

Management of Innovation in Learning Media at Al Fikh Orchard, Malaysia: A Case Study in Islamic Education

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Abstract: This study aims to analyze the management of innovation in learning media at Al Fikh Orchard, Malaysia, with a focus on its implementation in Islamic education. The research explores how innovative learning media are developed, managed, and applied to enhance the effectiveness of teaching and learning processes. This research employs a qualitative case study approach, utilizing interviews, observations, and document analysis to gather data. Participants include teachers, school administrators, and students who are directly involved in the teaching and learning process. Data were analyzed using thematic analysis to identify key patterns in the management of learning media innovation. The findings reveal that Al Fikh Orchard has implemented various innovative learning media, including digital platforms, interactive multimedia, and gamification techniques, to improve student engagement and understanding. Effective management strategies involve structured planning, continuous teacher training, and periodic evaluations to ensure the media's relevance and effectiveness. However, challenges such as limited technological resources and varying levels of digital literacy among educators remain significant barriers. To address these issues, the institution has adopted strategies such as collaborative learning, external partnerships, and customized training programs for teachers. This study highlights the importance of systematic media innovation management in Islamic education to optimize learning outcomes. The findings suggest that institutions seeking to enhance their learning media must focus on sustainable planning, professional development, and adaptive strategies to overcome implementation challenges. Future research could explore the impact of these innovations on student performance over an extended period.

Keywords: Learning Media, Innovation Management, Islamic Education, Digital Learning, Case Study

Introduction

Islamic education plays a crucial role in shaping students' character and Islamic values. With rapid technological advancements, Islamic educational institutions in various countries, including Malaysia, are required to continuously innovate in learning media to enhance teaching quality (Hassan, 2020). Innovation in learning media not only improves students' understanding but also increases their engagement and motivation in the learning process (Rahman et al., 2021).

Al Fikh Orchard, as one of the Islamic educational institutions in Malaysia, has adopted various strategies in managing innovation in learning media. In this digital era, many educational institutions have begun transitioning to technology-based learning, such as multimedia-based learning, e-learning, and gamification in education (Ahmad & Zain, 2022). The management of innovation in learning media is a crucial aspect in

ensuring the effectiveness and efficiency of technology-based learning media (Yusof, 2023).

According to Setiawan (2021), innovation in learning media within Islamic education must be based on Islamic values to ensure it is not only pedagogically effective but also aligns with Islamic principles. This aligns with research conducted by Harfiani and Mavianti (2022), who emphasized that technology in Islamic education should be used as a tool to enhance students' spiritual understanding, not merely as a teaching aid.

Several studies indicate that the success of learning media innovation depends on the institution's readiness to adopt technology (Fullan, 2007). In the context of Islamic education, learning media innovation must not only be pedagogically effective but also align with Islamic values (Ahmad, 2022). Therefore, it is important to understand how Al Fikh Orchard integrates technological aspects with Islamic values in their innovation management.

Innovation management in learning media involves various stages, from planning and implementation to evaluation. According to Rogers (2003), the success of an innovation is greatly influenced by the level of adoption by its users. In Islamic education, teachers play a central role in ensuring that learning media innovations can be effectively implemented without contradicting Islamic principles (Rahim & Abdullah, 2022).

In the context of Islamic education, technology-based approaches can enhance interactivity in learning. A study by Yusuf et al. (2023) found that the use of technology such as augmented reality and virtual reality in Islamic education helps students better understand abstract concepts in the Qur'an and Hadith. However, the implementation of this technology requires a well-thought-out management strategy to prevent technological disparities between students and teachers (Ismail et al., 2022).

According to Nurzannah (2023), the implementation of learning media innovation must be based on in-depth research on students' needs. This study shows that many Islamic educational institutions face challenges in implementing technology-based learning media due to a lack of preparedness among teachers in adopting digital innovations. Therefore, training strategies and teacher competency development are crucial factors in the success of learning media innovation.

