

Integration of Information Technology in Religious Education in Schools

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ABSTRACT: This research aims to explore the use of information technology in religious education and learning in schools and its impact on the quality of education and the development of students' knowledge and motivation in religious learning. A descriptive qualitative approach was used in this study with the participants being Muhammadiyah school teachers in Tebing Tinggi city, North Sumatra, Indonesia. The research data were collected through interview, observation, and document techniques. The findings of this study explain that the integration of information technology, such as online learning, web and social media in religious learning has a positive impact on developing students' insights into broader learning materials, increasing students' knowledge of religious materials and motivation in learning. This research explains that technology integration is very important in achieving education and learning goals. To achieve these goals, technology integration in learning in Muhammadiyah schools is developed through (1) learning objectives, (2) learning materials, (3) methods and strategies, (4) technology and resources, (5) learning evaluation, and (6) results and impact.

KEYWORDS: Information technology, religious education

I. INTRODUCTION

The growth of civilisation has made information technology an important part of many aspects of life. Including in Islamic education, one of which is in religious learning activities at school. Information technology is used to disseminate materials and information relevant to Islamic teachings (Sugianto et al., 2023). This is important because a good understanding of Islam can shape learners' character in everyday life. The use of information technology in Islamic religion lessons has a positive effect and impact on students, where teachers modify and integrate technology in learning (Hasibuan, 2016). Teachers utilise information technology because they want to foster students' insight and motivation towards Islamic religion lessons. As the implementation of education in Indonesia according to Law Number 20 of 2003 article 1 paragraph (2) states that a National Education is education based on Pancasila and the 1945 Constitution which is rooted in religious values, Indonesian national culture and responsive to the demands of changing times. As the nation's cultural heritage that has long been rooted in Indonesian society, Islamic education, both as a system and an institution, has inevitably become an integral part of the national education system (Nuryana, 2019).

Information technology plays a very important role in improving the effectiveness of religious activities in schools. In Islamic-based high schools, such as Muhammadiyah schools, technology has been used by them in learning, modifying technology-based learning methods and reinforcing Islamic teaching materials in a more interactive and interesting way. The use of multimedia in learning can help students understand religious concepts better than traditional teaching methods that are often boring (Elihami, 2017). The use of technology in learning, such as Islamic history, important figures, and worship practices that are uploaded on various learning platforms and can be accessed by students anytime and anywhere, makes learning more effective, interesting and fun (Fauzi and Arifin, 2023). Research findings have shown that students who learn through visual media tend to have a better understanding of the material taught compared to conventional methods (Camilleri, 2017). A report on the transformation of education in Indonesia has highlighted the importance of technology integration in the education reform programme which marks a significant change in the approach to learning (Wahyudi and Jatun, 2024). The integration of information technology in learning also allows for online discussions between students and teachers. Through platforms such as google classroom or discussion forums, students can learn effectively, asking questions and discussing material they don't understand. This not only increases student engagement in learning, but also creates a more collaborative learning environment (Hsu, 2007).

Although information technology provides various benefits in the implementation of religious activities, the integration of technology in learning in Indonesia is still faced with a number of problems and challenges. Limited human resources, technology infrastructure and access are still a number of obstacles. In some parts of Indonesia, the lack of technology infrastructure and internet access in schools is still a problem in technology-based learning (Wahyudi and Jatun, 2024). Not all teachers have

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adequate skills in the use of information technology. Many teachers still face difficulties in integrating technology in learning [8]. The use of information technology can also have a negative impact, opening up opportunities for misuse by students. Schools need to ensure that all platforms used are safe and compliant with applicable regulations. This is in line with Law No. 27 of 2022 on personal data protection law which regulates the management and protection of personal information (Nuryana, 2019).

The integration of technology in religious education and learning is an important part of modern times. Information technology opens up various opportunities to expand and channel learners' knowledge in strengthening religious education in schools. This study therefore aims to explore how schools integrate technology in learning and its impact on developing students' knowledge and motivation in religious learning.

