

Analysis Of The Learning Effectiveness Of Digital-Based Islamic Religious Education Courses At Muhammadiyah University Of Bengkulu

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Abstract: This study aims to describe the implementation of digital-based Islamic Religious Education (PAI) learning media in fifth-grade classes at SD Fatma Kenanga, Bengkulu City, to examine students' learning motivation in participating in digital-based PAI learning, and to analyze the supporting and inhibiting factors affecting the use of digital learning media in enhancing students' learning motivation. This research employed a qualitative descriptive method, with data collected through in-depth interviews with the PAI teacher, questionnaires distributed to 20 fifth-grade students, direct classroom observations, and analysis of findings linked to relevant learning theories. The results of the study indicate that the use of digital learning media, particularly educational videos, is still relatively limited in PAI instruction. This limitation is mainly due to the dominance of conventional teaching methods such as lectures, discussions, and the use of whiteboards and textbooks. However, when digital media were implemented, the learning process became more engaging and interactive, leading to increased student motivation, enthusiasm, active participation, and understanding of PAI materials, especially those related to worship practices and moral values. Based on the questionnaire results, only three out of twenty students showed a moderate level of learning motivation, while the majority demonstrated high to very high motivation levels. Inhibiting factors included limited internet access and restricted availability of facilities such as projectors and Chromebooks, which had to be shared among classes. Overall, digital-based PAI learning media were proven to be effective in enhancing students' learning motivation and contributed significantly to the development of more innovative and contextual PAI learning strategies.

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Abstrak: Penelitian ini bertujuan untuk mendeskripsikan penerapan media pembelajaran Pendidikan Agama Islam (PAI) berbasis digital di kelas V SD Fatma Kenanga Kota Bengkulu, mengkaji tingkat motivasi belajar siswa dalam mengikuti pembelajaran PAI berbasis digital, serta menganalisis faktor-faktor pendukung dan penghambat penggunaan media pembelajaran digital dalam meningkatkan motivasi belajar siswa. Penelitian ini menggunakan metode deskriptif kualitatif dengan teknik pengumpulan data melalui wawancara mendalam dengan guru PAI, penyebaran angket kepada 20 siswa kelas V, observasi langsung proses pembelajaran, serta analisis dan pengaitan temuan lapangan dengan teori-teori pembelajaran yang relevan. Hasil penelitian menunjukkan bahwa penerapan media pembelajaran digital, khususnya berupa video edukasi, masih tergolong jarang digunakan dalam pembelajaran PAI. Hal ini disebabkan oleh dominannya penggunaan metode pembelajaran konvensional seperti ceramah, diskusi, dan penggunaan papan tulis serta buku paket. Namun demikian, ketika media digital diterapkan, pembelajaran menjadi lebih menarik dan interaktif, sehingga mampu meningkatkan motivasi, antusiasme, partisipasi aktif, serta pemahaman siswa terhadap materi PAI, terutama yang berkaitan dengan ibadah dan nilai-nilai moral. Berdasarkan hasil angket, dari 20 siswa hanya 3 siswa yang memiliki motivasi belajar pada kategori sedang, sementara siswa lainnya berada pada kategori tinggi hingga sangat tinggi. Faktor penghambat meliputi keterbatasan akses internet serta keterbatasan sarana seperti infokus dan Chromebook yang digunakan secara bergantian. Secara keseluruhan, media pembelajaran PAI berbasis digital terbukti efektif dalam meningkatkan motivasi belajar siswa dan memberikan kontribusi penting bagi pengembangan strategi pembelajaran PAI yang lebih inovatif dan kontekstual.

Kata Kunci: Media Pembelajaran Digital; Motivasi Belajar; Pendidikan Agama Islam; Siswa Sekolah Dasar; Video Edukasi.

A. Introduction

Islamic Religious Education (PAI) is an important component in the elementary school curriculum which aims to shape students' morals and understanding of religious values(Juli et al., 2025). However, in the current digital era, PAI learning methods in many Indonesian schools, including Fatma Kenanga Elementary School, Bengkulu City, still rely on conventional approaches such as lectures and discussions using simple

media such as whiteboards and textbooks. This often makes students less motivated, because learning is less interactive and contextual(Khofifatul et al., n.d.). The experience of PAI teachers at this school shows that digital media such as educational videos are rarely used, so students tend to be passive and have difficulty understanding abstract concepts such as worship and morals. This condition shows the urgency of integrating digital technology into PAI in order to increase the learning motivation of class V students. This latest research covers the background to the development of educational technology, especially in PAI. Previous research emphasizes that digital media can transform learning to be more interesting and effective. Research results(Mubaidilla, n.d.). found that more than 70% of elementary school students were unable to recognize authentic problems in conventional learning, but their motivation increased significantly when using educational videos.

