



## MALAYSIAN JOURNAL OF LEARNING AND INSTRUCTION

<https://e-journal.uum.edu.my/index.php/mjli>

How to cite this article:

Azman, N. A., Hamzah, M. I., & Abd Razak, K. (2025). Digital integration in primary school Islamic education: Teachers' perspectives on its impact on students' learning. *Malaysian Journal of Learning and Instruction*, 22(2), 140-160. <https://doi.org/10.32890/mjli2025.22.2.7>

### DIGITAL INTEGRATION IN PRIMARY SCHOOL ISLAMIC EDUCATION: TEACHERS' PERSPECTIVES ON ITS IMPACT ON STUDENTS' LEARNING

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Received: 4/3/2024

Revised: 25/7/2025

Accepted: 25/5/2025

Published: 31/7/2025

#### ABSTRACT

**Purpose** - This study explores how the integration of digital technology in Islamic education impacts primary school students' learning, from the perspective of Islamic education teachers. It aims to highlight the potential benefits of digital integration in the classroom and to address the gaps between Islamic education teachers' perceptions and students' digital competencies.

**Methodology** - Using a qualitative case study design, the study involved five Islamic education teachers proficient in digital technology, selected through a snowball sampling technique. Data were collected via interviews, classroom observations, and audio-visual analysis. Thematic analysis was conducted using NVIVO 14 software, guided by the framework of Miles, Huberman, and Saldaña (2020). Trustworthiness was ensured through triangulation, member checking, peer review, detailed audit trails, and inter-rater reliability.

**Findings** - The analysis revealed five major themes: enhancing motivation, fostering independent learning, revealing digital prowess, optimizing digital interaction, and promoting collaboration. These themes reflect students' increased engagement and competitiveness, development of self-directed learning skills, mastery of digital tools, improved communication—including English language—and collaborative teamwork in learning tasks.

**Significance** - This study offers Islamic education teachers a renewed perspective on the value of integrating digital technology into their teaching practices. By showcasing practical insights and pedagogical strategies, the findings aim to empower educators to create dynamic, student-centred learning environments aligned with the demands of 21st-century education and national aspirations for a digitally literate generation.

**Keywords:** Impact of digital teaching, digital integration, student learning, Islamic education, primary school.

## INTRODUCTION

The launch of the Digital Education Policy (DEP) 2023 reflects Malaysia's commitment to developing high-quality human capital capable of competing on a global scale. In line with this vision, the Ministry of Education (MoE) has introduced the Student Digital Competency Standards to cultivate students who are knowledgeable and proficient in integrated, creative, and innovative use of digital technology. One of DEP's main goals is to produce digitally literate students (MoE, 2023). As implementers of government policy, teachers are fully responsible for ensuring that these objectives are achieved. This responsibility extends to Islamic education teachers, whose role is crucial in shaping the intellectual, spiritual, and physical development of students.

In response, Islamic education teachers have actively embraced digital education within their subject, incorporating digital technologies into their teaching and learning practices. This reflects their support and commitment to the national agenda of fostering digital proficiency among students. Previous studies have highlighted this initiative, focusing on areas such as teacher competence in Islamic education (Malla et al., 2023; Noor et al., 2021), students' digital learning experiences (Mohd Haslin & Hamzah, 2023; Tugiah et al., 2022), and the development of digital content in Islamic education (Nawi, 2020; Yusoff et al., 2019; Zahari et al., 2021). These studies demonstrate the dedication and positive response of Islamic education teachers to ongoing educational reforms. This study specifically focuses on the primary school level, a critical stage where students begin to discover their potential across social, emotional, cognitive, and psychomotor domains (Kuo et al., 2024). At this stage, students also tend to absorb and respond to learning more quickly (Nuphanudin et al., 2023). However, there remains a need for further research to evaluate the effectiveness of digital education in Islamic education, especially in terms of achieving its primary goal: enabling students to apply their learning in real-life situations, rather than merely acquiring theoretical knowledge.

In light of this, every teacher holds a crucial responsibility to ensure that their chosen teaching methods effectively support the primary goal of student learning. However, not all Islamic education teachers fully grasp the importance of integrating digital technology into their lessons. Based on previous research (Yusof & Yaakob, 2022), many Islamic education teachers demonstrate limited proficiency in integrating digital tools into their instructional practices and express cautious attitudes towards the future of digital learning among students. This cautious approach has resulted in missed opportunities to enhance students' digital competencies, particularly at the primary school level (Faisal & Adnan, 2021). Despite statistical evidence from 2019 to 2022 indicating that students possess basic digital proficiency (MoE, 2023), the use of advanced digital teaching methods remains underutilized in Islamic education. This highlights a disconnect between the available technological capabilities and their practical application in the classroom.

