

DEEPER UNDERSTANDING OF MODERN LEARNING: HOW TECHNOLOGY OPENS THE STUDENTS' INTERESTS

Susilo Gondo
Universitas Islam Negeri Sultan Aji Muhammad Idris Samarinda
e-mail: Susilogondo5@gmail.com

Abstract: Technology plays a crucial role to stimulate students' interest in this modern era. This article aims to explore the impact of the latest technology on the learning process and how these innovations can open students' interests. Through an analytical approach, the researcher has investigated various technological tools and platforms that facilitate interactive learning and personalization of curriculum. Besides, this article examined the challenges might arise with the integration of technology in modern learning contexts. The research is library research, with documentary data collection methods, and analysis using content analysis. The results of this study aimed to provide an in-depth understanding of how technology can be a catalyst to strengthen students' interests, open up new opportunities, and increase the effectiveness of the learning process in this digital era.

Keywords: learning, modern, technology, student, interest.

Abstrak: Dalam era pembelajaran modern, teknologi memainkan peran krusial dalam merangsang minat peserta didik. Artikel ini bertujuan untuk mengeksplorasi dampak teknologi terbaru pada proses pembelajaran dan bagaimana inovasi tersebut dapat membuka pintu minat peserta didik. Melalui pendekatan analitis, kami menyelidiki berbagai alat dan platform teknologi yang memfasilitasi pembelajaran interaktif dan personalisasi kurikulum. Selain itu, artikel ini mencermati tantangan yang mungkin muncul seiring dengan integrasi teknologi dalam konteks pembelajaran modern. Penelitian merupakan penelitian kepustakaan, dengan metode pengumpulan data dokumenter, dan analisis menggunakan analisis konten. Hasil telaah ini bertujuan memberikan pemahaman mendalam tentang bagaimana teknologi dapat menjadi katalisator untuk memperkuat minat peserta didik, membuka peluang baru, dan meningkatkan efektivitas proses pembelajaran di era digital ini.

Kata kunci: dunia pembelajaran modern, teknologi, minat peserta didik

INTRODUCTION

Education is an organized and structured way of achieving knowledge, skills, values and attitudes that are important for a person's physical, mental, emotional and

social growth.¹ In this modern era, education has experienced a significant transformation along with the technology development. Technological advances open up new opportunities and challenge traditional concepts in the learning. As a gateway to knowledge, modern learning is process of transferring information, interesting and relevant experience for students. This article aims to deepen in the modern learning, with a special focus on the role of technology in opening the students' interests.

In facing the challenges of the times, modern education is faced with the need to continue to innovate in order to maintain its appeal for students living in this digital era. Educational technology is a key pillar in this effort, providing learning methods that are dynamic and tailored to individual needs. How can technology create a learning environment that encourage and arouses students' interest? Are technological developments able to go beyond the conventional boundaries of learning and enrich the learning experience?

Entirely, education plays an important role in shaping personality and improving one's quality of life. By having quality education, someone is able to increase job opportunities, open doors for career advancement, improve physical and mental well-being, and become a productive society who makes a positive contribution to the world. The use of technology in education has become an increasingly popular and important topic in today's digital era.²

To increase sophisticated digital era, technology has changed many things in human life, including the field of education. Language education, especially Indonesian, is also influenced by technological developments positively.

Educational technology is an academic field that aims to facilitate the learning process by utilizing various learning resources, including appropriate technology, to create effective and efficient learning. This term is misunderstood as the use of technology in the educational process; however, educational technology also includes the use of print and non-print media. This is occurred because initially educational

¹ Nyoman Ayu, Putri Lestari, and Universitas Triatma Mulya, "Pendampingan Belajar Siswa Sekolah Dasar Untuk Meningkatkan Kemampuan Calistung" 5 (2024): 680–92.

² Fardani, A. T. Penggunaan Teknologi Virtual Reality Untuk Sekolah Menengah Pertama Pada Tahun 2010-2020. *E-Tech: Jurnal Ilmiah Teknologi Pendidikan*, (2020). 8 (1).

technology was considered a medium, but the terms educational technology continue to develop along with current developments in science and technology³

Technological developments in education grow up rapidly and provide many possibilities to improve student learning experiences. The latest technological innovations have enabled the development more effective and efficient learning methods, allowing students to learn in a more interactive, accessible and personalized way. One of the technological innovations in education that continuously develop is e-learning or electronic learning.⁴

This article discusses the impact of latest technology to create modern learning, exploring the paradigm shift from traditional approaches to technology-based learning. The main focus is how technology can open the students' interests, create an inspiring learning atmosphere, and turn the learning process into a deeper and more memorable experience. Through deductive analysis, the researchers explore concrete evidence that highlights the role of technology in changing the face of modern education and understand how this can have a positive impact on students' interests.

By digging deeper the relationship between technology and students' interests, it is hoped that this article can provide a deeper understanding of the potential and challenges which arise to explore the modern learning in the era of digital technology.

METHOD

A. Identification of Variable

1. Independent Variable:

Learning Technology: The use of technology in education, such as online learning platforms, educational applications, multimedia devices, etc., it is known as learning technology. That is all tools, applications or platforms used to support the learning process.

³ Jurnal Pendidikan et al., "PENERAPAN PENDIDIKAN KARAKTER MELALUI KEGIATAN KEDISIPLINAN SISWA Septi Wahyu Utami Universitas PGRI Semarang" 04 (2019): 63–66.

⁴ Lazuardy Akbar Fauzan Edwin Wahyu Dirgantoro, "Sosialisasi Manfaat Kebugaran Jasmani Pada Masa Pandemi Covid 19 Pada Masyarakat Pesisir Desa Tanete Kabupaten Tanah Bumbu" 3, no. 3 (2021): 211–18, <https://ppjp.ulm.ac.id/journals/index.php/btj/article/view/2478/pdf>.