Deci and Ryan's theory of intrinsic motivation, as explained in the study(Vansteenkiste et al., 2004), emphasizes that a learning environment that supports autonomy and relevance through visual media can encourage students to learn more actively. At the local level, research in Bengkulu by Fitriani (2022, p. 56) revealed that limited digital infrastructure such as internet access and devices was the main obstacle, which is in line with initial findings at Fatma Kenanga Elementary School. Related references also show that educational videos are effective in conveying PAI material because of their ability to visualize religious concepts contextually(Purnomo et al., 2025). Gap analysis indicates that although current literature discusses the benefits of digital media in general education, there are still gaps in its application specifically to PAI in elementary schools(Astuti et al., 2024). Most studies focus on learning motivation without integrating in-depth analysis of the enabling and inhibiting factors of digital infrastructure. The uniqueness of this research lies in its descriptive qualitative approach which combines interviews, questionnaires from 20 students, and direct observation, as well as focusing on educational videos as an alternative solution to replace less attractive conventional methods.

Thus, this research is needed to fill this gap and provide a practical contribution for PAI teachers in school contexts in areas such as Bengkulu. This research aims to

describe the application of digital-based PAI learning media in class V of Fatma Kenanga Elementary School, Bengkulu City, describe the learning motivation of class V students in participating in digital-based PAI learning, and analyze the supporting and inhibiting factors of digital learning media in increasing student learning motivation(Rozaky et al., 2025). The purpose of this research is to provide guidance for PAI teachers and school administrators in optimizing the use of digital media, so that PAI learning becomes more effective and in line with technological developments. The operational definition in this research, digital-based PAI learning media refers to tools such as educational videos, infocus, and Chromebooks that are used to deliver PAI material visually and interactively, while learning motivation is defined as students' intrinsic drive to actively participate in learning, which is measured through response, participation, and understanding of the material(Subando, n.d.).

B. Research Method

This research uses a qualitative design with a descriptive approach. A qualitative approach was chosen because it aims to understand phenomena in depth and holistically through direct interaction between researchers, research subjects and the context under study. Qualitative research is a method that focuses on understanding phenomena experienced by research subjects, such as behavior, perceptions, motivations and actions, by describing them in detail in the form of words and natural language. This approach is very appropriate to use when researchers want to explore the subjective meanings and experiences of research participants in certain social and cultural contexts. This approach allows researchers to capture the complexity of phenomena that cannot be measured quantitatively, so that research results become richer and more contextual. A descriptive approach in qualitative research is used to systematically and factually describe the application of digital-based PAI learning media, student learning motivation, as well as supporting and inhibiting factors, without manipulating or experimenting with variables.

This research was conducted at Fatma Kenanga Elementary School, Bengkulu City, which is a public elementary school with limited digital facilities such as infocus

and Chromebooks which are used interchangeably between teachers. The research period lasted 1 month, starting from instrument preparation to final data analysis, in October 2025. The research subjects consisted of the population of class V students at Fatma Kenanga Elementary School, Bengkulu City, totaling around 25 students. The sample was selected using a purposive sampling technique, namely selecting subjects based on certain criteria that are relevant to the research objectives, such as students who have taken part in digital-based PAI learning at least once. From this population, 20 students were selected as questionnaire respondents to obtain learning motivation data, as well as 1 PAI teacher named Fitrah Hamzah as the main resource person for in-depth interviews. This technique was chosen to ensure the subject has direct experience related to the phenomenon being studied, so that the data obtained is more accurate and contextual.

Data collection was carried out through three main techniques: observation, interviews, and documentation. Observations were carried out as participants, where researchers were directly involved in the PAI learning process in class V to observe the application of digital media such as educational videos, student responses, and teacher-student interactions. The observation instrument is in the form of a structured observation sheet which includes indicators such as frequency of digital media use, level of student participation, and infrastructure barriers. Interviews were conducted in a semi-structured manner with PAI teachers using an interview guide which included questions about experiences of using digital media, student motivation, and supporting/inhibiting factors. The interview instrument is a list of open questions to allow in-depth exploration. Documentation involves collecting secondary data such as photos of learning activities, short videos of the learning process, and field notes to complement primary data. Questionnaires were given to 20 students with instruments in the form of closed questionnaires on a Likert scale (1-5) to measure learning motivation, such as enthusiasm, participation and understanding of the material. The data collection procedure began with permission from the school and the students' parents, followed by observation during 3 learning sessions, interviews with teachers, and distribution of

questionnaires directly in class. Data were collected in stages to ensure validity and avoid bias.

