

## Digital Transformation in Islamic Education, Improving The Quality of Teachers in Islamic Education in Padangsidempuan City

Yanti Helena<sup>1</sup>, Solihah Titin Sumanti<sup>2</sup>

<sup>1,2</sup> Universitas Islam Negeri Sumatera Utara, Indonesia

Correspondence: [yantihelena@gmail.com](mailto:yantihelena@gmail.com)

**Abstrak.** : Digital transformation in Islamic education has become an important topic in improving the quality of education, including in Padangsidempuan City. Rapid technological developments have had a significant impact on the way of teaching and learning at various levels of education, including Islamic education. This research aims to analyze how digital transformation can play a role in improving the quality of teachers in Islamic education in Padangsidempuan City. Using qualitative methods, this research identifies the challenges faced by teachers in implementing technology as well as the strategies implemented to optimize the use of technology in the learning process. The research results show that although there are obstacles in terms of access to technology and teachers' digital skills, with proper training and adequate infrastructure support, digital transformation can have a positive impact on the quality of Islamic education in this area. Therefore, it is important for related parties to continue to improve the quality of training for teachers and expand access to technology in Islamic educational institutions.

**Keywords:** Digital transformation, Islamic education, Technology in digital learning education

### Introduction

In the era of globalization and rapid technological development, digital transformation has become an important need in various sectors, including education. Islamic education as a form of education that emphasizes the formation of character and religious values, also needs to adapt to technological advances in order to remain relevant and able to

answer the challenges of the times.<sup>1</sup> Digital transformation in Islamic education aims to increase effectiveness and efficiency in the teaching and learning process, as well as facilitate access to information for teachers and students. In Padangsidempuan City, the application of digital technology in Islamic education has great potential to improve the quality of education and teacher competence. However, challenges such as lack of digital skills, limited facilities, and resistance to change are obstacles that need to be overcome.

Digital transformation in Islamic education includes several important aspects. First, the application of technology in the learning process, such as the use of digital devices, educational applications, and e-learning platforms, allows the teaching and learning process to be more interactive and flexible. Second, improving the quality of teachers is the main key to realizing quality education.<sup>2</sup> A qualified teacher has a good understanding of technology and is able to utilize it in learning, especially in the context of Islamic education which demands a balance between technological aspects and religious values.<sup>3</sup> In Padangsidempuan City, efforts to improve the quality of teachers in Islamic education can be done through educational technology training and workshops, as well as support from the local government and related institutions. Other challenges faced in the digital transformation of Islamic education in Padangsidempuan City include cultural resistance, limited infrastructure, and minimal adequate policy support. Therefore, a strategic approach is needed that involves collaboration between educational institutions, government, and the community to encourage the adoption of technology in Islamic education.<sup>4</sup> This transformation not only changes the way of

---

<sup>1</sup> Jurnal Multikultural, "BERBAGAI JURNAL KEAGAMAAN," *HARMONI VIII*, no. 30 (n.d.).

<sup>2</sup> A. Nasution, *Digitalisasi Pendidikan: Konsep Dan Implementasi Dalam Pendidikan Islam*. (Bandung: Alfabeta, hal 32, 2018).

<sup>3</sup> Abdul Aziz and Khoirul Anam, "Moderasi Beragama Berlandaskan Nilai-Nilai Islam," *Direktorat Jenderal Pendidikan Islam Kementerian Agama RI*, 2021, 131, [https://cendikia.kemenag.go.id/storage/uploads/file\\_path/file\\_28-09-2021\\_6152761cdc6c1.pdf](https://cendikia.kemenag.go.id/storage/uploads/file_path/file_28-09-2021_6152761cdc6c1.pdf).

<sup>4</sup> Santi Siregar, "PENERAPAN NILAI - NILAI MODERASI BERAGAMA DI LINGKUNGAN MASYARAKAT DESA AEK BATANG PAYA KECAMATAN SIPIROK KABUPATEN TAPANULI SELATAN," *Skripsi* (Universitas Islam Negeri Syekh Ali Hasan Ahmad Addary Padangsidempuan, 2024).

teaching, but also changes the way of looking at Islamic education amidst the dynamics of modernization.<sup>5</sup>

Digital transformation in Islamic education not only has an impact on teaching methods or methods, but also brings significant changes to the way of viewing Islamic education itself.<sup>6</sup> In the era of modernization filled with technological developments, Islamic education needs to adapt so as not to be left behind in preparing a generation that is able to face the challenges of the times. This transformation opens up opportunities to present Islamic values through a more relevant and contextual approach, for example by integrating religious values in digital platforms that are close to students' daily lives.

