Effective Learning Models: Advancing Islamic Education Materials for Quality Teaching and Learning

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Abstract: The main issue found in this research is the lack of Islamic Religious Education material that can attract the attention of students and learners in PAI subjects. This research aims to find a new approach in developing Islamic Religious Education learning materials that suit the needs of students today. The main focus is divided into two aspects. First, includes the development of Islamic Religious Education learning materials which are based on the application of e-mobile based material models, second includes the development of Islamic Religious Education learning materials which are based on the application of Quipper School based material models. This research applies a qualitative approach, using the literature study method. The analytical approach used in this research is content analysis. Based on the study above, it can be concluded that the development of instrumental e-mobile-based PAI materials in the form of e-books which have been tested and the development of Islamic Religious Education learning materials based on Quipper School can be efficient and practical in its implementation in front of students, both directly and indirectly. . Both have proven effective in improving students' PAI learning achievement.
Keywords: Development; Learning Materials; Pendidikan Agama Islam

Abstrak: *Isu utama yang ditemukan dalam penelitian ini adalah kekurangan materi Pendidikan Agama Islam yang dapat memikat perhatian pelajar dan peserta didik dalam mata pelajaran PAI. Penelitian ini bertujuan untuk menemukan pendekatan baru dalam pengembangan materi pembelajaran Pendidikan Agama Islam yang sesuai dengan kebutuhan peserta didik pada masa sekarang. Fokus utamanya terbagi menjadi dua aspek. Pertama, mencakup pengembangan materi pembelajaran Pendidikan Agama Islam yang didasarkan pada penerapan model materi berbasis e-mobile, kedua mencakup pengembangan materi pembelajaran Pendidikan Agama Islam yang didasarkan pada penerapan model materi berbasis Quipper School. Penelitian ini menerapkan pendekatan kualitatif, dengan menggunakan metode studi pustaka. Pendekatan analisis yang digunakan dalam penelitian ini adalah analisis konten. Berdasarkan kajian diatas maka dapat disimpulkan bahwa pengembangan materi PAI berbasis e-mobile instrumental dalam bentuk e-book yang diuji coba dan pengembangan materi pembelajaran Pendidikan Agama Islam berbasis Quipper School dapat efisien dan praktis dalam implementasinya di depan peserta didik, baik secara langsung maupun tidak langsung. Keduanya terbukti efektif dalam meningkatkan prestasi belajar PAI peserta didik.*
Keyword: *Development; Learning Materials; Islamic Religious Education*

INTRODUCTION

The primary issue identified in this study is the lack of Islamic Education materials that can captivate the interest of students and learners in Islamic Education subjects. Thus far, the Islamic Education teaching materials introduced to students, particularly those in schools, have been considered uninspiring and often perceived as monotonous. This has negatively impacted students' interest in learning and the desired learning outcomes (Faruq, 2020). Although Islamic Education is a mandatory subject assessed from school to university levels by the Ministry of Religious Affairs, it is crucial to develop more suitable teaching materials that align with the advancement of Islamic Education as an alternative worth considering (Desva & Suyadi, 2019).

To date, research related to the development of Islamic Education teaching materials has been limited to PAI (Islamic Education) teaching strategies and their emphasis on ease of understanding for learners or has been more focused on the context of PAI curriculum development (Apri & Suyadi, 2019). The goal is to ensure that Islamic Education learning aligns with the lesson plan. This research has also been followed by efforts to develop character education and Islamic environmental education. Consequently, the findings of this study aim to ensure that Islamic Education teaching materials are well-received by students and learners (Ulya, Laily, & Hakim, 2020). Islamic Education learning plays a significant role in shaping individuals who apply Islamic educational values in their surroundings and in their character when interacting with society (Handayani, Ruswandi, & Arifin, 2020). Therefore, research focusing on the development of Islamic Education teaching materials remains scarce, and few researchers have explored it within the context of Islamic Education. Nevertheless, the findings of such studies are expected to have a significant impact on individuals who uphold Islamic educational values (Maskuri, Ma'arif, & Fanan, 2020).