II. LITERATURE REVIEW

2.1 *Technology Integration in Learning*

The concept of technology integration can be seen from two terms, namely integration and technology. The word integration comes from the English word 'integration' which means integrating or merging. The integration of technology by teachers into the school curriculum and learning, can be done by teachers by analysing the concept of technology integration, teacher competence in technology, procedures for integrating technology into the curriculum, and the application of technology in learning. Integration of technology into learning or a curriculum in schools because technology is used in various situations such as educational systems (schools and classrooms), and technology (computers and other technologies) can help the effectiveness of learning (Barakina et al., 2021). Technology that can be integrated into curriculum or learning consists of print technology, audiovisual technology, computer-based technology, and integrated technology by combining various means of supporting the learning system, between content and student reactions in learning (Njiku, 2023). Limit technology to information and communication technology using various supporting tools, namely computer hardware, multimedia projectors, software, and the web or internet (Akram et al., 2022).

The use of technology in Islamic religious education learning aims to facilitate the process of delivering material and enriching teaching methods. Technology offers a wide range of applications and digital platforms that can assist teachers in delivering religious materials in a more interesting and interactive way. Through this integration, learning is no longer limited to textbooks or conventional methods such as lectures, but can be done through learning videos, educational applications, and virtual simulations that can strengthen students' understanding. In learning Islamic religious education, technology also allows students to access religious information from various sources quickly and precisely (Khasanah, 2024). The internet, for example, is a repository of information that can be used by students to find references or deepen religious material independently. This is very helpful for students to be more active in the learning process, because they do not only depend on the teacher's explanation in class, but can also explore various perspectives and understandings of religion through valid digital sources (Wahyudi and Jatun, 2024).

Technology integration is a conscious and planned incorporation or use of technology in the learning process in the classroom or outside the classroom. Technology integration in learning can be the use of software, hardware, and various other digital tools. Integrating technology in teaching can improve learning efficiency, encourage active student participation, and create more engaging and relevant learning experiences (Khan and Alamri, 2017). The role of technology in education is to improve the quality of teaching and learning and prepare students to face the challenges of an ever-evolving digital world (Christensen, 2014). In the digital age, the influence of technology on education is undeniable. Technology has revolutionised teaching methodologies, offering personalised and interactive learning experiences that cater to diverse learning styles. The integration of technology in education has the potential to transcend the boundaries of the traditional classroom, enabling distance learning and democratising access to quality education (Ambarwati et al., 2022).

2.2 *Impact of Technology Integration in Religious Learning*

The conscious and integrated combination or use of technology in the classroom for educational purposes is known as technology integration. Essentially, its purpose in education is to raise the standards of teaching and learning, while equipping students with the necessary skills to succeed in the rapidly evolving digital sphere. Technology integration can make learning more affordable, efficient and adaptive to individual needs (Subroto et al., 2023). The use of information technology in religious activities in schools can be seen in various aspects, such as the delivery of material, organisation of events, and management of participant data. In Muhammadiyah schools, religious activities such as recitation and celebration of Islamic holidays often utilise technology to facilitate implementation. According to data obtained from the school's internal survey, around 70% of religious activities are held with the support of technology, either in the form of digital presentations or live broadcasts through online platforms. It is argued that technology can help increase student participation and engagement in learning. With the adoption of technology, students can gain access to more diverse and interactive learning resources, such as learning snippets, simulations and educational games. This can help increase students' interest and motivation in learning, and facilitate more creative and collaborative learning (Raja and Nagasubramani, 2018).

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Technology integration in education involves several aspects, including: (1) Hardware: this includes the use of physical devices such as computers, tablets, smartphones, projectors and other devices used in learning, (2) Software: this includes applications, programmes, e-learning platforms and other software resources used in the learning context, (3) Internet connection: Fast and stable internet access enables access to online resources, online collaboration, and distance learning, (4) Learning methods: this involves changes or adjustments in teaching methods, which can be used to support active, collaborative and personalised learning, (5) Digital content: this includes the use of digital learning materials such as e-books, learning videos, simulations, and other interactive content, (6) Evaluation and measurement: can be applied to measure student progress, conduct formative and summative assessments, and provide faster feedback (Christensen, 2014; Akram et al., 2022; Ambarwati et al., 2022).