The researcher has identified three key gaps in existing studies related to the integration of digital technology in teaching: methodological, contextual, and practical. From the practical perspective, there appears to be a mismatch between Islamic education teachers' perceptions and beliefs and the actual digital skills and capacities of their students (Haron et al., 2020; Suhid et al., 2021; Sholeh, 2023). While methodologically, many studies adopt a statistical standpoint, existing qualitative research tends to focus narrowly on aspects such as teachers' attitudes towards technology or specific classroom

instructional practices (Hsbollah & Hassan, 2022; Ng et.al, 2022; Zainal & Noor, 2023). As a result, there is a lack of comprehensive qualitative studies that thoroughly investigate teachers' broader experiences, insights, and challenges related to digital teaching and learning. This gap underscores the need for more extensive qualitative research that captures the complex perspectives of teachers and students, encompassing a diverse range of experiences and responses to digital teaching and learning. Such research can offer valuable insights into the effectiveness of digital tools, the support systems required for successful implementation, and the overall impact of digital learning on educational outcomes. Focusing on primary education is crucial, as it lays the foundation for students' lifelong learning. Introducing digital technology at this stage facilitates the development of essential digital literacy skills that are essential for future academic and personal success (Vargas & Castro, 2020).

Thus, from the perspective of Islamic education teachers, it is essential to examine the impact of digital technology integration in the teaching of Islamic education in primary schools. This study aims to explore how the incorporation of digital tools influence students' learning experiences as perceived by Islamic education teachers. This article aims to provide Islamic education teachers with valuable insights and inspiration, emphasizing their responsibility of delivering modern, up-to-date instruction that meets the evolving needs of today's learners. The researcher earnestly hopes that educators in Islamic education will recognize the significance of contributing to the national vision for 2030—cultivating a digitally proficient generation.

## **LITERATURE REVIEW**

The rapid advancement of digital technology has significantly transformed the contemporary educational landscape. What began as basic computer usage has evolved into sophisticated learning applications and platforms that support interactive and collaborative teaching methods. The integration of digital technology has introduced dynamic teaching strategies, enabling students to access educational resources with increased flexibility and facilitating information delivery through multimedia formats. Tools such as learning management systems (LMS), mobile learning applications, and pedagogical software offer numerous opportunities to enhance teaching effectiveness, promote critical thinking, and enrich students' overall learning experiences. This transformation impacts not only how educators deliver content but also how students engage with material and interact with one another.

Studies demonstrate that integrating digital technology into teaching and learning yields significant positive effects on students. For instance, studies have shown that technology integration enhances prospective teachers' critical and creative thinking skills, nurtures multidimensional 21st-century competencies, and improves academic performance (Yilmaz, 2021). Additionally, gamification applications and immersive digital technologies—such as virtual reality (VR) and augmented reality (AR)—have proven effective in enhancing student performance in STEM subjects and language learning (Garzón & Acevedo, 2019; Pan et al., 2022). Digital technology also plays a pivotal role in improving student engagement, motivation, and interest in learning, while fostering communication and collaboration skills (Fu, 2013; Mdhlalose & Mlambo, 2023). Educators have acknowledged the benefits of ICT in assisting students with special educational needs and those with lower performance levels by providing more personalized and effective learning opportunities (Zheng et al., 2016). Furthermore, research indicates that digital technology positively impacts learning across various disciplines, including mathematics, science, languages, and the arts. It contributes to the development of essential academic skills such as literacy, writing, problem-solving, and metacognition (Chauhan, 2017; Chuaungo et al., 2022; Ng et al., 2022). Moreover, the use of digital technology fosters lifelong learning

skills, enabling students to continue learning and growing beyond traditional educational settings (Haleem et al., 2022; Nuphanudin et al., 2023). Overall, the integration of ICT in education offers substantial benefits. It not only enhances academic achievement, engagement, motivation, communication, collaboration, and creativity, but also provides crucial support for students with diverse learning needs and those with below average performance levels.

Despite evidence suggesting that digital technology enhances student engagement and academic performance, there remains a notable gap in research concerning its broader impact on students' holistic development—particularly in the context of Islamic education. Areas such as personal development, emotional growth, and participation in extracurricular activities have received limited attention. More comprehensive qualitative research is needed to explore how digital integration in teaching and learning affects students from the educators' perspective. Digital platforms, when thoughtfully adapted to educational contexts, have the potential to offer more nuanced insights into the far-reaching implications of digital integration in schools.

To address the focus of this study, it is essential to investigate two key dimensions of digital learning: The first involves students' acquisition of knowledge, skills, and values related to digital technology. The second concerns the innovative, creative, and integrated use of digital technology in teaching and learning. This study specifically focuses on the latter—namely, the exposure to and experience with digital learning as facilitated by Islamic education teachers. Previous research has highlighted various applications of digital teaching techniques in Islamic education. These include the use of virtual reality to simulate the Hajj experience (Salleh et al., 2021), mobile technologies (Bakar & Hassan, 2019), multimedia tools in Quranic instruction (Haron et al., 2020; Mohamad et al., 2021), video conferencing platforms like Google Meet (Moyang & Razak, 2022), digital game-based learning strategies (Zahari et al., 2021), and platforms such as Google Classroom (Hassan & Zulkifli, 2022; Suhaimi & Baharudin, 2021). While these innovations represent advancements, there are still significant gaps in understanding how digital technology is integrated into Islamic education as a whole. In particular, further exploration is needed into teachers' perspectives on how digital tools impact pedagogical practices, student engagement, and learning outcomes. Addressing these gaps will provide a more comprehensive understanding of the effectiveness, challenges, and opportunities associated with digital technology in Islamic educational contexts. Such insight will help enhance the effectiveness of digital integration strategies and their implementation.

