

Short Communication

Importance of Educational Technology on Learning

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Abstract

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Technology has enhanced the way students may learn inside the classroom. Studies showed that the use of computers, educational software, and audio-visual techniques have resulted in better understanding and interaction of students within the classroom. These educational technologies also aid teachers in monitoring and assessing student performance. Hence, the use of educational technologies is beneficial for both the students and the teachers.

Keywords: Education, technology, learning, platform, collaboration, school, computers, literacy

INTRODUCTION

Educational technology refers to the technology devoted to the development and application of tools such as software, hardware, and processes to promote education (General Assembly, 2017). The utilization of education technology, and the enhancement of curriculum with the use of audio-visual elements increased during the last half of the 21st century. Within the last decade, educational technology has enhanced communication, entertainment, and information retrieval (Stevick and Gross, 2015).

Both physical hardware and electronic applications are utilized when educators incorporate technology in the classroom. It encompasses several domains, which include learning theory, computer-based training, and online learning. When using educational applications, teachers may incorporate apps, graphics, and other materials in the classrooms (Design and Technology Association, 2005).

Goldberg (2003) studied the effects of computers on student writing. The study indicated that the writing process became more collaborative, iterative, and social within computer classrooms as compared to paper and pencil environments. Studies have suggested that, on the average, students who have used computers to learn how to write were more engaged and produced higher quality work.

Advantages of Educational Technology

There are many benefits obtained from the use of technology in educational activities. These include:

Independent Learning of Students

Since students use individual laptops and tablets, they can easily find the information they are interested in and learn it on their own. As a result of the constant changes in society, it is important for educators to consistently update their course materials in real time. Thus, it allows students to access the most up-to-date information. Given the knowledge that students acquire in the classroom, they can apply it and become more knowledgeable outside of the classroom setting (Haertel and Means, 2003).

Prepares Students for the Future

Technology is a crucial component to the progression of future advances. When students use computers and tablets in the classroom, they are not only imparted with academic knowledge but are also learn how to use

technological gadgets. This environment allows students to communicate better using the gadgets, to connect with their peers easily, and to have better job prospects upon graduating (Haertel and Means, 2003).

Makes Lessons Engaging

Having educational videos provides an additional avenue to learning, instead of solely listening to their teacher's monotonous voice. For example, in a college setting, it permits faculty and students to participate in dynamic demonstrations, simulations, and designs that can be utilized to explore and check theories (Brown and Green, 2011). Listed below are several ways to differentiate instruction using technology in the classroom.

Multiple Learning Styles

Different videos can explain a single concept in completely different ways, thus, increasing the likelihood of students learning the subject matter.

Multiple Teaching Styles

The use of videos and other methods as a part of educational technology provides teachers with a variety of ways to educate students of all ages.

Connect Concepts to Applications

Vide applications provide situational-based scenarios which can enhance student learning. Hence, the teacher can evaluate the students comprehension of the concepts.

Students Gain Deeper Understanding

Unlike the generally accepted teaching method, students may rewatch a video lesson repeatedly to gain the necessary understanding.

Attention Leads to Retention

Concrete, visual images can improve the attentiveness of students. Naturally attentive students become more knowledgeable and perform better on assessments once exposed to the use of educational technologies as media of instruction.

Another important aspect of educational technology is the use of computers. Even though computer laboratories

are common in schools for some time, the concern is if the students have computer access throughout the week. Having enough computers for all the students and creating a consistent schedule for the entire school has always been a challenge. A possible solution to this problem is the use of mobile laptop carts. Imagine a large cart with 25 laptops shelved, plugged into outlets within the cart, and only the cart needs an external outlet to power all the laptops – where each student is assigned a computer number (Use of Technology, 2013). Instead of scheduling computer time for the use of a computer laboratory, teachers can reserve laptop carts and bring the computer lab to the classroom. Classroom Response Systems, otherwise known as Voting Response Systems or “clicker,” is becoming a common trend as an additional method in the teacher’s educational technology plan. These devices allow the entire class to interact with one another and improve collaboration among peers.

The students can use blogs, wikis, games, curriculum software, and intervention software to show comprehension of the content. Once the hardware is in place, the question now is what will the students do on the available technology, in this case, our computers. Educational software is such a broad term and schools are constantly researching software that targets K-12 students. These softwares may serve a variety of purposes including high school credit recovery, homebound students, and after-school programs.

The constant improvement and availability of Educational technology is continuously improving classroom management, which can result in a continuous growth in the future (Swezey, 2001).

CONCLUSION

In conclusion, technology has in many ways shaped the way students learn. Videos, wikis, blogs, and other platforms have created much more interactive and collaborative approaches to how students may learn and grow. The rapid expansion of future jobs requiring technological competencies make it ideal for students to advance their learning goals. Having early exposure to technology improves their ability to succeed both inside and outside of the classroom.

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