By involving technology in learning activities, for example, such as utilising computers, tablets as support for research, content creation, or presentations. Support from various parties, including the government, educational institutions, and educators is needed to ensure that technology integration in education can be implemented effectively and sustainably. Through joint efforts, technology integration in education is expected to make a significant contribution in advancing the quality of education in this digital era. There are several benefits of integrating technology into the student learning experience that can improve the quality and effectiveness of learning, including: (1) Access to education resources, (2) Customised and self-paced learning, (3) Improved collaboration and communication, (4) Skills and abilities development, and (5) Faster and more efficient evaluation (Chandra, 2005; Okojie et al., 2006; Mdhlalose and Mlambo, 2023). The uses of technology in education are (1) Increase motivation in learning, (2) Increasing specialised learning capabilities, (3) Support new or innovative learning approaches, and (4) Increase teacher work productivity (Roblyer et al., 1997; Hughes and Roblyer, 2023).

2.3 Theoretical Frameworks

The integration of technology in learning Islamic Religious Education (IRE) is one of the strategic steps in facing the changing times and the challenges of globalisation. In this digital era, technology has changed many aspects of life, including education. The use of technology is not only limited to general science, but also penetrates into the field of religious education. In this context, Islamic Religious Education (IRE) as one of the important elements in education also adapts to technological developments, making it more relevant and accessible to students at various levels (Khasanah, 2024). In this context, students will find it easier to learn the content or subject matter and carry out learning activities in accordance with the learning objectives or competencies that have been set (Fauzi and Arifin, 2023). Meanwhile, teachers must facilitate student learning by integrating technology to improve student performance (Roblyer et al., 1997; Smalldino, 2008; Suprayekti, 2011). Integrating technology into learning is an important step in harnessing the potential and benefits of technology to improve the quality of education (Mishra and Koehler, 2006). Figure 1 is a framework for integrating technology in learning applied in schools.



Figure 1 Integration of Technology in Learning

III. RESEARCH METHODS

This research uses descriptive qualitative methods. Descriptive qualitative research to describe and describe existing phenomena, is natural, pays more attention to the characteristics, quality, or interrelationships between activities (Maxwell, 2016; Prasetya, 2022). This study took place in Muhammadiyah schools in Tebing Tinggi city, North Sumatra, Indonesia. A total of 12 teachers in senior high schools were selected as respondents. The research data collection techniques used semi-structured interviews, observation and documentation. Interviews involve in-depth conversations with respondents who have relevant knowledge or experience about the research topic. The questions asked are flexible, allowing respondents to provide in-depth and informative answers. Observation involves direct observation of behaviours, interactions, or activities that are happening in the

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field. Documentation involves collecting data from various document sources, such as reports, books, photographs, and other media (Hutter et al., 2010). The research data was analysed using thematic techniques. Thematic analysis is a qualitative data analysis method that aims to identify, analyse, and report recurring patterns of meaning in the data. This method involves a systematic process to find the main themes in the data (Naeem et al., 2023).

IV. RESULT AND DISCUSSION

This research data comes from the results of interviews with respondents, namely teachers and students, as well as the results of observations and collection of documentation in the field. The research data that has been collected is then processed and conclusions are drawn. The interview data presented and displayed in this article is data that has been shortened or data that has been summarised beforehand to make the organisation, description and meaning of the data easier. In addition, the identities of the respondents were coded or disguised, as for example teacher 1 (T1), teacher 2 (T2), and so on. Based on data analysis, this research has found five themes related to technology integration in religious education, namely: (1) learning objective, (2) learning materials, (3) methods and strategies, (4) technology and resources, (5) learning evaluation, and (6) results and impact. The findings of this research are explained as follows.

The findings of this study shed light on respondents' opinions that technology can help improve students' knowledge, participation and engagement in learning. With the adoption of information technology, students can gain access to a more diverse and interactive range of religious learning resources. The integration of technology in religious learning can help improve students' knowledge, interest and motivation in learning, as well as facilitate more creative, innovative and collaborative learning. The integration of technology in education and learning is not only a necessity, but also an investment in creating a learning environment that is appropriate and keeps up with the times.

Learning Objective

An important aspect of integrating information technology into learning is developing lesson plans. Lesson plans are developed by taking into account the needs of students and the characteristics of the school. Respondents explained that they develop a plan for integrating information technology in learning that is appropriate to the needs, characteristics of students and schools. The lesson plans are developed by considering the learning needs of students, teachers and schools, as well as the availability of information technology resources in schools. This planning concerns how information technology will be integrated into the curriculum, including selecting appropriate learning media and methods, as well as ensuring that the technology supports learning objectives. Here is some evidence from interviews with research respondents.

"Integrating technology in learning requires good planning, such as considering the needs and characteristics of students or schools" (T1).

