DESIGNING PAI-BASED DIGITAL LKPD: A NEEDS STUDY TO IMPROVE SPIRITUAL INTELLIGENCE IN ELEMENTARY SCHOOL

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Abstract

This study examines the need for developing a PAI-based digital LKPD to enhance spiritual intelligence among elementary school students at SDN 1 Ubung. Traditional PAI learning materials are less engaging, leading to low student motivation and superficial understanding of religious values. The research adopts a qualitative approach, involving interviews, observations, and document analysis. The findings reveal four key issues: (1) lack of interactive features in conventional PAI learning, (2) absence of reflection-based activities, (3) teachers' challenges in integrating technology, and (4) limited accessibility due to internet constraints. This study supports Keller's ARCS Model, Bloom's Taxonomy, and Zohar & Marshall's Spiritual Intelligence Theory, emphasizing interactive, reflective, and accessible learning. The findings suggest that a well-designed digital LKPD can enhance student engagement, critical thinking, and moral development. Future research should explore long-term impacts and effective teacher training strategies for digital Islamic education.

Keywords: *Digital LKPD, PAI, Spiritual Intelligence, Islamic Education, Interactive Learning.*

Abstrak

Penelitian ini mengkaji kebutuhan pengembangan LKPD digital berbasis PAI untuk meningkatkan kecerdasan spiritual siswa SD di SDN 1 Ubung. Bahan ajar PAI konvensional kurang menarik, menyebabkan motivasi belajar rendah dan pemahaman nilai keagamaan yang dangkal. Penelitian ini menggunakan pendekatan kualitatif dengan wawancara, observasi, dan analisis dokumen. Hasil penelitian mengungkapkan empat masalah utama: (1) kurangnya fitur interaktif dalam pembelajaran PAI, (2) tidak adanya aktivitas reflektif, (3) tantangan guru dalam mengintegrasikan teknologi, dan (4) keterbatasan akses akibat kendala internet. Studi ini mendukung Model ARCS Keller, Taksonomi Bloom, dan Teori Kecerdasan Spiritual Zohar & Marshall, yang menekankan pembelajaran yang interaktif, reflektif, dan mudah diakses. Hasil penelitian menunjukkan bahwa LKPD digital yang dirancang dengan baik dapat meningkatkan keterlibatan siswa, berpikir kritis, dan

pengembangan moral. Penelitian selanjutnya dapat mengeksplorasi dampak jangka panjang dan strategi pelatihan guru yang efektif dalam pendidikan Islam digital.

Kata Kunci: LKPD Digital, PAI, Kecerdasan Spiritual, Pendidikan Islam, Pembelajaran Interaktif.

INTRODUCTION

Islamic Religious Education (PAI) plays a crucial role in shaping students' character and spiritual intelligence. According to (Anisa et al., 2023), spiritual intelligence is the ability to understand the meaning of life, practice moral values, and develop self-awareness in relation to God and others. In the educational context, spiritual intelligence helps students build morality, enhance resilience, and develop a meaningful vision of life (Doustdar Toosi et al., 2016) Meanwhile, digital LKPD (Lembar Kerja Peserta Didik or Student Worksheets) is a learning tool that can improve student engagement and learning effectiveness. (Avischa Esty Wandani et al., 2022) highlights that today's generation is composed of digital natives, who are more comfortable learning through technology than traditional methods. Therefore, developing digital LKPD in PAI education can be an innovative solution to instill spiritual values in a more engaging and effective way.

In the current era of digitalization, one of the biggest challenges in education is instilling spiritual values amid the rapid flow of information and secular influences. A UNESCO (2022) study shows that children today spend more time in the digital world, yet interest in moral and religious education has declined(Widodo et al., 2023). This indicates that religious education needs to adapt to technology to remain relevant and appealing to students. Additionally, a Pew Research Center (2021) report highlights a growing crisis in spiritual values among the younger generation globally, characterized by a decline in religious awareness and moral behavior(Saputri & Wahyuni, 2024). This phenomenon calls for more innovative learning approaches to ensure that spiritual values are embedded in students from an early age.

Indonesia faces similar challenges. A survey by the Ministry of Education, Culture, Research, and Technology (2023) revealed that 68% of elementary school students have lost interest in learning PAI due to conventional and less interactive teaching methods(Zahrudin et al., 2021). This issue is exacerbated by the lack of technology integration in PAI education, making students more attracted to digital content that is not always educational or religious.