2. Dependent Variable:

Student learning interest: The level of interest and enthusiasm of students in participating learning process. They can be measured through observations, survey, or test.

B. Research Theme

The main focus of this research is exploring the influence of technology towards students' learning interest in a modern learning context. The aim of this research is to examine how the use of technology in education can influence and possibly increase students' interest in the learning process. Some sub-themes that can be researched include: Advanced technology in education and its impact on learning methods.' 'Technological advances in education and their impact on learning. The relationship between the use of technology and the level of student involvement in the teaching and learning process. Technology education is the most effective type in increasing interest in learning. Challenges and opportunities in integrating technology into the educational curriculum. Change in the way of learning from traditional methods to technology-based learning. The impact of technology on intrinsic and extrinsic incentives of student learning. The role of teachers in facilitating technology-based learning.

C. Instruments

Such main instruments used were academic database: Utilization of information sources such as Google Scholar, JSTOR, ERIC, or Scopus to search for and access appropriate scientific articles, journals, and academic publications. Reference Management Systems, such as Mendeley, Zotero, or EndNote, are used to organize, store, and manage collected references. Literature Synthesis Matrix: Table or matrix used to organize and compare results from various literature sources based on relevant themes or variables. The Thematic Analysis Framework is a tool used to identify, analyze and report patterns (themes) in data obtained from the literature. Quality Assessment Checklist: A tool used to evaluate the quality and relevance of studies included in a literature review.

The PRISMA Flowchart was used to systematically represent the selection process of studies included in the literature review. Qualitative Analysis Software such as NVivo or ATLAS.ti is utilized to assist in coding and thematic analysis of the collected texts. Data Visualization Software is utilized to create graphic visualizations, diagrams, or concept maps that visualize findings and relationships between concepts. The Literature Review Protocol is a document that explains the inclusion and exclusion criteria, search strategies, and analysis methods that will be used in literature research. Data Extraction Sheet: General instructions for collecting appropriate information from each study included in the review.

Using this tool, researchers can collect, organize, analyze, and synthesize information from various literature sources systematically to answer research questions about how technology opens up students' interests in learning contexts. This study used the literature method with a qualitative approach to analyze and synthesize previous research related to the topic discussed in the class to observe students' interactions using learning technology.

D. Research Method

The references collection was carried out through academic databases such as Google Scholar, ERIC, and JSTOR. To analyze data, the researchers used content analysis in order to identify the main themes from the literature that has been collected, then combining results from various sources to find answers to research questions.

FINDING AND DISCUSSION

A. Research Result

The application of technology in education provides various significant positive impacts towards students' learning and cognitive development, and

negative impact on students' physical and mental health. One of the positive impacts is increasing students' motivation and interest in learning.⁵

The use of technology in learning not only improves understanding of the material, but also develops students' digital skills. This can equip them with relevant skills to face the demands of the modern world of work. So, parenting can be interpreted as the treatment of parents towards children in the form of caring for, nurturing, teaching, educating, guiding, training, which is manifested in the form of discipline, providing role models, love, punishment, rewards, and leadership in the family through the words and actions of parents.

Technology provides easier and faster access to learning resources, and allows students to learn in a more interactive and interesting way. This can increase student participation in class and provide a more positive learning experience. Apart from that, the application of technology in education can also increase time and cost efficiency in learning. With e-learning and other technology, students can access teaching materials anytime and anywhere, saving time and transportation costs to the place of study.⁶

The use of technology in learning can increase students' interest in learning in a way that is appropriate with new days. The rapid progress of information technology in the globalization era cannot avoid its influence on the world of education. Globalization requires the world of education to always adapt to technological developments in order to improve the quality of education, especially in the learning process. Information technology is a combination of computer technology and telecommunications in information systems.⁷

However, there are also negative impacts from implementing technology in education, especially related to students' physical and mental health. Several studies show that excessive use of technology can have a negative impact on

⁵ Heri Dermawan, "Edusaintek: Jurnal Pendidikan, Sains Dan Teknologi," *Edusaintek: Jurnal Pendidikan, Sains Dan Teknologi* 10, no. 1 (2023): 311–28.

⁶ Agus Triyono, "Pendidikan Karakter Pada Sistem Boarding School," *Jurnal Kependidikan* 7, no. 2 (2019): 251–63, <https://doi.org/DOI:https://doi.org/10.24090/jk.v7i2.3085>.

⁷ Mutia Ade Syafitri, Muh Husen Arifin, and Yona Wahyuningsih, "Peranan Teknologi Informasi Dalam Pendidikan IPS Untuk Anak Sekolah Dasar," *Jurnal Pendidikan Tambusai* 6 (2022): 4411–14, <https://jptam.org/index.php/jptam/article/view/3551/3023>.

students' physical health, such as posture problems, poor vision, and headaches. Apart from that, the use of technology can also have an impact on students' mental health.⁸

Terlalu banyak Too much time spent in front of screens and excessive use of social media can increase the risk of internet addiction and social isolation. This can have an impact on students' mental and emotional health. In the context of the school environment, the application of technology can also have positive and negative impacts on student health. For example, the presence of sophisticated hardware and software such as smart boards and e-learning can increase time and cost efficiency, as well as provide a more interactive and interesting learning experience.⁹

The implementation of technology in education may have complex positive and negative effect towards student health in the school environment. Therefore, it is necessary to carry out a comprehensive evaluation and wise management in the application of technology in education, so that it can provide optimal benefits for students without compromising their health and privacy.¹⁰

According to Ngalim, learning is any relatively permanent change in behavior that occurs as a result of practice or experience. Technology provides access to a variety of interactive learning tools, such as simulations, educational games, and interactive videos. This helps create an interesting and entertaining learning experience, increasing students' interest in the subject matter.

