Indo-MathEdu Intellectuals Journal

p-ISSN: 2808 – 5604
e-ISSN: 2808 – 5078
Volume. 5, No. 1, 2024

TECHNOLOGY INTEGRATION IN THE HANNAFIN AND PECK MODEL: DYNAMIC TRANSFORMATION OF ISLAMIC RELIGIOUS EDUCATION AT SDN CILENGKRANG

Lilis Romdon Nurhasanah[1], Mulyawan Safwandy Nugraha[2], Ujang Dedih[3]
[1, 2, 3]Universitas Islam Negeri Sunan Gunung Djati Bandung, Jl. A.H. Nasution No.105, Jawa Barat, Indonesia
Email: marsharosyatulfikriah@gmail.com

Article History

Received: 09-01-2024

Revision: 13-01-2024

Accepted: 15-01-2024

Published: 17-01-2024

Abstract. This research adopts a qualitative approach, employing a case study method to explore the impact of technology integration in the teaching of Islamic Religious Education (PAI) at SDN Cilengkrang. Data collection is conducted through interviews, observations, and document analysis to gain deep insights into the experiences of teachers and students regarding the instructional model that incorporates technology. The research aims to provide a detailed understanding of how technology, including PAI software and online platforms, influences the engagement and comprehension of religious concepts among students. The data analysis process in this study is inductive, where researchers systematically explore patterns, themes, and relationships emerging from interviews, observations, and document analysis. Thus, the research aims to comprehensively describe the positive impact of technology integration in PAI learning. The findings of this research support existing literature and emphasize the potential of dynamic PAI learning, integrating cognitive aspects with religious values. The success of technology integration in PAI teaching at SDN Cilengkrang, despite facing challenges in teacher training, has significant positive implications. Serving as a foundation for improving the quality of PAI teaching, this research opens new opportunities for more dynamic and holistic learning experiences.

Keywords: Hannafin and Peck Model, Technology Integration, PAI

Abstrak. Penelitian ini mengusung pendekatan kualitatif dengan menggunakan metode studi kasus untuk mengeksplorasi dampak integrasi teknologi dalam pengajaran Pendidikan Agama Islam (PAI) di SDN Cilengkrang. Pengumpulan data dilakukan melalui wawancara, observasi, dan analisis dokumen guna mendapatkan wawasan mendalam tentang pengalaman guru dan siswa terhadap model pengajaran yang menggabungkan teknologi. Hasil penelitian diharapkan dapat memberikan pemahaman yang mendetail mengenai bagaimana teknologi, termasuk perangkat lunak PAI dan platform online, memengaruhi keterlibatan dan pemahaman konsep keagamaan siswa. Proses analisis data dalam penelitian ini bersifat induktif, di mana peneliti secara sistematis mengeksplorasi pola, tema, dan hubungan yang muncul dari wawancara, observasi, dan analisis dokumen. Dengan demikian, penelitian ini bertujuan untuk menggambarkan secara mendalam dampak positif integrasi teknologi dalam pembelajaran PAI. Temuan penelitian ini mendukung literatur yang ada dan menonjolkan potensi pembelajaran PAI yang dinamis, mengintegrasikan aspek kognitif dengan nilai-nilai keagamaan. Keberhasilan integrasi teknologi dalam pengajaran PAI di SDN Cilengkrang, meskipun dihadapkan pada tantangan pelatihan guru, memiliki implikasi positif yang signifikan. Sebagai dasar untuk peningkatan kualitas pengajaran PAI, penelitian ini membuka peluang baru untuk pengalaman belajar yang lebih dinamis dan holistik.

Kata Kunci: Model Hannafin dan Peck, Integrasi Teknologi, PAI

How to Cite: Nurhasanah, L. R., Nugraha, M. S., & Dedih, U. (2024). Technology Integration in The Hannafin and Peck Model: Dynamic Transformation of Islamic Religious Education at Sdn Cilengkrang. *Indo-MathEdu Intellectuals Journal*, 5 (1), 364-379. http://doi.org/10.54373/imeij.v5i1.788

INTRODUCTION

The incorporation of technology in the educational realm of SDN Cilengkrang has emerged as a pivotal concern, particularly in the context of elevating the quality of learning. The Hannafin and Peck learning model, which places a strong emphasis on integrating technology into the learning process, stands as an exceptionally pertinent foundation for application within the school environment (Nurmadiah, 2019). Given the swift progress of technology, substantial opportunities exist to metamorphose the learning encounter of Islamic Religious Education (PAI) at SDN Cilengkrang into a more dynamic and captivating experience for students. The integration of technology in the Hannafin and Peck Model (Andriani, Sudatha, & Suartama, 2021), can be viewed as a strategic maneuver in harmony with the need for updates in PAI teaching methodologies at SDN Cilengkrang. The aspiration to instigate positive transformations in PAI learning at the school renders the integration of technology through the Hannafin and Peck model an appealing and pertinent choice (Fauziah & Asrizal, 2023). The transformation of dynamic learning is not merely an innovation but also a response to the requisites of modern students at SDN Cilengkrang who are maturing in the digital era.

