THE ROLE OF INFORMATION TECHNOLOGY IN IMPROVING THE CONCEPT OF INDEPENDENT LEARNING IN ISLAMIC RELIGIOUS EDUCATION

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Abstract: This study explores and analyses the role of Information and Communication Technology (ICT) in improving independent learning in Islamic religious education. Information and Communication Technology (ICT) has become crucial in modern education, enabling wider access to learning resources, facilitating effective communication, and creating more dynamic learning experiences. This research is a research using literature study methods or literature review. The results showed that ICT significantly strengthens the concept of independent learning in Islamic religious education. Through Information and Communication Technology (ICT), students can access various learning resources, interact dynamically with subject matter, and develop independent research skills. In addition, Information and Communication Technology (ICT) has great potential to strengthen the concept of independent learning in Islamic religious education. Recommendations were given for developing policies that support the integration of ICT in the Islamic religious curriculum, more intensive teacher training in the utilization of technology, and the development of quality digital learning resources.

keyword: Information technology, independent learning, Islam

INTRODUCTION

The Industrial Revolution 4.0 has significantly changed the education paradigm by introducing advanced technologies such as artificial intelligence, big data, the Internet of Things (IoT), robotics, and cloud computing¹. The Industrial Revolution 4.0 demands new skills from the workforce, such as programming, data analysis, problem-solving, and collaborative skills. Education must adapt its curriculum to prepare students with these skills for the future job market demands². Education in the Industrial Revolution 4.0 era must become more dynamic, adaptive, and skill-oriented to produce graduates ready to face future challenges.

Education is a systematic process designed to transfer knowledge, skills, values, and norms to individuals through various methods such as teaching, training, and experience³. More than just providing information, education also involves character building, developing critical thinking skills, and preparation for life in society. Its main goal is to help individuals

¹ Lalu Adi Adha, "Digitalisasi Industri Dan Pengaruhnya Terhadap Ketenagakerjaan Dan Hubungan Kerja Di Indonesia," *Jurnal Kompilasi Hukum* 5, no. 2 (2020): 267–98.

² Izzah Millati and others, "Peran Teknologi Pendidikan Dalam Perspektif Merdeka Belajar Di Era 4.0," *Journal of Education and Teaching (JET)* 2, no. 1 (2021): 1–9.

³ Satria Kharimul Qolbi and Tasman Hamami, "Impelementasi Asas-Asas Pengembangan Kurikulum Terhadap Pengembangan Kurikulum Pendidikan Agama Islam," *Edukatif: Jurnal Ilmu Pendidikan* 3, no. 4 (2021): 1120–32.

reach their maximum potential and contribute positively to society⁴.

Islamic religious education plays an important role in shaping the character and morals of Muslim individuals and preparing them to face the challenges of modern times⁵. In this context, independent learning emerges as a relevant approach, emphasising student independence in the learning process. This concept aligns with Islamic teachings that encourage people to seek knowledge actively and deeply.

Islamic religious education in the Merdeka Belajar education system promotes tolerance, understanding, and inter-religious dialogue⁶. Through this learning, students are expected to be able to understand and appreciate religious and cultural diversity in Indonesia, by developing an inclusive attitude and mutual respect for differences. Islamic Religious Education also provides students with a moral and ethical basis by introducing principles such as honesty, integrity, justice, and compassion⁷. Another role is to shape the character of students, teach virtues, and prepare them to be responsible citizens and contribute positively to society. In its implementation, learning materials are prepared by taking into account the social and cultural context of students for relevance to their daily lives and applying innovative and interactive learning methods to increase student attraction and involvement in the teaching and learning process⁸.

However, amid the rapid development of information technology, new challenges arise in implementing independent learning in Islamic religious education. Information technology has changed how we learn, presenting new opportunities and challenges in the educational process. With this development, it is important to investigate how the role of information technology can be utilized to strengthen the concept of independent learning in the context of Islamic religious education ⁹. Through information technology, students can access various Islamic religious learning resources from different parts of the world, explore deeper knowledge about religious teachings, and participate in discussions and exchanges of

⁴ Sahri Sahri and Muh Ibnu Soleh, "Islamic Education As A Foundation For The Formation Of A Generation With Superior Character," *Jes Journal Education and Supervision* 1, no. 1 (2023): 18–30.