Technology provides access to a variety of interactive learning tools, such as simulations, educational games, and interactive videos. This helps create an interesting and entertaining learning experience, increasing students' interest in the subject matter. Using adaptive learning algorithms, technology enables personalization of the curriculum. Students can access material according to

⁸ Muhammad Hasan, *Pengembangan Media Pembelajaran* (Klaten: Tahta Media Group, 2021).

⁹ Dian Ratu, Ayu Uswatun, and Hascaryo Pramudibyanto, "Pendidikan Dalam Masa Pandemi Covid-19 Pendahuluan" 10, no. 1 (2020): 41–48.

¹⁰ Mayasari, "Analisis Penerapan Teknologi Dalam Pendidikan Dan Dampaknya Terhadap Kesehatan Di Lingkungan Sekolah," *Journal on Education* 06, no. 01 (2023): 93–100, <https://jonedu.org/index.php/joe/article/view/2916/2468>.

their level of understanding and learning speed, thereby increasing their self-confidence and interest in learning.

Technology enriches the learning experience through the use of multimedia, such as images, audio and video. This media not only makes it easier to understand concepts but also makes learning more fun, encouraging students to be more interested and involved. The internet and technology make information accessible from all over the world. Students can explore a variety of topics, cultures and perspectives, opening their horizons and increasing their interest in broader learning.

The application of technology in education must be done wisely and considered comprehensively, taking into account factors such as student health, security and privacy. Educational institutions must continuously evaluate the use of technology, as well as provide education and support for students to use technology in a healthy and positive way. Thus, the application of technology in education can provide optimal benefits for students without sacrificing health and balance in their lives¹¹. Online learning platforms and collaboration tools enable students to work together online. These interactions can stimulate students' interest through discussions, joint projects, and the exchange of ideas, creating a social and dynamic learning environment.

Educational apps offer innovative learning methods and are often designed to match a learner's learning style. These applications can be interactive quizzes, interactive exercises, or game-based learning platforms, which effectively increase the interest of learners. Technology allows students to connect learning with real-world applications. For example, engaging students in practical projects that utilize technology can increase their interest by presenting relevant and applicable challenges.

Technology enables learners to provide direct feedback towards their performance. This helps them to understand their strengths and areas of improvement quickly, provides positive encouragement and directs their interest in achieving greater heights.

¹¹ MMayasari.

Online learning and online platforms provide greater accessibility and flexibility. Learners can learn anywhere and at any time, reducing feelings of constraint and increasing their interest because learning better fits their lifestyle.

Through the combination of these features, technology opens their interests by creating learning experiences that are interesting, relevant, and tailored to individual needs. Thus, technology plays an important role in changing the dynamics of modern learning and has positive impact towards students' motivation and interest.

The implementation of E-learning and online learning Platform at SDN 009 Rantau Pulung allowed students to access study materials online via the e-learning platform. The use of multimedia, learning videos, and interactivity on these platforms can increase student attraction and engagement. This had a significant positive impact towards student learning process. Through online access to course materials and the use of multimedia technology, learning videos and interactive elements on e-learning platforms increased the student interest and engagement.

1. Accesibility of Learning Material

Students can access study materials anytime and anywhere via e-learning platforms. This creates flexibility in learning, allowing students to adjust study time according to their personal rhythm and preferences

2. Increasing Attraction through Multimedia:

The use of multimedia, such as images, audio and video, has increased the attractiveness of learning materials. Visualization of difficult concepts and use of multimedia elements have helped students understand the material in more in-depth and engaging way.

3. Interactive to increase engagement:

Interactive features on e-learning platforms have provided a more dynamic learning experience. Students can engage in interactive activities such as online quizzes, simulations, or online discussions, creating a more participatory learning environment.

4. Diversification of Learning Methods:

The application of E-learning allows teachers to diversify learning methods. From instructional videos to interactive simulations, students can learn with various ways, based on their individual learning styles.

5. Ease to monitor and valuate:

Online learning platforms provide convenience in monitoring and evaluating student performance. Teachers can track each student's progress, provide feedback, and design online assessments to measure their understanding.

6. Flexibility of times and space

Online learning provides flexibility of time and space that allows students to study according to a schedule that suits them. This has proven effective in overcoming time constraints and physical distance.

Although the implementation of E-learning and Online Learning Platforms brings a number of positive benefits, it is still important to continuously monitor and evaluate their impact. Technical support and ongoing guidance for teachers and students are key to ensuring the success and effectiveness of learning in an online environment. By continuously improving and optimizing learning strategies, we can provide better and more relevant learning experiences for the future.

Besides, the application of E-learning and Online Learning Platforms, technology and AI-based learning are key elements in the transformation of education in the digital era. The significance of this learning is increasing with major changes in our lifestyle, work and learning processes.¹²

Using technology efficiently, we can form a young generation that is intelligent, creative, and ready to face a future full of opportunities. Technology is not only a means of learning, but also a gateway to a world full of information and opportunities.¹³

By utilizing technology, the transfer of knowledge from teachers to students is now more effective. Digital and interactive media help in

¹² Muhammad Soleh Hapudin, "Journal Of Informatics And Information Society MANAJEMEN PEMBELAJARAN BLENDED LEARNING DALAM UPAYA MEMPERLUAS AKSESIBILITAS LAYANAN PENDIDIKAN" 123456 (2019): 1–7.

¹³ Hapudin.

conveying information in a way that is more interesting and easy for students to understand.¹⁴

The results of this research illustrate that every educational unit or learning process that uses technology in developing students' learning needs is very effective and efficient. And collaboration between parental parenting and the use of technology in learning encourages positive progress in student development, forming individuals who are ready to face the complexities of the modern world. Technology also opens up students' interest in the world of modern learning through a combination of features that create learning experiences that are interesting, relevant and tailored to individual needs. The role of technology as a catalyst in increasing students' motivation and interest in the learning process enables the creation of a more effective and meaningful learning environment.