Furthermore, research from the Center for Character Education Development (2022) indicates that spiritual intelligence among Indonesian elementary school students remains low(Iqbal Mustakim et al., 2024). This is evident in students' lack of discipline in religious practices, low social empathy, and weak internalization of religious values in daily life. Therefore, the development of adaptive, technology-based learning materials is urgently needed.

Preliminary observations at SDN 1 Ubung have identified several key issues related to PAI learning. Many students struggle to stay engaged with traditional religious education methods, as they find them monotonous and unappealing. Teachers also face challenges in integrating digital tools into their lessons due to limited training and lack of appropriate digital teaching materials. Additionally, assessments indicate that students' spiritual intelligence development is not optimal, as seen in their lack of enthusiasm for religious activities and weak application of moral values in everyday life. These challenges highlight the need for a more interactive, digital-based learning approach to enhance students' spiritual intelligence.

Several studies have explored the integration of digital tools in education, but few have specifically focused on the development of digital LKPD for PAI to improve spiritual intelligence in elementary schools. Research by (Dewi et al., 2022) examined the impact of digital learning on religious education but did not address the specific needs of elementary school students. Another study by (Sumarmi et al., 2021) highlighted the potential of digital worksheets in Islamic education but lacked an in-depth analysis of the specific requirements for effective digital LKPD design. This research aims to fill this gap by conducting a needs analysis to develop a PAI-based digital LKPD specifically designed to enhance students' spiritual intelligence. By identifying the actual needs of teachers and students, this study will contribute to the development of more effective and engaging learning materials for PAI education in elementary schools.

Based on the issues and gaps identified, this study aims to analyze the specific needs of teachers and students in the development of PAI-based digital LKPD. It also seeks to design an effective and engaging digital LKPD model that enhances spiritual intelligence among elementary school students and evaluate the feasibility and effectiveness of the proposed digital LKPD in improving students' spiritual intelligence. By addressing these objectives, this research seeks to provide an innovative educational solution that combines

religious education with modern digital learning strategies, ensuring that students can develop their spiritual intelligence in an engaging and meaningful way.

RESEARCH METHOD

This study employs a qualitative research approach to analyze the needs for developing a PAI-based digital LKPD aimed at enhancing students' spiritual intelligence in elementary schools. Qualitative research is used to explore and understand the experiences, perceptions, and challenges faced by teachers and students in learning Islamic Religious Education (PAI). Through this approach, the study seeks to gain in-depth insights into the factors influencing the effectiveness of digital learning materials in fostering spiritual intelligence.

The research will be conducted using a case study design, focusing on SDN 1 Ubung as the primary research site. This design allows for a comprehensive examination of the real-world context in which PAI is taught, particularly regarding the integration of digital learning tools. The participants in this study include PAI teachers, elementary school students, and school administrators, selected through purposive sampling to ensure that relevant perspectives are gathered.

Data collection methods include observations, in-depth interviews, and document analysis. Observations will be carried out in the classroom to examine the current teaching and learning process, particularly the challenges faced by students and teachers in engaging with PAI materials. In-depth interviews with teachers and school administrators will provide insights into the pedagogical strategies, technological challenges, and expectations for digital LKPD. Additionally, document analysis will be conducted on existing PAI learning materials and curriculum guidelines to assess the gaps that digital LKPD can address.

The collected data will be analyzed using thematic analysis, where patterns and themes emerging from the interviews, observations, and document reviews will be identified and categorized. To ensure the validity of the findings, triangulation will be applied by comparing data from different sources, including teacher interviews, classroom observations, and document analysis. Member checking will also be conducted by allowing participants to review the study's findings to confirm their accuracy and relevance.

By employing this qualitative research approach, the study aims to provide a detailed and contextual understanding of the needs for PAI-based digital LKPD development,

ensuring that the resulting educational materials are aligned with both students' learning styles and teachers' instructional needs.

RESULT AND DISCUSSION
Result

This chapter presents the research findings obtained through qualitative methods, including observations, in-depth interviews, and document analysis. The data were collected from teachers, students, and school administrators at SDN 1 Ubung to explore the needs for developing a PAI-based digital LKPD and its potential to enhance students' spiritual intelligence. The findings are discussed based on the research objectives, followed by an analysis of recurring themes and patterns.