This research aims to discover new approaches to developing Islamic Education teaching materials that align with the needs of today's learners. The study focuses on two main aspects. The first involves the development of Islamic Education teaching materials based on the implementation of e-mobile-based content models, designed to encourage students to remain creative and innovative in their learning process. In this context, students will be taught how

to optimize information technology, which is expected to be reflected in improved learning outcomes and grades (Suyadi, 2019). The second aspect of the development is the implementation of teaching materials using the Quipper School-based model. Through this approach, students are expected to analyze and evaluate their understanding of Islamic Education subjects. The goal is to enable students to learn independently, creatively develop Islamic Education materials, and, for instance, easily recall concepts in Aqidah Akhlak, such as obligatory attributes and related topics (Anuli, 2017).

A relevant study to this research is Khalimatus Sadiyah's work titled *Model Pembelajaran Pendidikan Agama Islam (PAI) Berbasis Quantum Teaching di SMP Se-Kabupaten Jepara* (Sadiyah, 2015). The e-mobile-based teaching material development model offers a significant novelty compared to the Quantum Teaching model used in Islamic Education classes in Jepara. The e-mobile model integrates digital technology as the primary learning medium, allowing students to access materials flexibly and interactively via mobile devices. This approach broadens the scope of learning, making it more inclusive and relevant for students in the digital era. In contrast, the Quantum Teaching model in Jepara focuses on optimizing the classroom learning environment through a multisensory approach and creating an enjoyable learning atmosphere, with minimal reliance on technology. The strength of the e-mobile model lies in its support for self-directed learning, providing resources accessible anytime and anywhere, and increasing student engagement through interactive features like online quizzes and virtual discussions. This approach also promotes students' digital literacy, an essential competency for the 21st century, which is not a primary focus of the Quantum Teaching model. Thus, the e-mobile-based model not only enhances the quality of Islamic Education through a deeper understanding but also prepares students to face the challenges of the technological era effectively (Tahir Tavukcu, 2020).

This research is grounded in the perspective that developing Islamic Education teaching materials can address several challenges associated with teaching this subject, including making it easier for students to understand the material. This arises in response to criticism that Islamic Education materials have often been perceived as monotonous and uninteresting, attributed to a lack of creativity and innovation in their development (Sartika & Munastiwi, 2019). Material development serves as a crucial indicator in the learning process, especially since many students currently face challenges in comprehending and catching up with the materials presented by teachers (Fauziyah, 2020). Considering these aspects, exploring alternative approaches in developing Islamic Education teaching materials has become increasingly relevant (Suyadi, Nuryana, & Fauzi, 2020)

RESEARCH METHODS

This study adopts a qualitative approach using a literature review method. Information is gathered from various literary sources, including journal articles, books, documents, and works focusing on the development of Islamic Education teaching materials relevant to modern contexts (Suyadi & dkk, 2019). The primary focus of this research is the application of Islamic Education teaching material development, with the study subjects centered on students, learners, and the younger generation within the *Sekolah Merdeka* framework (Arifin, 2018).

The data for this research were obtained through searches across several databases, such as the Internet, Google Scholar, and Publish or Perish, using the following keywords:

1. Development of Islamic Education teaching materials
2. E-mobile-based Islamic Education teaching materials
3. Text-based Quipper School teaching model

Through these keyword searches, 116 scientific articles were identified. These were then filtered by the researchers in line with the research objectives, resulting in 40 articles deemed relevant to the study topic. The data were drawn from various sources, including national and international journals, reference books, and academic works such as theses and dissertations (Maksudin, 2016).