B. Discussion

Learning is a fundamental process that occurs throughout human life. It involves the acquisition of knowledge, understanding, skills, attitudes, and values that enable individuals to grow, develop, and adapt to their environment. Learning is not only limited to the scope of formal education at school or university, but also occurs in various everyday contexts, such as at home, at work, and through social experiences.¹⁵

Learning refers to a process that involves planned and systematic learning activities, with the aim of changing student behavior, knowledge, understanding, skills, attitudes and values.¹⁶

¹⁴ Putri Oktavida & Khusnul Khotimah, PENGEMBANGAN METODE PEMBELAJARAN PENDIDIKAN AGAMA ISLAM DI ERA DIGITAL, (<https://journal.nabest.id/index.php/annajah> e-ISSN: 2964-965X (Media Online) | p-ISSN: 2964-9633 (Media Cetak) Vol. 02 No. 05 (September 2023) DOI: xxxxx), 72.

¹⁵ Habibi, Roy Kembar, Maman Surahman, and Deviyanti Pangestu. 2023. "Penguatan Pendidikan Karakter Di Era Generasi Digital Bagi Mahasiswa Universitas Lampung." *Sinau : Jurnal Ilmu Pendidikan Dan Humaniora* 9 (2): 275–96. <https://doi.org/10.37842/sinau.v9i2.153>.

¹⁶ Chairul Azmi, PENERAPAN PEMBELAJARAN BERDIFERENSIASI PADA TEMA PERKEMBANGAN TEKNOLOGI UNTUK MENINGKATKAN HASIL BELAJAR SISWA

In the context of formal education, learning is a process in which teachers convey information and concepts to students with the aim of making them understand and internalize the material. It involves a variety of methods and strategies, including direct teaching, discussions, projects, and the use of technology. Learning also encourages students to develop critical skills, problem solving, and the ability to think creatively.¹⁷

In the midst of rapid changes and advances in information and communication technology, the world of education is experiencing an important transformation. Education is no longer limited to traditional learning methods which only use textbooks and teacher speech in the classroom.¹⁸

In the increasingly developing digital era, communication technology has experienced rapid development and has become an inseparable part of everyday life. The development of communication technology has had a major impact on various aspects of life, including the world of education. The use of communication technology in learning has experienced significant growth in the last few decades. Devices such as computers, tablets, smartphones and the internet have opened the door to unlimited access to information.¹⁹

Educational technology refers to a method that provides appropriate visual aids to facilitate learning activities by utilizing learning resources.²⁰ Another definition states that educational technology involves people, methods, theories, ideas, and media to analyze problems, plan, select, manage, and utilize all aspects related to learning.²¹

SEKOLAH DASAR, (Jurnal Didaktika Pendidikan Dasar: doi: <https://doi.org/10.26811/didaktika.v8i1.1246>: 2024)

¹⁷ Siringoringo, Rasmala, Masduki Asbari, and Cesilia Margaretta. "Strategi Pembelajaran Berdiferensi: Akselerasi Meningkatkan Potensi Peserta Didik." *Journal of Information Systems and Management (JISMA)* (2023). 2 (5): 13–16. <https://doi.org/https://doi.org/10.4444/jisma.v2i5.436>.

¹⁸ Abdullah, D., Dewi, K. A. K., Sembiring, D., Nursyamsi, S. Y., & Hita, I. P. A. D. Analysis Of Online Learning Media On Pjok Learning Outcomes. *Journal on Research and Review of Educational Innovation*, (2023). 1(2), 64–69.

¹⁹ Agustina, Ria, Trisna Rukhmana, Nandia Pitri, and Silvia Meirisa. 2023. *Sistem Pendidikan Digital*. Edited by Paput Tri Cahyono. Yayasan Cendikia Mulia Mandiri.

²⁰ Januszewski, A. Educational Technology: The Development of a Concept. *Educational Technology*, (2008). 48 (3), 24-30.

²¹ Munir. *Teknologi Pendidikan: Konsep dan Aplikasinya*. (Jakarta: Kencana. 2008).

The use of technology in learning opens the door to faster and wider access to information. The internet provides the ability to access learning resources in real-time from various parts of the world.²² Communication technology is a field that is developing rapidly in the current digital era. It includes a variety of tools, applications, and platforms that enable individuals to communicate, share information, and interact with others, both locally and remotely. In recent decades, developments in communications technology have changed the way we live, work and learn.²³

Aligning technology into the curriculum is not just about adding the latest hardware and software, but also exploring how technology can enhance the student learning experience.²⁴ In facing the times, technology not only makes changes in life, but also has a big impact on the world of education. Therefore, innovation in education is becoming increasingly important considering the main role of education in the success of a learning system. Therefore, the principles used in developing and utilizing educational technology need to be considered, such as understanding the system or media used, focusing on students as the center of learning, and optimizing resources in the learning process.²⁵

Therefore, teachers have a responsibility to create innovative teaching methods, including technology as a tool to encourage and empower students. By carrying out this transformation, education not only aims to accumulate knowledge, but also to develop 21st century skills, such as critical thinking skills, creativity and collaboration.²⁶

²² Ulimaz, A. Meningkatkan hasil belajar siswa kelas x pada konsep keanekaragaman hayati menggunakan model pembelajaran inkuiri. *Konstruktivisme: Jurnal Pendidikan Dan Pembelajaran*, (2015). 7(1), 61–66.

²³ Jelita Dwi Septya, Implementasi Pemanfaatan Teknologi Komunikasi Dalam Pembelajaran, *Jurnal menegemen Pendidikan Islam*, (2022), 3.