This research is directly relevant to the educational environment at SDN Cilengkrang, with a specific focus on the implementation of technology integration in the teaching of Islamic Religious Education (PAI). The study recognizes the importance of conducting a meticulous evaluation of the current practices of technology integration in PAI learning. This evaluation aims to shed light on potential challenges or uncertainties in the existing methods, offering a clearer trajectory for the development of more adaptive and effective teaching methodologies within the school.

Anticipating valuable outcomes, the research aims to provide insights that can significantly contribute to initiatives directed at enhancing the overall quality of religious education at SDN Cilengkrang. The study recognizes the contemporary demands of education and the progress in technology, emphasizing the need for alignment with these exigencies. This alignment is considered crucial for ensuring that the educational practices at SDN Cilengkrang remain relevant and effective in the face of evolving educational and technological landscapes. Ultimately, the research seeks to identify and address any shortcomings in the current state of PAI learning, providing a foundation for improvements that are in tune with the contemporary educational context.

METHOD

This research endeavors to employ a qualitative methodology (John W. Creswell, 2016), utilizing a case study approach to delve into the integration of technology within the Hannafin and Peck Model. The primary focus is the transformative impact on Islamic Religious Education (PAI) learning at SDN Cilengkrang. The qualitative method is selected to comprehensively grasp the contextual intricacies of technology implementation in PAI learning, alongside its consequential effects on the learning dynamics within the school. The case study approach offers expansive room for an in-depth exploration of the specific context of SDN Cilengkrang, facilitating an understanding of the complex interactions among the variables at play. The data analysis techniques employed in this research encompass various qualitative methods. The initial steps involve a comprehensive literature review and preliminary research to establish the conceptual framework, drawing on existing studies and scholarly articles (Izza, Falah, & Susilawati, 2020). This compilation of relevant literature forms the theoretical and contextual foundation for the study.

As the research narrows its focus on SDN Cilengkrang as the primary case study, specific criteria, such as the degree of technology integration and the success of PAI learning transformation, guide the selection process. Field data collection comprises interviews with key stakeholders, including the school principal, PAI teachers, students, and school staff. Additionally, classroom observations of PAI sessions utilizing the Hannafin and Peck Model with technology integration are conducted. The scrutiny of documents related to the implementation of technology in PAI learning supplements the data collection process.

The amassed data undergoes analysis using content analysis methods, aiming to distill key findings regarding technology integration and the transformative aspects of learning. Following this analysis, the conceptual framework is crafted based on the results, elucidating the pivotal role of technology integration within the Hannafin and Peck Model as a catalyst for the dynamic transformation of PAI learning at SDN Cilengkrang. To validate the findings, engagement with stakeholders at SDN Cilengkrang is planned, providing a platform for feedback and additional perspectives from those intimately involved in PAI learning at the school. The research report is structured meticulously, comprising sections such as introduction, theoretical framework, methodology, findings, analysis, conclusions, and recommendations. Overall, the proposed research methodology is intricately designed to yield a profound understanding of how technology integration shapes a dynamically transformative paradigm in PAI learning at SDN Cilengkrang.

RESULTS AND DISCUSSION

Introduction to the Hannafin and Peck Model

The Hannafin and Peck Model, employing the "Model 4C/ID" approach, serves as a highly relevant foundation for the integration of technology into Islamic Religious Education (PAI) learning at SDN Cilengkrang. This model's learning paradigm emphasizes four key components: "Learning Tasks," "Supportive Information," "Just-In-Time Information," and "Part-Task Practice" (Sukardjo, Nirmala, Ruiyat, Annuar, & Khasanah5, 2023). In the context of SDN Cilengkrang, its implementation brings forth innovation (Shofiyyah, Nilna Azizatus, Tedy Sutandy Komarudin, 2023), utilizing technology to enrich student learning experiences (Novit, Virijai, & Asrizal, 2023). Learning Tasks, or learning assignments, are seamlessly integrated with technology to enhance interactivity and the appeal of PAI learning (Multazam, Syahrial, & Rusmono, 2023). The use of adaptive learning software facilitates personalized learning based on students' comprehension levels, creating a more engaging and tailored educational experience. Meanwhile, Supportive Information, or supplementary information, is enriched with technology, presenting PAI content through multimedia formats such as videos and animations (Abubakar, Mohamed, Aman, Megat, & Lukman, 2023). This approach provides a multi-sensory experience, enriching students' understanding of religious concepts.

