

BENCHMARKING

JURNAL MANAJEMEN PENDIDIKAN ISLAM

OPTIMIZING DIGITAL TEACHING RESOURCES TO IMPROVE THE QUALITY OF ISLAMIC RELIGIOUS EDUCATION IN HIGH SCHOOL

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Abstract

This study explores how optimizing digital teaching resources can improve the quality of Islamic Religious Education (IRE) in high schools. Using a descriptive qualitative method, including interviews, observations, and document analysis, the research examines teachers' strategies in planning, integrating, and evaluating digital tools, as well as their role in boosting students' interest, motivation, creativity, and understanding. Findings indicate that digital resources such as e-books, instructional videos, Learning Management Systems (ELMU), school websites, interactive quizzes (Quizizz, Kahoot), and online communication forums positively influence IRE learning effectiveness. These resources support more interactive, contextual, and collaborative learning experiences, which enhance student engagement and Islamic character development. Nonetheless, challenges such as limited infrastructure, teachers' digital literacy, and uneven internet access persist. To address these issues, ongoing training, institutional support, and improved internet access are essential to ensure that all students can access learning equitably. The study's outcomes aim to guide the development of a relevant, innovative, and sustainable digital-based IRE learning model amid the ongoing digital education transformation.

Keywords: Digital Learning Resources, Islamic Education, Learning Quality, Educational Technology

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INTRODUCTION

In the digital era, technology-based teaching resources have become integral to education (Jamil, 2022). Digital teaching resources include applications, learning videos, online modules, and e-learning platforms, which provide high accessibility and flexible time for students (Suryanto, 2024). Another advantage is the ability to tailor learning materials to students' individual needs, making the learning experience more interactive and relevant (Putra, 2021). Thus, the use of digital teaching resources not only supports classroom learning but also provides more varied and innovative opportunities for independent learning (Sakti, 2023). In Islamic Religious Education (IRE), the quality of learning has become increasingly urgent amid rapid globalization, which can erode the moral and spiritual values of the younger generation (Marantika, 2024). IRE serves as a support for character building that is faithful, pious, and noble (Sumiyati, 2016). However, the challenges of modernity often necessitate adapting IRE teaching approaches to ensure relevance and effectiveness for students, particularly at the high school level (Tambak, 2020). Quality learning is not only about transmitting knowledge but also about internalizing Islamic values in students' daily lives (Junaedi, 2019). Therefore, optimizing the use of digital teaching resources is essential, as without careful planning, integration,

and evaluation, these resources are unlikely to have a meaningful impact on the quality of IRE learning.

Although digital teaching resources have many advantages, their implementation still faces various obstacles (Indarta et al., 2022). Some schools do not yet have adequate technological infrastructure, such as a stable internet connection and supporting learning devices (Aulia et al., 2024). On the other hand, the quality of IRE learning is also hampered by a lack of innovation in teaching methods that can attract students' interest (Safitri et al., 2025). Teachers' difficulties in integrating technology into learning also reduce the effectiveness of achieving IRE objectives (Sambaga, 2024). This condition confirms that optimizing the use of digital teaching resources is not only about the availability of technology but also about how it is managed, integrated, and evaluated systematically to improve the quality of IRE learning.

Previous research revealed by Murtado et al (2023) Their study, entitled *"Optimizing the Use of Online Learning Media as an Effort to Improve Student Learning Outcomes in High School,"* focuses on the flexibility and accessibility of online media but does not address more comprehensive optimization strategies, particularly for IRE learning. Meanwhile, the research by Komsiyah (2022) The article entitled *"Optimizing the Use of Social Media in Islamic Education Among Millennials"* highlights the role of social media but does not extensively discuss other digital teaching resources. Meanwhile, Kosim (2020) entitled *Strengthening Character Education in the Industry 4.0 Era: Optimizing Islamic Education in Schools*, emphasizes the importance of character education through IRE, but does not discuss in depth the integration of digital technology in learning. From these three studies, a clear gap emerges: few studies comprehensively explore strategies to optimize digital teaching resources (e-books, videos, LMS, applications, and online forums) to improve the quality of IRE learning at the high school level. Considering these challenges and opportunities, this study emphasizes the urgency of developing strategies to optimize the use of digital teaching resources in IRE learning. The main focus is on how the planning, integration, evaluation, and contribution of digital teaching resources can strengthen the quality of IRE learning in secondary schools.

