

## The Influence of Technology in the World of Education

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ARTICLE INFO	ABSTRACT
<p><b>Article history:</b></p> <p>Received : 26-12-2023 Revised : 25-01-2024 Accepted : 22-02-2024</p> <hr/> <p><b>Keywords:</b> Influence, Technology, Education</p>	<p><i>This study investigates the influence of technology in the world of education. With the rapid advancement of digital technology, its impact on educational practices and outcomes has become increasingly significant. Through a comprehensive review of existing literature, this research explores the multifaceted influence of technology on various aspects of education, including teaching methods, learning experiences, student engagement, and educational outcomes. The study examines how technology has transformed traditional classroom settings, facilitating the adoption of innovative teaching strategies such as flipped classrooms, blended learning, and personalized instruction. Additionally, it investigates the role of educational technology tools such as learning management systems, interactive whiteboards, and educational apps in enhancing instructional delivery and facilitating student learning. Furthermore, the research explores the broader implications of technology in education, including its potential to democratize access to education, bridge learning gaps, and foster lifelong learning. It also addresses challenges associated with technology integration, such as digital divide, privacy concerns, and the need for teacher professional development. Moreover, the study discusses emerging trends in educational technology, such as the use of artificial intelligence, virtual reality, and gamification, and their potential to revolutionize educational practices and outcomes. By synthesizing empirical evidence and theoretical frameworks, this research provides insights into the transformative power of technology in education and its implications for educational policy and practice. Ultimately, this study contributes to a deeper understanding of the influence of technology in the world of education and highlights the opportunities and challenges associated with its integration into teaching and learning environments. It serves as a foundation for future research and informs evidence-based strategies for leveraging technology to enhance educational outcomes and promote lifelong learning.</i></p> <div></div> <p>This work is licensed under a <a href="https://creativecommons.org/licenses/by/4.0/">Creative Commons Attribution 4.0 International License</a>.</p>
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### 1. INTRODUCTION

Entering the present era, global technological advances have influenced various aspects of life in the fields of politics, economics, culture, arts and even in the field of education.

Technological progress in this era is something that we cannot avoid in life, because technological progress goes hand in hand with scientific progress. In the field of education, technology has an important influence on science, where in science students are taught about natural phenomena and facts and with this technology, humans use technology to apply this knowledge. Technology helps humans to create innovations that can help people's daily lives. - days and makes a very energy-draining job easier.

Technology is something that can help all people throughout the world to help become a means to carry out daily activities carried out by humans at work and in education. Technology is also included in a field of science to study a system contained in a computer or laptop and make a tool or application installed on a network to help or facilitate humans in their daily activities. In the development of a more modern era, technology is also becoming more sophisticated and more advanced, such as more media supporting workers and pupils in carrying out their assignments. Just like now, the sudden emergence of a virus from China has weakened the economy and education, therefore at this time technology is really needed by everyone because most of the activities carried out by all workers and students are done online. or online at home, many media are managed by any party such as meet, zoom, classroom and others. The existence of this new technology makes it easier for all workers and students to get to work and school, but there are several problems that exist in using this media.

With the increasing creation of technology at this time, all parties in the world of education must be able to balance and keep up with existing technological advances. We can see that influenced by the environment around us, technology is greatly supported by the availability of internet networks which can influence other developments, especially in the scope of education World. In education, the internet is used as a support in learning media. The world of education needs to improve the progress of schools and education by providing positive innovation. Schools are expected not to miss out on advanced technology by providing electronic devices that support the learning process. Good and complete facilities and infrastructure will make learning activities run effectively and efficiently