²⁴ Meisuri, M., Zuliana, Z., Jahara, J., Mardikawati, B., & Wahyuni, E. Pemanfaatan Media Pembelajaran Berbasis Video dengan Menggunakan Aplikasi Canva. *At-Tasyrih: Jurnal Pendidikan Dan Hukum Islam*, (2023). 9(2), 398–412.

²⁵ Sudiman, A., Taufik, T., Hadi, S., & Wulan, R. *Pengembangan dan Pemanfaatan Media Pembelajaran*. (Bandung: Remaja Rosdakarya. 2009).

²⁶ Erlianti, D., & Wibowo, A. Kepuasan Pelanggan Pada PT FIFGROUP Cabang Dumai. *Jurnal Ilmiah Ekonomi Dan Pajak*, (2023). 3(1), 30–34.

The transformation of education through the use of technology has also opened the door to distance learning or e-learning. In this digital era, students can access education remotely through online learning platforms, webinars, or virtual classes.²⁷

This includes a variety of things, such as phones, computers, mobile devices, the internet, social networks, email, instant messaging, messaging applications, video conferencing, and more. Communications technology allows us to communicate efficiently and effectively, regardless of physical distance, thereby enabling global collaboration, rapid exchange of information, and access to unlimited resources.²⁸

Era of 4.0 with technological advances such as artificial intelligence, internet of things, and cloud computing has caused fundamental changes in various aspects of life. Education, in facing this transition, needs to undergo important transformations. Innovation in the learning process is very important, not only to meet students' learning needs in facing future challenges, but also to support the vision of Society 5.0, namely a society that is human-focused, sustainable and driven by technology. The importance of learning innovation in the era 4.0 and Society 5.0 can be seen in several main aspects. First, era 4.0 brings rapid changes in labor market needs and demands, necessitating lifelong learning, and learning innovations enable easier access to relevant knowledge and training. Second, the 4.0 era provides opportunities for personalization in education, with technology that allows learning to be tailored to individual abilities and interests. Third, learning innovation supports the shift from knowledge-based education to skills-based education, in line with the Society 5.0 vision. Fourth, learning innovation supports efforts to create an inclusive society that focuses on sustainability and helps students understand global challenges. Fifth, learning innovation helps create critical and adaptive learners, who can

²⁷ Nirfayanti, N., & Nurbaeti, N. Pengaruh Media Pembelajaran Google Classroom Dalam Pembelajaran Analisis Real Terhadap Motivasi Belajar Mahasiswa. *Proximal Jurnal Penelitian Matematika Dan Pendidikan Matematika* ISSN 26158132 (Cetak) ISSN 26157667 (Online), (2019). 2(1), 50–59.

²⁸ Jonatan, Jonatan, and Anwar Three Millenium Waruwu.. “Peran Teknologi Digital Dalam Pengembangan Pembelajaran Kristen Di Era Digital.” *ANTHOR: Education and Learning Journal* (2023) 2 (6): 805–11. <https://doi.org/https://doi.org/10.31004/anthor.v2i6.233>.

think critically, solve problems, and contribute to solving complex problems in Society 5.0.²⁹

In previous research, by Uik Hanifah Salsabila et al, it was stated that the transformation of Islamic education for generation Z through the application of technology in the classroom showed a significant positive impact on the character and morals of the younger generation. Generation Z, known as the generation that seeks truth, shows a positive tendency in developing openness, inclusiveness, communication skills and realism in decision making. The use of technology, especially e-learning, provides broad accessibility to Islamic learning, enriches the learning process with interactive media, and increases student motivation. However, along with the benefits, it is necessary to be aware of the potential negative impacts such as loss of depth of religious understanding, exposure to inappropriate digital content, and the risk of social isolation.³⁰

One of the main problems in the world of education is the lack of effectiveness of the learning process. In teaching and learning activities, students tend to only learn theory. Classroom learning focuses more on students' ability to understand the subject matter, but pays less attention to the application of the theory in everyday life. This causes students to not understand the subject matter more deeply. In teaching and learning activities, the teacher's role is very important to develop students' potential and creativity, so that students not only have theoretical knowledge, but are also able to practice it in the future as the times progress.³¹

A lot of technologies have been developed as a media to make students interested in learning. The use of computers for example can present learning material in an interesting way through text, audio and visuals. With the help of

²⁹ Ita Soegiarto dkk, Inovasi Pembelajaran Berbasis Teknologi Artificial Intelegences (AI) pada Sekolah Kedinasan di Era Revolusi Industri 4.0 dan Society 5.0. (INNOVATIVE: Journal Of Social Science Research Volume 3 Nomor 5 (Tahun 2023): <https://i-innovative.org/index.php/Innovative>:)

³⁰ Unik Hanifah Salsabila dkk, Transformasi Pendidikan Islam untuk Generasi Z: Peran Teknologi dalam Ruang Kelas, (Kaunia : Integration and Interconnection of Islam and Science Journal Vol. 19, No.2, October (2023), <http://ejournal.uin-suka.ac.id/saintek/kaunia>), 60.

³¹ Septy Nurfadillah,Dkk. Pengembangan Media Pembelajaran Berbasis Teknologi Untuk Meningkatkan Hasil Belajar Siswa SD Negeri Pinang 1 (BINTANG: Jurnal Pendidikan Sains Volume 3, Nomor 1, April (2021);153-16) <https://ejournal.stitpn.ac.id/index.php/bintang>.

this interesting media, students will more easily understand the subject matter, and this will have a positive impact on their learning outcomes. The hope is that the use of this media can increase students' learning motivation.