The analytical approach used in this study is content analysis, aimed at understanding and identifying concepts of e-mobile-based Islamic Education learning and text-based Quipper School learning models relevant to the *Sekolah Merdeka* or *Kampus Merdeka* context. This analysis seeks to provide guidance and influence the younger generation in advancing Islamic Education and improving societal well-being by ensuring adequate access to Islamic Education as a learning hub (Weinberger-Litman, 2020). To support the findings, data were also collected from various sources, including national and international journals, reference books, academic works (books and scientific journals), and online references from Google Scholar. Data collection utilized documentation instruments, comprehensively incorporating primary and secondary data holistically.

What makes this study unique is its focus on the relevance of Islamic Education learning models in the development of Islamic Education teaching materials within school environments. The research explicitly and thoroughly examines teaching theories within the text-based Quipper School model and e-mobile-based learning, highlighting their significant impact on Islamic Education (Suyadi, 2020).

RESEARCH RESULTS AND DISCUSSION
Research Results
Definition of Islamic Education Teaching Materials

Previously, Islamic Education materials at various educational levels were divided into several subjects, including Al-Quran Hadith, Aqidah-Akhlak, Fiqh, and Tarikh/SKI (Islamic Cultural History). These materials are delivered through teaching methods and educational media (Khabir, 2009). Islamic education embodies three core values in its objectives, realized through learning approaches:,

1. Shaping learners to become the best servants of Allah SWT.
2. Supporting education aligned with the teachings of the Quran and Hadith.
3. Engaging motivation and discipline consistent with principles stated in the Quran, referring to the concepts of rewards and punishments (Handayani, Ruswandi, & Arifin, 2020).

According to Rusdiana, Islamic Education is a conscious and planned effort to prepare learners to recognize, understand, internalize, and have faith and piety towards Allah SWT. It also aims to cultivate good moral character through Islamic education rooted in the teachings of the Quran and Hadith. This is achieved through various approaches such as guidance, teaching, practice, and experiential learning (Miftakhuddin, 2019). Majid defines learning as an effort to educate individuals or groups through various strategies, methods, and approaches designed to achieve predetermined objectives. Similarly, Hendro emphasizes that learning is a process to shape individuals, requiring meticulous planning to ensure learning effectiveness and efficiency (Widodo & Nurhayati, 2020).

Based on the above understanding, this research concludes that Islamic Education teaching materials constitute a well-structured and systematic activity. It involves instructional content such as the Quran and Hadith, aimed at conveying this knowledge effectively to learners within the classroom setting.

Development of Islamic Education Teaching Materials
1) Development of Islamic Education Teaching Materials Based on E-Mobile

n the process of developing Islamic Education (PAI) teaching materials, various approaches and innovations have been explored. For instance, researchers have referred to a study conducted by Remiswal and A.J. Firman, published in a journal article in 2020. This study focuses on the development of PAI teaching materials utilizing an instrumental e-mobile approach. The results include the creation of PAI materials in the form of e-books, available in two distinct variations:

a. TE-book, A teacher's electronic book designed as a guide for educators in developing PAI materials.

b. SE-Book: A student's electronic book intended as a learning resource for students in PAI education (Remiswal & Firman, 2020).

In the material development process, the TE-Book is crafted through an analysis of Islamic Education materials, considering various aspects such as learning skills (*maharah*), learning objectives, teaching methods, and assessment strategies. On the other hand, the SE-Book is developed based on the TE-Book and is expanded into four distinct dimensions: historical-based, theoretical-based, cases-based, and value-based (Remiswal & Firman, 2020).

The historical-based dimension in the SE-Book introduces or provides an overview of the material to be studied. The theoretical-based dimension contains the core material that students must understand and master according to their learning capabilities. The cases-based dimension presents situational cases related to the theoretical material. The value-based dimension emphasizes reflection activities on the learning process undertaken.

The design of the e-books is meticulously planned to enhance students' motivation and engagement during the learning process. The goal is to facilitate comprehension and improve higher-order thinking skills (HOTS). These skills involve cognitive processes that encourage students to process information and ideas in ways that generate new understanding and deeper implications. To achieve these objectives, an interactive e-book was developed using the Appy Pie application.