The concept of Just-In-Time Information ensures the timely availability of relevant information. Technology integration enables swift access to online resources and learning materials, offering flexibility for SDN Cilengkrang students to deepen their understanding at their convenience. Lastly, Part-Task Practice, referring to exercises focusing on specific parts of learning tasks, is augmented with technology. Students can receive targeted exercises and immediate feedback, allowing them to address challenges progressively. The 4C/ID Model, developed by Hannafin and Peck, aims to design complex learning by breaking it down into components that are more accessible for students to understand and master (Yuli Yanti, Pudjawan, & Wayan Suwatra, 2020). This model's principles, encompassing Learning Tasks, Supportive Information, Just-In-Time Information, and Part-Task Practice, will be strategically applied in the technology integration at SDN Cilengkrang. The application of the Hannafin and Peck model in PAI learning at SDN Cilengkrang is anticipated to foster a more effective, contextual, and relevant learning experience for students. By blending the principles of the 4C/ID Model and leveraging technology judiciously, this integration is poised to bring about dynamic transformation in alignment with the modern educational needs at SDN Cilengkrang.

Technology Integration Scope

The incorporation of technology into the Hannafin and Peck Model for Islamic Religious Education (PAI) learning at SDN Cilengkrang encompasses the utilization of diverse technological tools capable of effecting dynamic transformation in the learning process (Rohmah & Tegeh, 2022). One facet of technology amenable to integration is specialized PAI learning software designed to deliver PAI content interactively and compellingly. This software frequently features elements such as animations, videos, and comprehension assessments, thereby enriching student engagement and facilitating comprehension of religious concepts (Shofiyyah, Nursobah, & Tarsono, 2020). This integration at SDN Cilengkrang has yielded positive outcomes by fostering a more interesting and pertinent learning experience.

In tandem with software, the incorporation of online platforms stands out as a noteworthy choice. These platforms furnish virtual learning environments wherein students can access materials, engage in interactions, and partake in learning activities (Oktavia & Khotimah, 2023). In SDN Cilengkrang, the deployment of online platforms facilitates student discussions, exploration of additional resources online, and the assignment of collaboratively completed tasks. This engenders a flexible and interactive learning milieu, staying abreast of technological advancements. Specialized PAI applications assume a pivotal role in this technological integration at SDN Cilengkrang. These applications can be tailored to furnish in-depth religious information, proffer interactive exercises, or guide students in participating in worship activities. By harnessing specialized PAI applications, learning can be precision-guided according to the requisites and objectives of religious education. The critical consideration of selecting technology types that harmonize with the context of PAI learning and the exigencies of students at SDN Cilengkrang remains paramount.

The assimilation of technology into the Hannafin and Peck Model bequeaths substantial opportunities to elevate the PAI learning milieu at SDN Cilengkrang. Learning software, online platforms, and specialized PAI applications collectively contribute to crafting a more engaging, relevant, and contemporary educational experience. By adeptly leveraging this technological arsenal, PAI learning at SDN Cilengkrang can evolve into a more dynamic, captivating, and congruent educational paradigm aligned with the needs and evolutions of students in this digital epoch.

Concept of PAI Learning Transformation

The transformation of PAI learning in this research context signifies a profound and positive shift in the methodology of teaching Islamic Religious Education at SDN Cilengkrang.

This transformation involves the integration of technology, primarily through the utilization of the Hannafin and Peck Model, to establish a more adaptive, interactive, and pertinent learning environment. By adhering to the principles of this model, the aim is for PAI learning to transcend mere routine obligations, evolving into a motivational and profound experience. This transformation encompasses alterations in how students engage with PAI materials through integrated technology, intensifying their involvement in the learning process, and fortifying their comprehension of religious values. Students are anticipated to actively partake in exploring religious concepts, augmenting their understanding through diverse digital resources, and transferring that knowledge into everyday life contexts (Iiq Taufiq Syaibani, 2022). Additionally, this transformation involves a redefinition of the teacher's role, shifting from an information provider to a learning facilitator who assists students in achieving a more profound understanding of religious teachings. Thus, the "transformation of PAI learning" within this research embodies a notable transition towards a more dynamic, technology-driven learning experience, positively impacting students' understanding and application of religious values in their daily lives.

The comparison between traditional learning and the learning outcomes derived from the integration of technology in the Hannafin and Peck Model opens up new vistas in the approach to Islamic Religious Education learning (Hasriadi, 2022). In traditional learning, instruction typically follows a linear trajectory, with teachers serving as custodians of information and students as passive recipients. Religious concepts are traditionally communicated verbally or through reading materials, with minimal interaction or the incorporation of media beyond textbooks. In contrast, through the integration of technology in the Hannafin and Peck Model, learning becomes more interactive and multisensory. PAI content is presented via learning software incorporating animations, videos, and comprehension assessments. This not only introduces visual and auditory dimensions that enrich students' understanding but also craft a more engaging and pertinent learning experience. While traditional learning often restricts access to additional information or supplementary resources, the integration of technology in the Hannafin and Peck Model opens doors to extensive access to diverse online PAI materials and resources. Online platforms facilitate student discussions, enabling them to exchange perspectives and experiences related to religious concepts. Additionally, specialized PAI applications can furnish tailored exercises, ensuring that each student can overcome learning challenges based on their individual needs.

