

Educational Strategies for Success in The Technology Era 5.0

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ABSTRACT

Technology 5.0 is the latest evolution of technology, which connects the physical and digital worlds more integratively and effectively from its definition to its application in various sectors, such as manufacturing, agriculture, health and education. In the era of technology 5.0, technology increasingly optimizes human life by speeding up the production process and providing more efficient and accurate solutions. However, technological development also raises challenges, such as irresponsible use of technology and privacy violations. The Technology Era 5.0 has become a new phenomenon in the development of technology in various fields, including in the field of education. These changes influence education to be able to develop 21st century competencies and skills. This article reviews the development of education in the Technology 5.0 era, as well as the challenges and opportunities associated with the use of technology in education. In this era, curriculum and technology-based learning methods must be developed to meet the needs of the times. Teachers must also be trained to have the ability to operate increasingly sophisticated technology, as well as take advantage of opportunities to create more inclusive and skills-based learning. Education in the Technology 5.0 era provides an opportunity to strengthen the relevance of education to the needs of the times.

1. Introduction

Technological developments have been very rapid in the last few decades, especially since the discovery of the internet and personal computers in the 1980s. Technological developments have brought significant changes in various fields, such as communication, transportation, health, entertainment and education (Sefriani, R., et al. 2022). The Internet allows people to connect and communicate easily around the world, while computers and mobile devices allow us to access information and services quickly and easily.

At this time, technology is developing rapidly and undergoing significant transformation, especially with the emergence of technology 5.0. Technology 5.0 promises greater connectivity between humans and machines, as well as between machines and machines. This allows the development of systems that are smarter, more adaptive, and can interact with the environment more effectively. Some of the 5.0 technologies that are currently developing include Internet of Things (IoT), Artificial Intelligence (AI), Robotics, 3D Printing, and Augmented Reality (AR), (Samala, A. D., et al. 2023).

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Technology Era 5.0 is a technological era that integrates technology with various aspects of human life, including in the field of education. Education in the Technology 5.0 era emphasizes learning oriented towards developing 21st century competencies and skills, such as problem solving skills, creativity, collaboration, critical thinking and systemic thinking (Hakiki, M., & Fadli, R. 2021).

Apart from that, education in the Technology 5.0 era also faces challenges in integrating increasingly advanced technology into learning, so there is a need for changes in the curriculum and technology-based learning methods. This also requires the development of teachers' abilities to operate technology, as well as the support of adequate educational infrastructure and resources (Lee, H., et al. 2020). Technology era 5.0 learning refers to changes in learning approaches carried out by utilizing the latest technology (Muhaimin. 2021). The very rapid development of technology in recent years has opened up new opportunities in the field of education, allowing educators and students to take advantage of the latest technological innovations in their learning activities.

However, although there are so many benefits from using technology in everyday life, technological developments also bring new challenges, such as dependence on technology and lack of direct social interaction and irresponsible use of technology and invasion of privacy. Therefore, there is a need for a good understanding of technology and its impact on society and the environment. Technology must be developed responsibly and paying attention to its impact on human life and the environment (Setiawan D., 2021).

2. Literature Reviews

2.1 Recognizing Education in the Era of Technology 5.0

The era of society 5.0 has indirectly had the impact of increasingly advanced changes in several aspects of life, such as economic, social, cultural and of course educational. This is very closely related to changes in the educational sector because the resources prepared to face each era are individuals who were originally students in the educational environment. Therefore, it is felt that education must make changes and developments in accordance with the demands of the era, namely in this case the era of society 5.0 which is in line with the industrial revolution 4.0 which focuses on the pace of technological development (Samala et al., 2023).

Society 5.0 is a civilization concept proposed as the next stage of the evolution of human society, after the four previous stages, namely Society 1.0, 2.0, 3.0, and 4.0. Society 5.0 focuses on the use of advanced technology such as artificial intelligence (AI), robotics, IoT (Internet of Things), and Big Data to solve complex social and environmental problems and demands broader and holistic collaboration (Sefriani, R., 2022) .

Learning in the technology era 5.0 also includes developing the skills of the younger generation to be able to innovate and face change quickly, including social and emotional skills, critical thinking skills, creativity and the ability to collaborate. Technology era 5.0 learning emphasizes the use of technology as a tool to improve the quality of learning and provide better solutions for society (Setiawan D., 2021).

2.2 Learning is easy and fun by keeping up with the times

Education is one of the most important things in human life. In its development, education has experienced various changes and adjustments to the times. In the era of technology 5.0, learning is also experiencing significant changes and innovations. Learning is no longer only done in the classroom using books and handwriting, but instead uses technology as a learning medium. This aims to make learning easier and more enjoyable for students (Syarifuddin H., 2021).

Easy and enjoyable learning is the main goal in education. This can be achieved by following developments with the times, especially in the field of technology. The current digital era has provided many conveniences and made it easier to access information and learning resources. One learning approach that is suited to current developments is a learning approach based on information and communication technology (ICT). In this approach, media and technology are used as tools in learning. The use of ICT in learning can enrich students' learning experiences, increase students' interest in learning, and help students understand learning material more easily (Sofiana N., 2020).

