Journal of Advances and Scholarly Researches in Allied Education
Vol. 16, Issue No. 6, May-2019, ISSN 2230-7540

Modern Technology, Trends and Learning Approaches in Education

Gaurav Yadav*

Institution as J. S. University, Shikohabad

Abstract – This article highlights the role of innovative technologies in providing modern tools and the importance of modern innovative teaching methods and technology in the higher education system. During the lecture, new instructive technology and modern approaches are used to increase the quality and efficacy of education, as well as to train competitive staff. Each lesson has its own unique training subject technology. Since the aim of both the teacher and the student is to achieve a positive outcome, the lesson teaches them how to use technology to achieve that goal. Computer-based work, video, delivery content, poster, information technology, different literature, and carefully crafted interactive methods can all be used depending on the teacher's ability. The practice of simply transferring courses online can be shockingly disabling, so education designers face a challenge in designing high-quality e-learning environments for professional education. In light of this, I have been highlighted in this paper, the modern developments in the online education system, which make the teaching and learning process more useful and stable.

----------X----------

INTRODUCTION

Education is the process of passing on one person's experience, principles, methods, abilities, and beliefs to another. The Internet is increasingly dictating how we work, socialize, teach, and learn in our daily lives. As the Internet becomes a more important educational tool, online education provides educators and students with access to a wealth of resources. Online education of various kinds, also known as distance education or web-based education, has become a standard part of many university programs over the last decade. Online education opens up exciting possibilities for expanding the learning experience for a wide range of students. Professors at colleges may consider online teaching of their class as the demand for online education grows. Although online training has many similarities to face-to-face instruction, it also has its own set of skills and specifications. The auditory, visual, and tactile senses are all involved in the learning process. The conventional approach to education at a university campus is not for all. Online learning is for those who want to prepare for a degree while working or handling other responsibilities.

Web-based learning, e-learning, and interactive learning are all terms that have been used to describe online learning. It's a web-based course that uses web-based resources and events. To use technology resources that may be required, students must be technologically savvy. Students in the modern era tend to be more self-reliant, technology disciplined, and tech-savvy, making them well-suited to the online world. For a high-quality college degree, online learning has its own perks. Each online course must meet Academic standards.

It provides comfort in terms of time and space, as well as cost-effectiveness and versatility. Students can receive a globally recognized degree without having to attend classes on campus through online learning.

ROLE OF ONLINE EDUCATION:

Students who are unable to engage in conventional classroom environments prefer online schooling. It's easy because it helps you to research from anywhere with an Internet connection. Online courses are available 24 hours a day, seven days a week. The number of online courses has increased dramatically over the last decade. While online education may not be suitable for all, it is considered cost-effective in some developing countries. It goes without saying that online teaching and learning (both synchronous and asynchronous) is used in a wide range of disciplines, including engineering, computer science, medicine, nursing, industry, music, and the social sciences.

Also in business organisations, online teaching and learning is becoming more popular. Online education and learning is also in its infancy. It has become increasingly popular as a college and

university alternative in recent years, both in the United States and abroad. Online education should be an essential part of majority of Universities and colleges. When online courses are designed to take advantage of the learning opportunities provided by online technology, they are the most successful. When the need for online education among those with employment and a need for lifelong learning grows, so do expectations for the implementation of an online teaching and learning framework.

Today's newest and most common form of distance education is online learning. It has had a significant effect on postsecondary education over the last decade, and the trend is only expected to continue. The pressure on educational systems to cut costs while retaining or enhancing student outcomes is growing. According to recent figures, 1.5 million elementary and secondary students engaged in online learning in 2010. (Wicks 2010).

The word "online learning" refers to a variety of services that use the Internet to provide instructional materials and foster connections between teachers and students, as well as between students themselves. Online learning can be completely online, with all training delivered via the Internet, or it can be mixed, with online elements combined with face-to-face interactions (Horn and Staker 2010). Online learning is becoming increasingly common in many school districts and states.

ROLE OF BLOCK CHAIN TACHNOLOGY:

Blockchain technology is an essential part of human invention and survival. We have just scratched the surface of what it can do for society's progress. Whole sectors will be transformed, and the online education market will be no exception, thanks to blockchain's added protection and incentives. The blockchain makes online transactions much safer. It's a decentralized digital ledger that keeps track of all transactions and makes them public. The chain refers to the entire list of transactions or events, and each new transaction is referred to as a block, hence blockchain. Since the blockchain is distributed, it isn't kept in one location, making it more safe.

Inspite of online education let people learn skills from their homes, there are still issues needs to be addressed. The most serious issue with online courses is user retention and completion rates. Tokens on the blockchain have solutions to these two issues. When students enroll in a class, the only reward they usually receive is a grade. Many people lack the self-discipline to continue learning outside of a traditional classroom setting. One solution is to use blockchain tokens to reward students for their success in a course. Students would be more motivated to complete online courses if they are given tokens that they can trade for other cryptocurrencies and ultimately cash [1].

