



INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

LEARNING AND NEW TECHNOLOGY

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ABSTRACT

The entire world was forced to adjust, slow down and adapt, given the unprecedented challenges that came with the outbreak of covid-19. The pandemic has drastically changed the way we learn due to social distancing and lockdown.

Students now have to use distance learning through digital platform due to social distancing even though some schools are reopening. The introduction of new technology into the educational system is to revolutionize the system with a strong focus on connectivity, versatility and student-centered learning. Therefore, this paper is intended to show the reality of learning and new technology, how it has changed the landscape of educational practice by considering four major areas of current technology trend in education such as E-learning, Gamification, Video-assisted learning, Immersive learning with VR and AR.

For better or worse, we are living in a technology driven world. Since the internet exploded into the scene in the 80's and 90's, it has become very accessible to the average family in the early 2000's and eventually began to fit into our pockets with the development of smart phones and tablets. It is safe to say that technology is on an upward trajectory and it shows no sign of slowing down anytime soon. Today, new technology such as the internet has dominated many aspects of our lives; we are so used to it that we do not even think about all the areas it touches. It helps us communicate with our friends and family. It's a valuable tool in the kitchen as we lookup recipes and ingredients. We access our entertainment online, whenever we have any questions from the most mundane to the most complicated we ask the

internet, but there is one facet of our lives, however where we might not often think about the effect of new technology and that is the realm of education.

Learning and new technology Internet of Things(IOT) were the biggest educational technology trends of 2019. The outbreak of covid-19 pandemic has drastically changed the way we teach and learn. Students now have to get use to distance learning through digital platforms due to lockdown and social distancing. Even though some schools are reopening, the trend may continue. The new and latest technology trend in education is being revolutionized with a strong focus on connectivity, versatility and student-centered learning.

WHAT IS EDUCATIONAL TECHNOLOGY AND ITS IMPORTANCE

Many people can recognize that educational technology is devoting technology to promote education. It is true. The Association for Educational Communication and Technology (AECT) has defined it as facilitating, learning and improving performance by creating, using and managing appropriate technological processes and resource. On the other hand some educator see technology as a concept of transforming the traditional book teachings and learning to digital form. The difference lies in the way knowledge is delivered, all thanks to technology innovation to make learning more effective. Educational technology is simply the process of integrating technology into education to build better teaching and learning experiences that result in higher learning outcome.

IMPORTANCE OF TECHNOLOGY IN LEARNING

There are lots of reasons why educators moved to technology based teaching and learning, replacing the traditional paper and pen teaching method.

- **INNOVATIVE TEACHING METHODS:** Technology is an innovation of humans, so when an educator can apply technology to teaching, it is also innovation. Technology allows teachers to provide multimedia to address diverse learning styles such as animations, live video. Besides, technology enables teachers to create online courses where students can learn in their own space and at their own pace.
- **IMPROVE COLLABORATION AND COOPERATION:** Technology has made it possible for everyone to stay connected. Students and teachers connect, discuss, share their opinions and act upon situations collaboratively. For instance, E-learning is an educational tool that features collaboration by enabling students to share and discuss ideas, instead of being in a classroom and listening to teachers speak for 45 minutes. In E-learning students can join an online group or platform and learn together by interacting with their peers. In this case, teachers are more accessible and act as mentors to help students develop themselves. This collaborative learning approach has bridged the gap between teachers and students and also helps students to strengthen their inter-personal relationship skills.
- **CHANGE IN LEARNERS ROLE:** The benefits of using technology are numerous; ranging from how teachers teach both online and offline. Now always having to go to a specific class at a specific time; students can learn whenever and wherever. Technology changes the way students approach learning, it makes learning more fun and exciting for students when they feel engaged in learning. Students tend to learn better, remember better and also apply knowledge better to real life. Technology makes education smarter, more effective thus satisfying learner's need. When learners use new technology as a tool, they are in an active role rather than passive recipient of information transmitted by a

teacher. The students here are active, making choices about how to generate, obtain, and manipulate information. Technology allows many more learners to be actively thinking about information, making choices and executing skills than a typical teacher –led – lesson. Moreover when technology is used as a tool to support the learner in performing authentic tasks, the learners are in the position of defining their goals, making design decisions and evaluating their progress. The teacher is no longer the center of attention as the dispenser of information rather plays the role of a facilitator, setting project goals and providing guidelines and resources.