To increase the effectiveness and efficiency of learning, it is necessary to develop various creative and innovative learning models. This is important so that the learning process does not feel boring and monotonous. Basically, learning is a process of communication or conveying messages to students. The message is in the form of learning material conveyed through verbal and nonverbal communication symbols. This message will be received by students as knowledge, skills, or values that can be used in everyday life. To convey this message effectively, adequate means or media are needed, such as overhead projectors, flip charts, videos, film strips, LCD projectors, three-dimensional objects, textbooks or modules, computer programs, and so on.³²

Learning media has an important role in supporting the quality of the teaching and learning process. Media can also make learning more interesting and fun. One of the learning media that is currently developing is audio-visual media. From the definition above, it can be concluded that learning media is a tool in the teaching and learning process to stimulate the thoughts, feelings, attention and abilities or skills of learners so that they can encourage the learning process.³³

Media formed from a combination of technologies provides innovation by combining various types of media that are controlled via computers. This combination of technologies is considered the latest method, especially when supported by advanced computers with extraordinary capabilities. By using media like this, there are new opportunities for more creative and dynamic learning, providing challenges and opportunities for students to understand and master the material in a more interesting and in-depth way. Rapid advances in

³² Septy Nurfadillah, Dkk. Pengembangan Media Pembelajaran Berbasis Teknologi Untuk Meningkatkan Hasil Belajar Siswa SD Negeri Pinang 1 (BINTANG: Jurnal Pendidikan Sains Volume 3, Nomor 1, April (2021); 153-16) <https://ejournal.stitpn.ac.id/index.php/bintang>.

³³ Joni, Purwono. dkk. Penggunaan Media Audio-Visual Pada Mata Pelajaran Ilmu Pengetahuan Alam Di Sekolah Menengah Pertama Negeri 1 Pacitan. Dalam Jurnal Teknologi Pendidikan dan Pembelajaran Vol.2, No.2, (2014). 127

digital technology have had a major impact on the education sector. The use of digital technology in learning opens the door to active learning experiences, building knowledge, strengthening problem-solving abilities, and exploring knowledge in more depth for students. More than just a tool for conveying information, digital technology creates learning spaces that connect teachers and students from different physical locations.³⁴

In addition, innovative learning methods are needed to overcome boredom and increase student motivation and enthusiasm for learning. Therefore, educational institutions need to have innovation to avoid problems in implementing learning methods.³⁵

The following points can increase students' interest in the teaching and learning process, such as: (1). Lecturers/teachers should use variations in teaching so that students' enthusiasm and interest in learning increases so that learning achievement is as expected. (2). Lecturers/teachers help students to know the relationship between the material they are expected to learn and themselves as individuals.³⁶

The classroom can be a place where all aspects of the educational curriculum, including its learning materials and resources, as well as all topics related to that material, are taught and reviewed. The way the class is organized and the way learning is conducted are two factors that determine educational success.³⁷ In this digital era, technology is a main key to increase students' literacy and numeracy at elementary schools. Think of a classroom where engaging educational games replace boring textbooks, interactive simulations help students to understand abstract concepts easily, and animated videos and

³⁴ Putra, I. Ketut Gede Darma, and Ketut Gede Darma. "Pendidikan berbasis teknologi informasi." Bali: Rakorda Disdikpora Bali (2009): 224-232
https://scholar.google.com/citations?view_op=view_citation&hl=en&user=Cm9pMCwAAAAJ&citation_for_view=Cm9pMCwAAAAJ:_kc_bZDyKSQC

³⁵ Moch Tohet & Fildah Zahrona Alfaini, PEMBELAJARAN HYBRID: INTEGRASI PEMBELAJARAN BERBASIS TEKNOLOGI DENGAN KONVENSIIONAL UNTUK MENINGKATKAN MOTIVASI BELAJAR TAJWID, (AT-TAJDID: Jurnal Pendidikan Dan Pemikiran Islam (p-ISSN: 2548-5784 |e-ISSN: 2549-2101) Vol. (07) (02), (Juli-Desember) (2023), (509)-(521) Doi: <http://dx.doi.org/10.24127/att.v6521a2366>)

³⁶ Sofan & Elisah, *Tatik. Strategi Pembelajaran Sekolah Terpadu.* (Jakarta: Prestasi Pustaka.2011).

³⁷ Faruqi, D. Upaya meningkatkan kemampuan belajar mahasiswa melalui pengelolaan kelas. *Evaluasi: Jurnal Manajemen Pendidikan Islam*, (2018). 2(1), 294-310.

colorful info graphics that increase interest to read and encourage knowledge exploration.³⁸

One of the matters that influence learning motivation is the learning environment and parenting patterns which will influence the quality of student learning. A high desire and enthusiasm for learning can create motivation.³⁹ Parents' approaches to facilitating children's learning at home vary depending on the child's psychological learning needs. In this case, relations and social interactions between parents and children at home must be harmonious. According to Vygotsky, social interaction has an important role in helping students understand complex concepts, solve problems, and the learning process. Furthermore, the internalization process involves changing psychological activities based on language use.⁴⁰ From this process it is hoped that a student's motivation will grow by itself without the element of compulsion so that students' interest in learning will increase.

CONCLUSION

Technology plays an important role to open students' interest in modern learning. Through various innovative features and approaches, technology is able to create a learning environment that is interesting, relevant and appropriate to the individual needs of students. The use of technology in education has a big impact on the learning process and cognitive development of students, and negative impact on physical and mental health if not managed properly. The use of technology in education has increased student motivation, interest and participation in the learning process through wider access to resources, personalized learning and a more interactive learning experience.

Online learning and e-learning platforms have increased accessibility, flexibility and efficiency in education, allowing students to learn anytime and

³⁸ Aka, K. A. Pemanfaatan Teknologi Informasi Dan Komunikasi (TIK) Sebagai Wujud Inovasi Sumber Belajar Di Sekolah Dasar. *ELSE (Elementary School Education Journal): Jurnal Pendidikan Dan Pembelajaran Sekolah Dasar*, (2017). 1(2a).