"In planning, we first identify how technology can be used to enhance learners' learning experience. For example, using videos, interactive presentations or online chat" (T2).

Technology-integrated lesson planning is a systematic process of preparing and planning teaching and learning activities. According to T1 and T2, lesson plans must be prepared in order to achieve the religious learning objectives set by the school. This process includes various aspects, from analysing student needs, setting goals, selecting learning strategies and methods, developing teaching materials, to evaluating learning outcomes. Integrating technology into the curriculum can be done by teachers by starting planning activities and considering the selection of appropriate technology (Zhang, 2022). These digital technologies have made a paradigm shift in the entire education system. It is not only a knowledge provider but also a co-creator of information, a mentor, and an assessor (Haleem, 2022).

Learning Materials

The integration of information technology in religious learning materials in Muhammadiyah schools is the incorporation of technology such as software, hardware, and other digital resources into teaching and learning materials and processes. This integration aims to create and develop richer, more interesting, interactive, and effective learning materials, and help students develop knowledge and skills in learning. The integration of technology in learning materials according to respondents aims to provide more visual, interactive and interesting learning materials. The teachers explained that the integration of technology in religious learning materials is done by utilising information technology into each subject matter, so that the subject matter is more interesting. For example, the integration of video, animation, simulation, online learning platforms, and e-books. The integration of technology into learning materials is also adapted to the needs and learning styles of students while taking into account the availability of facilities resources at school. For example, the integration of technology and religious learning materials by using online learning platforms. Through this medium of technology, teachers can assign differentiated tasks, provide more personalised feedback, and monitor each student's learning progress. Here is some evidence of interviews with respondents.

"Once the necessary technology and media have been selected, the next step is to select materials that support the implementation of the lesson strategy, technology, and media" (T3).

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"We first ask students to study a video on learning and problem solving, ... before being asked to practice the material ... in addition, we can choose a variety of media and technology tools that suit the learning objectives and needs ... there are many options available such as e-learning platforms, learning applications, interactive software, and assistive devices" (T4).

According to T3, the selection of technology or media should be tailored to the subject matter and the objectives to be achieved for each subject matter, this will involve a process of reviewing the technology, media and materials to be taught. Then presenting the technology, media and materials and setting up a learning environment that supports the students' learning experience. T4 argues that the learning process involving technology in learning has encouraged students to learn to solve problems and develop their skills through practice. Learning has become more interactive and enjoyable with the availability of diverse materials and media.

Integration of technology into learning materials, namely in the learning process or linked to a discipline (Christensen, 2014; Akram et al., 2022). Learning as a set of actions intentionally designed by the teacher is an external event to support the internal learning process of students (Khan and Alamri, 2017).

Methods and Strategies

Technology integration in learning methods is the use of digital devices, resources and platforms to enhance learning and teaching experiences. It includes the use of various digital tools, such as hardware, software, and internet resources, to create an interactive and engaging teaching and learning process. The respondents explained that the integration of technology in learning enhances students to engage in learning more actively and creatively through simulations, educational games and interactive content. Through the integration of technology into learning materials, it is easier for students to learn independently through online learning platforms that provide various learning resources and learning activities. In addition, teachers can use learning videos to explain complex concepts or to provide real-life examples. The following is evidence of interviews with research respondents.

"Integrating technology in learning requires student-centred learning strategies so that there is an active teaching and learning process...for example presenting a concept through internet searches...as teachers, we also continue to facilitate learning through tutoring" (T5).

The integration of technology and the selection of learning strategies is very important for a teacher in learning, he must choose technology and apply strategies that are suitable for use in the learning process (Hasibuan, 2016). Learning strategies are the activities of the teacher to be a facilitator to achieve goals. Integration of technology and learning strategies to spur increased student proficiency in technology utilisation (Khasanah, 2024). The elements that need to be improved are access to technology utilisation, output of technology utilisation, and impact of technology utilisation (Hsu, 2007). Learning using technology that is programmed and systematic can spur on technology-based learning levels, where each level is reviewed from the factors of infrastructure, human resources, content, learning, and policies and programmes (Smalldino et al., 2008).