⁵ Nur Efendi and others, "The Strategy Of Islamic Education Institutions In Improving The Quality Of Learning In The Digital Era," *PARAMUROBI: JURNAL PENDIDIKAN AGAMA ISLAM* 6, no. 2 (2023): 1–13.

⁶ Elim Simamora, "Konsepsi Peningkatan Peranan Kerukunan Umat Beragama Guna Menciptakan Solidaritas Nasional Dalam Rangka Ketahanan Nasional," *KERUGMA: Jurnal Teologi Dan Pendidikan Agama Kristen* 1, no. 1 (2019): 1–16.

⁷ Irpan Îlmi et al., "Islamic Educational Values as the Core of Character Education," *EDUTEC: Journal of Education And Technology* 7, no. 2 (2023): 406–71.

⁸ Muammar Khadafie, "Pendidikan Agama Islam Dalam Sistem Pendidikan Merdeka Belajar," *TAJDID: Jurnal Pemikiran Keislaman Dan Kemanusiaan* 7, no. 1 (2023): 72–83.

⁹ Faldin Fahza AlFaizi, Yesi Airohmah, and Bakti Fatwa Anbiya, "Analisis Konsep, Teori Teknologi Informasi Dan Implikasinya Dalam Pengembangan Teknologi Pembelajaran PAI Di Indonesia: Sistematik Literatur Riview," *Jurnal Sosial Teknologi* 3, no. 11 (2023): 931–43.

ideas that transcend the confines of the classroom¹⁰. Thus, information technology has great potential to improve the quality and effectiveness of Islamic religious learning.

Along with the opportunities presented by information technology, various challenges also arise. One of the main challenges is ensuring that the use of information technology in Islamic religious learning improves access to information and encourages the development of students' critical, analytical, and spiritual skills¹¹. In addition, it is also important to consider issues related to ethics and morals in the use of information technology in the context of Islamic religious education.

With this background, this study aims to explore in depth the role of Information Technology in improving the concept of independent learning in Islamic religious education. By better understanding how information technology can be optimized to support meaningful and relevant Islamic religious learning, it is hoped that this research can make a significant contribution to the development of Islamic religious education in this digital era.

METHODS

This research is a research using literature study methods or literature review. A literature review is a comprehensive overview of research done on a specific topic to show the reader what is already known about the topic and what still needs to be known to find a rationale for research that has been done or for future research ideas. While collecting data, the data used in this study comes from research carried out and published in national and international online journals. In this study, researchers searched research journals published online using the ProQuest, PubMed, Research Gate, SagePub and Scholar engines¹². Meanwhile, analyzing data is done in several steps, namely reducing data where researchers select the data needed and which data is not needed. Then, the next step is to present data that has gone through the data reduction process. After that, the data that has been presented earlier will then be interpreted through the process of data analysis¹³.

RESULT AND DISCUSSION

A. Introduction to the Concept of Free Learning

The Ministry of Education and Culture of the Republic of Indonesia (Kemendikbud RI) a few months ago confirmed that there is a new policy in the world of

¹⁰ Fauzan Ismael and Supratman Supratman, "Strategi Pendidikan Islam Di Era Digital: Peluang Dan Tantangan," *INNOVATIVE: Journal Of Social Science Research* 3, no. 3 (2023): 4526–33.

Musyafak Musyafak and Muhamad Rifa'i Subhi, "Strategi Pembelajaran Pendidikan Agama Islam Dalam Menghadapi Tantangan Di Era Revolusi Industri 5.0," *Asian Journal of Islamic Studies and Da'wah* 1, no. 2 (2023): 373–98.

¹² Sugiyono, *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif Dan R and D* (Bandung: Alfabeta, 2016).