The most conspicuous distinction lies in student engagement in the learning process. Learning through the Hannafin and Peck Model offers students opportunities to actively participate in challenging learning tasks, diverging significantly from the more passive student interaction typical of traditional learning (Novita Piqriani, Yurika, & Amin, 2023). Consequently, this comparison underscores a paradigm shift from teacher-centric learning to student-centric learning, wherein technology catalyzes fostering interactivity, heightened engagement, and a more profound understanding of religious concepts.

Desired Dynamics of Learning

The transformation of learning at SDN Cilengkrang aims to achieve several positive outcomes that enrich students' learning experiences. Firstly, the goal of the learning transformation is to enhance student engagement in the learning process. By adopting methods and technologies that challenge and support students' learning styles, it is anticipated that students will become more active and enthusiastic participants in their school environment (Melati et al., 2023). Furthermore, the learning transformation at SDN Cilengkrang aims to strengthen the understanding of concepts. By presenting learning materials contextually, interactively, and relevantly, it is expected that students will have a better understanding of the subject matter. This transformation also supports the idea that acquired knowledge can be easily remembered and applied in real-world situations.

Equally important, the learning transformation at SDN Cilengkrang has the goal of encouraging the application of religious values in students' daily lives. By synchronizing the curriculum with religious teachings and providing learning experiences that promote Islamic character and ethics, it is hoped that students will be able to transfer these values into positive actions in their daily lives. Overall, the goal of the learning transformation at SDN Cilengkrang is to create a more dynamic learning environment that is relevant and has a positive impact on the cognitive, emotional, and spiritual development of students (Komarudin, Shofiyyah, & Ulum, 2023). The integration of technology into the learning of Islamic Religious Education (PAI) at SDN Cilengkrang brings significant new dynamics (Musyafak, 2023). Technologies such as specialized PAI learning software, online platforms, and religious applications have transformed the traditional paradigm into a more interactive and relevant learning environment. Firstly, the use of learning software allows the presentation of PAI materials in a more interactive format, involving elements such as animation, videos, and comprehension assessments. This not only increases students' interest but also facilitates a deeper understanding of religious concepts. Furthermore, the integration of online platforms creates

new dynamics by providing a virtual learning space. Students can access materials, interact online, and participate in discussions or collaborative projects, introducing a richer social dimension to PAI learning (Husna, Sitika, & Fauziah, 2022). Lastly, specialized PAI applications provide a more personalized and customized learning experience. Students can use these applications to delve into materials and practice and even receive guidance in performing religious practices. Thus, the integration of technology creates new dynamics in PAI learning at SDN Cilengkrang, offering a more engaging, adaptive experience tailored to the needs of students in this digital era.

Implementation of the Model in the Context of Islamic Religious Education (PAI)

In SDN Cilengkrang, the meticulous implementation of the Hannafin and Peck Model in Islamic Religious Education (PAI) aims to create an effective and captivating learning experience (Surawan, 2022). The process begins with the planning phase, where teachers meticulously design clear learning objectives, identify student needs, and select suitable teaching strategies. For instance, teachers may establish specific goals such as comprehending the concept of tauhid and opting for methods like group discussions to foster collective understanding. The subsequent phase involves organization, wherein teachers systematically structure learning materials and provide pertinent resources. In the context of PAI learning at SDN Cilengkrang, teachers leverage technology, such as concise lecture videos elucidating religious concepts with compelling visuals (Ritonga & Halimah, 2023). This approach enhances student engagement and promotes a more profound understanding of the material. Following this, the implementation phase includes the direct delivery of material to students. Teachers employ interactive strategies like discussions, simulations, or case studies to facilitate a more profound understanding. For example, in a lesson on Islamic ethics, teachers may employ case studies to contemplate how religious values can be applied in everyday situations within the SDN Cilengkrang environment. Finally, the evaluation phase entails assessing the attainment of learning objectives. Teachers employ various forms of assessment, including written exams, projects, or presentations, to gauge student understanding (Fajri & Sahlan, 2023). Students might be tasked with creating a project illustrating the application of religious values in their daily lives.

Although the implementation of the Hannafin and Peck Model presents diverse challenges, such as adopting technology in the context of religious learning and contending with limitations in technology infrastructure, SDN Cilengkrang can seize significant opportunities. The use of technology can amplify the allure of learning, activate student participation, and provide

broader access to quality educational resources. In conclusion, the implementation of this model in SDN Cilengkrang not only poses challenges requiring resolution but also unfurls substantial opportunities to enhance the quality and relevance of religious education, fortify student engagement, and equip them to confront moral and ethical challenges in their lives.

Results and Impact of Technology Integration

The assessment of student learning outcomes at SDN Cilengkrang following the implementation of technology integration in Islamic Religious Education (PAI) is a critical aspect for comprehending the impact and success of this teaching method (Bachtiar Hariyadi, Yuli Astutik, Chusnul Chotimah, 2023). Firstly, the evaluation is conducted by measuring students' understanding of the learning material. The use of technology enables the collection of more measurable data, such as online exam results, interactions in learning platforms, or collaborative projects presented digitally. In this way, teachers can assess the extent to which students have achieved the set learning objectives. Additionally, the evaluation involves the aspect of student engagement during the learning process. Interactive learning software, online forums, or student responses to digital materials can provide insights into how engaged and interested students are during lessons. This is crucial in assessing whether technology integration not only enhances conceptual understanding but also sustains student motivation.