Based on this background, this study attempts to answer several questions: How can digital teaching resources be optimally integrated into IRE learning? What factors support and hinder the optimization of digital teaching resources? How does this study contribute as a reference for the optimal use of digital teaching resources? This article serves as a reference for the use of digital teaching resources in high schools, particularly to improve the quality of IRE learning. By examining practical, sustainable strategies, this study is expected to make a substantive contribution to the optimization of educational technology, thereby supporting IRE learning in the digital era.

RESEARCH METHOD

This study uses a descriptive qualitative approach (Taylor et al., 1990) to examine the optimization of digital teaching resources in improving the quality of Islamic Religious Education (IRE) at SMA Negeri 1 Bandung. Data were collected through in-depth interviews and direct observation from February 20, 2025, to June 3, 2025. Interviews were conducted with Islamic Religious Education teachers and students to obtain in-depth information about the use, challenges, and strategies for optimizing digital teaching resources in IRE learning.

Observations were conducted directly during the learning process to see how digital teaching resources were used in the classroom, how teachers and students interacted, and how students responded to the learning method. Documentation, such as learning tools (lesson plans, digital modules, and media), was also examined as supporting evidence.

Data analysis was conducted using (Braun & Clarke, 2013) thematic approach, which involves identifying, organizing, and categorizing data based on the main themes relevant to the research focus. The themes analyzed included the types of digital teaching

resources used, the obstacles to their implementation, the optimization strategies employed by teachers, and their impact on learning quality. Data from interviews and observations were manually coded, then organized into themes and subthemes for in-depth analysis within an appropriate theoretical framework.

To ensure validity and reliability, data triangulation was carried out (Miles & Huberman, 1994), namely by comparing the results of interviews, observations, and documentation. In addition, member checking was conducted by reconfirming the interpretation results with the informants to ensure that the presented data were consistent with their experiences. With this approach, the study is expected to make a substantive contribution to the identification of best practices for the use of digital teaching resources in IRE learning, offering relevant strategic recommendations for educators and educational institutions in the digital age.

Result

1. Digital Teaching Resources in IRE Learning

Digital teaching resources include online tools and materials to support learning activities. These media utilize information and communication technology to provide broader, more flexible, and interactive access to various information and learning experiences (Julaiha, 2024). The following is an explanation of the various types of digital teaching resources in Islamic Religious Education (IRE) learning:

a. E-Books and E-Journals

E-books are digital books accessible via computers, tablets, or smartphones. They enable students to conveniently and efficiently access important religious materials, like Qur'an interpretations, hadith studies, or Islamic history books (Pradita et al., 2022). The Islamic Religious Education and Morality Book, provided by the Ministry of Education and Culture, is among the most frequently accessed e-books by students. It serves as the primary reference for teaching and learning because it provides systematic material, aligns with the national curriculum, and incorporates practice questions, character values, and the cultivation of noble character relevant to students' lives.

Accessing this book digitally through platforms like e-book.kemdikbud.go.id allows students to read it anytime and anywhere, even during online learning. This is supported by student interviews where they mention, *"It is constructive because it is easy to find material without opening a book."* Additionally, e-journals provide students with access to the latest research, thereby promoting a deeper understanding of current religious issues. Therefore, e-books and e-journals enrich teaching materials, improve students' digital literacy, and foster scientific exploration of Islamic topics. Combining both methods in learning has proven effective (Ayuningsih et al., 2025) Encourages students to think critically, access reliable sources, and understand Islamic teachings within the framework of modern life.