The initial step in creating the teaching media is registering on the website www.appypie.com. This platform provides free facilities for creating Android-based learning media, although its usage requires an internet connection. This innovative approach to developing e-mobile-based teaching materials is expected to enrich the learning experience and foster independent and engaging education, aligning with modern technological advancements.

Based on this, the resulting e-book design is:

a. TE-Book

The development of the TE-Book aims to create teaching materials that effectively support the achievement of learning objectives. This process involves

analyzing the content outlined in the Lesson Plan (RPP) and the Islamic Education (PAI) Textbook for Grade X. The analysis focuses on the learning objectives, teaching methods, and assessment strategies. Ultimately, this analysis results in the creation of a high-quality SE-Book..

b. SE-Book

The SE-Book is developed based on the framework established in the TE-Book. The TE-Book serves as a guide for educators in designing an SE-Book of optimal quality. It is important to note that the SE-Book focuses solely on the development of materials and does not encompass all elements of learning, such as evaluation. This emphasis aligns with the e-mobile instrumental approach.

A concrete example of this development is found in a study conducted at SMAN 10 Padang, as detailed by Remiswal and A.J. Firman in a 2020 journal article. This institution has adopted the e-mobile instrumental approach as a learning tool for Islamic Education (Remiswal & Firman, 2020).

Validation and Effectiveness of E-Mobile-Based Teaching Materials The product development results—comprising two e-book variants—underwent validity and effectiveness tests to assess their suitability as PAI teaching materials utilizing the e-mobile instrumental approach. Validity Test: Conducted to rationally evaluate whether the new instructional model is more effective than the previous ones. This validation process involved Focus Group Discussions (FGD) with experts and practitioners. The results of the validity test indicated high levels of validity in several aspects, including material feasibility, language, contextual assessment, presentation quality, and visual aspects. Effectiveness Test: The implementation of the e-mobile-based teaching materials demonstrated effectiveness in improving students' achievements in Islamic Education at SMAN 10 Padang.

Advantages of E-Mobile-Based teaching materials flexibility, Students can learn at any time and place, enhancing accessibility and convenience. Support for Educators: Simplifies the process of delivering PAI materials and provides tools for analysis and task assignments. Enhanced Student Engagement: Facilitates a more interactive and autonomous learning environment. This approach demonstrates the potential of the e-mobile instrumental model as an innovative and effective tool for modern Islamic Education, ensuring both educators and learners benefit from flexible, accessible, and high-quality teaching materials..

2) **Development of Islamic Education (PAI) Learning Materials Using the Quipper School Application**

In the development of Islamic Education (PAI) learning materials, a wide variety of approaches and resources are available. One study referenced by the researcher is from Wadan Y. Anuli (2017) in a journal article, which focuses on developing teaching materials related to faith (aqidah) and character (akhlak), based on the Quipper School platform as its learning foundation. The materials

developed in this study have specific characteristics, being online in nature and incorporating various media elements such as text, images, audio, and video. All these contents are integrated through the Quipper School application platform. From assessments in terms of learning, content, and media aspects, the results showed that the number of students achieving the expected level of understanding after using this learning media was significant. (Anuli, 2017).

Gambar 3 : Quipper School Text-Based E-Learning

The above image illustrates one example of text-based learning material developed using Quipper School, in alignment with relevant research. The material development process was carried out through five stages: analysis, design, production, testing, and distribution (Admin, 2020). Analysis: Includes evaluating the goals to be achieved and the final form of the product to be created. Design: Encompasses procedures for inputting various types of materials such as PDF/PowerPoint texts, video learning materials, exam questions, and homework assignments. Production: Involves integrating all components, synchronizing them, and testing the program to ensure everything functions properly. Testing: Includes initial evaluations by experts in content and media, as well as field testing, which involves preliminary, main, and operational testing stages. (Abdullah & Azis, 2019). And the last step, Distribution: Aims to disseminate the revised product to users. Data collection was conducted through observations, questionnaires, and exams, and then analyzed using descriptive statistics. The results of these trials were used to enhance the Quipper School-based learning materials being developed (Sholeh, 2018).