Education is learning or learning knowledge, skills that are carried out or carried out by humans to know the things that will be done in the world of work. Education starts from an early age, namely TPA (daycare) to college or university level for the tallest. In Indonesia, education is divided into several parts, there is the State. private and Muhammadiyah. For state schools, all students can study at these schools, all religions can attend state schools, while for private schools, most of the schools are based on Islam and learning about religion and Muhammadiyah schools focus on those from Muhammadiyah families but also accept students who are not Muhammadiyah. Actually There is nothing different about these schools, because essentially schools are for studying and imparting the education provided by these schools. Education is also a provision for finding jobs that will be taken by students and students, because each education has its own major depending on the school or university. Education can also be a measure of a person's intelligence, because those who have education will be seen as knowledgeable and can be trusted by an organization or group. Despite extensive research on the influence of technology in education, there are several gaps that warrant further investigation. One significant gap is the need for more nuanced studies that explore the differential impacts of technology across various educational levels, disciplines, and learning environments. Existing literature often provides broad overviews or generalizations, overlooking the specific contexts in which technology is implemented and its effects on different student populations.

Moreover, while many studies focus on the benefits of technology in enhancing instructional delivery and student engagement, there is limited research on its potential drawbacks or unintended consequences. More comprehensive investigations are needed to examine issues such as digital distraction, information overload, and the impact of technology on social and emotional development. Additionally, there is a gap in research that explores the effectiveness of specific educational technology tools and interventions in improving learning outcomes. Many studies focus on describing the features of technology or assessing overall satisfaction, but there is a lack of rigorous empirical research that measures the direct impact of technology on student achievement, critical thinking skills, and other learning outcomes. Furthermore, there is a need for research that examines the role of technology in promoting equity and inclusivity in education. While technology has the potential to democratize access to

education and address learning gaps, there are concerns about widening disparities and exacerbating inequalities. Investigating strategies for mitigating these disparities and maximizing the benefits of technology for all students is essential.

Finally, there is a gap in research on the long-term sustainability and scalability of technology integration initiatives in education. Many studies focus on short-term implementation or pilot projects, but there is limited evidence on the scalability of successful interventions and their long-term impact on educational systems. Addressing these research gaps will contribute to a more comprehensive understanding of the influence of technology in the world of education and inform evidence-based strategies for maximizing its potential to improve teaching and learning outcomes.

## **2. METHODS**

This research uses library research, namely looking for research sources by collecting several pieces of literature sourced from journals, books and other sources, to make it easier to conduct research on the Influence of Technology in the World of Education. In research, the technique used to collect data is by searching for material related to the discussion in this article, both digitally and manually. After making references, then analyze the data that has been collected by displaying, reducing and reconstructing it so that it becomes a concept that new, using content analysis that prioritizes intertextuality.

## **3. RESULTS AND DISCUSSION**

### **Meaning of Educational Technology**

The problem that often occurs in the world of education in Indonesia is the weak process of learning activities carried out in the classroom, in this case the learning process is only theory carried out in the classroom environment and this learning aims to direct the students' ability to understand the material. . However, in this theory there is a lack of material for application in daily life. In learning, the presence of an educator has high potential in developing students' potential and creativity, but the important role of existing educational technology is very useful for learning from lower to upper levels, such as learning media which can function as a medium for learning. fun, the media also helps to find more complete insights.

Educational technology can be interpreted as a study or practice for students to help in the teaching and learning process in schools. It can be a process of creating teaching that requires a process that uses existing technology and is sufficient to create a learning concept. In educational technology, what needs to be used is the system that is needed to create a process for developing human needs or performance on a daily basis. In the process, educational technology requires several components such as components and equipment that are used in processing and analyzing data and solving a problem. which exists. In learning, the tools used in educational technology can also change the teacher's position in teaching because in this learning the teacher expects students to be able to use technology that now exists and also sophisticated technology to present their learning outcomes with these tools. in the form of media or otherwise. The role of the teacher is also still needed to continue teaching in the classroom because the function of technology itself is to facilitate learning, not to take over the teacher's role completely.

The use of learning technology is one means of preparing the workforce in the future, because in this aspect it is seen as a body that has an interest in schooling. Heads of schools and education offices need to pay attention to educational technology related to the formal educational environment, therefore educational technology is Currently used, it is starting to develop as education that teaches theory and practice where human processes, resources and systems can be designed, developed, utilized, managed and assessed. The knowledge and information that needs to be mastered is not small, but very much and without limits. The development of educational technology is largely determined by increasing needs, influenced by the development of technological science as a product of human creativity. Communication and information are said to be influences of technological development.