ROLE OF ARTIFICIAL INTELLIGENCE:

Students like interactive classes where they are not overburdened, whether they are receiving their education online or not. Artificial intelligence can assist in the creation of such a fascinating and useful platform. Since the changing world no longer places age restrictions on learning, there are a plethora of different ways to educate oneself using AI. On the other hand, the use of technology in education has modified the format of teaching-learning experience. The shift in teaching methods from linear curriculum to project/skill based learning is the first and most noticeable change that everyone notices. This means that students develop soft skills such as problem solving, constructive communication, and other skills that will be useful in the workplace in the future. This changes the educational model by encouraging teachers to act as mentors and guides for their students.

ROLE OF AR AND VR TECHNOLOGY:

Field trips, guest lectures, and other costs are also reduced in the virtual world. Students are exposed to a variety of worlds, allowing them to grow in all directions and establish self-awareness. Augmented reality is a branch of technology that is rapidly evolving, and it is expected to be integrated into online education in the near future [2].

Information technology (IT) is an important enabler in the learning process [3,4]. Since the twentieth century, attempts to integrate IT into a means of instruction have preceded the evolution of education [5]. The internet and mobile technologies, which were invented in the 1970s, have sparked a variety of e-learning developments [6].

The success of video games has prompted researchers to look into the possibilities for games-based learning [7]. Although e-learning and game-based learning continue to pique educators' and researchers' interest, the use of “Augmented Reality (AR)” and “Virtual Reality (VR)” technology has made a triumphant return to the educational stage and is gaining even more traction in the last decade [8,9].

Digital and augmented reality have gained a lot of traction in the field of education in the last few years. Various scholars and educators have attempted to investigate various methods for integrating such innovations in various educational settings. However, the issue of its educational efficacy remains unanswered. The educational setting is described as pre-school through tertiary education, professional education, and training in the context of this research. It also assesses whether any visible methodological trends exist, as well as whether there is a connection between the findings of empirical studies and the evaluator as a

key stakeholder in the delivery and production of services.

ROLE OF CONTEMPORARY LEARNING APPROACHES:

In distance learning communities, new information and communication technologies promised more desired ways of immersive learning. However, there was a risk that emerging technology would be used to reassert new forms of digitally focused and amplified instructional industrialism, involving the mass production and delivery of digitized forms of pre-packaged teaching tools to new global student audiences through learning management systems and digital object content repositories.

Such approaches reflected a possible technological and educational advancement that Evans and Nation could not have predicted in their 1980s critique, but which they fully acknowledged a decade later in their work on educational technology in higher education (Evans & Nation, 2000, p. 169). We come across natural and constructed ecosystems in ecological and architectural notions of "climate." The possibilities of virtual worlds question these well-understood concepts of physical environments as dynamic structures. We believe that, considering the zeal with which education policymakers and planners have embraced the digital era and the information economy by literally going online over the last decade, the realities and subtleties of a holistic conception of a learning environment have eluded them.

Furthermore, such environments connect academic and administrative support resources to students' e-learning environments. Technologies for e-learning contribute to teaching techniques by providing a collection of interactive learning tools and communication methods nested within a larger physical learning environment. These virtual and physical tools, as well as interactions, are intended to aid students in developing their attitudes, expertise, and skills, i.e., the overall behaviour needed to function effectively in a discipline or area of professional practise.

Appropriate and substantive architecture seeks to build long-term, diverse learning environments that promote modes of learning that participants value in a variety of virtual and physical settings. Institutional, faculty, school, program/course, and discipline levels may all create such environments. Although all levels are interconnected, the study focuses on the program/course level in terms of professional education.

CONCLUSION:

A large number of studies in the reviewed literature have attempted to determine whether computer-mediated education, such as e-learning, blended learning, or hybrid learning, is superior to conventional face-to-face teaching in terms of learning outcomes and student satisfaction. Researchers, educators, and educational decision-makers all want to know which format produces the best outcomes for their students and institutions.

REFERENCES:

[1] Wicks, M. (2010). A National Primer on K-12 Online Learning. Version 2. *International association for K-12 online learning*.

[2] https://elearningindustry.com/blockchain-in-online-education-impact

[3] https://aithority.com/technology/education-and-research/role-of-artificial-intelligence-in-online-education/

[4] D.H. Jonassen (1999). Computers as mindtools for school: Engaging critical thinking, NJ: Prentice Hall.

[5] E. Smeets (2005). Does ICT contribute to powerful leaning environments in primary education?," Computers & Education, 44(3): pp. 343-355.

[6] P. Saettler (1968). A history of instructional technology, New York: McGraw ill.

[7] G. Cui, and S. Wang (2008). “Adopting cell phones in EFL teaching and learning," Journal of Educational Technology Development and Exchange, 1(1): pp. 69-80.

[8] M. D. Dickney (2007). “Games design and learning: a conjectural analysis of how massively multiple online rol playing games (MMORPGs) foster in trinsic motivation," Educational Technology Research and Development, 55(3): pp. 253-273.

[9] F. Wang, B. Lockee, and J. Burton (2011). “Computer game-based learning: Chinese older adults' perceptions and experiences," Journal of Educational Technology Systems, 40(1): pp. 45-58.

[10] M. Fernandez (2017). “Augmented virtual reality: How to improve education systems," Higher Learning Research Communications, 7(1): pp. 1-15.

[11] https://elearningindustry.com/blockchain-in-online-education-impact.

Corresponding Author

Gaurav Yadav*

Institution as J. S. University, Shikohabad