One of the significant contributions of the development of Quipper School-based Islamic Education (PAI) materials is the ability to integrate information and communication technology into learning. This integration is particularly challenging in the realm of Islamic Education, especially in the context of online learning. A major benefit of online learning with Quipper School is the flexibility it offers in terms of time and place for students. For example, if a student is unable to attend school physically, the school can easily send assignments through the Quipper School application.

As a concrete illustration, a literature study on development has noted that Madrasah Aliyah Negeri (MAN) 1 Kota Bitung, as mentioned in Wadan's

2020 article, is one of the educational institutions that has adopted Quipper School as a learning tool in Islamic Education (PAI) subjects. This step supports the improvement of the quality of Islamic Education and enhances PAI learning more efficiently, demonstrating a commitment to improving the quality of Islamic Education by wisely utilizing available resources.

Wadan's research findings state: "*After undergoing a series of testing phases, including limited feasibility tests by content and media experts, as well as field tests encompassing preliminary field testing, the PAI learning materials developed using Quipper School have met the criteria to be considered a final product ready for dissemination and implementation by users. The feasibility evaluation is reflected in the assessments, which almost entirely received a 'B' grade in the 'Good' category, meeting the researcher's expectation that the feasibility level would achieve at least a 'C' grade in the 'Fairly Good' category. In addition to meeting feasibility criteria, the Quipper School-based PAI learning materials have several strengths and weaknesses. One of the strengths is their broad accessibility, allowing the materials to be accessed anytime and anywhere, as long as there is an internet connection. This eliminates the necessity of viewing them in a classroom or specific location. Another advantage is the variety of formats, such as videos, text, writings, PDFs, and PowerPoint, as Quipper School is equipped with adequate management tools. The results of this development have been published online and can be accessed anytime.*" (Anuli, 2017).

Based on these findings, the researcher concludes that the development of Quipper School-based PAI learning materials can be efficiently and practically implemented for students, whether directly or indirectly. Students can effectively receive Islamic Education materials delivered by educators. As previously explained, Quipper School-based materials align well with online learning environments, enabling students to learn conveniently anytime and anywhere. The ease of using these learning materials also simplifies the educators' task in delivering PAI materials, as well as assisting in the analysis and completion of assignments given by educators or teachers.

Discussion

1. Development of Islamic Education Learning Materials Based on E-Mobile
The development of e-mobile-based learning materials is grounded in the instrumental e-mobile approach (Nisak, (2021)). This approach leverages mobile device technology as the primary medium for accessing learning materials. A study cited in a journal article by Remiswal and A.J. Firman (2020) provides valuable insights into efforts to develop Islamic Education (PAI) learning materials based on e-mobile technology. The goal of this development is to present a more effective, interactive, and relevant approach that meets the learning needs of students in the digital era (Utomo, 2023). Two types of e-books

were developed: the **TE-Book** for educators and the **SE-Book** for students. These were designed with deep pedagogical considerations, including:

- Needs Analysis for Educators and Students: The TE-Book provides detailed guidance for educators in preparing materials, while the SE-Book focuses on students' learning needs through four clearly defined dimensions (historical, theoretical, cases, and value-based).
- Design Principles Based on HOTS (Higher Order Thinking Skills): Emphasizing the development of students' critical, analytical, and reflective thinking skills (Remiswal & Firman, 2020).

This development reinforces the concept that technology-based learning can enhance flexibility, motivation, and students' absorption of PAI materials (Kustati & Amelia, 2024).

The dimensions within the SE-Book provide a holistic and integrated learning structure:

- Historical-Based: Offers contextual introductions to relevant Islamic history linked to core materials. For instance, in the study of aqidah, students are guided to understand the historical background of the importance of tawhid.
- Theoretical-Based: Presents core materials oriented toward achieving learning outcomes, helping students systematically understand foundational concepts.
- Cases-Based: Integrates case studies relevant to students' lives, enabling them to see direct connections between theory and real-life applications.
- Value-Based: Encourages students to reflect on Islamic values within the context of their learning experiences, such as applying the values of honesty and responsibility (Remiswal & Firman, 2020).