By utilizing technology, Islamic education can become more inclusive, interactive, and flexible, in accordance with the characteristics of 21st century learning.<sup>7</sup> In addition, digital transformation also invites educators, especially in Padangsidempuan City, to renew their understanding of Islamic education. They are required not only as transmitters of knowledge, but also as facilitators and guides in the use of technology that has positive value.<sup>8</sup> In this way, Islamic education not only conveys religious material, but also hones students' critical, creative, and digital ethical abilities amidst modernization.

## RESEARCH METHODOLOGY

This study uses a qualitative approach<sup>9</sup> with a descriptive method to analyze the phenomenon of digital transformation in Islamic education and improving the quality of teachers in Padangsidempuan City. The qualitative approach was chosen because it focuses on an in-depth

---

<sup>5</sup> Helminia Salsabila et al., "Peran Generasi z Dalam Moderasi Beragama Di Era Digital," n.d., 118–28.

<sup>6</sup> R. Al-Mubarak, "'Transformasi Digital Dalam Pendidikan Islam'," *Jurnal Pendidikan Islam* 9(1), 15–3 (2021).

<sup>7</sup> D. Suparno, *Peran Teknologi Dalam Peningkatan Kualitas Pendidikan*. (Yogyakarta: Deepublish, hal 28, 2020).

<sup>8</sup> Z. Arifin, *Pendidikan Islam: Konsep Dan Praktik*. (Jakarta: RajaGrafindo Persada, hal 51, 2015).

<sup>9</sup> Feni Rita; Et.al Fiantika, *Metodologi Penelitian Kualitatif. In Metodologi Penelitian Kualitatif*, ed. Yuliatr Novita, Rake Sarasas, Cet.1 (Padang: PT. GLOBAL EKSEKUTIF TEKNOLOGI, 2022).

understanding of the role of technology in learning and developing teacher competencies in Islamic education.

- a. **Type of Research** This research is a qualitative descriptive study that aims to describe how digital transformation is applied in Islamic education in Padangsidempuan City, as well as to identify the challenges, opportunities, and impacts of the use of technology on improving the quality of teachers in Islamic education.
- b. **Location and Time of Research** This research was conducted in several schools and madrasahs in Padangsidempuan City that provide Islamic education. The selected locations cover various levels of education, from elementary to secondary levels. This research was conducted for six months, starting from January to June 2024.
- c. **Subjects of the Study** The subjects of this study consist of: Islamic Education Teachers: Includes teachers who teach in schools and madrasahs in Padangsidempuan City who have or are implementing technology in the learning process. Principals of Schools/Madrasahs: As policy makers related to the implementation of technology and training for teachers. Students: As recipients of the impact of digital transformation in learning.
- d. **Data Collection Techniques** Data in this study were collected through several techniques, namely: In-depth Interviews: Interviews were conducted with teachers, principals, and students to obtain more in-depth information about the application of technology in Islamic education and the challenges faced. Participatory Observation: Researchers were involved in the teaching and learning process in the classroom to directly observe how technology is used in learning and the quality of teacher teaching. Documentation: Collect documents related to the use of technology in education, such as digital-based learning plans, teacher training reports, and school policies regarding the use of technology.
- e. **Data Analysis Techniques** Data collected from interviews, observations, and documentation were analyzed using thematic analysis techniques. The analysis process consisted of the following steps: Data Transcription: All interviews and observation notes were transcribed to facilitate analysis. Initial Coding: Data were coded to

identify key themes related to the implementation of digital transformation and improving teacher quality. Theme Grouping: Coded data were grouped based on similarities and their relevance to the research objectives. Report Preparation :

Based on the themes found, the researcher compiled a report to describe the main findings and conclusions that can be drawn from this research.

## **Results and Discussion**

Based on the data analysis that has been conducted, this study found several important findings regarding digital transformation in Islamic education and efforts to improve teacher quality in Padangsidempuan City. The results of this study are divided into two main parts, namely research results and discussions that include findings related to the application of technology in Islamic education and its impact on the quality of teaching and teacher competence.