Therefore, the inclusion of digital technology in the Islamic education curriculum has been shown to positively influence student learning. For instance, Mohamad et al. (2012) found that digital teaching approaches support students' intellectual, spiritual, and behavioural development. This perspective aligns with the humanistic learning paradigm, which emphasises the realisation of each student's full potential. Within this paradigm, students are encouraged to apply both intrapersonal and interpersonal intelligence in the construction of knowledge and skills—capacities that can be nurtured with appropriate teacher support. Consequently, teachers must provide a variety of educational materials and experiences that help unlock students' potential (Eng & Ngen, 2022). To maximise student learning outcomes, they must adopt creative and flexible teaching strategies, including integrating digital technology (Nordin, 2024). In the context of the modern classroom, teachers are not only responsible for academic instruction but also for shaping human capital capable of contributing meaningfully to the future.

The Ministry of Education is committed to transforming the digital education landscape through the development of the Digital Education Policy 2023. This policy aims to maintain continuity and elevate

the quality of education nationwide. It is founded on six basic principles: (1) Digitally literate students, (2) Digitally competent teachers, (3) A culture of visionary digital leadership, (4) Enabling infrastructure and information systems, (5) High-quality digital content, and (6) Strategic partnerships with dedicated stakeholders. This study focuses on the first core principle—digitally literate students. This principle emphasises the importance of cultivating students who can use digital technology in an integrated, creative, innovative, responsible, and ethical manner. Digitally literate students are expected to be capable of generating innovations, analysing scientific data, solving problems, and collaborating and communicating effectively. The DEP outlines four strategies and eight initiatives to support this core objective. These are summarized in Table 1 as follows.

**Table 1**

*Strategies and Initiatives under Thrust 1: Digitally Literate Students*

Strategy	Initiative	Output	Time Line
1.1 Empower digital education <b>curriculum and assessment</b>	1.1.1 Adding subjects to the <b>curriculum</b> to meet the needs of the digital era	<ul style="list-style-type: none"> <li>• Students are able to apply digital skills in daily life.</li> <li>• Subject curriculum integrates digital education.</li> </ul>	2023-2030
	1.1.2 Improving integrated assessment using digital technology	<ul style="list-style-type: none"> <li>• An integrated assessment system is implemented across schools, vocational colleges, and matriculation colleges.</li> <li>• Students are guided into appropriate academic or career pathways based on their potential, interests, and inclinations.</li> </ul>	
1.2 Develop <b>Student Digital Competence Standards</b>	1.2.1 Develop a <b>standard</b> for student digital competence	Students achieve a level of digital competence based on the standards set in the Student Digital Competence Standards.	2026-2030
	1.2.2 Provide standard measurement <b>instruments</b> for students' digital competence	<ul style="list-style-type: none"> <li>• Students' digital competence levels can be measured and reported.</li> <li>• Enables targeted interventions based on individual needs.</li> </ul>	
	1.2.3 Implement <b>targeted intervention plans</b> for students' digital competence standards	Students are given opportunities to achieve the required digital competence level as defined in the Student Digital Competence Standards.	

(continued)

Strategy	Initiative	Output	Time Line
1.3 Cultivate the use of digital technology in an integrated, creative, innovative, and ethical manner in <b>student-centered learning</b>	1.3.1 Strengthen student understanding through a <b>deep learning</b> approach	Students apply knowledge and skills through exploration and investigation across the curriculum using digital technology independently and ethically.	2023-2030
	1.3.2 Apply and practise the <b>ethical</b> use of digital technology among students	Students become responsible and ethical cyber citizens who practise safe internet use.	
1.4 Cultivate <b>students' potential and talent</b> in digital technology through co-curricular activities	1.4.1 Increase student involvement in digital-based <b>co-curricular activities</b> by incorporating entrepreneurial elements.	Students are able to adapt the knowledge, skills, and values gained from digital education to advance their talents and career pathways.	2023-2030

Source. Educational Technology Resources Division, MoE 2023.

Table 1 outlines the Malaysian Digital Education Policy 2023 which aims to promote the widespread adoption of digital technology across the national education system. Central to this policy is the integration of digital tools into teaching and learning practices, aimed at enhancing students' educational experiences through the effective use of digital technologies. The policy emphasizes the enhancement of the education curriculum to align with the requirements of the digital era, including the introduction of subjects that incorporate digital education components. Furthermore, the policy underscores the importance of providing comprehensive training and support for educators to effectively integrate digital technologies into their pedagogical approaches. This strategic approach is designed not only to equip students with essential digital competencies but also to prepare them for continued educational advancement and future career success in an increasingly technology-driven world.

