

## MODERN TECHNOLOGIES IN EDUCATION

Hasanboyeva Barno Sherali qizi, Islamova Xolida Xamza qizi Foreign language department in preschool and primary education, 540-20-group student

**Abstract:** Without a doubt, technology has changed the way we live. It has changed many facets of life and altered what it means to live. With the aid of new generations, several difficult and important tasks may be completed with ease. Education has undergone a transformation thanks to technology. Projectors in classrooms and universities have the power to significantly increase student engagement and interaction. As this idea gains more traction and recognition, it will only grow. Based on our study, the majority of individuals use live chat solutions. The most frequent chore in technology is searching for a job.

**Keywords:** Education, modern technology, teaching, Online Learning Platforms

#### INTRODUCTION

The impact of technology can be felt in every possible field one such field in Education. The transfer of knowledge becomes very easy and convenient, as well as effective when aided by technology. Students can make use of the internet, projectors, and other aids to enhance their learning. Students like appealing visuals and something that entices them to think rather than just read. Projectors within the schools and colleges can take the interaction and interest levels right up. This is a concept that will continue to rise as it gets more and more support.

# The Role of Technology in modern education systems

The advancements in technology have had a significant impact on our daily lives, our careers, and our education. In today's digital age, technology is crucial in shaping modern education systems.<sup>1</sup> Technological advancements are transforming learning and teaching. They may try out novel pedagogical approaches using digital resources, including online courses, smartphone applications, and cloud-based software. Let's talk about how technology impacts modern education systems and transforms our approach to education.

# **Online Learning Platforms**

Online learning platforms have revolutionized the way students learn. Thanks to the proliferation of online education, students now have more flexibility in when and how they study. Students may find courses ranging from the basics to more complex

<sup>&</sup>lt;sup>1</sup> Shah (2011, July 16) Why does writing make us smart? huffingpost.com. Retrieved February 25th 2013 from http://www.huffingtonpost.com/2011/07/16/why-does-writing-make-us-\_n\_900638.html

topics on online learning sites. Chat rooms and forums on these sites also facilitate realtime communication between students and teachers.<sup>2</sup>

Coursera is a widely used online education provider. Coursera offers over 4,000 courses from more than 200 universities and organizations worldwide. Students can choose from various courses, from data science to business management, and learn from some of the world's top educators.

Another popular online learning platform is edX. edX offers over 3,000 courses from 130 universities and organizations worldwide. Students can learn about various topics, from computer science to psychology, and receive a verified certificate upon completion.

# **Mobile Apps**

Apps for smartphones and tablets are becoming routinely used in today's classrooms. Mobile apps provide students with access to educational content on the go, enabling them to learn whenever and wherever they want. From language learning apps to math and science apps, countless mobile apps are available to students.

One popular language-learning app is Duolingo. Duolingo offers free language learning courses in over 40 languages. The app uses gamification to make language learning fun and engaging for students.

Another popular mobile app is Photomath. Photomath is a math app that uses a student's phone camera to solve math problems. Those with difficulty with mathematics and who may benefit from extra help outside of class would download this app.

## **Cloud-Based Tools**

Cloud-based tools are changing the way teachers and students collaborate and communicate. Cloud-based tools allow students to work on projects and assignments in real-time from anywhere worldwide. Teachers also benefit from these tools since they simplify the process of grading assignments and giving feedback to students.

One popular cloud-based tool is Google Drive. Google Drive allows students to store and share files with classmates and teachers. This tool allows students to collaborate on documents, spreadsheets, and presentations in real-time.

Another popular cloud-based tool is Canvas. Canvas is a platform for online course development and administration. Canvas provides students access to course materials, assignments, and assessments in one centralized location.

# **Virtual Reality**

Virtual reality (VR) is a cutting-edge tool for classroom instruction. Some many settings and events would be difficult, if not impossible, to duplicate in a traditional

<sup>&</sup>lt;sup>2</sup> Beringer, V. (2009, October 20) For kids, pen's mightier than keyboard. futurity.org. Retrieved February 25th 2013 from http://www.futurity.org/society-culture/for-kids-pens-mightier-than-keyboard/#more-4909.



classroom setting, but with virtual reality, students may experience them all. History, science, and even the arts may all be taught to pupils via virtual reality.