¹³ Dkk Fitria Widiyani Roosinda, Ninik Sri Lestari, *Metode Penelitian Kualitatif*, Cet I (Yogyakarta: Zahir Publishing, 2021).

education: "Freedom of Learning". Freedom of learning is a new policy initiated by the minister, a member of the advanced Indonesian cabinet, Nadiem Anwar Makarim. Freedom of learning is born from many problems in education, especially those that focus on actors or human empowerment¹⁴. The concept of Free Learning is an idea in the education system that emphasizes the independence of students in choosing and managing their learning process¹⁵. This idea aims to give students freedom to determine their interests, goals, and ways of learning, so that they can optimally develop their potential according to personal needs and interests.

Freedom of learning is a teaching system that is not only carried out in the classroom but also outside the classroom. With the nuances of learning, will be more comfortable so that students can discuss more with the teacher, learn outside the classroom or other terms on field trips, and form a character that is independent, courageous, intelligent in getting along, civilized, polite, competent, and the difference is that each child has his talents and intelligence in their respective fields" ¹⁶. Therefore, the principles of independent learning can be formulated, namely:

- 1. Students are free to develop their potential
- 2. Provide direct experience to students in learning
- 3. Educators/teachers are required to be able to guide and be good facilitators
- 4. Educational institutions are obliged to be educational laboratories for student change
- 5. Activities in educational institutions and at home must be collaborted.

In this concept, students are allowed to conduct independent exploration, research, and learning outside the classroom and choose the subjects they want to study in depth¹⁷. Teachers act as facilitators and guides in the learning process, helping students to develop skills of independent learning, critical analysis, and problem solving. The purpose of Merdeka Belajar is to create a learning environment that allows each individual to grow and develop according to his or her own potential and interests, thus producing graduates who have independence, creativity, and the ability to continue learning throughout life¹⁸.

¹⁴ Siti Baro'ah, "Kebijakan Merdeka Belajar Sebagai Strategi Peningkatan Mutu Pendidikan," *Jurnal Tawadhu* 4, no. 1 (2020): 1063–73.

¹⁵ Pitri Maharani Efendi, Tatang Muhtar, and Yusuf Tri Herlambang, "Relevansi Kurikulum Merdeka Dengan Konsepsi Ki Hadjar Dewantara: Studi Kritis Dalam Perspektif Filosofis-Pedagogis," *Jurnal Elementaria Edukasia* 6, no. 2 (2023): 548–61.

¹⁶ Gerhajun Fredy Purba, "Implementasi Pendekatan Pendidikan Matematika Realistik Indonesia (PMRI) Pada Konsep Merdeka Belajar," *Sepren* 4, no. 01 (2022): 23–33.

¹⁷ Cecep Abdul Muhlis Suja'i, "Implementasi Kurikulum Merdeka Dalam Membangun Karakter Siswa Pada Mata Pelajaran Pendidikan Agama Islam Di Smp Nurul Qomar," *HASBUNA: Jurnal Pendidikan Islam* 2, no. 1 (2023): 147–70.

Atika Cahya Fajriyati Nahdiyah, "Merdeka Belajar Dan Kampus Merdeka (MBKM) Dalam Pandangan AL HIKMAH Jurnal Studi Keislaman, Volume 14, Nomor 1, Maret 2024

B. Application of Information Technology in Islamic Religious Education Learning

The use of information and communication technology in learning depends on the willingness of teachers to use it in learning programs and the ability of teachers to use technology as an effective medium and source of learning¹⁹. Therefore, every teacher must always be willing to face the challenges of increasingly advanced information and communication technology and have a commitment to always use information and communication technology in learning. With the use of information and communication technology by Islamic Religious Education teachers, it is expected to help and facilitate them to direct students in achieving learning goals²⁰.

The application of Information Technology in Islamic Religious Education Learning is very important in facing the times²¹. Here are some ways in which information technology can be applied in the context of Islamic Religious Education learning:

1. Use of e-learning platforms

The use of e-learning platforms such as Moodle, Google Classroom, or special Islamic Religious Education platforms can make it easier for teachers to provide materials, assignments, and interactions with students online.

2. Mobile app

The development of mobile applications containing religious materials, prayers, or interactive quizzes can facilitate students in learning whenever and wherever they are.

3. Utilization of multimedia

Learning can be enriched by the use of multimedia such as video, animation, and audio to explain religious concepts more visually and interestingly for students.