## METHODOLOGY

### Study Design and Participants

This study adopts a qualitative research methodology and employs a case study design. Specifically, it utilises a single case study approach as described by Stake (1995), focusing on a group of primary school Islamic education teachers proficient in digital technology as the unit of analysis. This approach aligns with the study's aim of naturally exploring the real-life phenomenon (Lincoln & Guba, 1985) of digital technology integration in Islamic education and its impact on student learning (Patton, 2015; Yin, 2018). The study involved five Islamic education teachers from primary schools across three states in Malaysia. Participants were chosen through a linear snowball sampling technique based on specific criteria such as having received digital education awards and actively participating in national digital activities related to Islamic education. Initial participant recommendations were obtained from an officer at the Education Technology Resources Division (Bahagian Sumber dan Teknologi Pendidikan

- BSTP). The officer’s role was limited to suggesting the names of initial participants. Following this, the researcher conducted data collection in an iterative manner, using referrals from participants already involved in the study to identify additional participants. This method enabled the researcher to gradually expand the sample while ensuring relevance by focusing on individuals directly involved in digital education initiatives within Islamic education. This method also facilitated access to a specific and information-rich group of participants who could provide meaningful insights related to the implementation and perceived impact of digital technology integration in the primary school environment.

**Table 2**

*Participant Details*

Participant	Service (Year)	State	Digital Award
P1	14	Johor	- National Level Inspiration Teacher - Juara Digital Teacher - ICT Teacher Icon - Advocate Teacher - Innovative Teacher -1 Bestari Net Inspiration Teacher - Bestari Coordinator Teacher Icon
P2	14	Johor	- Al Imam Al Ghazali Gold Award - Juara Digital Teacher
P3	9	Johor	- Bestari Coordinator Icon - State Education Inspiration Teacher
P4	3	Negeri Sembilan	- Juara Digital Teacher - Peneraju Generasi Digital Teacher - Virtual Learning Teacher Icon - EDUFLUENCER
P5	8	Selangor	- State & National Educational Technology Teacher Icon - Innovative Teacher

**Data Collection and Analysis**

Data for this study were collected through qualitative methods including interviews, observations, and audio-visual analysis (Creswell, 2018; Merriam, 2015). Among these, interview data served as the primary source for developing themes aligned with the study’s research objectives. Concurrently, observational data, document analysis, and audio-visual materials provided complementary sources to support and validate the study's findings. The researcher served as the principal instrument in the data collection process, utilizing a semi-structured interview protocol to guide the interviews. Observational data were collected using a systematic observation checklist adapted from Yin, (2018). Furthermore, audio visual data—sourced from platforms such as Facebook, YouTube, blogs, and other digital platforms—were used to enrich the dataset with authentic documentation of participants’ digital teaching practices. To strengthen the validity of the findings, data triangulation was applied by integrating insights from various sources. Ethical protocols were adhered: data collection commenced only after obtaining approval from the Educational Policy Planning and Research Division (EPRD) and

the respective school administrators. All participants were informed of the nature of the study and provided written informed consent voluntarily. Audio recorders were used to capture the interviews, and mobile phones were used to document observational data.

The interview transcripts were analysed using a thematic analysis approach as outlined by Miles, Huberman, and Saldaña (2020), and the process was conducted with the aid of NVIVO 14 software. According to Saldaña (2016) the data analysis process involves two main coding cycles: First-cycle coding begins with assigning initial codes to the data units. In this study, the researcher performed open coding, followed by coding revisions, and the creation of definition codes in the first round of analysis. In the second cycle, the researcher developed pattern codes and engaged in clustering to identify emerging patterns. At this stage, the main themes of the study were constructed. Following the completion of both rounds, to further organize and clarify the emerging themes, the researcher applied cognitive mapping (Miles, Huberman, & Saldaña, 2020), allowing for a more accessible visual understanding of the thematic structure. As shown in Appendix 2.0, the analysis generated five major themes corresponding to the study's research objectives. These themes are arranged according to their frequency of occurrence, as determined by NVIVO 14, presented in descending order from the most to least prominent.

