Study of Islamic Education Policy in the Digital Era: Challenges and Opportunities for Technology-Based Learning by Utilizing Canva at SMAN 4 Kuala Nagan Raya

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Abstract

This study examines the implementation of technology-based Islamic education policies at SMAN 4 Kuala Nagan Raya, focusing on the challenges and opportunities in utilizing Canva as a learning medium. The research method uses a qualitative approach with data collection techniques through interviews, observations, and document analysis. The results of the study reveal three main findings: Limited infrastructure, such as unstable internet access and a lack of digital devices, hinder the optimization of technology-based learning; Low digital competence of teachers in using Canva and other educational platforms due to lack of training; Student behavior that is not yet fully adaptive to digital learning, indicated by the dominance of gadget use for entertainment rather than learning. However, this study also identifies opportunities for development, such as the enthusiasm of young teachers for technological innovation and the potential for collaboration with digital service providers. Further analysis shows the gap between national policies (such as Merdeka Belajar) and implementation at the local level, which requires a context-based approach and ongoing support. The implications of this study emphasize the importance of improving infrastructure, practical teacher training, and cultivating digital literacy to encourage effective transformation of Islamic education in the digital era.

Keywords: *Islamic education, digital era, Canva, education policy, technology-based learning.*

Introduction

The rapid development of information and communication technology has brought major changes in various sectors of life, including the world of education. In the digital era like today, the transformation of the learning system is a necessity to answer the challenges of the ever-evolving era. Islamic education as an integral part of the national education system cannot be separated from this flow of change, (Pauliana 2007). The need to utilize technology in the learning process of Islamic Education is becoming increasingly urgent so that Islamic material can be delivered contextually, relevantly, and interestingly for the younger generation living in the digital ecosystem. Through the use of technology, learning can take place more interactively, flexibly, and reach students more widely, both in terms of time and space.

In line with this, the government has encouraged the digitalization of education through various policies and programs such as Merdeka Belajar, school digitalization,

strengthening teacher competency, and developing digital learning platforms. These policies generally aim to improve the quality of learning and expand access to education that is equitable throughout Indonesia,(Firmansyah et al. 2023). However, in its implementation, this policy often encounters obstacles, especially in areas that still experience limited infrastructure and resources. One example is SMAN 4 Kuala Nagan Raya, a school located in the semi-peripheral area of Nagan Raya Regency, Aceh. This school is a real portrait of how technology-based education policies face major challenges when applied in complex local contexts,(Rahardja et al. 2019).

Based on field observations, there are several main problems that hinder the successful implementation of technology-based learning policies, especially in Islamic Education subjects at SMAN 4 Kuala Nagan Raya. First, unstable and limited internet access is the main obstacle. Many teachers and students have difficulty accessing digital learning platforms because the internet network is weak and often unavailable. Second, the condition of school infrastructure is still far from adequate. Most classrooms are not equipped with technological devices such as LCD projectors, computers, or Wi-Fi networks,(Hasnida, Adrian, and Siagian 2024). The lack of education budget allocated for the procurement of technological facilities is the main cause of this limitation. Teachers often have to use personal devices or even rely on conventional methods because there is no adequate digital learning media available at school.

In addition, teacher competence in operating and integrating technology into the learning process is still a problem. Many Islamic Education teachers are not yet accustomed to using digital platforms such as Google Classroom, Canva, YouTube, or other educational applications,(Arum 2023). This is due to the lack of training and professional development provided on an ongoing basis. Teachers find it difficult to adapt to digital devices, especially those who have been teaching with traditional methods for a long time. As a result, technology-based learning innovations do not run optimally. Not only from the teacher's side, students' awareness of the importance of utilizing technology for learning is also still low. Most students are more interested in using technology for entertainment or social media, while its use for learning is still very limited. A digital but productive learning culture has not been fully formed in the school environment,(Sinaga and Firmansyah 2024).