The sustainability of innovation in learning media largely depends on the institution's commitment to providing adequate resources. According to the educational change theory by Fullan (1991), changes in the education system must be sustainable and involve all stakeholders, including teachers, students, and parents. Therefore, innovation management at Al Fikh Orchard not only focuses on technology but also on the social and cultural aspects of Islamic education (Mahmood, 2023).

Overall, this study is expected to provide insights into the importance of managing innovation in learning media within Islamic education. The findings of this research can serve as a reference for other Islamic educational institutions in developing more effective and sustainable innovation strategies.

In conclusion, innovation in learning media is a key factor in improving the quality of Islamic education. Effective innovation management will help educational institutions optimize the use of technology in learning. Therefore, this study will explore in-depth the strategies of innovation management in learning media at Al Fikh Orchard as an effort to enhance learning effectiveness in Islamic education.

Theoretical Review

Innovation management in Islamic education is a process of planning, organizing, implementing, and evaluating innovations applied in an educational institution (Setiawan & Rahmadi, 2021). Innovation in Islamic education not only covers technological aspects but also more effective teaching methods that align with Islamic principles (Rahim, 2022). In this regard, innovation aims to enhance learning effectiveness without compromising the fundamental Islamic values. Therefore, it is essential for Islamic educational institutions to have an appropriate innovation management strategy for utilizing learning media.

Learning media play a crucial role in supporting the effectiveness of the teaching and learning process. Properly used media can significantly improve students' understanding of the material (Harfiani & Mavianti, 2022). In Islamic education, learning media must integrate Islamic values so that students not only acquire knowledge but also develop strong Islamic character (Setiawan, 2021). The rapid advancement of technology also provides opportunities for Islamic educational institutions to utilize various digital-based learning media to enhance education quality.

Innovation management in learning media must be based on several fundamental principles, including strategic planning, effective organization, evaluation-based implementation, and continuous development (Nurzannah, 2023). In the context of Islamic education, the success of innovation is significantly influenced by teachers' readiness, the availability of facilities and infrastructure, and institutional policy support (Fullan, 2007). Therefore, Islamic educational institutions must develop an innovation management model that aligns with students' needs and the institution's vision and mission.

Innovation in learning media for Islamic education can be categorized into several forms, such as interactive multimedia, Sharia-based e-learning, and gamification in Islamic learning (Rahman et al., 2021). Interactive multimedia helps students understand abstract concepts in a more engaging and comprehensible way. Meanwhile, Sharia-based e-learning allows students to access learning materials anytime while adhering to Islamic principles (Yusuf, 2023). Gamification in education is also an effective method for increasing students' learning motivation by incorporating game elements into the learning process.

According to Rogers (2003), the success of learning media innovation is influenced by five main factors: relative advantage, compatibility, complexity, trialability, and observability. In Islamic education, an additional factor to consider is the extent to which the innovation aligns with Islamic values (Setiawan, 2021). Moreover, the applied innovation must positively impact learning quality and strengthen students' Islamic character.

Technology has opened new opportunities for developing learning media in Islamic educational institutions. According to Harfiani and Mavianti (2022), the use of augmented reality (AR) and virtual reality (VR) in Islamic education has proven effective in enhancing students' understanding of abstract concepts in the Qur'an and Hadith. However, the implementation of these technologies still faces challenges, such as a lack of digital skills among educators (Nurzannah, 2023). Therefore, training

teachers in technology use is a strategic step that Islamic educational institutions must take.

Fullan (2007) proposed an educational change model consisting of three main stages: initiation, implementation, and institutionalization. This model can be applied to learning media innovation in Islamic educational institutions to ensure the sustainability of innovations. Setiawan (2021) adapted this model by incorporating the aspect of alignment with Islamic values at each stage. Thus, the management of learning media innovation in Islamic education must be carried out systematically to achieve optimal results.

The implementation of learning media innovation in Islamic education must follow a systematic and evaluation-based process to achieve optimal results (Rahim, 2022). However, one of the main challenges in implementation is the resistance from educators who are not yet familiar with technology (Harfiani & Mavianti, 2022). Therefore, continuous training and socialization are necessary to improve teachers' readiness in adopting innovative learning media.