### ***Trustworthiness***

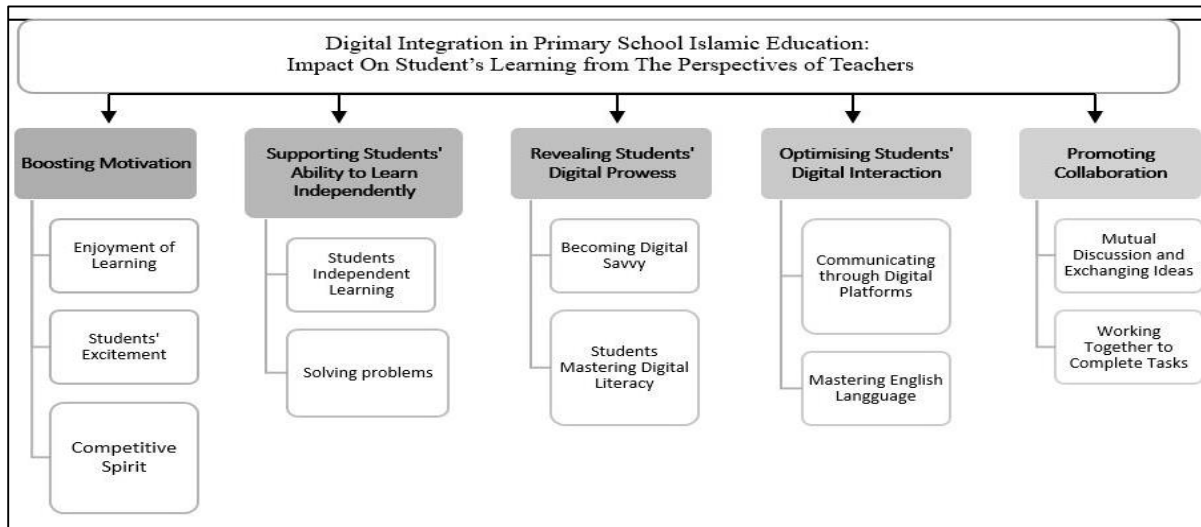
To ensure the credibility and reliability of the findings, this qualitative study adhered to established procedures for establishing trustworthiness in research (Lincoln & Guba, 1985). The researcher employed data triangulation by drawing from numerous sources (Merriam, 2015; Yin, 2018), involving several study participants, and incorporating both member checking and an expert peer review process (Creswell, 2018). These strategies were implemented to minimize potential bias and avoid duplication of interpretation. To enhance data transferability, the researcher provided a rich, thick description of the of the study context. Additionally, this study employed audit trails and inter-rater reliability to ensure transparency and the validity of the study results.

## **FINDINGS**

This study examined how Islamic education teachers perceive the impact of digital integration on student learning. Analysis of the data revealed five main themes and eleven sub-themes, as illustrated in Figure 1 as follows:

**Figure 1**

*Concept Mapping of the Results*



Based on the thematic concept map in Figure 1, the five overarching themes that emerged to address the study's objective are as follows: (1) Boosting motivation (Sub-theme: Students' excitement, competitive spirit, and enjoyment of learning). (2) Supporting Independent Learning (Sub-theme: Students' ability to learn independently and solve problems). (3) Revealing Digital Prowess (Sub-themes: Mastery of digital literacy and becoming digitally savvy). (4) Optimising Digital Interaction (Sub-themes: Communication through digital platforms and English language mastery). (5) Promoting Collaboration (Sub-themes: Mutual discussion, exchanging ideas, and working together to complete tasks).

***Theme 1: Boosting Motivation***

All study participants agreed that integrating digital tools in the teaching of Islamic education significantly enhances students' interest and motivation. They observed that students became more enthusiastic and eager to learn when digital methods were applied, leading to increased focus and the cultivation of healthy academic competition.

***Sub-theme: Enjoyment of Learning***

Participant 5 emphasized the importance of capturing students' attention in Islamic education lessons. He noted that enjoyment plays a vital role in helping students remain focused and absorb lesson content effectively:

*“The important thing is that we want to grab our students' attention and have fun. When they have fun, they will pay more attention and focus more on learning. Whatever we teach, they will easily understand and attain.” (P5)*

He further attributed this enjoyment to the use of digital technology in the classroom:

*“So, one of the fun things is technology.” (P5)*

Participant 1 shared how he used interactive quiz platforms such as Quizziz and Kahoot! to create a fun and competitive environment in teaching Islamic education.

*“So, when we do quizzes and kahoots, the impact is high, it’s really fun because the students are racing to get the highest ranking in answering the quiz. The impact is fun learning.” (P1)*

These interview insights were further supported by classroom observations. Students demonstrated visible enthusiasm and joy during digital assessments. The following field note excerpt describes such a moment:

*“Students cheered with joy as a sign of support when their group representatives successfully answered the interactive quiz questions in the e-Jauhar portal in front of the class.” (P2)*

### ***Sub-theme: Students’ Excitement***

The integration of digital tools into Islamic education lessons was found to significantly boost students’ excitement and active engagement in the learning activities. Participant 2 observed that students became more engaged when they were able to see, hear and interact with digital content during the learning process:

*“When we use digital technology, they will focus. When they see, hear, and get involved together... there, the students are excited to involve themselves in every activity.” (P2)*

This excitement was echoed by Participant 5, who noted the impact of using Augmented Reality (AR) as a conceptual aid in teaching Islamic education. According to him, AR created an immersive and stimulating environment that captured students’ attention:

*“When I see Augmented Reality applied to the students, they are excited... Of course it zaps to their mind.” (P5)*