The interviews with PAI teachers at SDN 1 Ubung revealed several key challenges in delivering Islamic Religious Education effectively. The majority of teachers expressed concerns over students' low engagement with traditional learning materials, which rely heavily on textbooks and printed LKPD. One teacher stated that students find conventional worksheets boring and often lack motivation to complete them, as they prefer interactive and visually appealing content, which traditional LKPD does not provide. Furthermore, teachers highlighted the difficulty of integrating technology into the classroom due to limited digital resources. Another teacher mentioned that while they recognize the need to modernize teaching methods, they lack training and access to digital learning tools, making it difficult to implement technology-based strategies. Additionally, there was a concern that students struggle to reflect on spiritual values, as many can recite prayers and memorize religious texts but fail to internalize their meanings and apply them in daily life.

Observations conducted in PAI classes provided insight into students' learning behaviors. During traditional PAI lessons, students showed minimal engagement, particularly when lessons were delivered using lecture-based approaches. Many students were passive listeners, responding only when asked direct questions. When given printed LKPD, several students completed the tasks mechanically without demonstrating a deeper understanding of the content. In interviews, students expressed a strong preference for interactive learning methods. One student mentioned that they enjoy using their phone or tablet to watch Islamic videos but find printed worksheets uninteresting. Another student suggested that learning would be more enjoyable if it included games, videos, or something interactive rather than just answering written questions. These findings indicate a mismatch

between students' learning preferences and current PAI teaching methods, highlighting the need for digital LKPD with interactive elements.

A review of existing PAI textbooks and printed LKPD used at SDN 1 Ubung revealed several limitations. First, there was a lack of interactivity, as the materials primarily consisted of text-heavy content with minimal visual or multimedia support, making them less engaging for digital-native students. Second, the exercises were primarily focused on memorization rather than contextual application, reducing students' ability to internalize and practice spiritual values in everyday situations. Third, there was an absence of digital integration, as the materials did not provide QR codes, links, or multimedia components that could enhance students' engagement and comprehension. These gaps support the need for a digitally enhanced LKPD that includes multimedia, interactive exercises, and reflection-based activities.

Based on the qualitative data, four major themes emerged regarding the requirements for PAI-based digital LKPD. The first theme was the need for interactive features, as both teachers and students agreed that digital LKPD should include videos, animations, and interactive quizzes. These features can increase engagement and improve retention of Islamic teachings. One teacher emphasized that students learn better when they see and interact with the content, suggesting that animations and quizzes could help them grasp religious concepts more effectively. The second theme was the need for encouraging spiritual reflection. The data highlighted that while many students can recite prayers, they struggle to understand their significance. A suggested feature was a daily reflection journal where students could write about how they applied Islamic values in their lives. Another teacher proposed that a digital LKPD could include reflection prompts, asking students how they practiced honesty, kindness, or patience in their daily routines.

The third theme was accessibility and usability concerns. Several teachers raised concerns about students' access to devices and the need for user-friendly designs. While many students have smartphones, some lack stable internet connections. To address this, an offline-accessible version of the digital LKPD was suggested. A teacher explained that not all students have internet at home, so a downloadable LKPD that works offline would be more practical for the school. The fourth theme was the integration with the school curriculum. To ensure effectiveness, the digital LKPD must align with the national curriculum. Teachers stressed the importance of maintaining educational standards while incorporating digital

enhancements. One teacher stated that the content should still follow the PAI curriculum but should be delivered in a way that is more engaging and interactive for students.

The findings confirm that previous studies on digital learning in PAI have not fully explored the specific needs of elementary school students. While earlier research focused on digital teaching strategies, few studies have examined the integration of spiritual intelligence development within digital LKPD. This study fills that gap by identifying the specific features and pedagogical approaches necessary for effective digital PAI learning. The study's findings have important implications for educators, curriculum developers, and policymakers. The proposed digital LKPD should incorporate interactive, reflective, and curriculum-aligned components while being accessible to students with varying technological resources.