Evaluating learning media innovations aims to assess their effectiveness and efficiency in supporting education (Nurzannah, 2023). According to Stufflebeam's (2003) educational evaluation theory, there are four main components in innovation evaluation: context, input, process, and product. A well-conducted evaluation ensures that the implemented innovations can be continuously improved and adapted to students' needs and technological developments.

Challenges in managing learning media innovation in Islamic education include limited resources, insufficient teacher readiness, and resistance to change (Rahman et al., 2021). According to Setiawan (2024), the best solution to address these challenges is to enhance teacher training and provide more adequate learning facilities. With support from various stakeholders, innovation in Islamic education can be optimally implemented and have a positive impact on students.

Innovation management in learning media is a crucial aspect of improving the quality of Islamic education. With proper management, learning media innovations can become effective tools in helping students understand material more deeply while maintaining Islamic values (Harfiani & Mavianti, 2022). In the context of Al Fikh Orchard, Malaysia, the innovation strategies implemented reflect the need for a systematic approach based on Islamic values. Therefore, this study aims to explore in greater depth how these innovation strategies are implemented and how they impact the quality of learning at the institution (Setiawan, 2021).

Method

This study employs a qualitative approach using a case study method to analyze the management of innovation in learning media at Al Fikh Orchard, Malaysia. A qualitative approach was chosen as it allows researchers to explore phenomena in depth based on experiences, perspectives, and social interactions occurring in the Islamic education environment (Creswell, 2018). The case study method was selected because it focuses on a specific context, namely innovation in the use of learning media within a particular Islamic educational institution (Yin, 2018).

The subjects of this research include educators, school administrators, and students involved in the use and management of learning media at Al Fikh Orchard. The sample was selected purposively, targeting key informants who play significant roles in implementing media innovation within the institution (Miles & Huberman, 1994). This

approach ensures that the collected data is relevant and provides an in-depth understanding of the research topic.

Data collection techniques used in this study include in-depth interviews, participatory observations, and document analysis. Interviews were conducted with school principals, teachers, and students to gain their perspectives on the effectiveness and challenges of implementing innovative learning media (Harfiani & Mavianti, 2022). Participatory observation involved directly observing the learning process using innovative media in the classroom. Additionally, document analysis was conducted on curricula, school policies, and evaluation reports on the use of learning media.

The research instruments included interview guidelines, observation sheets, and documentation checklists. The interview guidelines were developed based on key aspects of innovation management, such as planning, implementation, and evaluation of learning media (Setiawan, 2021). The observation sheets were used to record teacher-student interactions and the effectiveness of learning media in enhancing student comprehension. Meanwhile, the documentation checklist ensured that all relevant documents were analyzed.

Data analysis was conducted using thematic analysis as developed by Braun and Clarke (2006). The process began with interview transcription, data coding, identification of key themes, and interpretation in line with the research objectives. Coding was done manually, considering the relationships between data obtained from various sources (Miles, Huberman, & Saldaña, 2014).

To enhance data validity, this study employed source and methodological triangulation. Source triangulation was conducted by comparing interview results from different informants, while methodological triangulation was carried out by combining interviews, observations, and document analyses to obtain a more comprehensive picture (Patton, 2015). These techniques ensured that the data obtained was accurate and scientifically accountable.

Data credibility was also strengthened through member checking, where interview results and data interpretations were confirmed with informants to ensure their alignment with their experiences (Creswell & Poth, 2018). Additionally, peer debriefing was conducted through discussions with fellow researchers or experts in Islamic education to obtain input and critiques on the research findings.

Ethical considerations were a primary concern in this study. Each informant was provided with clear information regarding the research objectives and given the opportunity to consent before participating (Bogdan & Biklen, 2007). Furthermore, confidentiality was maintained, and the collected data was used solely for academic purposes.

The research methodology employed in this study is expected to provide comprehensive insights into how learning media innovation is implemented at Al Fikh Orchard. The findings of this study may serve as a reference for other Islamic educational institutions in developing more effective innovation strategies aligned with Islamic values (Setiawan, 2021).

