



International Journal of Multidisciplinary Research Transactions

(A Peer Reviewed Journal)

www.ijmrt.in

A Research Paper on “Use of Technology in Education”

Mr.Sairaj S. Suryavanshi^{1*}, Mr.Satyajeet S. Mandale²

^{1,2} Kolhapur, India.

*Corresponding author

DoI: <https://doi.org/10.5281/zenodo.6918739>

Abstract

The technology is playing major role in any area and its giving lot of benefits to the stakeholders of that area. One of the defining features of development today is the relationship between education and technology, stimulated by the spectacular growth in internet connectivity and mobile penetration. We live in a connected world. An estimated 40% of the world's population now uses the internet and this number is growing at a remarkable rate. While there are significant variations in internet connectivity among countries and regions, the number of households with such links in the global South has now overtaken those in the global North. Moreover, over 70% of mobile telephone subscriptions worldwide are now in the global South. Five billion people are expected to go from no to full connectivity within the next twenty years. However, there are still significant gaps among countries and regions, for example between urban and rural areas. Limited broadband speed and lack of connectivity hamper access to knowledge, participation in society and economic development.

The internet has transformed how people access information and knowledge, how they interact, and the direction of public management and business. Digital connectivity holds promise for gains in health, education, communication, leisure and well-being. Artificial Intelligence in education and various application areas.

Keywords: Technology, Learning, College, Skill based, Teacher, Outcome, Students, Syllabus.

1. Introduction

Technology plays an increasingly significant role in improving access to education for people living in impoverished areas and developing countries. Educational technology is not merely a matter of education and technology alone but is also about the societal culture wherein that educational technology is implemented. Charities like One Laptop per Child are dedicated to providing infrastructures through which the disadvantaged may access educational materials.

The education without use of advanced tools and techniques will be considered as of low quality in the near future the education field will be prominent field which is using technology in every activity of the education. According to one article, technology in developing countries is mostly limited, but some countries do have new advances in terms of pro-technology policies and biotechnology developments. One position effect of improving technology in developing countries is less dependence of developing countries on developed countries' exports of goods or technology. Developing infrastructures, promoting entrepreneurship, and formulating more open policies to technology are all somewhat effective ways of improving education and economies of developing countries.

2. Technology in Classroom



Source :- <https://www.google.com/search?q=A+RESEARCH+PAPER>

India is developing technologies that will pass learning materials directly to its students. In 2004, the Indian Space Research Organization launched EDUSAT, a communications satellite providing access to educational materials that can reach more of the country's population at a greatly reduced cost.

Educational tech (EdTech), mostly, information and communication technology can address issues, such as, an absent school teacher by conveying better lessons, preparing instructors and motivating students. In this generation, the price of educational technology has fallen to the point where EdTech is easily accessible even in generally poor nations. Tablets cost as low as \$28 and India has the least expensive data plans on the planet. With less expensive data plans new companies such as Extra Class has come into light which aims to provide affordable education to 260 million children.

3. Backbone of Technology in Education

Following are the main points to be considered while adding various facilities of technology in education

- Hardware and Communication Requirements
- Software Requirements
- Expert Support Required
- Financial Requirement
- Government Rules and Regulations

The Association for Educational Communications and Technology (AECT) defined educational technology as "the study and ethical practice of facilitating learning and improving performance by creating, using and managing appropriate technological processes and resources". It denoted instructional technology as "the theory and practice of design, development, utilization, management, and evaluation of processes and resources for learning". As such, educational technology refers to all valid and reliable applied education sciences, such as equipment, as well as processes and procedures that are derived from scientific research and in a given context may refer to theoretical, algorithmic or heuristic processes: students to learn how to use technology as well as their common assignments.



Source:-<https://www.google.com/search?q=A+RESEARCH+>

Accordingly, there are several discrete aspects to describing the intellectual and technical development of educational technology:

- Educational technology as the theory and practice of educational approaches to learning.
- Educational technology as technological tools and media, for instance massive online courses, that assist in the communication of knowledge, and its development and exchange. This is usually what people are referring to when they use the term "edtech".
- Educational technology for learning management systems (LMS), such as tools for student and curriculum management, and education management information systems (EMIS).
- Educational technology as back-office management, such as training management systems for logistics and budget management, and Learning Record Store (LRS) for learning data storage and analysis.
- Educational technology itself as an educational subject; such courses may be called "computer studies" or "information and communications technology (ICT)".^[10]

4. Effects of Technology on Education

The key job that innovation needs to play in education is proportional access to a portion of the core tools that can make an important effect in the lives of both instructors and students. Some important themes can be identified to create worldwide techniques to help advancements that match the particular needs of a developing society. Some of the significant topics is to guarantee that students have access to the correct learning material, particularly in their own dialects since it guarantees a better comprehension of subjects.