This structure provides a multidimensional approach that not only facilitates the comprehension of concepts but also promotes practical application and the internalization of religious values.

This study highlights the success of e-mobile instrumental-based e-books through two main tests:

- Validity Test: Conducted through FGD sessions with experts to assess the feasibility of content, language, contextualization, presentation, and visual aspects. The results indicated that the product met pedagogical standards for use in learning.
- Effectiveness Test: Implementation at SMAN 10 Padang demonstrated improved student achievement in Islamic Education (PAI) subjects. The e-mobile-based materials were found effective in enhancing students' learning motivation and absorption of the taught content (Anggelina, 2021).

This success reflects how technology-based material development can address challenges in conventional learning, such as low student engagement or limited classroom learning time.

The development process for the interactive e-books utilized the **Appypie** application, enabling the creation of Android-based materials with features such as:

- Multimedia integration (videos, audio, and interactive quizzes).
- High accessibility, as it can be used on various mobile devices.
- Simple user interface, making it easy for both teachers and students to access (Chusni, 2018).

This technology is highly relevant in supporting the Kurikulum Merdeka framework, which emphasizes flexibility, personalized learning, and technological integration in the teaching-learning process (Dewi & Latifah, 2024). While the study demonstrates success, there are several challenges that need to be addressed:

- Technological Infrastructure Limitations: Not all educational institutions have adequate internet access or technological devices. A solution is to provide offline modules that can be downloaded for access without an internet connection.
- Digital Literacy for Teachers and Students: Using technology requires intensive training to ensure all parties can optimally utilize the application. This training should be incorporated into professional development programs for educators.
- Funding and Resources: Developing technology-based materials demands significant investment in terms of time and cost. Collaboration with organizations or technology sponsors could be a viable solution.

This study provides several important implications for the development of technology-based learning, including the following: First, curriculum development—Islamic Education (PAI) curriculum needs to be integrated with a technology-based approach to enhance students' competitiveness in the digital era (Faradis & Reksiana, 2022). Second, teacher competence improvement—teachers should be supported with training focused on mastering educational technology (Zain, 2016). Third, data-driven evaluation—technology implementation should be regularly evaluated to ensure its effectiveness in achieving learning outcomes (Alhaq, Nugraha, & Oding, 2022).

The recommendations offered are as follows:

1. Develop partnerships with technology service providers to support the sustainability of e-mobile-based learning programs.
2. Increase socialization for teachers and students on the benefits and how to use technology in PAI learning.

3. Adopt a similar approach for other subjects to support comprehensive and holistic learning.

2. Development of Islamic Religious Education (PAI) Learning Materials Based on Quipper School

The study referenced from (Anuli, 2017) escribes innovative efforts in developing Islamic Religious Education (PAI) learning materials based on the Quipper School application. These findings are relevant for utilizing digital technology in learning, particularly in supporting more flexible and interactive learning processes.

Quipper School is an online learning platform designed to efficiently manage materials, assignments, and student evaluations (Talib, 2019). In this study, the platform was used to develop PAI materials, covering topics such as Aqeedah and Akhlak. The materials were designed using various media, including text, video, images, and audio, all integrated within the application.

The advantages of this approach include:

• Flexibility of Access: Students can access the materials anytime and anywhere as long as they are connected to the internet.

• Diverse Media Formats: Materials are delivered through various formats such as text, PowerPoint, and video to enrich the learning experience.

• Alignment with Modern Learning: Quipper School supports technology-based learning that is relevant to the educational needs of the digital era(Ariani, 2023).

