



THE ROLE OF TECHNOLOGY IN MODERN EDUCATION

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Abstract: Nowadays, technology has a huge role in modern education and in the modern world and nothing can be achieved without it. In addition, due to the development of business and marketing technologies in modern education, online learning is possible, namely Google, Zoom and You tube and a number of other sites and applications where you can learn. This is followed by a number of researches and articles, and based on these, we can say how to strengthen education, create a special approach to weak areas and students. (Soki D. Shyamlee, 2017)

Keywords: Technology in education, Business, online learning, Teaching strategy, and Digital communication





INTRODUCTION

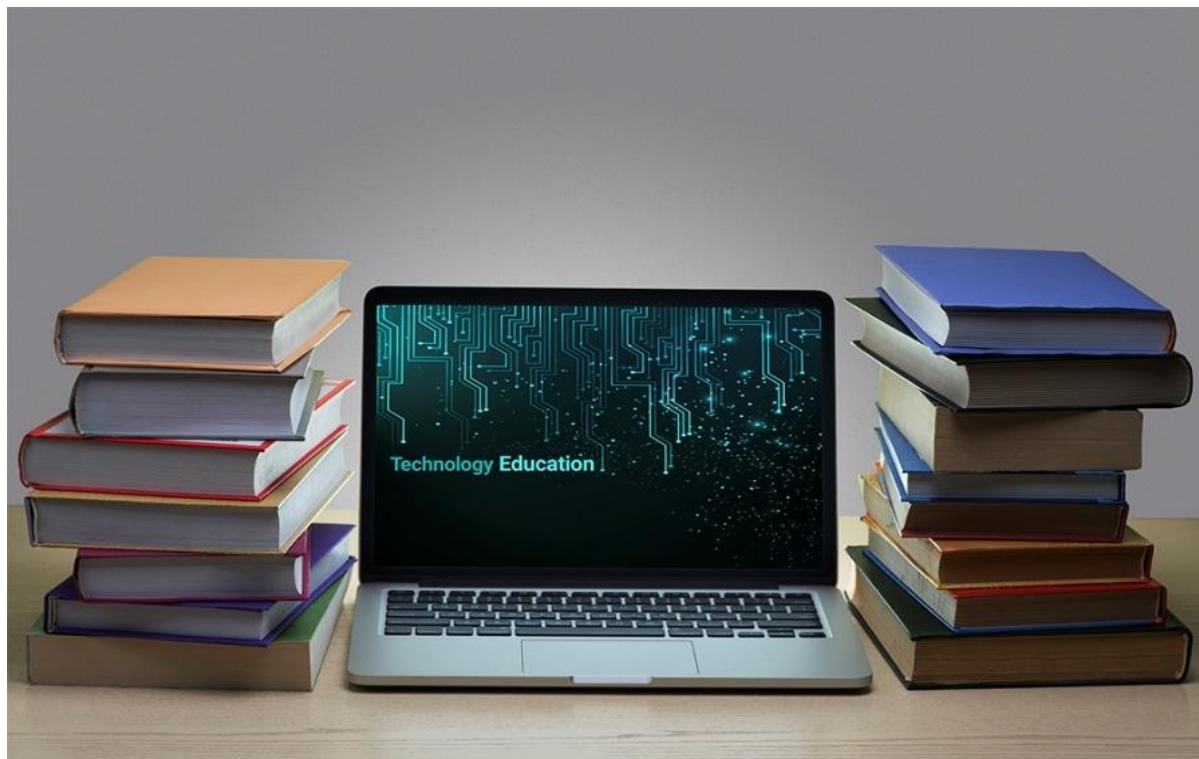
The main reason for the development of technology in education is that there have been shortcomings over the years, and as a result, it was not possible to develop without technology, and therefore, technology has developed dramatically, which has changed the current education system and a number of jobs, and if you need to learn something, AI or all kinds of online courses are enough, including blackboards, teaching materials. As a result, technologies such as projectors and virtual reality have taken an important place in education, because they allow us to imagine history and see it with our own eyes, as well as online courses adapted to our time, which certainly bring great benefits to the education system. AI allows us to learn in the subject we want, whether it is business or education or IT, it provides us with very deep information and is a very good teacher. At the same time, in response to the effective and worldwide discussions on the integration of technology into education (Ozkan Yilmaz, 2017), it is of great importance and education is strong with them.



Research Hypothesis

It can be said that the integration of learning and technology (such as VR, and AI) will positively influence the knowledge and activity of students and their learning. It is also important to use technology, which will prove its relevance in terms of learning methods and preferences, and AI will greatly help those who want to work individually and quickly increase the effectiveness of learning.