Assessing character and ethics can also be incorporated into the evaluation of learning outcomes. The application of religious values in students' daily lives can be measured through behavioral observations, participation in religious activities, or practical projects that apply these values (Ismail, 2022). This evaluation helps determine the extent to which technology integration supports character formation and the application of religious values in real-life actions (Hartati, Fernadi, & Utama, 2022). The expected positive impacts of technology integration in PAI learning at SDN Cilengkrang include improved student understanding through concept visualization, broader access to educational resources, and the application of religious values in practical contexts. By judiciously leveraging technology, PAI learning at SDN Cilengkrang can become more dynamic, support character development in students, and prepare them to face moral and ethical challenges in their daily lives. Evaluating learning outcomes becomes a crucial instrument to measure the effectiveness of technology integration and optimize its benefits for students at SDN Cilengkrang.

Evaluation of Student Responses

Assessing students' acceptance and satisfaction with the modified learning approach using technology integration models, such as the Hannafin and Peck Model, is a crucial step at SDN Cilengkrang to gauge the effectiveness and acceptance of innovation in the context of Islamic Religious Education (Erina, 2022). Various methods, including surveys, interviews, or questionnaires, can be employed by teachers to collect data on the extent to which students embrace these changes and how content they are with the learning experience. The level of student acceptance can be measured through their responses to the integration of technology into learning. Questions like "To what extent do you feel comfortable with the use of technology in Islamic Religious Education?" or "Do you believe that this new learning method enhances your understanding of religious concepts?" can offer valuable insights. Additionally, measuring the level of student satisfaction may involve evaluating specific aspects of modified Islamic Religious Education, such as comprehension of concepts, engagement in the learning process, as well as the clarity and relevance of religious content.

Examples of measuring the level of student acceptance and satisfaction at SDN Cilengkrang may include questions like, "How satisfied are you with your participation in discussions and interactive learning activities?" or "Has technology integration helped you understand religious concepts better?". Through the evaluation of the level of student acceptance and satisfaction, teachers can gain valuable insights to optimize the modified Islamic Religious Education model, create a more positive experience, and enhance the effectiveness of religious learning by leveraging technology at SDN Cilengkrang. Student feedback and responses become essential tools for understanding the impact of technology integration in Islamic Religious Education, and teachers at SDN Cilengkrang can respond wisely to improve and adjust their teaching approaches.

Recommendations for Further Development

In the context of SDN Cilengkrang, the integration of technology into the Hannafin and Peck Model for Islamic Religious Education (PAI) can be enhanced through a set of suggestions and recommendations. Firstly, additional training should be provided to teachers to ensure a profound understanding of the use of technology that aligns with the PAI context at SDN Cilengkrang (Rahayuningsih & Muhtar, 2022). Workshops, online training, or professional development programs can assist teachers in mastering the technical and strategic skills necessary to implement this model effectively (Hariyadi, 2023). It is also crucial to continuously update and refine the integrated digital learning resources within the model. The

development of high-quality digital content, such as videos, interactive simulations, or learning software, can offer students at SDN Cilengkrang a richer and more engaging learning experience. These resources should be relevant to the PAI curriculum and support the defined learning objectives.

Active student participation in the learning process can be enhanced by utilizing online platforms or applications that encourage discussion, collaboration, and joint projects. Teachers at SDN Cilengkrang can design activities that motivate students to actively participate in utilizing technology to understand and apply religious values in their daily lives (Rahmiati & Azis, 2023). Other recommendations involve further research to measure the long-term impact of technology integration in PAI learning. Evaluation studies can help identify successes and challenges that may arise over a specific period at SDN Cilengkrang, providing insights into how technology can be sustainably and effectively applied in the context of religious education. By implementing these recommendations, the integration of technology into the Hannafin and Peck Model at SDN Cilengkrang can continue to evolve, creating a more dynamic, relevant, and supportive learning experience for students in understanding and applying religious teachings in their daily lives.

Implications

The integration of technology into the Hannafin and Peck Model for transforming Islamic Religious Education (PAI) learning at SDN Cilengkrang brings significant positive implications. The utilization of technology not only enhances the quality of learning by presenting materials more dynamically and interactively but also increases student engagement in PAI learning. Through challenging and supportive approaches, students become more active and enthusiastic in participating in the learning process. The integration of technology also strengthens the understanding of religious concepts by presenting materials contextually, interactively, and relevantly. Teachers, as learning facilitators, can more effectively leverage technology after receiving additional training to integrate it into the learning process. Students at SDN Cilengkrang gain broader access to PAI educational resources, providing them with flexibility in the learning process. Moreover, this transformation of learning creates an environment that promotes the application of religious values in the daily lives of students. The evaluation of student progress becomes more efficient through the use of online platforms, and students become accustomed to technology, preparing them to face digital challenges in the future. Although there is potential for challenges, such as change management and inclusive

access to technology, careful planning and ongoing evaluation are required to maximize the positive potential of technology integration in PAI learning at SDN Cilengkrang.