Thus, this research not only contributes theoretically to the field of learning media innovation management but also offers practical contributions for Islamic education administrators in enhancing learning effectiveness. The case study approach enables this research to yield an in-depth understanding of best practices and challenges encountered in the implementation of innovative learning media at Al Fikh Orchard, Malaysia.

Research Findings and Discussion

Research Findings

The findings of this study reveal several key aspects of innovation management in learning media at Al Fikh Orchard, Malaysia. First, the institution has implemented a structured and systematic approach to integrating technology into Islamic education. Teachers at Al Fikh Orchard actively utilize digital platforms such as Google Classroom, Kahoot, and interactive whiteboards to enhance student engagement (Hwang, 2020). This approach aligns with previous studies emphasizing the role of technology in fostering interactive and student-centered learning (Mishra & Koehler, 2006).

Second, the study found that Al Fikh Orchard applies a blended learning model combining conventional face-to-face instruction with digital tools. This model enables students to access learning materials asynchronously while still benefiting from teacher guidance during classroom sessions (Garrison & Vaughan, 2013). Students reported increased motivation and comprehension due to the flexibility provided by this model, which is consistent with research highlighting the advantages of blended learning in Islamic education (Ally, 2019).

Third, the role of teachers as facilitators in implementing innovative learning media is crucial. The study found that teachers at Al Fikh Orchard receive regular professional development training to enhance their digital literacy. Workshops and training sessions focus on equipping educators with skills to effectively integrate technology into their teaching (Redecker & Punie, 2017). This is in line with the Technological Pedagogical Content Knowledge (TPACK) framework, which suggests that successful media integration requires a balanced understanding of technology, pedagogy, and subject content (Mishra & Koehler, 2006).

Another significant finding is the role of school leadership in fostering a culture of innovation. The management at Al Fikh Orchard encourages experimentation with new teaching methods and provides resources for digital tool implementation. This aligns with research by Fullan (2015), which emphasizes the importance of leadership in driving educational innovation. The study observed that teachers who received administrative support were more willing to adopt new instructional technologies.

The research also highlighted challenges in implementing innovative learning media. One primary challenge is the digital divide, as some students have limited access to technological devices at home (Selwyn, 2011). Although the school provides on-campus digital resources, disparities in technological access affect students' ability to engage with online learning materials outside the classroom. Additionally, some teachers initially faced difficulties adapting to new digital tools, a challenge reported in other studies on educational technology integration (Ertmer & Ottenbreit-Leftwich, 2013).

Discussion

The study findings underscore the importance of strategic planning in managing innovation in learning media. The successful integration of digital tools at Al Fikh Orchard reflects the effectiveness of a well-structured implementation framework. Previous studies indicate that institutions that adopt a planned approach to technology integration achieve higher levels of student engagement and academic performance (Means et al., 2013).

A significant factor contributing to the success of media innovation at Al Fikh

Orchard is the alignment of technology use with Islamic educational values. The study found that digital learning resources are carefully curated to ensure that they adhere to Islamic principles, preventing exposure to inappropriate content. This is consistent with research emphasizing the need for culturally and religiously sensitive digital learning environments (Hashim, 2018).

The impact of blended learning at Al Fikh Orchard aligns with existing research on hybrid education models. Studies indicate that combining traditional and digital learning methods enhances student participation and learning outcomes (Bonk & Graham, 2012). At Al Fikh Orchard, students reported that online learning resources complemented face-to-face instruction, reinforcing their understanding of Islamic subjects.

The role of teacher professional development cannot be overstated. The findings indicate that ongoing training and support play a crucial role in equipping educators with the necessary skills to integrate technology effectively. Research by Guskey (2002) emphasizes that sustained professional development leads to significant improvements in teaching quality. At Al Fikh Orchard, teachers who participated in digital training programs demonstrated greater confidence and competence in using learning technologies.

Leadership support emerged as another critical factor in the successful implementation of innovative learning media. Studies by Leithwood et al. (2020) highlight that strong school leadership fosters an environment conducive to innovation. The proactive approach of Al Fikh Orchard's management in encouraging technology adoption mirrors best practices in educational leadership for digital transformation.