b. Educational Videos

Educational videos are highly effective visual tools for illustrating abstract concepts or Islamic narratives (Fajarini et al., 2024). Platforms such as YouTube and other digital media platforms showcase IRE content, including worship procedures, the Prophet's history, and Islamic values. These videos facilitate student understanding with engaging, visual, and contextual presentations. The success of educational videos in IRE depends on their ability to integrate audio and visual elements, facilitating students' comprehension and retention of the material (Nursanti, 2022). A teacher at SMA Negeri 1 Bandung shared that having visual media makes explanations clearer. For instance, demonstrating prayer practices or Quranic verses through videos is more effective than lecturing alone. Students also noted that videos and animations clarify lessons and reduce boredom, which can be a problem with reading. Digital media, including videos and audio, facilitates understanding. Therefore, educational videos help teachers explain abstract concepts and boost students' interest and focus during IRE lessons.

c. Online Learning Platform

The ELMU Learning Management System (LMS), integrated into SMA Negeri 1 Bandung's SIAKAD, is a significant advancement in digital learning. It helps Islamic Religious Education (IRE) teachers manage virtual classes more systematically and efficiently (Ulfitriyah, 2015). SMA Negeri 1 Bandung's digital learning platform include organized management via the SIAKAD/ELMU LMS:

- Interactive Dashboard

The announcement feature and the UKBM (Independent Learning Activity Unit) display enable students to easily access the latest updates and monitor their learning progress in real time. Teachers confirm that this feature enhances academic communication. *"Since it is a digital platform, we use ELMU directly, where teaching materials, links, and evaluations can be shared. Tests can be scheduled, and students can access them conveniently."*

- Modular Courses in "My UKBM"

Each learning phase (E and F) consists of well-organized chapters, including material identification, introductions, assignments, and reviews. This structure enhances the consistency and autonomy of student learning. One student mentioned that ELMU simplifies access: *"It's easier to use ELMU. We open our cell phones, and all the material is there, so we don't have to search for it anymore."*

- Assessment and Feedback Features

Teachers can assign grades, quizzes, and assignments and provide direct feedback, fostering formative and reflective learning tailored to students' needs.

- Easy Module Search and Access

Students can easily find and search for materials using the "Search Materials"



Figure 1.1 Elmu as the LMS for SMAN 1 Bandung

d. Educational Website

The official SMA Negeri 1 Bandung website serves as a digital representation of the school, offering not only institutional details but also a comprehensive academic and online learning hub. The site's excellent features showcase the school's dedication to leveraging technology to promote a transparent, modern, and flexible educational environment process (Sugiyanto, 2022)

Advantages of the Official Website of SMA Negeri 1 Bandung :

- Transparency of School Profile

The Profile menu provides comprehensive and precise details on the school's history, vision and mission, accreditation, and the conditions for teachers and students, presenting the school's image openly and professionally.

- Digital Academic Integration

Features such as the SIAKAD App, e-Learning, and the Teacher Directory within the Academic tab constitute a digital ecosystem that comprehensively supports technology-based learning. Students also notice this: *"Using the school website makes it easier to find information and announcements."*

- Documentation Center for Works and Learning Media

Students and teachers can access a variety of written works, articles, journals, and learning videos, including school YouTube streams, through the Journal tab, which supports visual and creative learning.

- SMANSAMail Activation Dashboard

The primary step in optimizing digital learning resources for Islamic Education is enhancing the quality of human resources (HR). High-quality HR is a key factor in the successful implementation of this strategy across both technical and non-technical aspects (Mikraj et al., 2025).

1. Digital Literacy Competencies

Technical competencies encompass the professional skills required to create and use digital teaching resources. IRE teachers must be proficient in information technology, including learning software, interactive applications, and digital methods of delivering content (Amaly et al., 2021). One teacher mentioned, *"Digital platforms like ELMU are invaluable, but internet connectivity can be a challenge. Nonetheless, I continue to incorporate materials, quizzes, and assignments via the platform."* This underscores the importance of ongoing training to improve teachers' use of digital tools.

2. Innovative and Pedagogical Skills

In addition to digital literacy, teachers must cultivate innovative pedagogical skills that emphasize creativity, effective communication, and engaging approaches to capture students' interest (Dalimunthe & Pohan, 2023).