Participant 4 added that students’ excitement also stemmed from feeling appreciated when given the opportunity to use digital devices during class activities:

*“They are very excited when they can answer and press the keyboard on the computer. It’s as if, like us, when the teacher allows... eh, I’m chosen, I feel appreciated.” (P4)*

Despite the positive response, Participant 5 cautioned that this excitement must be managed to maintain focus on learning outcomes:

*“The excitement is undeniable. But we have to control the excitement. Because you know kids these days, right? Virtual things look like video games; sometimes they can be overwhelming.” (P5)*

### ***Sub-theme: Competitive Spirit***

Digital integration also nurtured a healthy sense of competition among students, motivating them to participate more enthusiastically in learning activities. Participant 4 described how the use of technology sparked students' eagerness to learn:

*"We see the impact in that these students are always eager to learn. Technology is like raising a child's spirit to learn." (P4)*

Participant 2 further illustrated how students competed for the opportunity to answer questions in class:

*"They are racing to be questioned. When they already know that when we browse something, they will ask the ustazah, there must be a next activity." (P2)*

Participant 3 described a similar pattern of competitive behaviour during digital assessments, particularly when using the Minecraft application:

*"Usually these students say, 'Whoever is fast wins.' So they will go after him to prepare all the questions. Actually, this is called a competition because he looks at his friends." (P3)*

The triangulation of teaching observation data supports the following themes: Field notes from classroom observations confirmed these findings. One note detailed how students enthusiastically competed to score higher in Quizziz:

*"The screen display in front of the class shows the ranking of the group of students who got high marks and vice versa. This ranking makes students excited and race to answer the Quizziz questions correctly." (P4).*

### ***Theme 2: Supporting Students' Ability to Learn Independently***

All study participants unanimously agreed that the integration of digital technology into Islamic education promotes students' capacity to learn independently and encourages them to solve problems on their own without relying solely on the teacher.

#### ***Sub-theme: Independent Learning***

Teachers observed that digital technology methods encourage students to take initiative in their learning process by using digital tools such as digital devices and internet access.

*"Because the students look for the information themselves, either from books or the internet." (P3)*

He emphasized that this type of self-exploration is central to the current era of education, even at the primary level.

*"That's right, I think he wants to explore on his own. That is a learning process. If he doesn't want to explore, he becomes a robot." (P3)*

To support this independent learning, Participant 5 described using AR flash cards that allow students to engage with the material at their own pace:

*“Students can interact with flash cards. If you press a letter, for example, the letter ba on the top line, it shows the students the ba sound. Then, students can follow the pronunciation. So independent learning can be done.” (P5)*

### ***Sub-theme: Solving Problems***

In addition to fostering independence, digital tools also help students develop problem-solving skills. Students are encouraged to find solutions on their own, even when faced with difficulties. Participant 3 shared an example of how even weaker students showed perseverance in solving problems:

*“If a student faces a problem, he finds a way to solve it himself. Even though the students are weak, he tries... Ha, you study Islamic education, even without a teacher. But if he can do it, I mean, he’s great.” (P3)*

This process of discovery leads to deeper, more meaningful learning experiences, as explained by Participant 1:

*“While learning while playing, let the students complete it themselves... This can give the students more experience exploring the activity.” (P1)*

These insights were supported by field observation notes from Participant 3’s lesson, where students were assigned a Minecraft-based project:

*“Students start doing assignments through the Minecraft game. This task requires students to complete a project while playing. The time given is 20 minutes to complete both tasks.” (P3)*

### ***Theme 3: Revealing Students’ Digital Prowess***

Findings from the study found that integrating digital technology into Islamic education lessons has had a positive impact in uncovering students’ digital capabilities in terms of mastery of digital literacy among primary school students.

#### ***Sub-theme: Students’ Mastery of Digital Literacy***

One of the earliest and observable impacts of digital integration is students’ ability to confidently operate digital devices well. As Participant 2 explained:

*“If we use a laptop, students come to the front and click the answers themselves using the mouse. We don’t teach, he does it himself.” (P2)*

Participant 1 similarly observed students’ growing independence in searching for information and completing tasks on the internet without the help of teachers.

*“... you can browse through Google, search for something in the search engine, download pictures and videos, and upload it yourself.” (P1)*

### **Sub-theme: Becoming Digitally Savvy**

Beyond basic digital literacy, students have begun to demonstrate advanced digital skills and creativity. Participant 2 described a sense of satisfaction in seeing her students create extraordinary digital products.

*“So, when students explore, they can make the material. For example, they can produce a more beautiful scrapbook than us that involves audio; YouTube elements are included in the scrapbook, and many other things. This is more about becoming a student.” (P2)*

Participant 3 also expressed pride in introducing digital learning to her primary school students, noting that such early exposure lays the groundwork and makes it easier for students to develop their potential at the secondary level.