- **INCREASED MOTIVATION AND SELF-ESTEEM:** It has been commonly and universally reported that the impact of technology on learners was an increase in motivation. Both teachers and students are sometimes surprised at the level of accomplishment displayed by students who have shown much less initiative with more conventional academic task. Teachers talked about motivation from a number of different perspectives, some mentioned motivation with respect to working in a specific subject area. Technology is the ultimate carrot for students; learning to use it enhances the self-esteem and make students excited about coming to school. New technology such as I-pad, tablets has been as empowering tool to students learning. They have a voices and it is not in any way secondary to anybody else’s voice. In many of these classes students choose to work on their I-pads and tablets during recess or lunch period. Teachers also cite technology’s motivation ñadvantages in providing a venue in which a wider range of students can excel compared to the conventional classroom with their stress on verbal knowledge and multiple choice test performance.

CURRENT TECHNOLOGICAL TREND IN EDUCATION

❖ E-LEARNING:



Image showing E-learning.

Distance learning has become the top educational technology trend overnight because of the outbreak of COVID-19 pandemic, social distancing and school closures. This led to the rising demand for online educational platforms. E-learning is education or training delivered electronically. It can be slide based online activities or it can also be an online course that helps a business train employees in necessary skills. With E-learning, educational content is delivered to learners through computers, laptops, tablets, and smartphones. Not only time saving but open many doors for interactive learning. Rather than being in a passive experience, learners can choose what they need to learn quickly and easily, wherever they are. They also learn through interacting directly with on-screen

information. Moreover, the decision-making scenarios in e-learning also encourage learners to make their own choices on what they will learn next. In e-learning, learners just soak in knowledge through reading or viewing content, it changes the way education is delivered. Also many e-learning courses include animation, podcasts, and videos that create multi-model and practical learning experience.

❖ VIDEO –ASSISTED LEARNING:



Video-assisted learning using educational videos.

In recent times, video-assisted learning has become more and more popular as classroom displays. The video day is no longer a television on a trolley being wheeled into a class but with the internet and digital devices, everyday can be a video day. This trend is also booming in distance learning conditions which students learn through computer screens. Videos especially animated videos are extremely beneficial to enrich lessons and make content comprehensible. It improves student's outcomes and reduces teacher's workload.

❖ BIG DATA WILL GET BIGGER:



Big Data will get Bigger.

To cater for learner's needs, the learning experience needs to be personalized. And with the outbreak of covid-19 and online learning booming, we now have bigger data than ever before. Instructional designers have relevant information about learner's experiences to customize and present the course in a suitable format. Some information you should look for is the course topic; learner enrollment, learner performance (time per course, completion, test result) and learner feedback (rating survey).

❖ **LEARNING ANALYTICS:** The current landscape of learning analytics has dramatically expanded, especially for higher education. Learning analytics allows educator to measure and report students learning just by the web. From that, it's possible for them to better understand and optimize learning. When teachers read insight from students learning processes they can improve the knowledge and skill acquisition of their students

accordingly. Also teachers are able to notice what pieces of knowledge weren't effectively delivered and enhance them next time. Moreover, learning analytics helps educators identify blocks of students who may have academic or behavioral challenges; from that, teachers could develop away to help students reach their full potentials.

- ❖ **GAMIFICATION:** If you are looking for a way to turn learning into a fun and engaging process; gamification is the most appropriate technology trend. There is no reason for students not to be actively involved in classroom games. Students can learn and practice while they are joining in exciting game activities. Gaming elements help create a funny and positive learning environment for learners. The adoption of gamification is most popular in the K-12 education sector, it's because kids quickly engaged in gaming videos or getting higher scores in a game. However, it doesn't mean that higher education or corporate training doesn't need fun element to improve the engagement level of learners.
- ❖ **IMMERSIVE LEARNING WITH VR AND AR:**



Role of AR/VR in education system

The class learning experience has undergone a tremendous change since virtual reality (VR) and Augmented Reality (AR) came into education. The rise in demand for experimental learning pushes forward the development of learning with VR and AR learning has become much more interactive than the traditional methods, while VR provides a constructed reality, AR gives an enhanced view of a real image. Thus they help explain complex concepts that plain images or even a Lab's hands-on experiments couldn't show students. Virtual Reality is pretty helpful when you are attending a medical training course. In detail, VR creates a chance for students to experience real-world surgeries in a low risk environment.

CONCLUSION:

In the end we know that there is a lot to digest when we talk about learning and new technology. However, let us keep in mind that technology and the advent of internet has stepped into education and has renewed the whole teaching and learning process. Technology as a tool in education has increased the accessibility and convenience of education also has change the learning behavior and learner's desire for learning.

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