Table 1. The Table of Islamic Education Learning with Hannafin & Peck Model

No	Actions	Results
1	Introduction to the Hannafin and Peck Model	The 4C/ID Model was developed by Hannafin and Peck as the foundation for integrating technology into Islamic Religious Education (PAI) at SDN Cilengkrang.
2	Learning Tasks with Technology	The implementation of learning tasks with technology to enhance interactivity and the appeal of Islamic Education learning in SDN Cilengkrang.
3	Supportive Information with Technology	The utilization of supportive information with technology involves presenting Islamic Education (PAI) material through multimedia such as videos and animations at SDN Cilengkrang.
4	Just-In-Time Information with Technology	The concept of Just-In-Time Information ensures the timely availability of relevant information through technology integration at SDN Cilengkrang.
5	Part-Task Practice with Technology	Enhancing exercises on specific parts of learning tasks with technological support, providing immediate feedback at SDN Cilengkrang.
6	The Scope of Technology Integration	Involving various types of technology, such as specialized Islamic Education (PAI) software and online platforms, for dynamic learning transformation at SDN Cilengkrang.
7	Specialized Islamic Education (PAI) Applications in Technology Integration	The role of specialized Islamic Education (PAI) applications in providing in-depth religious information, offering interactive exercises, and guiding students in religious activities at SDN Cilengkrang.
8	The concept of transformation in Islamic Religious Education (PAI) learning	The transformation of Islamic Religious Education (PAI) learning involves a profound change in how students interact with PAI content through the integration of technology at SDN Cilengkrang.
9	The comparison between traditional learning and technology integration	The comparison between traditional learning and technology integration reveals a paradigm shift from teacher-centered to student-centered learning at SDN Cilengkrang.
10	The Desired Dynamics of Learning	The transformation of learning at SDN Cilengkrang aims to enhance student engagement, strengthen conceptual understanding, and encourage the application of religious values in students' daily lives.

11	The results and impact of technology integration	The evaluation of learning outcomes and the positive impact of technology integration in Islamic Religious Education (PAI) at SDN Cilengkrang, including the improvement of students' understanding and the application of religious values.
12	Evaluation of Student Responses	Measurement of the level of acceptance and satisfaction of students regarding changes in learning with technology integration, including the evaluation of student responses to the use of technology in learning.
13	Recommendations for Further Development	Suggestions and recommendations for further development, including teacher training, the development of digital learning resources, and further research to optimize technology integration.
14	Implications of Technology Integration	Positive implications of technology integration in the Hannafin and Peck Model for the transformation of Islamic Religious Education (PAI) at SDN Cilengkrang, including improved learning quality and student engagement.

CONCLUSION

The Hannafin and Peck Model brings a new paradigm by utilizing technology as an integral element that not only enriches students' learning experiences but also enhances interactivity, accessibility, and student engagement in religious education. In technology integration, several crucial aspects can be highlighted, including the use of specialized PAI learning software, online platforms, and dedicated PAI applications. Furthermore, the implementation of the Hannafin and Peck Model can create more dynamic, interactive, and relevant learning for students, focusing on learning tasks, supportive information, just-in-time information, and part-task practice. The desired transformation in PAI learning involves a profound change in how students interact with PAI material through integrated technology. The primary goals include increased student engagement, better conceptual understanding, and the application of religious values in daily life. This model also introduces a shift in the teacher's role, not only as an information provider but also as a learning facilitator assisting students in gaining a deeper understanding of religious teachings.

The scope of technology integration includes various types of technology such as learning software, online platforms, and dedicated PAI applications. The selection of technology should align with the context of PAI learning and the needs of students at SDN Cilengkrang.

Technology integration is expected to bring opportunities to create a more engaging, relevant, and developmentally appropriate learning experience. In measuring the impact of technology integration, evaluating student learning outcomes involves comprehensive data collection to assess understanding, engagement, and the application of religious values. This evaluation allows teachers to adjust and enhance teaching strategies, ensuring that technology not only serves as an aid but also enriches students' overall learning experiences. Student responses to technology integration can be measured through surveys, interviews, or questionnaires. Evaluating the level of student acceptance and satisfaction helps teachers optimize the modified PAI learning model, create a more positive experience, and improve the effectiveness of religious education by leveraging technology. By wisely utilizing technology, the integration of technology in the Hannafin and Peck Model can bring positive impacts to the PAI learning process. Increased interactivity, accessibility, and diversity in teaching methods can provide a more holistic and relevant experience for students.