4. Social media

The use of social media platforms such as Facebook, Instagram, or Twitter to share information, discussions, and quizzes related to Islamic Religious Education can expand the range of learning and enrich interactions between teachers and students.

5. Webinars and video conferencing

Holding webinar or video conference sessions for discussion, lectures, or Q&As with religious experts can be an effective means of deepening religious understanding more

Filsafat Pendidikan Humanisme," Jurnal Filsafat Indonesia 6, no. 2 (2023): 143-51.

¹⁹ Igwe Sylvester Agbo, "Factors Influencing the Use of Information and Communication Technology (ICT) in Teaching and Learning Computer Studies in Ohaukwu Local Government Area of Ebonyi State-Nigeria.," *Journal of Education and Practice* 6, no. 7 (2015): 71–86.

²⁰ Fauziah Fathuddin, Nurdin Nurdin, and Rustina Rustina, "The Challenges of Teaching Islamic Education In the Millennial Generation Era," *International Journal of Contemporary Islamic Education* 5, no. 1 (2023): 1–14.

²¹ Muhammad Abu Bakar, Khidriyah Amimatul Umroh, and Fatima Hameed, "Improving Quality Islamic Education for Today's Generation," *At-Tadzkir: Islamic Education Journal* 2, no. 2 (2023): 118–28.

deeply.

6. Simulation and educational games

The use of simulations or educational games related to Islamic religious values can help students understand such concepts in a more interactive and fun way.

7. Online learning resources

Providing access to online learning resources such as e-books, e-journals, or video lectures from religious scholars and scholars can enrich students' learning experiences.

The application of information technology in Islamic Religious Education learning can help improve the quality of learning, expand accessibility, and make learning more interesting and relevant to the times. However, keep in mind that the use of technology must be wise and balanced, and still prioritize religious and ethical values in its use.

C. Advantages and Challenges of Using Information Technology in Islamic Learning

In the world of education, technology will provide added value in the learning process. This is related to the high needs of science and technology which are not all obtained in the school environment. Similarly, when exchanging data and information between schools, schools with communities, schools with local and central governments, especially in Islamic education and others, everything will be more effective and efficient if utilizing technology²². Islamic religious education is the main pillar in shaping the character, morals, and understanding of the religion of Muslims. However, in the era of ever-evolving information and communication technology, Islamic religious education faces new challenges. These changes include shifts in the way students search for and interact with religious information, as well as how teachers deliver religious lessons. In this digital era, students have easier and faster access to various sources of religious information, such as the Quran, hadith, tafsir, and other religious literature through the internet ²³. The use of information technology in Islamic learning has a number of advantages and challenges to consider:

1. Accessibility

Information technology allows easy access to various Islamic learning resources from anywhere and anytime, thus facilitating more flexible learning for students.

2. Interactive and Engaging

The use of multimedia, educational games, and interactive platforms can make Islamic learning more interesting and can increase student engagement.

²² Agus Ali and Erihadiana Erihadiana, "Peningkatan Kinerja Teknologi Pendidikan Dan Penerapannya Pada Pembelajaran Pendidikan Agama Islam," *Jurnal Dirosah Islamiyah* 3, no. 3 (2021): 332–41.

²³ Amirah Mawardi, "Edukasi Pendidikan Agama Islam Dalam Pemanfaatan Sumber-Sumber Elektronik Pada Siswa Madrasah Ibtidaiyah," *Journal on Education* 6, no. 1 (2023): 8566–76.

3. Material Enrichment

Information technology allows the use of various learning resources, such as videos, animations, and mobile applications, which can enrich students' understanding of Islamic concepts.

4. Collaboration and Communication

E-learning platforms and social media facilitate collaboration between students and teachers, as well as allow for more intensive interaction in discussions and questions and answers regarding Islamic religious materials.

5. Learning Independence

With information technology, students can learn independently, set their own learning tempo, and access additional materials according to their needs and interests.