*“Yes, it means a feeling of pride... Because primary school teachers can take students in that direction (digital learning), a better product will be born in high school. So if students know how to make PowerPoint, for example, high school teachers will find it easier to do their work.” (P3)*

In addition, Participant 5 highlighted how students’ familiarity with online learning during the Movement Control Order (MCO) period contributed to their digital fluency:

*“That thing (digital learning) has been going on for almost two years... If we ask the students to send their work—the voice recording—through Telegram, he will send it later. It means that they already know that it is a form of culture.” (P5)*

Support for these findings is further strengthened through audio-visual analysis, such as an image retrieved from Participant 1’s Facebook page, showcasing a student who won an international digital competition—a testament to the high level of digital proficiency achieved.

### **Figure 2**

*Participant 1’s Facebook page*



#### **Theme 4: Optimising Students' Digital Interaction**

The integration of digital technology into Islamic education lessons has significantly enhanced students' digital interaction, particularly in two areas: communication through digital platforms and improved English language proficiency.

##### **Sub-theme: Communicating through Digital Platforms**

The use of social media and communication applications during the early phases of home-based teaching and learning (PdPR) has persisted, becoming an effective tool for interaction between teachers and students. Participants reported that students are increasingly comfortable engaging through these digital platforms. Participant 3 shared that students feel more confident using platforms such as WhatsApp to ask questions:

*"The student's response is usually that he will ask a lot more in Whatsapp. Haa, because he is not shy of Ustaz."* (P3)

Participant 5 described using Telegram as an interactive space where students could discuss topics collaboratively, while he monitored and guided the discussion:

*"We ask questions related to shirk, then ask them to respond. We can monitor students' conversations and discussions in the class Telegram group. If there is anything wrong, we will tell you."* (P5)

Similarly, Participant 4 encouraged digital interaction using Flipgrid, a video-based platform that encouraged student to share and respond to each other's content:

*"We use Flipgrid to share videos that have been recorded. So, all students can access the video. Students can comment on and interact with uploaded videos."* (P4)

Participant 2 also used YouTube to stimulate interaction, where students could express their opinions and provide feedback in the comments section:

*"If it's on YouTube, the student can comment and give good or bad views."* (P2)

##### **Sub-theme: Mastering the English Language**

Another benefit highlighted was the improvement in students' English language proficiency as a result of using digital tools, as most digital devices use English. As noted by Participant 5:

*"So, we want our students to get used to computers. If this gadget is English, right?"* (P5)

He further encouraged students to use artificial intelligence (AI) tools that require verbal interaction in English in their learning. This approach help familiarize students with emerging technologies and also enhanced their language skills.

*"In AI, there is voice recognition where students can chat with the computer in English. It means that there we can cultivate the mastery of the English language... So, we want to let*

*our students get used to computers, they chat in English. Finally producing skilled students.” (P5)*

The findings were triangulated through audio-visual recordings of Participant 5’s lessons, which showed him effectively incorporating AI tools into Islamic education instruction at his school.

### Figure 3

*Image of a Teacher Teaching using AI*



### ***Theme 5: Promoting Collaboration***

The findings indicate that integrating digital technology into the teaching of Islamic education promotes collaborative learning. Through digital platforms and student-centred strategies, students are encouraged to discuss, exchange ideas and work together to complete classroom activities.

#### ***Sub-theme: Mutual Discussion and Exchanging Ideas***

Study participants highlighted that digital teaching strategies support student-centred teaching approaches and collaborative engagement. Participant 2 noted that digital learning environments often place students at the centre of the learning process:

*“According to what I usually do, this (digital learning) is student-centred. I like the students themselves to do it.” (P2)*

She further explained that students are given the freedom to determine their own learning, including to share their ideas without teacher intervention.

*“Students can present themselves, their reasons, and their own views without us guiding them.” (P2)*

Apart from open idea exchange, students also engage in group discussions to complete the assigned tasks. Participant 1 shared how students collaborated by distributing roles within their group:

*“They discuss... In a group activity of four people, one looks for material, one writes, one presents, and one answers questions. There should be collaboration between people to prepare the task.” (P1)*

### **Sub-theme: Working Together to Complete Tasks**

The integration of digital teaching techniques was also found to enhance team-based task completion. Participant 4 described how she used Minecraft to engage students in collaborative activities that required teamwork and strategic planning:

*“Usually, I always do it in groups... When in a group, they will discuss the storyline that needs to be made and who needs to build the world in Minecraft. In that, there is a multiplayer function, go in there and do it together. So, there is their collaboration.” (P4)*

Participant 3 also emphasized that technology helps to streamline collaborative processes, allowing students to complete tasks more efficiently. He provided an example of using collaborative tools such as PowerPoint:

*“I’ll give you an example: how much time can we save if we do something in the classroom that we paste, then we ask them to do it on a one-hour board or PowerPoint that they can edit together? How much time can we save if we get the same result? ... I prefer technology because this is their (the students’) time now.” (P3)*

## **DISCUSSION**

This case study examined the perspectives of five Islamic education teachers recognised for their expertise in digital technology, with a focus on its impact on primary school students' learning. The thematic analysis revealed five key themes: enhancing motivation, facilitating independent learning, revealing students' digital prowess, optimizing digital interactions, and promoting collaboration. These findings underscore the transformative role of digital integration in Islamic education, suggesting that it enriches learning experiences by enhancing student engagement, learning autonomy, digital competence, effective communication, and teamwork.