These problems indicate a gap between the direction of policies formulated at the national level and the reality of implementation at the school level. Although technology-based learning policies have good intentions, in practice not all schools have the same

readiness to implement them,(Hamdani 2021). Therefore, it is important to conduct an in-depth study to understand the dynamics of Islamic education policies in the digital era, especially in schools that face structural and cultural challenges. This study aims to analyze how technology-based learning policies are implemented in the context of Islamic Education learning at SMAN 4 Kuala Nagan Raya, identify the various challenges faced, and explore strategic opportunities that can be developed to improve the quality of technology-based learning,(Mansir 2022).

Through this study, it is expected to find a more comprehensive picture of the obstacles and potentials in the implementation of technology-based Islamic education policies, so that it can be a reference for policy makers, school administrators, and teachers in formulating strategic steps that are in accordance with local conditions,(Mansir 2020). This study is also expected to be able to contribute to the development of contemporary Islamic education literature, which is not only based on theory, but also based on empirical experience from the field. Thus, digital transformation in Islamic education is not just a discourse, but can be realized in real terms and have a positive impact on improving the quality of learning in Indonesian schools, especially in areas such as Nagan Raya.

This condition shows that the challenges of digitalizing education are not only related to technical aspects, but also touch on the dimensions of policy, school management, and the readiness of the human resources involved. At SMAN 4 Kuala Nagan Raya, for example, although the school has tried to follow government directives regarding the use of technology in learning, budget constraints make it difficult for the school to provide adequate digital devices. In many cases, teachers have to modify teaching materials independently or even use personal media to support the learning process ,(Andi Sadriani, M. Ridwan Said Ahmad, and Ibrahim Arifin 2023). This certainly has an impact on the workload of teachers, and creates a gap in the quality of learning between classes or subjects that do not have equal access to technology.

On the other hand, the implementation of digital education policies requires systematic support from regional policy makers, such as the Education Office, the Regional Office of the Ministry of Religion, and the district government,(Sindi Septia Hasnida, dkk 2023). Unfortunately, the synergy between these institutions has not been fully optimal, so that efforts to improve the quality of technology-based learning in schools have not received serious attention that is sustainable. Training for teachers is often ceremonial and not followed

by technical assistance. In fact, school digitalization programs often only target superior schools in the city center, while schools in the outskirts such as SMAN 4 Kuala Nagan Raya are left behind in terms of access and receipt of assistance,(Bowen et al. 2013).

It should be realized that the success of implementing technology in learning is highly dependent on the readiness and motivation of teachers as the main actors in the classroom. Islamic Education teachers have a strategic role not only in delivering religious material, but also in shaping the character and spiritual values of students. When teachers are not given adequate support to innovate, the learning that takes place will tend to be monotonous and unable to reach the dimensions of 21st century learning based on creativity, collaboration, communication, and critical thinking,(Munir and Zumrotus Su'ada 2024). In fact, through the integration of technology, Islamic Education learning can be packaged more attractively through content visualization, utilization of interactive videos, digital quizzes, and online discussion methods.

The opportunity to utilize technology in Islamic Education learning is actually very wide open, especially considering the high interest of the younger generation in digital content. Teachers can use media such as Canva to create infographics on aqidah-akhlak material, use YouTube as a reference for digital preaching, or utilize the Learning Management System (LMS) to compile flexible learning evaluations, (Ilyas and Maknun 2023). However, this opportunity can only be utilized optimally if there is structural support and policies that are adaptive to the local context of the school. This means that digitalization of education is not enough just by providing devices, but must be accompanied by strengthening teacher capacity, availability of resources, and supervision of implementation in the field.

In this regard, it is important to highlight how the role of the principal as an education manager also greatly determines the direction and success of technology integration in learning. Visionary and collaborative leadership can be a driving force for change in schools. Principals who actively encourage teachers to innovate, facilitate internal training, and establish partnerships with other institutions will be able to form a learning ecosystem that is more responsive to digital challenges,(Wibowo 2019). At SMAN 4 Kuala Nagan Raya, the principal's initiative is needed to encourage the creation of a healthy and productive digital culture, both among teachers and students.