Literature Review



Impact of modern technology in education

The modern world has seen the transformative impact of technology on education and has written an article on it and has proven its role in enhancing the teaching and learning experience. (R. Raja and P. C. Nagasubramani (2018)). One of the greatest achievements of humanity in the modern world is technology, the main reason why the modern world and education are modern is technology, technology in education has created and changed the traditional teaching methodology and proved it to be the most suitable.

If we look at the facts, it has made it easier for teachers to teach, and it has enabled students to learn, that is, to find a wide range of information. Therefore, the learning process is developing and becoming interesting because we have the opportunity to get the knowledge we want. One thing should not be forgotten is that knowledge obtained from books and literary books are leading to a decrease in reading. In the modern world, it plays a key role in improving work and our lives, and the authors of the article provide information about its consequences and limitations

Technology and education: Challenges and opportunities

It analyzes the integration of technology into education and draws conclusions from it in two ways, namely positive and critical. That is, the article expands simple information and allows for a deeper understanding and allows for penetration into economic systems, which is considered useful. The critical view emphasizes its characteristics as having value, not as a neutral and isolated force. In addition, it conducts research using online and offline education as an example and describes how technology has played a very large role in education and technology has its place not only in education but also in other

important aspects and proves that the impact of these on each other is very large. Because every piece of information belongs to someone and has an owner, it is necessary to check and determine whether it is true or false information, and in this case, it needs a person to form his own opinion and clarify. He also says that its harms cannot be forgotten, that is, it becomes dangerous when one completely adapts to it and relies on it, not having one's own opinion is a heavy loss, so one should not forget to use one's own opinion (Anita L. Cloete (2017))

Understanding the role of digital technologies in education: A review

It has caused a lot of changes and at the same time, how to make an impact is being emphasized, the UN 2030 Agenda for Sustainable Development has tried to not only integrate technology into education in all countries, but also to improve the quality of education and improve energy and reduce waste in the production of new paper materials. Basically, in COVID-19, the whole world has integrated technology into education and has become an effective work and has increased the cost. That is, books have been transferred to pdf and electronic textbooks. However, one of the needs was systematic preparation and if this is also overcome, the intended success will be achieved. help. from work, technology has revealed the problems and problems and shown the problems. A healthy demand for systematic learning is needed. (A. Haleem, Mohd Javaid, Mohd Asim Qadri and Rajiv Suman (2022))

The Role of Technology in Modern Science Education

Ozkan Yılmaz, in his article on the changes in the world, described each of Robotics, 3D, and AI in turn, and proved how important they are (Ozkan Yılmaz, 2023). Learning with these tools is interesting and focuses on facts and accuracy, and it is a very good lesson. Also, if these are used in large quantities, it also highlights the problems of insecurity, that is, we are adding technology to traditional learning, that is, we should not end traditional learning. Also, it highlights the infrastructure and resources for good development, and the costs of training teachers in technology.

The Use of Technology for Second Language Learning and Teaching: A Retrospective

In a 2007 article, M. Rafael Salaberry examines how technology has changed second language acquisition over time. It explores how language teaching has changed as a result of technological advances, from new devices like computers and VCRs to older devices like radios and televisions. According to Salaberry, although modern technologies have changed communication, language teaching has not always benefited from them. He thinks, it is not enough to just have technology, it must be used with the right and effective teaching strategies. According to him, studying how technology has been used in the past can help us better understand how to use new technologies in language teaching.

Use of Technology in English Language Teaching and Learning: An Analysis

In his (Solanki and Shyamlee, 2012) talk about the importance and importance of technology in the development of English and world languages, he gives very detailed and precise facts about how to use it. He lists a number of tools that can be used to learn, such as e-mails and blogs, digital dictionaries and online discussions, and calls for their use. He focuses on how to create interesting contexts and proves that these significantly improve learning. He proposes new models, and among their advantages are interactive lessons and the preparation of teachers for the next lesson. However, he emphasizes that it is not good to rely too much on these tools, because teachers must have a level of knowledge and are obliged to develop them.