From the viewpoint of the Islamic education teachers, digital technology positively influences student learning in various ways. Participants unanimously supported its integration, particularly due to its benefits for students in primary school including those with special educational needs. These findings align with previous research by Kiflee et al. (2020), Razali & Khalid (2021) and Zahari et al. (2021), which similarly identified positive outcomes of digital technology in educational settings. However, this study contributes three additional themes not found in Razali and Khalid (2021): revealing students' digital prowess, optimising digital interaction, and promoting collaboration. In addition, compared to previous studies, this study provides a more in-depth understanding of teachers' perspectives related to the impact of digital integration through a case study approach, as compared to the survey design by Kiflee et al. (2020) and the document analysis method adopted by Zahari et al. (2021).

Nevertheless, contradicting findings have been reported in other studies. While earlier research acknowledges the value of digital technology in lesson delivery, challenges remain. For instance, Mohd Haslin and Hamzah (2023) reported students' lack of engagement and commitment during virtual learning leading to reduced interest in Islamic education. Furthermore, Razali and Khalid (2021) noted that despite mobile learning strategies, some students continued to rely heavily on teacher support to complete their assignments. These differences in findings highlight the complexity of integrating digital technology in education. The effectiveness of digital tools appears to depend on various factors, including implementation strategies, teacher readiness and training, the suitability of digital platforms and student-specific characteristics such as motivation, learning styles, and access to external support systems playing crucial roles in its success. By considering these factors, the current study contributes to a more comprehensive understanding of the conditions under which digital technology can positively impact Islamic education. while acknowledging the complexities and challenges highlighted in previous research.

The integration of digital technology in Islamic education has offered study participants a comprehensive perspective through which to evaluate its effects on teaching practices. Their reflections extend beyond content delivery to emphasize the importance of creating meaningful and engaging learning experiences (Ismail & Ahmad, 2022). In adapting to current educational advancements, teachers are encouraged to cultivate innovative practices and adopt a reflective approach to their teaching. This aligns with findings by Abdullah and Razak (2021), which highlight that students' motivation to learn Islamic education is often driven by a desire for deeper religious understanding. When Islamic education is delivered in an enjoyable and student-centred manner—particularly important in primary education—students are more likely to retain information and apply what they have learned meaningfully in daily life (Yusop et al., 2015).

Equally noteworthy is the theme of students' digital prowess, which have emerged as a significant outcome in this study. Exposure to digital teaching approaches empowers students to engage more confidently with technology. Teachers' hands-on integration of digital technology in the classroom can serve to inspire students to explore digital environments with enthusiasm and confidence. By nurturing students' digital potential early—starting in primary school and continuing into secondary and tertiary education—the foundation is laid for the development of competent human capital. These findings are consistent with those of Saleh and Rosli (2019), who emphasized the value of digital literacy, collaboration and creativity as key marketability traits in preparing students for the future workforce. Thus, it is the duty of educators to intentionally cultivate these attributes through their teaching.

Additionally, the study's findings regarding students' self-learning capacity are in alignment with the humanistic learning theory underpinning this research. According to participants, digital tools foster student autonomy by encouraging exploration and problem-solving without over-reliance on teacher guidance. This intrinsic motivation is supported by the teacher's role in providing relevant digital resources and designing purposeful activities (Manukaram et al., 2014). Such an environment not only enhances independent learning but also supports the realization of each student's full potential. However, within the context of Islamic education, teachers continue to play a pivotal role—not only as facilitators but as moral guides, helping primary school students navigate digital content and make appropriate behavioural choices (Tamuri & Ajuhary, 2010).

## CONCLUSION

In summary, the incorporation of digital technology into Islamic education curriculum has demonstrated positive outcomes for primary school students' learning. This study reveals that digital tools can play a crucial role in helping students realize their full potential. Moreover, the role of teachers in delivering engaging and meaningful instruction is instrumental in shaping students' digital capabilities, thus nurturing a generation of digitally literate learners. Through interactive and stimulating digital learning environments, students develop a deeper interest in Islamic education, making the learning experience enjoyable. This engagement subsequently encourages self-directed learning, where students become more independent in acquiring knowledge and solving problems. As students gain confidence in their ability to learn independently, their capacity for interpersonal communication and teamwork are also strengthened. Ultimately this study provides valuable insights for Islamic education teachers, presenting a renewed perspective on the impact of digital integration in the classroom. It is hoped that these findings will inspire educators to remain enthusiastic and committed to delivering high-quality, future-oriented instruction that empowers students to thrive in an increasingly digital world.

## ACKNOWLEDGMENT

This research received no specific grant from any funding agency in the public, commercial, or not-for profit sectors.

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