Technology and education in life are an inseparable part of human life from ancient times until the end of time. Education and technology always develop along with human development on earth. Education is a very important personality-forming character, when developments in education always experience changes that are better and stronger than before.

### **The Role of Educational Technology**

This technology acts as a vehicle in delivering teaching. Technology in education is used as an intermediary to achieve learning goals. Students who can make good use of technology in education to increase their knowledge. Technology in supporting education can be expected to help students and educators in carrying out teaching and learning activities at school so that teachers can be helped in explaining or teaching to their students.

without having to get tired of checking the results of the training given to the student. In the current era of the development of information technology in the millennial era or in the more modern era of globalization, the role of information technology is really needed for several things related to the field of school and university education. Global demands require the world of education to always update technology and always adapt to adapt. schools with the development of information technology towards efforts to improve the quality of education, especially adapting its use to the world of education, especially in the learning process. Therefore, educational technology is very helpful in providing educational training to teachers or students so that when they go into work they can work professionally, and can use the learning facilities available in existing technological developments.

Information technology is not only used in schools, it can also be used for jobs such as vocational schools where in these schools they are taught to work directly according to their major with the help of new technology such as automotive vocations, so schools provide tools or technology to support these activities so After graduating, students can immediately operate the tools in the workshop. Information technology can also help the community's economy, as now there are many applications that help people travel or order food only via cellphone, such as Go-Jek, Grab and Shopee Food, with these applications they can help drivers earn a living and increase income for the shop or destination that they order from. customers. Lastly, in the world of agriculture, technology has a big influence on agriculture, such as plowing fields which used to be done using buffaloes, now as technology becomes more sophisticated, plowing fields using tractors which use machines makes it easier for farmers to plow the fields and to apply pesticides to the plants they are planting. There are tools that make things easier, namely using drones or unmanned aircraft which are controlled using a remote control which can be done remotely, thereby reducing the farmer's energy. The industrial technology that currently exists can cause very fundamental changes that can be felt in social and economic aspects.

Learning is a form of process in deepening knowledge that is taught by a teacher or expert in the field, this process requires several components that can help in carrying out the learning process, media or tools that have technology are needed that can balance the field being taught. In this case, the interaction carried out by the teacher and his students can give rise to a high level of knowledge. The learning process is a positive thing because students learn from not knowing at all to knowing about the learning, such as technology, people who are unfamiliar with technology, if they are guided and learn about technology, over time that person will understand about the world of technology. Likewise, technology has a big influence on learning because in our learning, educators also need the help of technology to provide material to students and it could be said that technology replaces the role of teachers in the classroom, but not completely, teachers are still needed to explain material that they don't understand directly and control the students in the classroom.

### **The Positive Influence of Technology on the World of Education**

With technology, of course this makes education very easy. It will be easier for everyone to learn anything without the obstacles of being far away. Schools and colleges also find it easy to find information that can be done at home and can reach several areas, students who take part in online learning easily. Technology to improve the quality of education, interactive educational tools are a way to improve education by interacting technology in class. Technology is said to be a good resource center to support the teaching and learning process. This is written in Permendiknas No. 41 of 2007 concerning Content Standard Graduate Competencies, the learning principle used in point 13 which reads "Use of information and communication technology to increasing the efficiency and effectiveness of learning. Technology as a determinant of choosing learning strategies, materials and media equipment that are used to improve the learning atmosphere. The

application of technology is beneficial for education, namely:

1. The emergence of mass media, as a source of knowledge and a center for education, especially electronic media. Examples include internet networks, computer labs.
2. The impact is that the teacher is not only a reference source of knowledge, so that students are not only focused on the teacher and the learning information provided by the teacher, but can also access learning material via the internet, the teacher has a role as a teacher and guide, so every student is guided in learning to direct and monitor the educational process, so that students do not take the wrong path in using Information Media in learning at school.
3. There are new methods that can make the learning process of students at school easier. With technology, methods are created that attract students' attention in learning and make it easier to understand the material.
4. Learning can be carried out online, for example by using the Zoom application, Google Meet, and using internet postal services.
5. There is a data management system for assessment results that uses the use of technology. At a time when technology was not yet developed, humans carried out research, the data analysis had to be carried out directly and went into the field and calculated manually, but with the current technology, all tasks can be done through technology, without requiring a long time and the results are more accurate. An example of technology is a laptop or computer that can manage data by utilizing programs on the laptop or computer.
6. Fulfillment of educational facilities quickly. For example, when making questions, it is necessary to make questions according to the number of students in the school, therefore there is a photocopy machine that can make copies quickly. With technological developments, all of this can be done in a short time.

In the learning process there are several benefits obtained from technology, namely:

1. This learning will be more interesting and effective.
2. Used to explain something complex clearly and easily understood.
3. Can speed up a long process quickly.
4. Presents rare events, as well as many new discoveries.
5. Shows events that are unexpected by humans

### **The Negative Influence of Technology on the World of Education**

Technology for education not only has a positive influence, but there is also a negative influence. In the world of education, speaking and communication skills are one of the skills that must be possessed. When learning via the internet, communication will be reduced, therefore they are more likely to interact with technology. In the world of education, there are definitely several problems that can occur which are caused by students and teachers, the problem in question is a negative influence that could possibly occur. This happens because as we all know, today's technology in the millennial era is very sophisticated, so everything in the world of technology can be accessed and this is an existing problem. In the following examples, this is a negative influence on students and teachers.

1. Often students or university students often access something on the internet, it can be worrying that they use what is available in information technology but not optimally, instead they use it for other things or they end up accessing information that contains things that are not good, such as pornography and games. on line. This is a concern for teachers and parents of these students, because in this case it could damage their minds and disrupt their education
2. For students, they can be exposed to information overload, that is, they can access everything that exists and they can find the information they are looking for continuously, such as opening pornographic things which can give them an addiction to accessing pornography and also online games. what makes them willing to spend money just for this game and the problem is the health of the students' eyes because they stare at the monitor screen too often and it can also disturb their learning activities and that is very detrimental for them and they can even neglect their obligatory obligations, namely prayer, because they are too busy. play online games.

3. Many pupils or students are addicted to cyberspace or the internet, this causes apathetic behavior towards new things, therefore when using the internet there must be a fortress or filter to access it. Apart from that, parental attention or parental supervision is an important role in instilling a mindset in a child's life.
4. In technology there are criminal acts (Cyber Crime). However, not only in the world of technology, but in the world of education, this can also happen and can become a serious problem in the world of education, for example there are students who steal confidential or important documents or assets that contain information about an existing system. In real education, assets are kept secret, such as documents regarding final exams, grades and attendance which are carried out using media that can be accessed via the internet.

As a teenager grows up, there are more and more things that teenagers want to know and also look for their identity and they try to follow the thought patterns and behavior of adults, and teenagers start to follow what adults do every day via the internet, they can search Whatever things that adults usually do, such as buying drugs or watching pornographic videos, in fact, even as teenagers, they have started to misuse technology, such as starting fights via social media, making fun of each other between schools and so on. And what plays a role in preventing negative influences is the role of parents and teachers in schools by reducing the use of cellphones or other technology every day and not advising children to go out in the middle of the night because that is the source of these negative influences.

#### 4. CONCLUSION

The continuous development of science and technology has had several influences on the environment. The existence of technology has affected all aspects, for example economic, social, political and even educational. Based on the material we discussed, namely the influence in the field of education. This influence not only has a positive influence but also a negative influence. The positive influence of technology in education includes making it easier for every student to search for information, knowledge, and broadening students' horizons. Meanwhile, the negative influence is that there are some children who misuse the use of this technology. For example, using this technology to play excessive games can reduce focus on learning, which can cause a decrease in children's achievement. With these positive and negative influences, we as users must be professional in using technology well so that the technological developments that occur can run well. Technology can also make work easier, therefore make the best use of technology.

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