achieve success (Desti et al., 2023). Thus, the success of digitalization is geared towards creating a creative and prosperous society through a multidimensional approach, which includes revitalizing the education system in terms of structure, tools, and policymakers. The goal is to give autonomy to learners, build self-confidence, critical thinking skills, and creativity, and form a common culture that supports more innovative education (Masrurah et al., 2024). The key to the success of creative education is that it must be a community-wide concern and a global responsibility. If this is done, efforts to build a more innovative and effective education system will likely succeed (Basuki, 2023). This statement emphasizes that the development of effective educational applications should be based on solid theory, systematic research, and appropriate pedagogical approaches. Technology in education, despite its great potential to improve the quality of learning, requires careful consideration of its benefits and relevance to educational objectives (Sa'diyah, 2023). The application of technology not accompanied by a precise analysis of academic needs and goals risks reducing its effectiveness and even creating new problems. Therefore, implementing technology in learning must align with a planned strategy, which includes revitalizing the education system in terms of structure, tools, and supporting policies.

The Industrial Revolution 4.0 in education certainly has advantages and disadvantages, including (Ajizah, 2021; Ma'rufah, 2022; Santika, 2020).

1. Pros:

    a) Creative: The digital platform can allow learners to express ideas and creativity.
    b) Communicative, digitalization of education facilitates communication between educators and learners and among learners.
    c) Critical Thinking: Learners often use technology to find solutions to their problems. This can awaken students' curiosity so that education can encourage students to think critically about a situation.
    d) Facilitating the learning process for educators and learners through learning media that offers audio and visual.
    e) Technology facilitates the education sector from basic to higher education, siakad, services through email applications and the like, and information related to institutions poured on the web.
    f) The learning evaluation process can be more effective using the Web-based Academic Grade Processing application.

2. Disasvantages (Harahap, 2019):

    a) The breadth of information provided by the Internet means that much knowledge, news, and information need to be proven credible.
    b) Decreased sensitivity to the environment and decreased quality of face-to-face interaction.
    c) The opening of opportunities for criminalizing education, such as the theft of essential questions or confidential documents.

Table 1 aims to provide a clear picture of which areas need digital transformation in learning methods, administration, evaluation, and accessibility of teaching materials. With digitalization in these areas, Islamic religious education can become more efficient and flexible and able to answer the challenges and needs of the growing Industrial Revolution 4.0 era.

Table 1. Digitalization of Research

Aspects	Digitalization	Not necessary	Reason
Learning Materials	Yes	No	Easy access to materials
Learning Materials	Yes (Multiple choice)	No (Essay and Practicum)	Multiple-choice questions are automatically quickly evaluated, but essays require subjective judgment so the teacher can better handle them.
Teacher and Student Communication	Yes (information notice)	No (personalized guidance and mentoring)	Digitalization supports fast communication. Face-to-face interaction is needed for in-depth, personalized guidance.
Student Attendance	Yes	No	Automate attendance management and tracking
Library and Learning Resources	Yes	No (for some physical resources and rare books)	Digital libraries have broad access, except for rare books and artifacts needing physical protection and limited access.
Education Administration	Yes	No	Speed up administrative processes and reduce the burden of physical documents.
Character Development	No	Yes	Character development is more effective through direct social interaction and activities that involve emotions and attitudes.
Extracurricular Activities	No	Yes	Activities such as sports, art, and music should be hands-on to engage physical skills and social interactions.

Source: Research 2024

Digitalization in education helps increase efficiency and flexibility in administration, material distribution, and objective assessment. However, some aspects involving physical skills, character development, and social interaction are more effective in person rather than entirely digitized. A balance between digitization and face-to-face interaction is essential to maintaining a holistic quality of education.

CONCLUSION

Aligning Islamic Religious Education (PAI) with the challenges of the Industrial Revolution 4.0 is necessary to maintain education's relevance in this modern era. The rapid development of technology requires adaptation of PAI to equip students with spiritual competence and 21st-century skills, such as critical, creative, and adaptive thinking. By utilizing technology to enrich learning, PAI not only maintains Islamic values but can also play a role in producing a generation that is resilient, moral, and ready to face change. Synergistic efforts between religious education and technology will be key in creating an education system that is harmonious with the challenges of the Industrial Revolution 4.0 without leaving the essence of spirituality and morality in Islam. To support this, this article suggests the need for further technological development aligned with Islamic values, such as Islamic interactive educational applications, online learning platforms that integrate character building, and equitable digital infrastructure.

Future research is expected to be more in-depth in exploring the impact of technology on Islamic character building, the development of a religion-based digital curriculum, and optimal strategies to overcome obstacles to technology implementation in areas with limited access. Thus, religious education can remain relevant and effective in facing the dynamics of changing times.

AUTHOR'S NOTE

The authors declare that there is no conflict of interest related to the publication of this article. The authors also confirm that all data and contents of this article are original and free from plagiarism. All information presented results from independent work based on valid and reliable sources. Thus, this article is expected to make an honest and meaningful contribution to the relevant scientific field.

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