One important component that determines the quality of education is teaching staff, because the role of teaching staff in the learning process is very central, because the main problem faced by the world of education is the problem of improving the quality of humans (teachers)²⁴. This is because teaching jobs require education and training. Therefore, teachers must master various competencies, including scientific competence, competence in mastering technology, and teaching competence. All these abilities are combined into a complete insight when a teacher is in front of the class. The challenges include the following:

1. Limited Access and Infrastructure

Not all students have equal access to information technology, and inadequate infrastructure in some areas can be an obstacle to the implementation of technology-based learning.

2. Content Quality

Not all Islamic content available online is of good quality and in accordance with religious teachings. Therefore, it is necessary to carefully select and assess the material used.

3. Dependence

Too dependent on information technology can reduce students' skills in conventional learning, such as reading physical books or discussing directly with teachers.

4. Adaptation Difficulties

For both teachers and students, the use of information technology in Islamic learning can require sufficient adaptation time and training to be utilized effectively.

²⁴ Nikmatussaidah Nikmatussaidah, "Implementasi Teknologi Informasi Dan Komunikasi (Tik) Sebuah Literasi Dalam Pembelajaran Pendidikan Agama Islam," *Jurnal Literasiologi* 5, no. 1 (2021): 36–49.

5. Security and Privacy

Special attention needs to be paid to the security and privacy of student data in the use of information technology, especially in e-learning platforms and social media.

By understanding these advantages and challenges, a holistic and integrated approach to applying information technology in Islamic learning can significantly benefit the learning process and students' understanding of teachings.

CONCLUSION

The role of information technology in improving the concept of independent learning in Islamic religious education shows that integrating information technology in Islamic religious learning can positively contribute to improving the concept of independent learning. Through the use of information technology, students can access learning resources independently, broaden their understanding of Islamic religious teachings, and increase learning engagement and motivation. In addition, the integration of information technology in Islamic religious education can also expand access to religious education resources, both traditional and contemporary, thereby increasing diversity and quality of learning.

REFERENCES

- Adha, Lalu Adi. "Digitalisasi Industri Dan Pengaruhnya Terhadap Ketenagakerjaan Dan Hubungan Kerja Di Indonesia." *Jurnal Kompilasi Hukum* 5, no. 2 (2020): 267–98.
- Agbo, Igwe Sylvester. "Factors Influencing the Use of Information and Communication Technology (ICT) in Teaching and Learning Computer Studies in Ohaukwu Local Government Area of Ebonyi State-Nigeria." *Journal of Education and Practice* 6, no. 7 (2015): 71–86.
- AlFaizi, Faldin Fahza, Yesi Airohmah, and Bakti Fatwa Anbiya. "Analisis Konsep, Teori Teknologi Informasi Dan Implikasinya Dalam Pengembangan Teknologi Pembelajaran PAI Di Indonesia: Sistematik Literatur Riview." *Jurnal Sosial Teknologi* 3, no. 11 (2023): 931–43.
- Ali, Agus, and Erihadiana Erihadiana. "Peningkatan Kinerja Teknologi Pendidikan Dan Penerapannya Pada Pembelajaran Pendidikan Agama Islam." *Jurnal Dirosah Islamiyah* 3, no. 3 (2021): 332–41.
- Bakar, Muhammad Abu, Khidriyah Amimatul Umroh, and Fatima Hameed. "Improving Quality Islamic Education for Today's Generation." *At-Tadzkir: Islamic Education Journal* 2, no. 2 (2023): 118–28.
- Baro'ah, Siti. "Kebijakan Merdeka Belajar Sebagai Strategi Peningkatan Mutu Pendidikan." *Jurnal Tawadhu* 4, no. 1 (2020): 1063–73.
- Efendi, Nur, and others. "The Strategy Of Islamic Education Institutions In Improving The Quality Of Learning In The Digital Era." *PARAMUROBI: JURNAL PENDIDIKAN AGAMA ISLAM* 6, no. 2 (2023): 1–13.
- Efendi, Pitri Maharani, Tatang Muhtar, and Yusuf Tri Herlambang. "Relevansi Kurikulum Merdeka Dengan Konsepsi Ki Hadjar Dewantara: Studi Kritis Dalam Perspektif Filosofis-