Research gaps and limitations

It is becoming much easier to identify weaknesses and strengths in subjects through modern technologies, because, for example, working in laboratories through VR or not using AI in biology and physics proves how interesting and effective education can be if it is used. Also, the quality of education increases when technologies are integrated into all education. When added to each subject and course, it will definitely show its benefits, that is, its impact, and when applied to businesses, it will show ways to manage, develop and adapt businesses, increasing work efficiency. Some areas that are not financially free have difficulty working with technologies and integrating them because the teachers themselves do not yet understand them sufficiently. Children, on the other hand, do not have access to technology, so they rely on teachers and books in such places, and it is not always good to rely on technology, emphasizing that they should focus on their own ideas and knowledge. (Solanki D. Shyamlee)

Problem statements

No matter how advanced technology is, in some countries, its use in education is very weak. That is, the lessons and knowledge that are being taught in the classroom are in some sense outdated. Therefore, if the use and use of AI and VR are controlled, the quality of education will increase, and teachers will be more qualified and have more opportunities to learn new knowledge. Then, they can teach each topic in more depth and precision. However, some teachers are not familiar with technology and their critical thinking and problem-solving skills are not enough. Therefore, it is necessary to bring technology to such places as soon as possible and help teachers to teach properly, and then the efficiency will be guaranteed to increase. (Taylor,2022)

Research questions

1. What are the current technologies in science education?
2. What challenges do educators face when integrating technology into science education, and how can these challenges be addressed?
3. How does the use of technology influence students' critical thinking, collaboration, and problem-solving skills in science education?
4. What strategies can be implemented to ensure equitable access to modern technologies in science education across diverse educational settings?



1. As technology advances, science education is being reshaped. In addition, smart boards and interactive whiteboards are replacing traditional blackboards, which provide teachers with greater convenience and the ability to deliver videos (Smith and Johnson, 2020). VR is a very important technology because it allows for virtual viewing and allows for immersive experiences, which is a great opportunity. AI is a huge source of information and a very professional teacher. (Smith and Johnson, 2020) Online courses allow people to learn at their own pace and in their own time, which also increases the effectiveness of education. (Miller, 2020)
2. The technologies that are being integrated into subjects and lessons can sometimes be a problem because teachers cannot use their knowledge to a sufficient level. This can be a big minus because they cannot adequately deliver the materials and preparations in the lessons, and in this case, such technologies do not benefit teachers. Therefore, traditional teaching is acceptable, but this leads to lagging behind the reformed teaching and may have a negative impact on the knowledge of students, that is, the quality of education. Therefore, it is advisable for teachers to be trained in technologies through training and lessons and to be taught modern teaching techniques. Also, it is not only the teachers who are not creating opportunities, but also the state, so it is necessary to control the convenience and keeping up with the times for teachers and students as much as possible, and then the effectiveness of education can increase and lead to the development of the state. It is also necessary to show how important technology is, so that everyone understands that technology has a huge role in education and should be used without forgetting this. (Ertmer and Ottenbreit-Leftwich (2010))
3. Integration of science education with technology gives students and teachers critical thinking, problem-solving skills, and the ability to differentiate information, which is important for teachers, which is important for making informed decisions and communicating independently. It also allows for visual imagination and allows for remote communication, and allows for the ability to contribute to teamwork and work in visual labs, which is safe and authentic. It also helps to understand complex scientific concepts and has the ability to obtain and learn from what you want, which is only useful if, as we have said, you know how to differentiate information in practice. This is very useful information, because in this modern world where all information is scattered, it is not difficult to search for and learn information, but it is important to differentiate and come to your own opinion and understanding. (Harrison and Killion (2019))
4. In order for science education to be equitable after the integration of technology, it is necessary to eliminate the need for resources and consider whether everything is effective from an economic perspective, that is, to provide the necessary means. (According to Warschauer and Matuchniak (2010), strategies are considered, that is, to develop schools in underfunded areas and provide them with the necessary means, and

to provide them with the necessary equipment, and to deliver them to those areas without internet access and to individually address the opinions and wishes of each student, the quality of education will increase. Another is that if major steps are taken such as adding online classes and adapting people, both the regions and the students will have a great development, and also training some teachers is a big job, that is, it needs to be done, and if this is paid for free by the state because they are teachers, teachers will have great benefits and motivation, and if literacy is done among teachers, this will be very effective. In this strategy, we can ensure that everything is open, meaning that we can provide great support and inclusive education to students and teachers.

Purpose of Study

The main goal of this research is to examine the role of technology in modern education and its transformational activities and problems. It focuses on the importance of using resources and organizing and uploading them to electronic resources, platforms, and interactive learning. VR and AI allow people to see what they are doing, which means they can quickly and easily learn difficult things. Platforms can help develop basic global communication and connections, students can learn about culture and various technologies without restrictions, which can help students, especially in remote areas, to access information they need, so that they can be updated and trusted. Teachers do not know the balance between technology and traditional teaching, which is not good and the level of impact on teaching, they also emphasized the equal distribution of resources, but they also emphasized the importance of ensuring that education does not lag behind in the process of critical thinking.