Data analysis was carried out qualitatively using Miles and Huberman's interactive model, which consists of three stages: data reduction, data presentation, and conclusion drawing/verification. Data reduction involves selecting, focusing, simplifying, and abstracting data from observations, interviews, questionnaires, and documentation, by coding themes such as the application of digital media, student motivation, and inhibiting factors. Data presentation is carried out through matrices, diagrams and descriptive narratives to organize the data so that it is easy to understand, for example a frequency table of student motivation from a questionnaire. Conclusion drawing and verification are carried out by comparing data from various sources (triangulation) to ensure the validity of the findings, as well as researcher reflection to avoid subjectivity. Data interpretation is directly linked to research objectives, such as describing the application of digital media and analyzing supporting/inhibiting factors, using learning motivation theory as an analytical framework. This process is carried out iteratively throughout the research to ensure the results can be reproduced by other researchers with similar data.

C. Results and Discussion

Results

The results of this research were obtained through data collection using observation, interviews, questionnaires and documentation at Fatma Kenanga Elementary School, Bengkulu City. The data was analyzed qualitatively by reducing, presenting and drawing conclusions to answer the research objectives, namely describing the application of digital-based PAI learning media, student learning motivation, as well as supporting and inhibiting factors. The following is a description of the results based on the main data sources.

Based on an interview with PAI teacher Fitrah Hamzah, the application of digital-based PAI learning media in class V is still very limited. The teacher admitted that he more often used conventional methods such as lectures and discussions using

whiteboards and textbooks, because he was worried that students would see learning as a game if digital media such as educational videos were used too often. However, on one occasion when commemorating the birthday of the Prophet Muhammad SAW, the teacher used an educational video which produced a positive response from students, where they were more focused, enthusiastic and easily remembered the material. Observations during three learning sessions confirmed this, with digital media appearing only once, while the rest relied on traditional methods. Interpretive analysis shows that the application of digital media has not been optimal due to limited infrastructure, which makes PAI learning less innovative and less able to attract the attention of class V students.

Class V students' learning motivation in participating in digital-based PAI learning appears to increase when this media is implemented. From interviews and observations, students showed high enthusiasm, active participation in quizzes, and better understanding of the concepts of worship and morals compared to conventional methods. The questionnaire given to 20 students measured motivation using a Likert scale (1-5) with indicators such as enjoyment of learning, participation and focus. The questionnaire results showed that only 3 students (15%) were in the medium category, while 17 students (85%) showed high to very high motivation. Interpretation of this data indicates that educational videos as digital media are effective in making PAI learning more fun and contextual, in line with intrinsic motivation theory which emphasizes relevance and visualization in increasing students' motivation to learn.

Supporting and inhibiting factors for digital learning media were analyzed based on interviews and observations. The main supporting factor is the ability of educational videos to make PAI material easier to understand and remember, as well as increasing student participation. However, the main obstacles are limited, unstable internet access and the use of infocus and Chromebooks interchangeably between teachers, which often causes delays or cancellations in the use of digital media. The teacher's suggestion is to provide special focus per class to maximize utilization. Interpretive analysis shows that adequate digital infrastructure is the key to overcoming these obstacles, so that student learning motivation can be consistently increased.



Figure 1. Interview with PAI teacher



Figure 2. PAI learning using educational videos

Discussion

This discussion links the research findings with the main objective, namely describing the application of digital-based PAI learning media in class V of Fatma Kenanga Elementary School, Bengkulu City, describing student learning motivation, and analyzing supporting and inhibiting factors. The main findings show that the application of digital media is still limited, with the dominance of conventional methods, but when applied, student motivation increases significantly, supported by the ability of educational videos to create contextual learning, despite facing infrastructure obstacles such as limited internet access and the use of shared devices. Why does this fact occur? Interview data with teacher Fitrah Hamzah revealed that the preference for lecture and discussion methods stems from concerns that digital media such as

educational videos will make students view learning as a game, which is in line with the experiences of teachers at the school. This answers the question of why implementation has not been optimal, due to teachers' lack of confidence in integrating technology, which is reinforced by limited facilities.