Furthermore, the role of the school community and parental participation are also important factors in supporting the digitalization process of learning. In a community

environment that is not yet fully familiar with the digital world, the role of the family is very large in shaping students' attitudes and motivation to learn at home, (Manan 2023). Therefore, digital literacy is not only the responsibility of teachers and schools, but also needs to be part of a joint movement that involves all elements of society. A collaborative and participatory approach is key to building a sustainable and contextual transformation of Islamic education in the digital era.

The rapid development of information and communication technology (ICT) has revolutionized various sectors of human life, including education. In today's digital era, the transformation of the learning system is a necessity in responding to the challenges of globalization and modernization. Islamic education as an integral part of the national education system is also required to adapt to technological developments in order to remain relevant and contextual for digital generation students, (Pauliana, 2007). The use of technology not only promises efficiency in the learning process, but also allows for the creation of a more interactive, flexible, and in-depth learning experience.

Responding to this dynamic, the Indonesian government has launched various strategic policies such as Merdeka Belajar, a school digitalization program, strengthening teacher competency, and developing an online learning platform. These policies are expected to expand equitable access to education and improve the quality of learning throughout the region, including in the context of Islamic education (Firmansyah et al., 2023). However, the implementation of this policy often faces significant challenges, especially in remote areas with limited infrastructure and human resources, such as what happened at SMAN 4 Kuala Nagan Raya, Aceh.

SMAN 4 Kuala Nagan Raya is a real representation of the gap between the idealism of central policy and the reality on the ground. Based on initial observations, a number of major obstacles were found in the implementation of technology-based learning policies in this school, especially in Islamic Education subjects. These problems include limited internet access that is not yet stable, minimal technological facilities such as computers, projectors, and Wi-Fi networks, low digital competence of teachers, and the lack of a digital learning culture among students, (Hasnida,dkk 2024; Arum, 2023; Sinaga & Firmansyah, 2024). Not only that, sporadic teacher training and the lack of synergy between schools and regional policy makers also worsen the situation.

These issues indicate a significant structural and cultural gap in the implementation of technology-based Islamic education policies. Although the spirit of digitalization continues to be encouraged, the readiness of schools, teachers, and the surrounding environment are key factors in determining the success of this transformation. Therefore, an in-depth and contextual study is needed to understand the dynamics of implementing this policy in a school environment that faces various limitations. This study aims to analyze in depth the implementation of technology-based learning policies in the context of Islamic Education at SMAN 4 Kuala Nagan Raya. The focus of the study is directed at: (1) how digital education policies are implemented in Islamic Education subjects; (2) the main challenges faced by schools, teachers, and students; and (3) strategic opportunities that can be developed to strengthen the effectiveness of digital learning.

To answer these problems, this study uses a qualitative method with a descriptive approach. This approach was chosen because it is able to describe comprehensively and deeply the reality that occurs in the field. Data collection techniques are carried out through observation, in-depth interviews with Islamic Education teachers and school principals, and documentation of policies and learning practices that are running in schools. The results of this study are expected to not only provide an empirical understanding of the situation faced by marginal schools in the digital era, but also provide recommendations for contextual and applicable learning policies and practices.

By considering the various challenges and opportunities that exist, this study is expected to provide a real contribution to the development of Islamic Education learning strategies that are adaptive to the development of the times,(Baihaki and Paramansyah 2024). SMAN 4 Kuala Nagan Raya is a concrete example of how geographical conditions, infrastructure limitations, and resource readiness affect the success of implementing technology-based education policies. Therefore, this study is not only important as material for evaluating policy implementation, but also as a reference for developing a technology-based Islamic learning model that is inclusive, equitable, and in accordance with the local values of the Acehnese people.

The development of information and communication technology (ICT) has brought significant transformation in various sectors, including education. In the digital era, technology-based learning has become an urgent need to ensure the relevance and effectiveness of education, including in the context of Islamic Education (Pauliana, 2007). The

use of digital platforms such as Canva, Google Classroom, and Learning Management System (LMS) offers opportunities to make learning more interactive, creative, and affordable. However, the implementation of digital education policies often faces complex challenges, especially in areas with limited infrastructure and human resources, such as at SMAN 4 Kuala Nagan Raya, Aceh.