³⁹ Harianti, R., & Amin, S. Pola asuh orangtua dan lingkungan pembelajaran terhadap motivasi belajar siswa. *Curricula: Journal of Teaching and Learning*, (2016). 1(2), 20-29.

⁴⁰ Dahar, R. W. *Teori-Teori Belajar & Pembelajaran*. (Jakarta: Penerbit Erlangga. 2011).

anywhere. The use of technology in learning needs to be done in a balanced manner, the benefits and potential risks, and ensuring its use is done wisely and ethically. The role of teachers is very important in advancing innovative teaching methods that combine technology effectively to encourage 21st century skills such as critical thinking, creativity and collaboration. The important role of parents in supporting students' motivation and interest in learning technology is also supported by learning environment well. Education in the digital era must continue to change based on technological developments so the students are ready to face future challenges, but paying attention to human relationships is important to the teaching and learning process.

REFERENCES

- Abdullah, D., Dewi, K. A. K., Sembiring, D., Nursyamsi, S. Y., & Hita, I. P. A. D. Analysis Of Online Learning Media On Pjok Learning Outcomes. *Journal on Research and Review of Educational Innovation*, (2023). 1(2), 64–69.
- Agustina, Ria, Trisna Rukhmana, Nandia Pitri, and Silvia Meirisa. *Sistem Pendidikan Digital*. Edited by Paput Tri Cahyono. Yayasan Cendikia Mulia Mandiri. 2023.
- Aka, K. A. Pemanfaatan Teknologi Informasi Dan Komunikasi (TIK) Sebagai Wujud Inovasi Sumber Belajar Di Sekolah Dasar. *ELSE (Elementary School Education Journal): Jurnal Pendidikan Dan Pembelajaran Sekolah Dasar*, (2017). 1(2a).
- Akbar Fauzan Edwin Wahyu Dirgantoro, Lazuardy, “Sosialisasi Manfaat Kebugaran Jasmani Pada Masa Pandemi Covid 19 Pada Masyarakat Pesisir Desa Tanete Kabupaten Tanah Bumbu” 3, no. 3 (2021): 211–18, <https://ppjp.ulm.ac.id/journals/index.php/btj/article/view/2478/pdf>.
- Ayu, Nyoman, Putri Lestari, and Universitas Triatma Mulya, “Pendampingan Belajar Siswa Sekolah Dasar Untuk Meningkatkan Kemampuan Calistung” 5 (2024): 680–92.
- Azmi, Chairul, PENERAPAN PEMBELAJARAN BERDIFERENSIASI PADA TEMA PERKEMBANGAN TEKNOLOGI UNTUK MENINGKATKAN HASIL BELAJAR SISWA SEKOLAH DASAR, (*Jurnal Didaktika Pendidikan Dasar*: doi: <https://doi.org/10.26811/didaktika.v8i1.1246>: 2024)
- Dahar, R. W. *Teori-Teori Belajar & Pembelajaran*. Jakarta: Penerbit Erlangga. 2011

- Dermawan, Heri, "Edusaintek: Jurnal Pendidikan, Sains Dan Teknologi," *Edusaintek: Jurnal Pendidikan, Sains Dan Teknologi* 10, no. 1 (2023): 311–28.
- Dwi Septya, Jelita, Implementasi Pemanfaatan Teknologi Komunikasi Dalam Pembelajaran, *Jurnal menegemen Pendidikan Islam*, (2022), 3.
- Erlianti, D., & Wibowo, A. Kepuasan Pelanggan Pada PT FIFGROUP Cabang Dumai. *Jurnal Ilmiah Ekonomi Dan Pajak*, (2023). 3(1), 30–34.
- Fardani, A. T. Penggunaan Teknologi Virtual Reality Untuk Sekolah Menengah Pertama Pada Tahun 2010-2020. *E-Tech: Jurnal Ilmiah Teknologi Pendidikan*, (2020). 8 (1).
- Faruqi, D. Upaya meningkatkan kemampuan belajar mahasiswa melalui pengelolaan kelas. *Evaluasi: Jurnal Manajemen Pendidikan Islam*, (2018). 2(1), 294-310.
- Habibi, Roy Kembar, Maman Surahman, and Deviyanti Pangestu. 2023. "Penguatan Pendidikan Karakter Di Era Generasi Digital Bagi Mahasiswa Universitas Lampung." *Sinau : Jurnal Ilmu Pendidikan Dan Humaniora* 9 (2): 275–96. <https://doi.org/https://doi.org/10.37842/sinau.v9i2.153>.
- Hanifah, Salsabila Unik dkk, Transformasi Pendidikan Islam untuk Generasi Z: Peran Teknologi dalam Ruang Kelas, (*Kaunia : Integration and Interconnection of Islam and Science Journal* Vol. 19, No.2, October (2023), <http://ejournal.uin-suka.ac.id/saintek/kaunia>), 60.
- Harianti, R., & Amin, S. Pola asuh orangtua dan lingkungan pembelajaran terhadap motivasi belajar siswa. *Curricula: Journal of Teaching and Learning*, (2016). 1(2), 20-29.
- Hasan, Muhammad, *Pengembangan Media Pembelajaran*, Klaten: Tahta Media Group, 2021
- Januszewski, A. Educational Technology: The Development of a Concept. *Educational Technology*, (2008). 48 (3), 24-30.
- Jonatan, Jonatan, and Anwar Three Millenium Waruwu.. "Peran Teknologi Digital Dalam Pengembangan Pembelajaran Kristen Di Era Digital." *ANTHOR: Education and Learning Journal* (2023) 2 (6): 805–11. <https://doi.org/https://doi.org/10.31004/anthor.v2i6.233>.
- Joni, Purwono. dkk. Penggunaan Media Audio-Visual Pada Mata Pelajaran Ilmu Pengetahuan Alam Di Sekolah Menengah Pertama Negeri1 Pacitan. Dalam *Jurnal Teknologi Pendidikan dan Pembelajaran* Vol.2, No.2, (2014). 127