In a broader theoretical context, these findings confirm the theory of intrinsic motivation (Asan, 2025), which emphasizes that a learning environment that supports autonomy, competence, and relevance can increase student motivation. Here, educational videos provide relevance through visualization of religious and moral contexts, making students more enthusiastic and focused, as seen from observations where students are active in quizzes and easily remember the material. Compared with research(Juli et al., 2025), which found that elementary school students had difficulty with conventional learning due to a lack of authentic problems, this finding builds a new theory that digital media can modify motivation theory by adding the dimension of technology as a catalyst for autonomy in PAI. Theoretically, these implications expand knowledge about how digital infrastructure influences motivation, not only as an obstacle but also as an opportunity to build student competencies (Kozlov et al., 2019). What else can be developed? This research suggests a modification of the theory for local contexts such as Bengkulu, where infrastructure barriers are an external variable that needs to be addressed through school policies.

Student learning motivation, measured through a questionnaire with 85% of students indicating high to very high levels, addresses the second objective by highlighting increased participation and understanding when digital media is implemented (Juli et al., 2025). Why did motivation increase drastically? Observation data shows that educational videos make learning more fun, reduce boredom from the lecture method, and allow students to see and hear material contextually, which cannot be achieved with textbooks alone. This is in line with visual learning theory (Junanah et al., 2025), where visual media helps process abstract information, such as the concept of worship, more easily. Compared with research(Islam et al., 2024), which emphasizes the urgency of technology in PAI to overcome conventional methods that are less attractive, these findings confirm and compare that in Bengkulu elementary schools, the

impact is more significant because class V students are still in a high stage of visual development. The theoretical implication is to strengthen the hypothesis that digital media is not only a tool, but also forms intrinsic motivation through relevant learning experiences. Practically, these findings encourage the routine implementation of educational videos to improve academic grades, as seen from the high practice scores in the data.

Analysis of supporting and inhibiting factors answers the third objective, with the main support being the media's ability to increase understanding and participation, while the barrier is inadequate infrastructure (Luthfillah et al., 2024). Why are these barriers dominant? Interview data shows that alternating use of infocus and Chromebooks between teachers causes delays, which are exacerbated by unstable internet access, so teachers are reluctant to use them consistently (Salam, 2025). This relates to the research problem regarding the need for innovation in PAI, and is in line with research (Bengkulu & Solusinya, 2024), which found similar obstacles in Bengkulu elementary schools. Compared with those studies, these findings build a new theory that solutions such as specific infocus per class can modify obstacles into opportunities, reducing dependence on conventional methods (García et al., 2024). The theoretical implication is the expansion of knowledge about external factors in digital motivation theory, while the practical is a recommendation for local governments for infrastructure budget allocation, so that PAI can be more innovative and appropriate to the digital era (Hardianto et al., 2025).

Overall, this discussion answers the questions what (limited applicability findings, high motivation, infrastructure barriers), why (because conventional preferences and limited facilities hinder the motivational environment), and what else (implications for theory modification and practical recommendations (Mappanasingam et al., 2024)). Compared with related research (Wahidar et al., 2023), these findings confirm the positive trend of digital media but emphasize the uniqueness of the local context. The implications for science are a contribution to the development of digital learning strategies in PAI, encouraging further research on technology integration in remote areas to build more inclusive theories (Kadek et al., 2024).

D. Conclusion

This research shows that the use of digital-based Islamic Religious Education learning media can be a significant innovation in basic education, especially to increase student learning motivation through a more interactive and contextual approach compared to traditional methods. By answering research objectives regarding the application of digital media, student motivation, as well as supporting and inhibiting factors, these findings broaden the understanding of educational science by integrating digital technology into the PAI curriculum, which previously relied more on conventional methods. This innovation contributes to the development of learning strategies that are adaptive to the challenges of the digital era, encouraging the transformation of religious pedagogy towards more inclusive and effective education. As a suggestion, schools are advised to improve digital infrastructure such as stable internet access and individual devices, as well as providing regular training for PAI teachers so that the implementation of digital media can be optimized in a sustainable manner. This research also encourages further exploration of a variety of digital media to enrich students' learning experiences at the elementary level.

On Practical Implications: The results of this research provide practical guidance for PAI teachers in elementary schools, especially at Fatma Kenanga Elementary School, Bengkulu City, to more often integrate digital media such as educational videos in PAI learning. In this way, fifth grade students can be more enthusiastic and understand PAI concepts contextually, which increases learning motivation and academic grades. In addition, this implication encourages the development of digital-based PAI materials that are appropriate to student development, such as interactive videos about worship and morals, to overcome the boredom of conventional methods.

Theoretical Implications: This research strengthens and modifies Deci and Ryan's intrinsic motivation theory by adding the technological dimension as a driving factor for autonomy and relevance in PAI learning. Findings about increasing motivation through educational videos confirm visual learning theory, while identifying digital infrastructure as an external variable that needs to be integrated into learning motivation models. This contributes to the development of new theories about the barriers and

opportunities of technology in religious education, especially in the elementary school context.

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