The development of Quipper School-based materials follows five systematic stages (Trisnaningsih, Suyanto, & Rahayu., 2016) :

1. Analysis: Evaluation of learning objectives and expected outcomes. This stage ensures that the developed materials are relevant to student needs and curriculum goals.
2. Design: Structuring the material format, including text, PDFs, videos, test questions, and homework.
3. Production: Integration of all material components into a complete learning program through the Quipper School application.
4. Testing: Involvement of subject and media experts to assess the feasibility of the product before field implementation. Testing is conducted in three stages:
   o Preliminary Field Testing: Initial trial to identify product deficiencies.
   o Main Field Testing: Broader evaluation with a group of students.
   o Operational Testing: Final testing to ensure the product is ready for use.
5. Distribution: Distribution of the product to users after revisions based on the testing results..

These stages ensure that the developed materials meet pedagogical standards and student needs.

The research shows that the Quipper School-based materials meet the feasibility criteria, with most aspects rated as "Good" by subject matter and media experts. Field evaluations also indicate significant results:

• Improvement in Student Understanding: Quipper School-based materials help students achieve the expected level of understanding.

• Learning Efficiency: Teachers find it easier to deliver material and assign tasks through the platform.

• Student Motivation: The interactivity and media variety in Quipper School enhance students' interest and motivation in learning Islamic Religious Education (PAI).

The advantages of Quipper School-based PAI material development include:

• Wide Accessibility: The material can be accessed anytime and anywhere.

• Variety of Learning Media: The combination of text, video, and interactive tasks enriches the learning process.

• Efficiency for Teachers: Teachers can easily manage assignments, evaluations, and analyze students' learning outcomes (Jailani, Widodo, & Fatimah., 2021).

However, the drawbacks of the Quipper School-based PAI material development include:

• Dependence on Internet Connectivity: Accessing the materials requires a stable internet connection, which is a challenge in areas with limited digital infrastructure.

• Technology Literacy: Both teachers and students need additional training to use the application optimally (Das, Wardah, Halik, & Besse., 2020).

The findings of this study provide valuable insights into the application of technology in PAI learning, particularly the strengthening of teacher competence. Intensive training for teachers in utilizing Quipper School should be a priority. Furthermore, Curriculum Integration: The PAI curriculum needs to be adapted to technology-based learning methods to ensure material relevance and the necessary technology infrastructure. The government and educational institutions should work to improve internet accessibility and technology devices, particularly in remote areas.

The recommendations offered are: Further Development:

1. Expanding the material coverage to include other PAI topics.
2. Ongoing Evaluation: Using feedback from teachers and students to continuously improve the material quality.
3. Technology Partnerships: Collaborating with technology service providers to enhance the accessibility and functionality of the platform.

CONCLUSION AND IMPLICATION

Conclusion

Based on the above review, it can be concluded that the development of e-mobile-based PAI materials in the form of e-books, which were tested, and the development of Islamic Religious Education (PAI) learning materials based on Quipper School, are efficient and practical in their implementation in front of students, both directly and indirectly. Both have proven effective in improving students' learning achievements in PAI and are highly suitable for the learning environment, allowing students to learn flexibly at various times and places. The ease of use of these learning materials also provides support for educators in delivering PAI content and simplifies the process of analysis and assigning tasks given by the teacher or educator.

Implication

The findings highlight significant implications for the integration of technology in Islamic Religious Education (PAI). The development of e-mobile-based PAI materials and the use of Quipper School-based learning tools provide an innovative solution to modern educational challenges. Their efficiency and practicality demonstrate that digital platforms can effectively support diverse learning environments, enabling students to learn anytime and anywhere. This flexibility caters to varied learning styles and schedules, promoting inclusivity and accessibility.

For educators, these tools simplify the delivery of PAI content and streamline processes such as task assignments and performance analysis, reducing the workload and increasing teaching efficiency. Furthermore, the proven effectiveness of these materials in enhancing students' learning outcomes underscores their potential as essential components of modern PAI curricula. The implications encourage educational institutions to prioritize the integration of such technologies to foster adaptive, student-centered learning environments, ensuring the continued relevance of PAI in a digital age.

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