REFERENCES

Abubakar, H., Mohamed, H. B., Aman, M., Megat, Z. B., & Lukman, Y. (2023). Does Student Teachers' Digital Interest in YouTube Technology Matter? A Case Study of Micro-Teaching Skills. *Journal of Advanced Zoology*, *44*(S-5), 875–883. Retrieved from http://jazindia.com/index.php/jaz/article/view/1014

Andriani, P. T., Sudatha, I. G. W., & Suartama, I. K. (2021). E-Summary Teaching Materials with Hannafin & Peck Models for Training Participants in the Human Resources Development Agency. *Indonesian Journal Of Educational Research and Review*, *4*(3), 534. https://doi.org/10.23887/ijerr.v4i3.40131

Bachtiar Hariyadi, Yuli Astutik, Chusnul Chotimah, F. (2023). Kontribusi Penggunaan Literasi Digital Terhadap Peningkatan Hasil Belajar Pendidikan Agama Islam. *Jurnal Keislaman*, *6*(2), 393–410. https://doi.org/https://doi.org/10.54298/jk.v6i2.3913 Abstract

Erina, F. (2022). Implementasi Pembelajaran Berbasis Teknologi Informasi Dan Komunikasi Dengan Menggunakan Komputer Multimedia Dalam Pembelajaran Pai Di Sdit Mutiara Kota Pariaman. *Jurnal Sosial Humaniora Dan Pendidikan*, *1*(2), 138–146. https://doi.org/10.55606/inovasi.v1i2.133

Fajri, Y. Al, & Sahlan, M. (2023). Evaluasi Pembelajaran Berbasis Information and Communication Technology (Ict) Pada Mata Pelajaran Pai. *Journal Regy Research in Education and Technology*, *2*(1), 99–102. Retrieved from https://journalregy.com/index.php/uvw/article/view/77

Fauziah, L., & Asrizal, A. (2023). Development of Sound Wave E-learning Material by Integrating Contextual Teaching with Smartphone to Improve Students' Critical and Creative Thinking Skills. *Jurnal Pendidikan Sains Indonesia*, *11*(4), 865–883. https://doi.org/10.24815/jpsi.v11i4.32174

Hariyadi, A. (2023). Pelatihan Pembuatan Konten Digital untuk Mendukung Proses Pembelajaran Daring Bagi Guru Sekolah Dasar Kudus. *SABAJAYA Jurnal Pengabdian Kepada Masyarakat*, *1*(2), 1–9. https://doi.org/10.59561/sabajaya.v1i2.23

Hartati, S., Fernadi, M. F., & Utama, E. P. (2022). Integrasi Teknologi Baru dalam Meningkatkan Pendidikan Islam di Indonesia. *Al-Liqo: Jurnal Pendidikan Islam*, *7*(2), 159–178. https://doi.org/10.46963/alliqo.v7i2.581

Hasriadi. (2022). Model Pembelajaran Jarak Jauh Pendidikan Agama Islam Berbasis Teknologi Informasi dan Komunikasi. *Jurnal Konsepsi*, *11*(1), 85–97. Retrieved from https://www.p3i.my.id/index.php/konsepsi/article/view/174/173

Husna, A. F., Sitika, A. J., & Fauziah, D. N. (2022). Online Learning dalam Pembelajaran PAI di SMPN 2 Karawang Barat. *Jurnal Pendidikan Tambusai*, *6*(2), 11071–11081. Retrieved from https://jptam.org/index.php/jptam/article/view/4195%0Ahttps://jptam.org/index.php/jptam/article/download/4195/3508

Iiq Taufiq Syaibani, T. W. (2022). Upaya Guru PAI dalam Proses Pembelajaran di Era Digital. *El Arafah : Jurnal Pendidikan Islam*, *1*(2), 33–43. Retrieved from https://journal.elghazy.or.id/index.php/elarafah/article/view/10

Ismail. (2022). Analisis Terhadap Pembinaan Akhlak Mahasiswa Melalui Mata Kuliah Agama Islam. *Jurnal Pendidikan Dan Konseling*, *4*(6), 13409–13413. https://doi.org/https://doi.org/10.31004/jpdk.v4i6.12730

Izza, A. Z., Falah, M., & Susilawati, S. (2020). Studi literatur: problematika evaluasi pembelajaran dalam mencapai tujuan pendidikan di era merdeka belajar. *Konferensi Ilmiah Pendidikan Universitas Pekalongan 2020*, *1*, 10–15. Retrieved from https://proceeding.unikal.ac.id/index.php/kip

John W. Creswell. (2016). *Research Design Pendekatan Metode Kualitatif, Kuantitatif, dan Campuran*. Yogyakarta: Pustaka Pelajar.