This study aims to analyze the implementation of technology-based learning policies in Islamic Education at SMAN 4 Kuala Nagan Raya, focusing on the use of Canva as a learning medium. This study identifies the structural and cultural challenges faced by schools and explores strategic opportunities to strengthen the digitalization of Islamic education at the local level.

Research methods

This study uses a qualitative approach with a case study type. This approach was chosen because it is appropriate to examine in depth the phenomenon of Islamic education policy in the digital era in a specific local context, namely SMAN 4 Kuala Nagan Raya. Case studies allow researchers to understand the dynamics of policy implementation more comprehensively, including the challenges and opportunities that arise in the field. The qualitative method is descriptive-analytical, where researchers try to describe the reality that occurs objectively based on data obtained through direct interaction with research subjects. Data were collected through in-depth interview techniques, participatory observation, and documentation. Interviews were conducted with the principal, Islamic Education teachers, administrative staff, and several students involved in the technology-based learning process. Observations were conducted to directly see classroom learning practices and the use of available technological facilities. Meanwhile, documentation was carried out on school policies, learning tools, and archives of digitalization programs that had been implemented.

The research location was conducted purposively, which was chosen intentionally because SMAN 4 Kuala Nagan Raya represents a school that faces challenges in implementing educational technology, but also has development potential. The selection of informants was conducted purposively and snowball, with the criteria that informants have understanding, experience, and direct involvement in the process of implementing technology-based Islamic education policies. Data analysis was conducted interactively through the process of data reduction, data presentation, and drawing conclusions. Data reduction was carried out by

filtering information that was relevant to the focus of the research. Data presentation was carried out in the form of descriptive narratives to facilitate interpretation and understanding. Furthermore, conclusions were drawn inductively based on patterns and themes that emerged from the results of data collection.

To maintain data validity, this study uses source and method triangulation techniques. Source triangulation is done by comparing information from various informants, while method triangulation is done by combining the results of interviews, observations, and documentation. In addition, the researcher also conducted member checks with several informants to ensure the accuracy of the interpretation of the data obtained. Through this method, it is expected to obtain an in-depth picture of the implementation of technology-based Islamic education policies at SMAN 4 Kuala Nagan Raya, as well as various factors that influence its success. This method also provides space for exploration of best practices that can be recommended as models for implementing technology-based learning in other schools with similar conditions.

Results and Discussion

This study reveals several key findings related to the implementation of Islamic education policies in the digital era at SMAN 4 Kuala Nagan Raya. The findings are classified into three main aspects, namely infrastructure and accessibility, teacher competence and readiness, and students' digital learning behavior. Each aspect is discussed in depth in relation to the support and obstacles to the implementation of technology-based learning in the context of Islamic education.

- Infrastructure and Internet Access Limitations

  The most significant obstacle found was the limitation of technological infrastructure. Most classrooms at SMAN 4 Kuala Nagan Raya are not yet equipped with basic digital devices such as projectors, computers, or Wi-Fi access. Based on interviews with the school, the limited education budget is one of the main causes of the difficulty in procuring digital support facilities. Teachers often use personal devices to access and deliver learning materials,(Amirudin 2019), but this cannot continue sustainably. In addition, slow and unstable internet connections are also major obstacles that hinder the online learning process. These findings indicate that infrastructure readiness is a major prerequisite for the successful implementation of digital-based policies.

- Low Digital Competence of Islamic Education Teachers in Implementing Canva Media

  Another significant challenge is the low digital competence of Islamic Education teachers. Most teachers are not yet accustomed to using digital learning platforms such as Google Classroom, Canva, or other educational video applications. A senior teacher stated that although the use of digital media is encouraged, they feel less confident and do not have adequate training to integrate technology effectively in learning. This is in line with the formulation of the problem in this study, which shows a gap between policy objectives and the readiness of educators,(Nuryadin 2017). The lack of structured and sustainable professional development programs is one of the causes of the slow adaptation to digital learning methods.

- Student Behavior and Attitudes in Digital Learning

  Although the majority of students have access to devices such as smartphones, their use is still predominantly for entertainment and social media rather than for learning activities. The results of observations and interviews show that a productive digital learning culture has not been strongly formed in the school environment. Students tend to be passive and still rely on direct explanations from teachers in the learning process. This shows a cultural challenge where both students and teachers are still in the process of transitioning from traditional to digital learning models. Without strong digital literacy education, the policy goal of creating active, technology-literate learners is difficult to achieve,(Hajri 2023).