- Pedagogis." Jurnal Elementaria Edukasia 6, no. 2 (2023): 548-61.
- Fathuddin, Fauziah, Nurdin Nurdin, and Rustina Rustina. "The Challenges of Teaching Islamic Education In the Millennial Generation Era." *International Journal of Contemporary Islamic Education* 5, no. 1 (2023): 1–14.
- Fitria Widiyani Roosinda, Ninik Sri Lestari, Dkk. *Metode Penelitian Kualitatif*. Cet I. Yogyakarta: Zahir Publishing, 2021.
- Ilmi, Irpan, Sri Wanayati, Aan Hasanah, and Bambang Samsul Arifin. "Islamic Educational Values as the Core of Character Education." *EDUTEC: Journal of Education And Technology* 7, no. 2 (2023): 406–71.
- Ismael, Fauzan, and Supratman Supratman. "Strategi Pendidikan Islam Di Era Digital: Peluang Dan Tantangan." *INNOVATIVE: Journal Of Social Science Research* 3, no. 3 (2023): 4526–33.
- Khadafie, Muammar. "Pendidikan Agama Islam Dalam Sistem Pendidikan Merdeka Belajar." *TAJDID: Jurnal Pemikiran Keislaman Dan Kemanusiaan* 7, no. 1 (2023): 72–83.
- Mawardi, Amirah. "Edukasi Pendidikan Agama Islam Dalam Pemanfaatan Sumber-Sumber Elektronik Pada Siswa Madrasah Ibtidaiyah." *Journal on Education* 6, no. 1 (2023): 8566–76.
- Millati, Izzah, and others. "Peran Teknologi Pendidikan Dalam Perspektif Merdeka Belajar Di Era 4.0." *Journal of Education and Teaching (JET)* 2, no. 1 (2021): 1–9.
- Musyafak, Musyafak, and Muhamad Rifa'i Subhi. "Strategi Pembelajaran Pendidikan Agama Islam Dalam Menghadapi Tantangan Di Era Revolusi Industri 5.0." *Asian Journal of Islamic Studies and Da'wah* 1, no. 2 (2023): 373–98.
- Nahdiyah, Atika Cahya Fajriyati. "Merdeka Belajar Dan Kampus Merdeka (MBKM) Dalam Pandangan Filsafat Pendidikan Humanisme." *Jurnal Filsafat Indonesia* 6, no. 2 (2023): 143–51.
- Nikmatussaidah, Nikmatussaidah. "Implementasi Teknologi Informasi Dan Komunikasi (Tik) Sebuah Literasi Dalam Pembelajaran Pendidikan Agama Islam." *Jurnal Literasiologi* 5, no. 1 (2021): 36–49.
- Purba, Gerhajun Fredy. "Implementasi Pendekatan Pendidikan Matematika Realistik Indonesia (PMRI) Pada Konsep Merdeka Belajar." *Sepren* 4, no. 01 (2022): 23–33.
- Qolbi, Satria Kharimul, and Tasman Hamami. "Impelementasi Asas-Asas Pengembangan Kurikulum Terhadap Pengembangan Kurikulum Pendidikan Agama Islam." *Edukatif: Jurnal Ilmu Pendidikan* 3, no. 4 (2021): 1120–32.
- Sahri, Sahri, and Muh Ibnu Soleh. "Islamic Education As A Foundation For The Formation Of A Generation With Superior Character." *Jes Journal Education and Supervision* 1, no. 1 (2023): 18–30.
- Simamora, Elim. "Konsepsi Peningkatan Peranan Kerukunan Umat Beragama Guna Menciptakan Solidaritas Nasional Dalam Rangka Ketahanan Nasional." *KERUGMA: Jurnal Teologi Dan Pendidikan Agama Kristen* 1, no. 1 (2019): 1–16.
- Sugiyono. *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif Dan R and D.* Bandung: Alfabeta, 2016.
- Suja'i, Cecep Abdul Muhlis. "Implementasi Kurikulum Merdeka Dalam Membangun Karakter Siswa Pada Mata Pelajaran Pendidikan Agama Islam Di Smp Nurul Qomar." *HASBUNA: Jurnal Pendidikan Islam* 2, no. 1 (2023): 147–70.