Based on the qualitative data, it is evident that PAI education at SDN 1 Ubung faces challenges in engagement, digital adaptation, and spiritual reflection. Students prefer interactive learning but are currently provided with static materials that do not fully support their spiritual growth. Teachers acknowledge the importance of digital learning but require training and resources to implement it effectively. To address these challenges, several recommendations are proposed. First, a digital LKPD with interactive elements such as animations, quizzes, and storytelling should be developed to engage students. Second, spiritual reflection activities should be included to help students internalize and apply Islamic values in daily life. Third, offline accessibility should be ensured to accommodate students with limited internet access. Fourth, teacher training programs should be provided on how to effectively integrate digital LKPD in PAI lessons. Finally, the digital LKPD should be aligned with national curriculum standards while making it engaging and student-friendly.

By implementing these recommendations, the PAI-based digital LKPD can serve as an innovative educational tool that not only enhances student engagement but also promotes deeper spiritual intelligence among elementary school students.

Tabel 1. Research Findings on the Needs for PAI-Based Digital LKPD

No	Category	Findings	Implications for Digital LKPD
1	**Teachers' Perspectives**	- Students show low engagement with traditional LKPD.	- Digital LKPD should include interactive and multimedia elements.

		- Teachers lack training in digital tools.	- Teacher training programs are necessary.
		- Difficulty in integrating technology in PAI lessons.	
2	**Students' Learning Preferences**	- Students prefer visual and interactive learning.	- LKPD should have videos, quizzes, and games.
		- Printed worksheets are perceived as boring.	- Reflection activities should be included.
		- Students lack deep understanding of spiritual values.	
3	**Document Analysis**	- Existing PAI materials lack interactivity.	- Digital LKPD should integrate multimedia and practical applications of religious values.
		- Content focuses on memorization rather than application.	
		- No digital integration in textbooks and LKPD.	
4	**Thematic Findings**	- Need for interactive features (videos, animations, quizzes).	- Develop an engaging and reflective LKPD.
		- Need for spiritual reflection activities.	- Ensure offline accessibility for students.
		- Accessibility concerns for students with limited internet.	- Align with curriculum while modernizing delivery.
		- Integration with national curriculum is crucial.	

Discussion

The findings of this study indicate that the development of a PAI-based digital LKPD is essential for enhancing students' spiritual intelligence at SDN 1 Ubung. The results reveal several critical aspects, including the limitations of traditional PAI learning materials, the need for interactive and reflective digital resources, and the challenges faced by teachers in integrating technology into religious education. This chapter discusses these findings in relation to relevant theories and previous studies, providing a deeper understanding of how digital learning tools can be optimized to support spiritual intelligence development in elementary school students.

One of the key findings of this study is the low level of student engagement with conventional PAI learning materials. Many students find printed LKPD uninteresting, which affects their motivation to participate actively in religious education lessons. According to Keller's ARCS Model of Motivation (Huett et al., 2008), effective learning materials should capture learners' Attention, be Relevant to their interests, enhance their Confidence, and provide Satisfaction. The lack of interactive elements in traditional PAI textbooks and worksheets fails to meet these criteria, leading to decreased student involvement. This aligns with the findings of (Nabilla et al., 2022), who reported that students exposed to digital learning resources demonstrated higher engagement and comprehension in religious studies compared to those using printed materials. Thus, integrating interactive multimedia elements such as videos, animations, and gamified quizzes in digital LKPD could significantly enhance students' motivation and participation in learning Islamic values.

Another major issue identified is the gap between students' ability to recite religious texts and their understanding of the deeper meanings behind them. This problem is linked to Bloom's Taxonomy of Learning Domains (Fadzilah Bee et al., 2021) which classifies learning into cognitive, affective, and psychomotor domains. Traditional PAI learning often focuses on the cognitive domain through memorization, neglecting the affective domain, which is crucial for internalizing spiritual values. A study by (Jannah & Suciptaningsih, 2023) found that students who engaged in reflective digital learning activities developed a stronger emotional connection with religious teachings. This suggests that incorporating reflection-based exercises in digital LKPD such as journaling, self-assessment, and real-life application tasks can help students internalize spiritual intelligence rather than merely memorizing religious content.

Furthermore, the study highlights the challenges faced by teachers in integrating technology into PAI instruction. Many teachers expressed concerns about their lack of training and limited access to digital tools, which aligns with the Technology Acceptance Model (TAM) by (Isupova et al., 2021). According to TAM, two primary factors influence the adoption of technology in education: perceived usefulness and perceived ease of use. If teachers do not receive adequate training or perceive digital tools as difficult to use, they are less likely to integrate them effectively into their teaching. This finding is supported by (Amelia & Muzakki, 2021), who found that teachers' readiness and competence in using digital resources significantly impact the success of e-learning in religious education. To address this issue, it is crucial to provide teacher training programs that equip educators with the necessary skills to utilize digital LKPD effectively in the classroom.