3. Student Development

Student resources should be optimized by fostering students' physical, mental, and spiritual development in a balanced manner. Digital learning enables students to independently and interactively explore topics, enhancing their understanding and creativity (Asrofah & Rifai, 2020). One student mentioned, *"Using digital media is easier; you just need to search for it. This allows us to learn beyond the books and to learn independently. As a result, I understand concepts more quickly."* Therefore, optimization strategies should also focus on enhancing students' digital literacy to align with IRE values.

b. Utilization of Information and Communication Technology (ICT)

The use of information and communication technology plays a crucial role in this strategy. Here are some possible actions:

1. Teacher Training

Offering comprehensive training to IRE teachers to equip them with skills to utilize technological tools like educational videos, interactive applications, and e-learning platforms (Aulia et al., 2024). *"Training is offered, especially for ELMU. However, it's not yet standard, so teachers still need to learn a great deal independently."*

2. Digital Media Development

Creating technology-based learning tools like simulations, animations, and interactive videos to enhance IRE materials. These media should relate to students' lives, making them easier to understand and more applicable to their needs (Muharrani et al., 2023). One student shared a positive experience: *"Learning with videos or animations is clearer and keeps me more engaged. It's easier to understand than just reading books."*

3. Improvement of Digital Infrastructure

Providing facilities like reliable internet, hardware such as computers or tablets, and easy-to-use learning platforms to support the use of digital teaching resources. Teachers noted, *"When the school's internet signal is stable, digital learning reaches its full potential. However, disruptions can cause students to struggle with accessing assignments or materials."* Hence, ensuring adequate facilities should be a key focus in optimizing digital learning resources.

c. Contextual Approach in Learning

Digital learning resource optimization strategies also require a contextual approach that integrates IRE materials into everyday life situations (Sidqy & Syafa, 2024). This can be achieved by.

1. Delivering Relevant Material

Teachers can relate Islamic values to contemporary phenomena, such as ethical use of social media or the impact of technology on spiritual life (Zain et al., 2024).

Observations at SMA Negeri 1 Bandung indicate that IRE teachers often provide concrete examples of everyday issues, for example, by linking moral values to students' behavior when using social media. One teacher stated, *"I often connect moral education material with the use of social media. So it is not just theory, but directly how they should be wise when commenting or sharing something on the internet."*

2. Use of Case Studies

Engaging students in discussions or analyzing case studies enhances the meaningfulness of learning (Hermansyah, 2025). According to the interview results, students are more interested when the material relates to real-life situations they experience. One student said, *"Using case studies is more interesting because we can discuss things we often face. So, IRE lessons do not feel far from our lives."* With this approach, digitally based IRE learning becomes more engaging because it does not merely present text or videos; it also builds students' contextual awareness in their daily lives.

d. Effective Management and Leadership

Effective leadership within educational institutions is essential to ensure this strategy runs smoothly (Romandoni et al., 2024). School principals and education administrators must have a deep understanding of Islamic education. Both these groups aim to integrate religious values with technology in their teaching programs. Observations show that school policies prioritize the ELMU LMS and school websites as leading platforms for digital learning. Teachers also noted, *"The school has supplied an LMS for support, and we are encouraged to use it as the main tool for digital instruction."*

e. Collaboration and Partnerships

This comprehensive strategy aims to optimize the use of digital teaching resources in IRE learning, enhancing both the quality of education and producing a generation that excels in religious knowledge and technology (Apiyani, 2023). The teacher explained, "For server management, we work with a third party, but the school's team still creates the content and oversees the LMS." From students' perspectives, digital collaboration is also evident in online group work. One student shared, *"For group projects, we usually use WhatsApp or Google Docs, which simplifies coordination and helps us avoid in-person meetings."* This collaboration between schools, third parties, teachers, and students fosters more sustainable use of digital learning resources for IRE learning.