Technology Resource

The integration of technology into learning has a very important purpose considering the demands of the times. One of them is to increase students' interest and participation in learning. Respondents explained that learning with the help of interactive apps, educational videos and digital platforms, students can learn more interestingly and enjoyably. In addition, technology also plays a role in preparing students for the demands of increasingly digitalised learning. By using technology, students can practise and develop their religious skills. The respondents also thought the use of digital media helps students develop multimodal literacy skills, understanding, analysing and producing learning products that incorporate different modes of representation. The integration of technology in learning at Muhammadiyah school allows students to access various educational resources online at school, such as digital books, learning videos, and online courses. The utilisation of technology in the learning process at Muhammadiyah schools includes (1) E-learning and digital resources, where the utilisation of e-learning platforms and digital resources such as learning videos, ebooks, and interactive learning resources can help students learn independently and facilitate teachers in providing interesting and varied materials, (2) Use of social media for discussion and collaboration. Judicious utilisation of social media as a platform for discussion or collaboration between students and teachers can expand out-of-class interactions and facilitate a more active exchange of ideas.

The transformation of religious education in the digital era is an important and inevitable step. The role of technology in religious learning is to advance and strengthen learning methods. Technology does not replace the role of teachers, but helps them achieve more optimal results (Camilleri, 2017). Online learning platforms and collaborative applications enable direct interaction between students and teachers, as well as among students (Raja and Nagasubramani, 2018). Utilisation of resources and technology in teaching to display and produce more creative and innovative learning (Chandra, 2005). Teachers must utilise technology well so that students can understand and comprehend. Not all students have equal access to devices and internet connections, creating a digital divide, the importance of providing quality content and effective teaching methods so that technology can have a real impact on students (Smalldino, 2008).

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Learning Evaluation

Technology enables the use of various evaluation formats such as interactive quizzes, simulations and online collaborative projects, which can be more effective in assessing various skills. Learning platforms allow evaluation to be done anytime and anywhere, increasing flexibility for students and teachers. Some of the key roles of technology in making learning evaluation easier include assessment automation that saves time and reduces teacher error or real-time data analysis that allows for quick identification of areas that need attention. Flexibility and accessibility that allows evaluation to be done anytime and anywhere, and personalisation of learning that tailors materials based on students' individual needs. One interview evidence with respondents is as follows.

“The use of technology applications as a medium in this learning evaluation is very helpful for us in conducting evaluations, because with the presence of this online-based application, educators do not have to check students' learning outcomes sheets one by one, but are processed directly by the application used, and the questions worked on by students in a randomised model. So as to minimise the occurrence of cheating in working on questions in the learning evaluation” (T7).

Respondent T7 explained that technology has helped them in their work of evaluating student learning outcomes more easily and quickly. The utilisation of technology has provided a variety of evaluation forms that allow for more comprehensive assessment of a wide range of skills, quick feedback that helps students immediately correct errors and improve understanding, long-term progress tracking that provides a comprehensive picture of student development, integration with learning resources that provides easy access to relevant materials.

The integration of technology in learning evaluation is important to fulfil learning aspects such as knowledge, morals, skills, intelligence and aesthetics processes. Evaluation is the process of collecting information, analysing how far students have reached and determining whether the learning metrics and methods have been achieved (Mertasari and Candiasa, 2022). In the application of learning in the classroom, technology as a learning medium can also help educators when experiencing assessment obstacles in the application of learning (Astuti et al., 2025). Evaluation is essential in the implementation of learning because it is not only part of the process but also has the power to improve learning and help students progress in education (Maier et al., 2016). In the use of technology, the development of learning evaluation can be done more interactively and effectively. In the past, conventional assessments used paper-based forms, but nowadays it is possible to switch to online forms or digital platforms that are easy to use and help assessment data to be identified more quickly (Wu et al., 2023).

Result and Impact

Technology in learning continues to develop along with the times. As educators often do to teach and learners to learn, namely by integrating technological instruments in the learning process. In the field of education, technology is a tool used to facilitate learning and help achieve desired outcomes. As the integration of technology in the field of religious education in Muhammadiyah schools can be utilised as a resource, administrative tool, and learning media. The results explain that technology integration provides positive results and impacts for students, teachers and schools.

Improved accessibility. Technology makes it easy for learners to access learning resources and information online anytime and anywhere. Technology such as the Internet has become an infinite source of information for learning. Websites, articles, videos and tutorials abound in cyberspace, providing invaluable knowledge and guidance. This is what is developed in schools and by utilising these resources to broaden horizons and enrich oneself with new knowledge.