- Policy Implementation Gap

  This study also found a gap between digital education policies at the national level and their implementation at the local level. Programs such as Merdeka Belajar and school digitalization actually aim to encourage the use of technology, but their implementation in areas such as Kuala Nagan Raya is still limited. The lack of coordination between the central and local governments has resulted in uneven distribution of resources and technical support. This finding shows the importance of adjusting policies to the local context so that their implementation is more effective,(Amirudin 2019).

- Development Opportunities

  Despite facing many challenges, there are a number of opportunities that can be utilized. The enthusiasm of several young teachers in trying out learning technology is one of the potentials that can be developed. In addition, the school community shows an

open attitude towards innovation despite limited facilities. Collaboration with educational technology providers, practical teacher training programs, and support from local governments can be the key to accelerating the digital transformation of Islamic education in this school. These opportunities are strategic entry points for policy makers and educators to gradually develop the quality of technology-based learning,(Manan 2023).

- Conformity with the Problem Formulation

  All of the above findings answer the problem formulation that has been presented previously, namely about how technology-based learning policies are implemented, what challenges are faced, and opportunities that can be utilized. Limited infrastructure, low teacher competence, and the lack of a digital learning culture are direct answers to the main problems,(Amirudin 2019). Meanwhile, the spirit and openness to innovation show that change is still possible if supported by the right strategy.

- Implications for Educational Policy and Practice

  Based on the results of this study, digital transformation in Islamic education is not enough to rely only on top-down policies. A bottom-up approach is needed through teacher capacity building, strengthening local infrastructure, and ongoing technical assistance. For schools such as SMAN 4 Kuala Nagan Raya, flexible budget policies, contextual digital training, and local innovation programs will greatly help bridge the gap between policy expectations and the reality of implementation,(Mansir 2022).

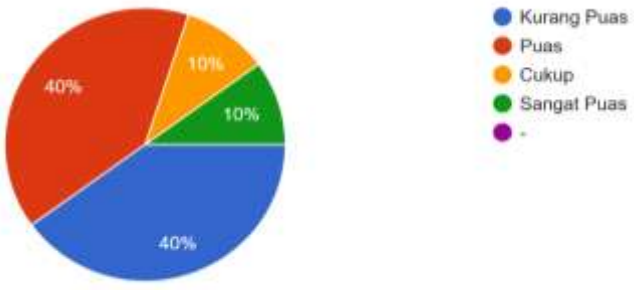

Figure 1. Level of Satisfaction with the Application of Technology in Learning

This diagram shows that most respondents (80%) feel satisfied and dissatisfied in balance with the application of technology in learning. Only a small portion feels quite satisfied (10%) or very satisfied (10%). This indicates that there are still challenges in improving the

quality and effectiveness of technology use in the school environment, both in terms of infrastructure, teacher skills, and student readiness.

The following is a bar chart showing the main obstacles students face in learning using technology media at school.

Figure 2. Main Obstacles in Learning with Technology Media in Schools

This diagram shows that most respondents (60%) are constrained by weak internet signal factors, (20%) do not have a device (cellphone/laptop), (10%) have no constraints, (10%) are still confused in determining the answer. This indicates that there are still challenges in improving the quality and effectiveness of technology use in the school environment, both in terms of infrastructure, teacher skills, and student readiness.

Conclusion

These problems indicate a gap between the policy direction formulated at the national level and the reality of implementation at the school level. Although the technology-based learning policy has good intentions, in practice not all schools have the same readiness to implement it. Therefore, it is important to conduct an in-depth study to understand the dynamics of Islamic education policy in the digital era, especially in schools that face structural and cultural challenges. This study aims to analyze how the technology-based learning policy is implemented in the context of Islamic Education learning at SMAN 4 Kuala Nagan Raya, identify the various challenges faced, and explore strategic opportunities that can be developed to improve the quality of technology-based learning.

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