Discussion

Optimization of Digital Learning Resource Utilization on the Quality of IRE Learning

The advancement of information and communication technology offers significant opportunities to enhance the quality of learning, including in Islamic Religious Education (IRE) (Suranti, 2025). Digital learning resources serve not just as supplementary media but also as strategic tools to foster more effective, engaging, and contextual learning (Fuadi & Nurmala, 2025), as their implementation has been shown to significantly enhance students' interest in learning, creativity, and comprehension of religious material.

This aligns with the opinion of (Febriani et al., 2025) This chapter explores how digitizing learning creates a more collaborative, adaptable, and personalized educational environment. It details strategies for using digital teaching resources at SMA Negeri 1 Bandung, including integrating technology, increasing student motivation, developing teachers' skills, and truly enhancing learning outcomes and character development.

a. Technology Integration in IRE Learning

At Bandung 1 Public High School, ICT enhances Islamic Religious Education with digital tools such as ELMU LMS, e-books, online journals, videos, and platforms such as Kahoot and Quizizz for managing classes, clarifying concepts, and assessing students. Interviews indicate that teachers and students benefit from the accessibility and flexibility of being able to access materials, assignments, and assessments at any time. Communication is supported through channels like WhatsApp. Overall, the integration of ICT functions not only serves as a supporting tool but also as a strategic element that

significantly improves the quality of IRE learning. This aligns with the findings of Resti et al (2024), who assert that digital teaching resources enhance students' information literacy, facilitate access to knowledge, and promote more autonomous learning. Therefore, ICT is not just an additional tool but a strategic means of improving the quality of IRE education.

b. Enhancing Student Interest, Motivation, and Creativity

Digital teaching resources enhance content delivery and increase student interest, motivation, and creativity through engaging formats such as videos, animations, and quizzes. Teachers and students find digital media clearer and more engaging, thereby improving understanding of topics such as prayer and Qur'anic verses. Students demonstrate greater enthusiasm and creativity in digital assignments, which promote critical thinking, collaboration, and innovative presentation of ideas, underscoring the positive impact of digital resources.

c. Strengthening Teacher Competence and Digital Skills

Teachers at SMA Negeri 1 Bandung are vital to optimizing digital resources, serving as instructors and facilitators who integrate technology and pedagogy, thereby making ICT skills essential. They use platforms such as ELMU and tools such as Kahoot and Quizizz to help students understand concepts through visualizations, and to guide them in creating digital content, such as videos, presentations, and infographics, to enhance creativity and learning. By using LMS for scheduling, assessments, and feedback, teachers' digital skills foster innovative, organized, and student-centered learning in the digital age.

d. Contribution to the Quality of Learning Outcomes and Character Education

Classroom observations show students are more engaged and motivated when using videos, animations, and interactive quizzes. Many find digital tasks easier, faster, and more enjoyable than traditional work. Teachers note that digital evaluations on platforms such as ELMU provide instant feedback, helping students identify and correct mistakes independently and making learning more reflective and accountable. Digital resources also support character development by discussing contemporary issues like online ethics and responsible technology use, fostering academic understanding and the practice of Islamic values in students' digital interactions.

CONCLUSION

This article concludes that effectively utilizing digital teaching resources is essential for enhancing the quality of Islamic Religious Education (IRE) in high schools. The results demonstrate that, when used properly, digital resources promote more interactive, engaging, and flexible learning experiences, helping students better understand religious content. Incorporating digital platforms, multimedia, and online learning tools makes access to materials easier and improves the overall learning process experience.

To ensure successful implementation, it is crucial to focus on enhancing teachers' digital skills via training, providing reliable technological infrastructure, and systematically incorporating digital tools into the IRE curriculum. Nonetheless, the study highlights ongoing challenges such as unreliable internet access, differing levels of digital competence among teachers, and resistance to changing traditional learning methods, all of which must be tackled to improve the effectiveness of digital learning.

In summary, digital teaching resources play a crucial role in boosting student motivation, advancing technological literacy, and improving learning results in Islamic Religious Education. Additionally, digital media promotes character development by situating Islamic values within students' digital experiences. Consequently, optimizing these resources is both an educational priority and a strategic move to ensure IRE learning aligns with modern demands education.

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