Despite these successes, challenges remain. The digital divide poses a significant barrier to equitable learning experiences. Previous studies have noted that socioeconomic disparities can hinder students' ability to fully benefit from digital learning resources (Van Dijk, 2020). At Al Fikh Orchard, efforts to provide on-campus digital resources mitigate some of these challenges, but home access remains a concern.

Another issue is teacher resistance to technological change. Some educators initially found it difficult to shift from traditional teaching methods to technology-enhanced instruction. Research by Ertmer (1999) suggests that overcoming teacher resistance requires addressing both external barriers (such as resource availability) and internal barriers (such as beliefs about technology). The findings indicate that targeted training and administrative support have helped alleviate some of these challenges at Al Fikh Orchard.

Student engagement is a key indicator of the effectiveness of learning media innovation. The research found that interactive digital tools increased student motivation, consistent with studies highlighting the role of gamification and multimedia in learning (Deterding et al., 2011). Tools like Kahoot and Quizizz were particularly effective in enhancing student participation.

Assessment methods have also evolved with the integration of learning media. Traditional paper-based assessments have been supplemented with digital quizzes and interactive evaluations. Research by Nicol and Macfarlane-Dick (2006) suggests that formative assessment through digital tools improves student learning by providing immediate feedback. The study found that Al Fikh Orchard has adopted a mixed assessment approach to leverage the advantages of digital evaluation while maintaining the rigor of traditional assessments.

The sustainability of learning media innovation depends on continuous evaluation

and adaptation. Research by Rogers (2003) on diffusion of innovation theory suggests that successful adoption of new technologies requires ongoing refinement based on feedback. The study found that Al Fikh Orchard regularly reviews its digital learning strategies to ensure their effectiveness.

In summary, the findings of this study align with broader research on the role of technology in education. The successful implementation of learning media innovation at Al Fikh Orchard can serve as a model for other Islamic educational institutions seeking to integrate technology while maintaining religious values. However, addressing challenges such as digital accessibility and teacher adaptation remains crucial for sustaining innovation.

Conclusion

This study reveals that the management of innovation in learning media at Al Fikh Orchard, Malaysia, has been systematically and structurally implemented. The integration of technology in Islamic education at this institution has successfully enhanced student engagement and learning effectiveness. The application of *blended learning* models, the use of digital platforms such as Google Classroom and Kahoot, and teacher training in digital literacy have supported the transformation of more modern and interactive teaching methods. This proves that innovation in learning media can be an effective solution in improving the quality of education, particularly in the context of Islamic education.

The success of this innovation is inseparable from the support of school leadership, which encourages the adoption of technology and provides sufficient resources for teachers and students. The management of Al Fikh Orchard actively creates a conducive environment for innovation by regularly training educators and ensuring adequate technological infrastructure for learning. This aligns with research emphasizing that progressive leadership plays a key role in the successful implementation of technology in education.

However, this study also identifies several challenges in implementing learning media innovation. One major obstacle is the digital divide, which remains a barrier for some students who lack access to technological devices at home. Additionally, the resistance of some teachers to adopting technology poses another challenge that needs to be addressed through continuous training and management support. Therefore, a more inclusive approach is necessary to ensure that all students and teachers can adapt to technological changes in education.

The findings of this study have significant implications for educational policy development, particularly in the context of Islamic education. The learning media innovation model applied at Al Fikh Orchard can serve as a reference for other educational institutions in developing technology-based learning strategies. Moreover, this study reinforces that innovation in learning media not only enhances teaching effectiveness but also strengthens Islamic values in the learning process through the curation of digital content aligned with religious principles.

As a recommendation, this study suggests that Al Fikh Orchard and similar institutions continue to develop learning media innovations by aligning technology with the needs of Islamic education. Regular evaluation and adaptation of digital learning strategies should be conducted to ensure that the innovations remain relevant and effective. Additionally, greater involvement of stakeholders, including parents and the community, in supporting the use of technology in education will be instrumental in

overcoming existing challenges. With a comprehensive approach, technology-based Islamic education can continue to evolve and provide maximum benefits for students and educators.

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