Komarudin, T. S., Shofiyyah, N. A., & Ulum, M. (2023). Multivariate Analysis on The Relationship Between Emotional Intelligence , Intellectual Intelligence , and Learning Outcomes in Psychology Education. *Journal Of Psychology And Instruction*, *7*(3), 94–102. https://doi.org/https://doi.org/10.23887/jpai.v5i2

Melati, E., Fayola, A. D., Hita, I. P. A. D., Saputra, A. M. A., Zamzami, Z., & Ninasari, A. (2023). Pemanfaatan Animasi sebagai Media Pembelajaran Berbasis Teknologi untuk Meningkatkan Motivasi Belajar. *Journal on Education*, *6*(1), 732–741. https://doi.org/10.31004/joe.v6i1.2988

Multazam, M., Syahrial, Z., & Rusmono. (2023). Development of Learning Models in Web Programming Courses With Computer-Based Learning Tutorials. *Turkish Online Journal of Distance Education*, *24*(2), 232–244. https://doi.org/10.17718/tojde.1081507

Musyafak, M. R. S. (2023). Teaching Strategies of Islamic Religious Education Educators in Facing Challenges in the Era of the 5.0 Industrial Revolution. *Asian Journal of Islamic Studies and Da'wah*, *1*(2), 373–398. https://doi.org/https://doi.org/10.58578/AJISD.v1i2.2109

Novit, I. E., Virijai, F., & Asrizal. (2023). Light Wave Digital Learning Material with Augmented Reality and CTL Model to Improve Students' 4C Skill. *Journal of Education Research and Evaluation*, *7*(3), 423–433. https://doi.org/10.23887/jere.v7i3.64595

Novita Piqriani, Y., Yurika, M., & Amin, A. (2023). Inovasi Pembelajaran PAI Berbasis Teknologi Informasi. *Jurnal Pendidikan Dan Konseling*, *5*(2), 2559–2565. https://doi.org/https://doi.org/10.31004/jpdk.v5i2.13626

Nurmadiah, A. (2019). Teknologi pendidikan. *Jurnal Al-Afkar*, *VII*(1), 61–90. https://doi.org/https://doi.org/10.32520/afkar.v7i1.220

Oktavia, P., & Khotimah, K. (2023). Pengembangan Metode Pembelajaran Pendidikan Agama Islam di Era Digital. *AN NAJAH : Jurnal Pengembangan Dan Pembelajaran Islam*, *02*(05), 66–76. Retrieved from https://journal.nabest.id/index.php/annajah/article/view/167

Rahayuningsih, Y. S., & Muhtar, T. (2022). Pedagogik Digital Sebagai Upaya untuk Meningkatkan Kompetensi Guru Abad 21. *Jurnal Basicedu*, *6*(4), 6960–6966. https://doi.org/10.31004/basicedu.v6i4.3433

Rahmiati, R., & Azis, F. (2023). Peranan Guru Sebagai Motivator Terhadap Motivasi Belajar Siswa. *Innovative: Journal Of Social Science Research*, *3*(3), 6007–6018. https://doi.org/https://doi.org/10.31004/innovative.v3i3.2476

Ritonga, M. M. N., & Halimah, S. (2023). Analisis Kemampuan Guru PAI dalam Merancang Media Pembelajaran Berbasis Digital di MAN 1 Medan. *Ainara Journal (Jurnal Penelitian Dan PKM Bidang Ilmu Pendidikan)*, *4*(1), 29–32. https://doi.org/10.54371/ainj.v4i1.234

Rohmah, S., & Tegeh, I. M. (2022). Multimedia Interaktif Untuk Meningkatkan Minat dan Hasil Belajar PAI. *Jurnal Edutech Undiksha*, *10*(2), 215–224. https://doi.org/10.23887/jeu.v10i1.43365

Shofiyyah, Nilna Azizatus, Tedy Sutandy Komarudin, M. S. H. (2023). Innovations in Islamic Education Management within the University Context : Addressing Challenges and Exploring Future Prospects. *Nidhomul Haq: Jurnal Manajemen Pendidikan Islam*, *8*(2), 193–209. https://doi.org/https://doi.org/10.31538/ndh.v8i2.3625

Shofiyyah, N. A., Nursobah, A., & Tarsono, T. (2020). Penggunaan Media Animasi Pada Pembelajaran Pai Untuk Meningkatkan Motivasi Belajar Tunagrahita. *Psychosophia: Journal of Psychology, Religion, and Humanity*, *1*(2), 32–46. https://doi.org/10.32923/psc.v1i2.1157

Sukardjo, M., Nirmala, B., Ruiyat, S. A., Annuar, H., & Khasanah5, U. (2023). Loose Parts: Stimulation of 21st Century Learning Skills (4C Elements). *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, *7*(1), 1073–1086. https://doi.org/10.31004/obsesi.v7i1.4088

Surawan, A. (2022). Efforts to Improve PAI Learning Through The Critical Thinking Model. *Journal of Contemporary Islamic Education (Journal CIE)*, *2*(1), 15–28. https://doi.org/https://doi.org/10.25217/cie.v2i1.2004 Efforts

Yuli Yanti, I., Pudjawan, I. K., & Wayan Suwatra, I. I. (2020). Pengembangan Lembar Kerja Siswa Model Hannafin Anf Peck Untuk Meningkatkan Hasil Belajar Siswa. *Journal of Education Technology*, *4*(1), 67–72. https://doi.org/10.23887/jet.v4i1.24094