One example of how virtual reality is being used in education is through the Google Expeditions program. Google Expeditions allows teachers to take their students on virtual field trips to different parts of the world. Traditional classrooms can't compare to this program's immersive learning environment.<sup>3</sup>

## **Artificial Intelligence**

Artificial intelligence (AI) is another new tool changing education for the better. It also serves as the best summarize tool for individual students', which may be tailored to their needs, and they can get immediate responses thanks to AI. Using this technology, educators better understand where their pupils are having difficulties and better equip them for success.

The Carnegie Learning mathematics software is one use of AI in the classroom. The Carnegie Learning math program uses artificial intelligence to provide personalized learning experiences for students. The program uses data analytics to identify areas where students may be struggling and adapt the content and difficulty level of the lessons to meet their individual needs.

The program also uses machine learning to provide real-time feedback to students on their progress. This feedback allows students to identify areas where they need to focus their attention and adjust their learning approach as needed.

### Gamification

Gamification is using game design techniques to engage and motivate learners. In education, gamification can make learning more interactive and fun. Gamification techniques can be used in various ways, such as adding game-like elements to lessons, creating educational games, and using leaderboards to encourage student competition.<sup>4</sup>

## **Augmented Reality**

Another new tool that is revolutionizing today's classrooms is augmented reality. Students can engage in real-time with digital items and places via augmented reality, which superimposes digital material on top of the actual world. Through traditional teaching methods, augmented reality can provide students with immersive, impossible learning experiences.

The Anatomy 4D app is an example of an augmented reality tool used in the classroom. The Anatomy 4D app allows students to explore the human body in 3D using augmented reality. The app provides students with a unique learning experience

<sup>&</sup>lt;sup>3</sup> Wang, S.-K., Hsu, H.-Y., Campbell, T., Coster, D. C., & Longhurst, M. (2014). An investigation of middle school science teachers and students use of technology inside and outside of classrooms: Considering whether digital natives are more technology savvy than their teachers. Education Technology Research and Development, 62(6), 637-662.

<sup>&</sup>lt;sup>4</sup> Wolf, M. A. (2010). Innovate to educate: System [re]design for personalized learning—A report from the 2010 Washington, DC: Software & Information Industry Retrieved http://www.ccsso.org/Documents/2010%20Symposium%20on%20Personalized%20 Learning.pdf

that allows them to see the human body's inner workings in a way that would not be possible through traditional teaching methods.

## **Big Data**

To characterize the vast quantities of data generated by computers and other contemporary methods, the phrase "big data" was coined. Big data may help teachers see where their students struggle academically and where they should focus their efforts. Learning trends and patterns may be discovered and tracked using big data.

The Blackboard Predict platform is one example of using big data in the classroom. The Blackboard Predict platform uses data analytics to predict which students are at risk of falling behind in their studies. The platform provides teachers with real-time alerts when a student is at risk, allowing them to intervene and provide additional support.

### Conclusion

Modern classrooms make extensive use of technology. Artificial intelligence, cloud-based computing, virtual reality, smartphone apps, and online learning platforms are all changing the way we approach education. With the aid of these tools, students may receive individualized instruction, fresh perspectives on their development, and real-time feedback. Education will surely be impacted by technological advancements as we move closer to the digital era.

It is time for all of us to usher in a more technologically advanced education sector in the future. Technology has a fantastic impact on training and, at the same time, might also pose negative effects. Teachers and students have to take advantage of this excellent mild and eliminate its drawbacks.

#### REFERENCES

- 1. Beringer, V. (2009, October 20) For kids, pen's mightier than keyboard. futurity.org. Retrieved February 25th 2013 from http://www.futurity.org/societyculture/forkids-pens-mightier-than-keyboard/#more-4909.
- 2. Brill, J. M., & Galloway, C. (2007). Perils and promises: University instructors' integration of technology in classroom-based practices. British Journal of Educational Technology. 38(1), 95-105.
- 3. Leising, J. (2013 January 30) The new script for teaching handwriting is no script Retrieved February at all. wsi.com 25th 2013 from http://online.wsj.com/article/SB1000142412788732364490457827215155162794 8.html?KEYWORDS=handw riting
- 4. Roschelle, J., Pea, R., Hoadley, C., Gordin, D., & Means, B. (2000). Future of children, 10(2), 76-101.