However, the use of ICT in learning is not always easy and enjoyable for teachers and students. Teachers need to prepare themselves and learn new technology in order to use it effectively in learning. In addition, factors such as access and availability of ICT infrastructure, as well as students' readiness to operate technology can also influence the success of ICT-based learning. Therefore, there needs to be support from schools, the government and the community to improve facilities and supporting facilities for ICT-based learning, as well as providing training and development for teachers in operating the latest technology. This will help speed up adaptation to the digital era and improve the quality of learning (Sunardi S., 2020).

In facing the challenges of learning in the digital era, students also need to prepare themselves by learning digital skills such as programming, data analysis and problem solving. These skills can help them be better prepared to face job competition in the future (Huda M., 2020).

2.3 The Right Mindset for Success in the Technology Era 5.0

Thinking about success in the era of technology 5.0 is one of the important things in facing an increasingly advanced and complex technological era. In this era, rapid technological changes mean that everyone must continue to adapt and innovate to continue to exist and be successful. Thinking successfully in the technology 5.0 era requires a different mindset from previous eras. A good mindset for success in the era of technology 5.0 is a mindset that is open to change, adapts quickly, and continues to learn and develop itself (Muhaimin, 2021).

Apart from that, it is also important to have critical and analytical thinking skills, as well as creativity in facing changes and challenges in the technology 5.0 era. With a good mindset and sufficient abilities, everyone can utilize technology to achieve success in various fields, be it business, education or career (Prensky, M., 2001).

However, a good mindset alone is not enough to achieve success in the technology 5.0 era. Apart from a good mindset, the ability to implement the knowledge and skills possessed into daily practice is also needed, as well as hard work and consistency in achieving the desired goals (Muhaimin, 2021).

3. Methodology

This article was written using the descriptive-qualitative method. The qualitative descriptive method is a research method used to understand a phenomenon in depth by collecting non-numerical data, such as words, images or documents. This method focuses on the description and interpretation of the phenomenon being researched (Wijaya. 2018, & Moleong. 2014)

In the qualitative descriptive method, researchers usually collect data through observation, interviews, or document study. The data obtained was then analyzed in depth by identifying patterns or themes that emerged from the data that had been collected (Sugiono, 2009). The researcher then provides an interpretation of the results of the data analysis.

Qualitative descriptive methods are usually used in research that focuses on the subjective experiences of individuals or groups, such as research on people's beliefs, values, or views on a phenomenon. This method is also suitable for use in exploratory research or in building new theories about a phenomenon (Suharsimi, 2015).

4. Results and Discussion

The material reviewed shows that education in the Technology 5.0 era must adapt to developments in advanced technology such as AI, robotics, IoT, and Big Data to prepare students to face future challenges. ICT-based learning transformation makes the learning process more interesting and accessible, but its success depends on infrastructure readiness and the ability of teachers and students to utilize technology. Support from various parties is needed to improve facilities and provide adequate training. An adaptive, innovative and continuous learning mindset, as well as the ability to think critically and creatively, are the keys to achieving success in an era of ever-developing technology (Samala, A. D., et al. 2023).

4.1 Education in the Era of Technology 5.0

The Technology Era 5.0 demands significant changes in the education system, with an emphasis on the use of advanced technology to prepare students to face future challenges. Social, emotional, critical thinking and creativity skills are important aspects that must be developed. Education must be able to utilize technology to improve the quality of learning and provide effective solutions to social problems (Setiawan D., 2021).

4.2 Technology Based Learning

The transformation of learning with an ICT-based approach has had a positive impact, making learning more interesting and accessible. However, the success of this approach depends on the readiness of the infrastructure and the ability of teachers and students to utilize technology. Support from various parties is needed to improve facilities and provide adequate training for teachers (Sofiana N., 2020).

4.3 Mindset for Success in the Technology Era 5.0

The Technology Era 5.0 requires an adaptive, innovative and continuous learning mindset. In addition to critical and creative thinking abilities, practical implementation of knowledge and skills is essential. With the combination of the right mindset and consistent effort, individuals can achieve success in various fields (Muhaimin., 2021).

5. Conclusion

The use of learning applications and the development of ICT-based learning models allows students to learn independently, interactively and funly. However, the right mindset is also important in facing challenges in the technology 5.0 era. The ability to think critically and analytically is a much needed skill, in addition to social skills and creativity.

In the era of technology 5.0, it requires the right mindset, appropriate skills and the ability to adapt to rapidly developing technology. With the right mindset, the necessary skills and good adaptability, we are expected to be able to face the challenges of the technology era 5.0 and achieve success in various aspects of life. The application of technology in learning, the use of learning applications and the development of ICT-based learning models are expected to speed up and simplify the learning process and provide a more interesting and interactive learning experience for students.

This researcher provides awareness to people in educational environments about the importance of their attitudes towards things around them in forming an understanding of educational strategies for success in the era of technology 5.0.

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