- Mayasari, "Analisis Penerapan Teknologi Dalam Pendidikan Dan Dampaknya Terhadap Kesehatan Di Lingkungan Sekolah," *Journal on Education* 06, no. 01 (2023): 93–100, <https://jonedu.org/index.php/joe/article/view/2916/2468>.
- Meisuri, M., Zuliana, Z., Jahara, J., Mardikawati, B., & Wahyuni, E. Pemanfaatan Media Pembelajaran Berbasis Video dengan Menggunakan Aplikasi Canva. At-Tasyrih: Jurnal Pendidikan Dan Hukum Islam, (2023). 9(2), 398–412.
- Munir. *Teknologi Pendidikan: Konsep dan Aplikasinya*. Jakarta: Kencana. 2008
- Mutia Ade Syafitri, Muh Husen Arifin, and Yona Wahyuningsih, "Peranan Teknologi Informasi Dalam Pendidikan IPS Untuk Anak Sekolah Dasar," *Jurnal Pendidikan Tambusai* 6 (2022): 4411–14, <https://jptam.org/index.php/jptam/article/view/3551/3023>.
- Nirfayanti, N., & Nurbaeti, N. Pengaruh Media Pembelajaran Google Classroom Dalam Pembelajaran Analisis Real Terhadap Motivasi Belajar Mahasiswa. Proximal Jurnal Penelitian Matematika Dan Pendidikan Matematika ISSN 26158132 (Cetak) ISSN 26157667 (Online), (2019). 2(1), 50–59.
- Nurfadillah Septy, Dkk. Pengembangan Media Pembelajaran Berbasis Teknologi Untuk Meningkatkan Hasil Belajar Siswa SD Negeri Pinang 1 (BINTANG: Jurnal Pendidikandan Sains Volume 3, Nomor 1, April (2021);153-16) <https://ejournal.stitpn.ac.id/index.php/bintang>.
- Oktavida, Putri & Khusnul Khotimah, PENGEMBANGAN METODE PEMBELAJARAN PENDIDIKAN AGAMA ISLAM DI ERA DIGITAL, (<https://journal.nabest.id/index.php/annajah> e-ISSN: 2964-965X (Media Online) p-ISSN: 2964-9633 (Media Cetak) Vol. 02 No. 05 (September 2023) DOI: xxxxx), 72.
- Putra, I. Ketut Gede Darma, and Ketut Gede Darma. "Pendidikan berbasis teknologi informasi." Bali: Rakorda Disdikpora Bali (2009): 224-232 https://scholar.google.com/citations?view_op=view_citation&hl=en&user=Cm9pMCwAAAAJ&citation_for_view=Cm9pMCwAAAAJ:_kc_ZDykSQC
- Ratu, Dian, Ayu Uswatun, and Hascaryo Pramudibyanto, "Pendidikan Dalam Masa Pandemi Covid-19 Pendahuluan" 10, no. 1 (2020): 41–48.
- Siringoringo, Rusmala, Masduki Asbari, and Cesilia Margaretta. "Strategi Pembelajaran Berdiferensi: Akselerasi Meningkatkan Potensi Peserta Didik." *Journal of Information Systems and Management (JISMA)* (2023.) 2 (5): 13–16. <https://doi.org/https://doi.org/10.4444/jisma.v2i5.436>.
- Soegiarto, Ita dkk, Inovasi Pembelajaran Berbasis Teknologi Artificial Intelegences (AI) pada Sekolah Kedinasan di Era Revolusi Industri 4.0 dan Society 5.0.

(INNOVATIVE: Journal Of Social Science Research Volume 3 Nomor 5
(Tahun 2023): <https://j-innovative.org/index.php/Innovative:>)

Sofan & Elisah, *Tatik. Strategi Pembelajaran Sekolah. Terpadu*. Jakarta: Prestasi Pustaka. s2011

Soleh Hapudin, Muhammad, "Journal Of Informatics And Information Society
MANAJEMEN PEMBELAJARAN BLENDED LEARNING DALAM
UPAYA MEMPERLUAS AKSESIBILITAS LAYANAN PENDIDIKAN"
123456 (2019): 1–7.

Sudiman, A., Taufik, T., Hadi, S., & Wulan, R. *Pengembangan dan Pemanfaatan Media Pembelajaran*. Bandung: Remaja Rosdakarya. 2009

Tohet, Moch & Fildah Zahrona Alfaini, PEMBELAJARAN HYBRID:
INTEGRASI PEMBELAJARAN BERBASIS TEKNOLOGI DENGAN
KONVENSIONAL UNTUK MENINGKATKAN MOTIVASI BELAJAR
TAJWID, (AT-TAJDID: Jurnal Pendidikan Dan Pemikiran Islam (p-ISSN:
2548-5784 | e-ISSN: 2549-2101) Vol. (07) (02), (Juli-Desember) (2023), (509)-
(521) Doi: <http://dx.doi.org/10.24127/att.v6521a2366>

Triyono, Agus, "Pendidikan Karakter Pada Sistem Boarding School," *Jurnal Kependidikan* 7, no. 2 (2019): 251–63, <https://doi.org/DOI:https://doi.org/10.24090/jk.v7i2.3085>.

Ulimaz, A. Meningkatkan hasil belajar siswa kelas x pada konsep keanekaragaman hayati menggunakan model pembelajaran inkuiri. *Konstruktivisme: Jurnal Pendidikan Dan Pembelajaran*, (2015). 7(1), 61–66.

Wahyu Utami, Septi, Jurnal Pendidikan et al., "PENERAPAN PENDIDIKAN KARAKTER MELALUI KEGIATAN KEDISIPLINAN SISWA Universitas PGRI Semarang" 04 (2019): 63–66.