Technology also drives long-term changes in education and examines its impact.

Research Methods

These studies mainly used secondary research and emphasized the role of technology in modern education in collecting data and approaching facts. Basically, it includes information on the benefits of integration and improving and strengthening the quality of education of students. As the research was based on the basics, each information was organized on official and reliable sites, namely Google scholar and special books were used, which highlighted the problems of access to technology and the confidentiality of personal data. Also, the miniaturization of large information has made it easier to understand and learn from small data, and this has further increased its importance in education.

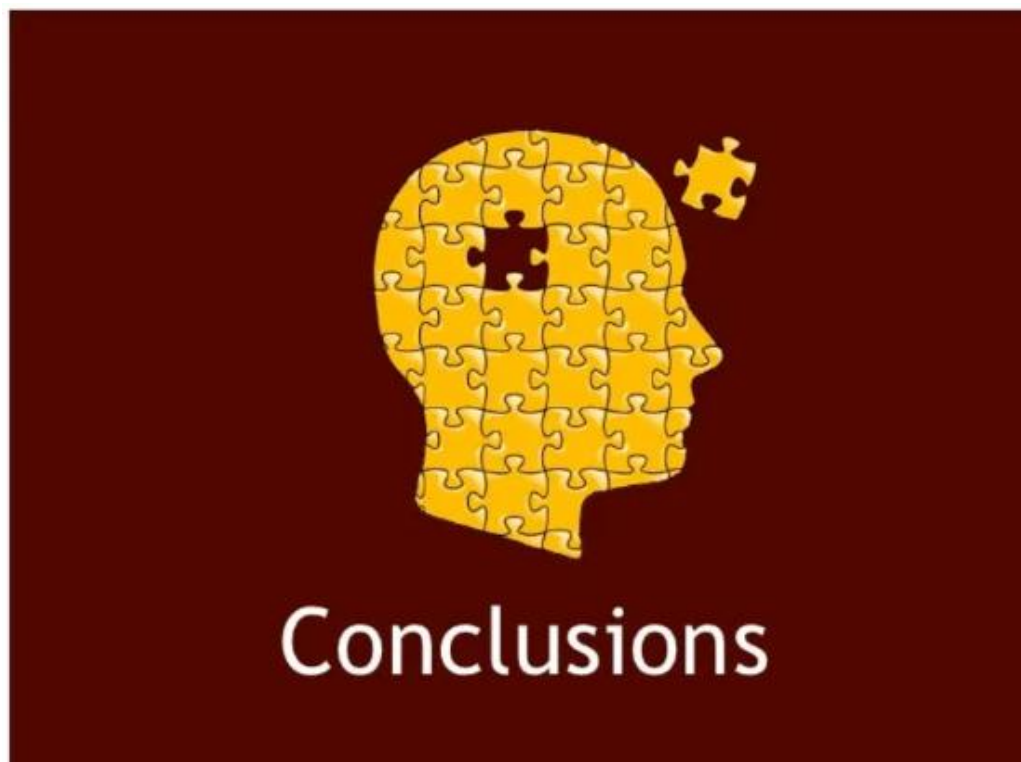
Finding



After these studies, we conducted a survey among people and used it to get complete information. In this, we received a 100% response rate:

- 1) Students in your profession 78%
- 2) Mostly teachers use it every day 85%
- 3) Learning from platforms 74%, namely Google classroom
- 4) 90% of users confirmed that their knowledge increases through technology
- 5) 41% of students face obstacles in using it
- 6) 63% of participants answered that institutional support is sufficient
- 7) 92% of participants stated that technology is very important.

Seeing these results, it is clear that some countries and regions need to be provided with freedom and convenience to use technology and that there are still many such regions that need to be developed, and efforts should be made to help them and this should be done as much as possible. Also, people understand how important technology is to be used very deeply. They understood how to use it and how to use it. Such conclusions were emphasized as leading to development and great success in education.



Conclusion

Technology has made a great contribution to the development of education and effective teaching, has had a positive impact, and has created very useful jobs for teachers and students, providing them with a wide range of freedoms and opportunities to find and learn information. At the same time, students and teachers and people from various fields have recognized the power of technology and have advocated for its

adaptation, emphasizing the need to provide schools and areas without internet access, that is, all areas with technology, and this will bring great benefits to the future of the country and bring these freedoms. After students were given the opportunity to learn and repeat their knowledge on AI and a number of platforms, the quality of education has increased significantly. Therefore, our time is adapting to technology, we must adapt to it, but let's not forget to have our own opinions and decisions, that is, we emphasize not to let technology control us.(Stošić Lazar (2015)

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