Implementation of Technology in Islamic Education Learning Digital transformation in Padangsidempuan City has begun to be implemented in a number of schools and madrasas, although the level of implementation varies. Several high schools and madrasahs have started using digital learning platforms, such as online learning applications (e-learning), the use of learning videos, and hardware such as projectors and computers in the classroom. However, at the elementary school level, the application of technology is still limited and focuses more on the use of simple visual aids. Improving Teacher Competence through Digital Training Teachers in Padangsidempuan City have shown openness to digital transformation in learning. However, most teachers admit to lacking the skills to utilize technology optimally. Training on the use of digital learning software and other technological tools has been carried out, although it is still limited and uneven.<sup>10</sup>

---

<sup>10</sup> A. Nugraha, M. S., Maskah, D. K., & Rohayani, "Islamic Ethical Concepts Relevant to Digital Technology.," *Proceedings of International Conference on Islamic Civilization And Humanities.*, 2023, <https://proceedings.uinsa.ac.id/index.php/iconfahum/article/view/1335>.

Some teachers complain about the lack of intensive and ongoing training that can help them master technology in learning. Challenges in Implementing Digital Transformation There are several challenges found in this study related to the implementation of digital transformation in Islamic education in Padangsidempuan City: Access and Infrastructure: Many schools and madrasahs in this area experience limitations in terms of technological infrastructure, such as unstable internet connections and inadequate hardware. Teacher Digital Skills: Although some teachers have basic skills in using technology, many still find it difficult to integrate technology effectively into the learning process. Social and Cultural Barriers: Some parents and communities still have traditional views towards Islamic education, viewing technology as less important in the context of religious education.

Positive Impact of Digital Transformation on Teacher Quality Despite the challenges, the application of digital technology in Islamic education in Padangsidempuan City has a positive impact on teacher quality, especially in terms of: Improving Teaching Ability: Several teachers reported that the use of digital learning media allowed them to deliver materials in a more engaging and interactive way. This improved students' understanding of Islamic education materials. Access to Learning Resources: With digital transformation, teachers can access various learning resources more easily and quickly, including online learning modules, video lectures, and scientific literature that can enrich the teaching process.

Challenges and Solutions in Implementing Technology Most of the challenges faced in implementing technology in Islamic education in Padangsidempuan City can be overcome with several strategic solutions, including: Improving Infrastructure: The government and schools need to improve technological infrastructure, such as improving internet connections and providing adequate devices for teachers and students.<sup>11</sup> Training and Professional Development: Improving teacher competency in digital technology is essential. Continuous training based on real needs in the field will help teachers feel more confident in using technology.

---

<sup>11</sup> Mardhiah Masril et al., "Analisis Gender Dan Intellectual Intelligence Terhadap Kreativitas," *Edukasi: Jurnal Pendidikan* 18, no. 2 (2020): 182, <https://doi.org/10.31571/edukasi.v18i2.1847>.

**Socialization to Parents and the Community:** To reduce misunderstanding and disagreement with the application of technology, a socialization program is needed for parents and the community regarding the benefits of technology in Islamic education. **The Importance of the Principal's Role in Digital Transformation** The principal has a very important role in initiating and supporting digital transformation in schools. The results of the study show that schools that have principals who support and take the initiative in implementing digital technology tend to be more successful in implementing various digital initiatives in learning.

Therefore, school principals need to be given training on technology-based education policies and effective change management. **Integration of Technology in Islamic Education Curriculum** Digital transformation in Islamic education is not only limited to the use of technology for teaching, but must also be integrated into the curriculum used. The Islamic education curriculum needs to be adjusted to technological developments, such as the use of social media for preaching, the use of digital Quran applications<sup>12</sup>, and teaching about the ethics of using technology in Islam. **Increasing Student Involvement in Digital Learning** The use of technology in Islamic education also provides opportunities for students to be more actively involved in the learning process.<sup>13</sup> Online learning platforms allow students to access materials anytime and anywhere, giving them flexibility in learning. However, it is important to ensure that these technologies are used in a way that supports character and moral development in accordance with Islamic values.

## Conclusion

Digital transformation in Islamic education in Padangsidempuan City is an important strategic step to answer the challenges of the times and improve the quality of education. Through the use of technology, the

---

<sup>12</sup> Q. Shihab, *Membumikan Al-Quran, Fungsi Dan Peran Wahyu Dalam Membumikan Al-Quran*. (Bandung: mizan, 2001).

<sup>13</sup> Alhamuddin., . “. ‘Pembelajaran Berbasis MI Pada Materi Pelajaran PAI Di Sekolah Untuk Meningkatkan Kemampuan Berpikir Kritis Anak (Studi Kasus Di SD Islam AL-Amanah Bandung Dan SD IT Buah Hati Jakarta’,” *Bandung: UPI*, 2015.

learning process can be carried out more efficiently, interactively, and interestingly for students. Digitalization not only facilitates access to information and learning materials, but also encourages the development of 21st century skills that are very much needed in today's modern world. However, to achieve this goal, special attention is needed to improve the quality of teachers as the spearhead of education. Educators must be given adequate training in the use of technology and innovative learning methodologies in order to facilitate students in a way that suits their needs.