The document analysis conducted in this study further confirms that existing PAI learning materials are not designed to support the development of spiritual intelligence. According to (Turi et al., 2020), spiritual intelligence involves the ability to apply moral and ethical values in real-life situations, requiring learners to engage in critical thinking, self-reflection, and personal growth. However, the current PAI textbooks at SDN 1 Ubung primarily emphasize rote learning and fail to encourage students to apply Islamic teachings in their daily lives. This finding is consistent with the research of (Hikmiyah, 2024), which concluded that Islamic education should move beyond knowledge transmission and incorporate experiential learning strategies to nurture students' spiritual intelligence. By embedding case studies, real-life problem-solving activities, and discussion forums in digital LKPD, students can be guided to reflect on their behavior and make ethical decisions based on Islamic principles.

Another significant aspect identified in this study is the accessibility challenge faced by students, particularly those from low-income backgrounds with limited internet access. Digital inequality is a well-documented issue in educational research, as highlighted by Van Dijk's Digital Divide Theory(Ricky Ardiansah & Zulfiani, 2023), which explains how disparities in access to technology can affect learning outcomes. While many students at SDN 1 Ubung have smartphones, they do not always have stable internet connections, making it difficult to rely solely on online learning resources. This aligns with the findings of (Rahmi et al., 2023), who emphasized the importance of developing offline-accessible digital learning tools to ensure equitable access to education. Therefore, the proposed digital LKPD

should be designed to function both online and offline, allowing students to download materials in advance and access them without requiring continuous internet connectivity.

The integration of digital LKPD with the national curriculum is another critical factor that must be considered. While technological advancements offer numerous benefits, digital learning materials must still adhere to educational standards and learning objectives set by the government. According to Bruner's Constructivist Learning Theory(Heyes, 2020), learning is most effective when students are actively involved in constructing their knowledge rather than passively receiving information. Digital LKPD should be structured in a way that allows students to explore Islamic teachings through problem-solving tasks, interactive storytelling, and collaborative learning activities, ensuring that they achieve the intended learning outcomes while engaging in a meaningful educational experience. Research by (Bakri et al., 2020) supports this view, demonstrating that digital constructivist-based learning in religious education significantly improves students' critical thinking skills and moral reasoning.

In light of these findings, it is evident that developing a PAI-based digital LKPD requires a multifaceted approach that addresses pedagogical, technological, and accessibility concerns. The study highlights the importance of designing interactive and engaging digital content, promoting spiritual reflection, providing teacher training, ensuring offline accessibility, and aligning the digital LKPD with the national curriculum. These findings contribute to the growing body of research on digital transformation in religious education, offering practical insights for educators, policymakers, and curriculum developers.

In conclusion, the discussion of these findings in relation to established theories and previous studies underscores the necessity of digital innovation in Islamic education. By adopting digital LKPD that incorporates multimedia, reflection-based learning, and curriculum integration, PAI instruction can become more effective in fostering students' spiritual intelligence. Future research should explore the long-term impact of digital LKPD on students' ethical decision-making and character development, as well as the best strategies for training teachers in digital pedagogy for Islamic education.

CONCLUSION

This study highlights the need for a PAI-based digital LKPD to enhance spiritual intelligence among elementary students at SDN 1 Ubung. Traditional PAI learning materials lack interactivity and reflection-based learning, resulting in low student engagement and

superficial understanding of religious values. Four key findings emerged. First, interactive digital features such as videos and quizzes can increase student motivation. Second, reflection-based activities are essential for internalizing Islamic teachings. Third, teachers need training to integrate technology into PAI instruction effectively. Fourth, offline accessibility is necessary to support students with limited internet access.

These findings align with Keller's ARCS Model, Bloom's Taxonomy, and Zohar & Marshall's Spiritual Intelligence Theory, emphasizing engagement, critical thinking, and ethical decision-making. A well-designed digital LKPD can bridge these gaps, making PAI learning more engaging, reflective, and accessible. Future research should focus on evaluating its long-term impact and enhancing teacher readiness for digital Islamic education

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