Improving the quality of learning. In traditional learning, students often only receive information from educators and printed books. The integration of technology in learning in Muhammadiyah schools has enabled students to learn more interactively and innovatively. Through simulations, educational games, interactive videos, and more. Technology integration also allows students to learn independently, develop skills and interests, and tailor learning to their personal learning pace and style.

Increased efficiency and cost savings in education. In education, such as the cost of textbooks and other resources can be substantial. Technology-based education allows learners to access learning materials at low or no cost. It also helps educational institutions reduce the cost of purchasing and storing printed materials. For example, automation of many administrative tasks such as learner data management, financial management, and reporting. This makes it possible to save time and resources and make decisions based on accurate and timely data.

V. CONCLUSIONS

Technology integration is the use of technology or devices to support learning and teaching. Where in integrating technology using various technology sources such as computers, software applications, the internet and others in classroom learning and managing schools. This research found five themes related to technology integration in religious education in Muhammadiyah schools, namely: (1) learning objectives, (2) learning materials, (3) methods and strategies, (4) technology and resources, (5) learning evaluation, and (6) outcomes and impacts. The findings of this study shed light on respondents' opinions that technology can help improve students' knowledge, participation and engagement in learning. With the adoption of information technology, students can gain access to a more diverse and interactive range of religious learning resources. The

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REFERENCES

- 1) Ding, W. and Marchionini, G. 1997 A Study on Video Browsing Strategies. Technical Report. University of Maryland at College Park.
- 2) Haleem. A., Javaid, M., Qadri, M.A., and Suman, R. (2022). Understanding The Role of Digital Technologies in Education: A Review. *Sustainable Operations and Computers*, 3, 275-285
- 3) Hasibuan, N. (2016). Islamic Education Development with Educational Technology Implications. *Fitrah: Jurnal Kajian Ilmu-Ilmu Keislaman*, 1(2), 189
- 4) Nuryana, Z. (2019). Utilisation of Information Technology in Islamic Religious Education. *Tamaddun*, 1(19), 12-19.
- 5) Sugianto, O., Munawaroh, L., Supriani, I., Cahyono., and Nyairoh. (2023). The Role of Technology in Islamic Education Learning. *Indonesian Journal of Islamic Studies*, 4, (1), (January-June, 2023), 17-24
- 6) Zhang, W. (2022). The Role of Technology-Based Education and Teacher Professional Development in English as a Foreign Language Classes. *Frontiers Psychology*, 13, 910315
- 7) Elihami, A.S. (2017). The Role of Islamic Learning Technology in Learning Organisations. *Jurnal Pendidikan*, 1(1), 154-163
- 8) Fauzi, M., and Arifin, M.S. (2023). Information and Communication Technology in Islamic Education. *Al-Ibrah : Jurnal Pendidikan dan Keilmuan Islam*, 8(1), 19-33
- 9) Camilleri, M.A and Camilleri, A.C. (2017). Digital Learning Resources and Ubiquitous Technologies in Education. *Technology, Knowledge and Learning*, 22 (1) (2017), pp. 65-82
- 10) Wahyudi, N.G., and Jatun (2024). Integrasi Teknologi dalam Pendidikan: Tantangan dan Peluang Pembelajaran Digital di Sekolah Dasar. *Indonesian Research Journal on Education*, 4(4), 444-451
- 11) Hsu, J. (2007). Innovative Technologies for Education and Learning: Education and Knowledge-Oriented Applications of Blogs, Wikis, Podcasts, and More. *International Journal of Information and Communication Technology Education (IJICTE)*, 3 (3) (2007), 70-89
- 12) Barakina, E.Y., Popova, A.V., Gorokhova, S.S., and Voskovskaya, A.S. (2021). Digital Technologies and Artificial Intelligence Technologies in Education. *European Journal of Contemporary Education*, 10 (2) (2021), 285-296
- 13) Akram, H., Abdelrady, A.H., Al-Adwan, A.S., and Ramzan, M. (2023). Teachers' Perceptions of Technology Integration in Teaching-Learning Practices: A Systematic Review. *Frontiers Psychology*, 13 (6 June 2023), 1-9.
- 14) Njiku, J. (2023). Attitude and Technological Pedagogical and Content Knowledge: The Reciprocal Predictors?. *Journal of Research on Technology in Education*, 55(6), 1020-1035
- 15) Khasanah, M. (2024). Challenges of Digital Technology Implementation in Islamic Education: Harnessing Innovation to Improve Learning Quality. *Leader: Jurnal Manajemen Pendidikan Islam*, 2(2), November 2024, 282-289
- 16) Khan, S and Alamri, S. (2017). Technology Integration in Education. *Imam Journal of Applied Sciences* 2(1), 1-7
- 17) Christensen, R. (2014). Effects of Technology Integration Education on the Attitudes of Teachers and Students. *Journal of Research on Technology in Education*, 3(4), 411-433.
- 18) Ambarwati, D., Wibowo, UB, Arsyadanti, H., & Susanti, S. (2022). Literature Study: The Role of Educational Innovation in Digital Technology-based Learning. *Jurnal Inovasi Teknologi Pendidikan*, 8(2), 173–184.
- 19) Subroto, D.E., Supriandi., Wirawan, R., and Rukmana, A.Y. (2023). Implementation of Technology in Learning in the Digital Age: Challenges and Opportunities for Education in Indonesia. *Jurnal Pendidikan West Science*, 1(7), Juli, 473-480
- 20) Raja, R., & Nagasubramani, P. C. (2018). Impact of Modern Technology in Education. *Journal of Applied and Advanced Research*, 3(1), 33–35
- 21) Okojie, M.C.P.O, Olinzock, A.A., and Boulder, T.C.O. (2006). The Pedagogy of Technology Integration. *The Journal of Technology Integration*, 32(2), 66-71
- 22) Hughes, J.E., and Roblyer, M.D. (2023). Integrating Educational Technology into Teaching: Transforming Learning Across Disciplines, 9th edition. Person.
- 23) Chandra, R. (2005). Technology Integration in Education. Kalpaz Publications (June 8, 2005)