.Good teaching quality is greatly influenced by the skills and knowledge of teachers in utilizing technology effectively. Although there are various challenges, such as limited infrastructure and access to technology, collaborative efforts between the government, educational institutions, and the community are needed to overcome these obstacles. With good synergy, it is hoped that the digital transformation in Islamic education in Padangsidempuan can run smoothly and have a positive impact on the younger generation. The digital transformation in Islamic education in Padangsidempuan City is a step that is not only relevant, but also essential to prepare students to face future challenges. By improving the quality of teachers through adequate training and support, as well as strengthening educational infrastructure, it is hoped that Islamic education in this city can develop better and produce a generation that is not only intelligent, but also has character and noble morals, in accordance with Islamic principles.

## References

- Al-Mubarak, R. “‘Transformasi Digital Dalam Pendidikan Islam’.” *Jurnal Pendidikan Islam* 9(1), 15–3 (2021).
- Alhamuddin. . “‘Pembelajaran Berbasis MI Pada Materi Pelajaran PAI Di Sekolah Untuk Meningkatkan Kemampuan Berpikir Kritis Anak (Studi Kasus Di SD Islam AL-Amanah Bandung Dan SD IT Buah Hati Jakarta)’.” *Bandung: UPI*, 2015.
- Arifin, Z. *Pendidikan Islam: Konsep Dan Praktik*. Jakarta: RajaGrafindo Persada, hal 51, 2015.
- Aziz, Abdul, and Khoirul Anam. “Moderasi Beragama Berlandaskan Nilai-Nilai Islam.” *Direktorat Jenderal Pendidikan Islam Kementerian*



- Agama RI*, 2021, 131.  
[https://cendikia.kemenag.go.id/storage/uploads/file\\_path/file\\_28-09-2021\\_6152761cdc6c1.pdf](https://cendikia.kemenag.go.id/storage/uploads/file_path/file_28-09-2021_6152761cdc6c1.pdf).
- Fiantika, Feni Rita; Et.al. *Metodologi Penelitian Kualitatif. In Metodologi Penelitian Kualitatif*. Edited by Yuliatris Novita. Rake Sarasin. Cet.1. Padang: PT. GLOBAL EKSEKUTIF TEKNOLOGI, 2022.
- Masril, Mardhiah, Oskah Dakhi, Torkis Nasution, and Ambiyar Ambiyar. "Analisis Gender Dan Intellectual Intelligence Terhadap Kreativitas." *Edukasi: Jurnal Pendidikan* 18, no. 2 (2020): 182.  
<https://doi.org/10.31571/edukasi.v18i2.1847>.
- Multikultural, Jurnal. "BERBAGAI JURNAL KEAGAMAAN." *HARMONI* VIII, no. 30 (n.d.).
- Nasution, A. *Digitalisasi Pendidikan: Konsep Dan Implementasi Dalam Pendidikan Islam*. Bandung: Alfabeta, hal 32, 2018.
- Nugraha, M. S., Maskah, D. K., & Rohayani, A. "Islamic Ethical Concepts Relevant to Digital Technology." *Proceedings of International Conference on Islamic Civilization And Humanities.*, 2023.  
<https://proceedings.uinsa.ac.id/index.php/iconfahum/article/view/1335>.
- Salsabila, Helminia, Devi Sintya Yuliasuty, Nur Halimah, and Silviatus Zahra. "Peran Generasi z Dalam Moderasi Beragama Di Era Digital," n.d., 118–28.
- Shihab, Q. *Membumikan Al-Quran, Fungsi Dan Peran Wahyu Dalam Membumikan Al-Quran*. Bandung: mizan, 2001.
- Siregar, Santi. "PENERAPAN NILAI - NILAI MODERASI BERAGAMA DI LINGKUNGAN MASYARAKAT DESA AEK BATANG PAYA KECAMATAN SIPIROK KABUPATEN TAPANULI SELATAN." *Skripsi*. Universitas Islam Negeri Syekh Ali Hasan Ahmad Addary Padangsidempuan, 2024.
- Suparno, D. *Peran Teknologi Dalam Peningkatan Kualitas Pendidikan*. Yogyakarta: Deepublish, hal 28, 2020.