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- 24) Mdhlalose, D and Mlambo, G. (2023). Integration of Technology in Education and its Impact on Learning and Teaching. *Asian Journal of Education and Social Studies*, 47(2), 54-63
- 25) Suprayekti. (2011). Integrating Technology into the Curriculum. *Perspektif Ilmu Pendidikan*, 24, XV Oktober 2011, 204-209
- 26) Smaldino, S.E., Lowther, D.L., & Russell, J.D. (2008). *Instructional Technology and Media for Learning*. Jakarta: Rencana Prenada Media
- 27) Roblyer, M.D., Edward, J., and Havriluk, M.A. (1997). *Integrating Educational Technology Into Teaching*. Prentice Hall.
- 28) Mishra, P., and Koehler, M.J. (2006). Technological Pedagogical Content Knowledge: A framework for teacher knowledge. *Teachers College Record*, 108 (6) (2006), 1017-1054
- 29) Maxwell, J.A. (2013). *Qualitative Research Design: An Interactive Approach*. 3rd Edition. SAGE Publications, Inc
- 30) Prasetia, I. (2022). *Research Methodology: A Theory and Practice Approach*. Umsu Press.
- 31) Hutter, I., Hennink, M.M., and Bailey, A. (2010). *Qualitative Research Methods*. Sage Publication Inc
- 32) Naeem, M., Ozuem, W., Howel, K., and Ranfagni, S. (2023). A Step-by-Step Process of Thematic Analysis to Develop a Conceptual Model in Qualitative Research. *International Journal of Qualitative Methods*, 22, October, 2023.
- 33) Wu, C.H., Lam, H.Y., and Wong, W.L.H. (2023). The Design and Evaluation of a Digital Learning-Based English Chatbot as an Online Self-Learning Method. *International Journal of Engineering Business Management*, 15: 1–22
- 34) Mertasari, N.M.S and Candiasa, I.M. (2022). Formative Evaluation of Digital Learning Materials. *Journal of Education Technology*, 6(3), 507-514.
- 35) Maier, U., Wolf, N., & Randler, C. (2016). Effects of a Computer-Assisted Formative Assessment Intervention Based on Multipletier Diagnostic Items and Different Feedback Types. *Computers and Education*, 95, 85–98.
- 36) Astuti, A.W., Azainil., and Warman. (2025). Analysing the Education Report Card as a Basis for Data-Based Planning in Improving the Quality of Public Primary School Education in South Bontang. *Jurnal Manajemen Pendidikan Dasar, Menengah dan Tinggi*, 6(2), 214-221



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