An AI-based tutoring system was put into an entry-level IT school in Pensacola by the U.S. Navy. This system involves a human tutor who monitors the student's progress while providing individual assessments. According to the Navy, the students that worked with the digital tutoring system consistently performed better on the tests than did the students who did not use the digital tutor. The adaptive technology appears to affect students positively because it can assist individuals that have different learning skills than others and therefore better equipped to learn on their own.



Source:-<https://www.google.com/search?q=A+Research+Paper+On>

5. Virtual Learning Environment

A virtual learning environment (VLE), also known as a learning platform, simulates a virtual classroom or meetings by simultaneously mixing several communication technologies. Web conferencing software enables students and instructors to communicate with each other via webcam, microphone, and real-time chatting in a group setting. Participants can raise hands, answer polls, or take tests. Students can whiteboard and screen cast when given rights by the instructor, who sets permission levels for text notes, microphone rights, and mouse control.

A virtual classroom provides an opportunity for students to receive direct instruction from a qualified teacher in an interactive environment. Learners can have direct and immediate access to their instructor for instant feedback and direction. The virtual classroom provides a structured schedule of classes, which can be helpful for students who may find the freedom of asynchronous learning to be overwhelming. Besides, the virtual classroom provides a social learning environment that replicates the traditional "brick and mortar" classroom. Most virtual classroom applications provide a recording feature. Each class is recorded and stored on a server, which allows for instant playback of any class over the course of the school year. This can be extremely useful for students to retrieve missed material or review concepts for an

upcoming exam. Parents and auditors have the conceptual ability to monitor any classroom to ensure that they are satisfied with the education the learner is receiving.

In higher education especially, a virtual learning environment (VLE) is sometimes combined with a management information system (MIS) to create a managed learning environment, in which all aspects of a course are handled through a consistent user interface throughout the institution. Physical universities and newer online-only colleges offer to select academic degrees and certificate programs via the Internet.



Source:-<https://www.google.com/search?q=VIRTUAL+LE>

6. Disadvantages of Using Technology in education

Globally, factors like change management, technology obsolescence and vendor- developer partnership are major restraints that are hindering the growth of Educational technology market.

New technologies are frequently accompanied by unrealistic hype and promise regarding their transformative power to change education for the better or in allowing better educational opportunities to reach the masses. Examples include silent film, broadcast radio, and television, none of which have maintained much of a foothold in the daily practices of mainstream, formal education. Technology, in and of itself, does not necessarily result in fundamental improvements to educational practice. The focus needs to be on the learner's interaction with technology—not the technology itself. It needs to be recognized as "ecological" rather than "additive" or "subtractive". In this ecological change, one significant change will create total change.

7. MOOCs IN Brief

Massively open online courses (MOOCs), although quite popular in discussions of technology and education in developed countries (more so in the US), are not a major concern in most developing or low-income countries. One of the stated goals of MOOCs is to provide less fortunate populations (i.e., in developing countries) an opportunity to experience courses with US-style content and structure. However, research shows only 3% of the registrants are from low-income countries and although many courses have thousands of registered students only

8. Conclusion

The Technology in education is going to be in increasing trend in the near future .the Authors have done decent contribution in creating the awareness about this important topic to the readers and the stake holders of the education field. All the educational institutes will add to their facilities these technology updation also and will invest a considerable amount every year in giving the technological facilities to the learners . The future of the teaching quality will depend on the proper use of technology and making students aware about their learning skills enhancement and development of all-round personality of the students.

Acknowledgement

Author thanks Dr Anil Gaikwad and all the friends and staff members for motivating me to study this topic . All the references used and endorsed herewith in the paper .

REFERENCES

- [1]. Cohen, J.; Schmidt, E. (2013). *The New Digital Age: Reshaping the Future of People, Nations and Business*. New York, Knopf.pp3-4
- [2]. Hart, A.D.; Hart, Frejd S. (2013). *The Digital Invasion: How Technology Is Shaping You and Your Relationships*. Baker Books.pp76-79
- [3]. Prensky, M. (2001). "Digital Natives, Digital Immigrants". *On the Horizon*. pp9 -11).
- [4]. Katherin, Marton (1992). "New technologies and developing countries: Prospects and potential" (PDF). *econstor.eu*. pp34-35
- [5]. Kennedy, Kerry (2011). "Conceptualizing quality improvement in higher education: policy, theory and practice for outcomes based learning in Hong Kong". *Journal of Higher Education Policy & Management*. pp 201–202.
- [6]. Website References :- https://en.wikipedia.org/wiki/Outcome-based_education

AUTHOR'S BIOGRAPHY

Mr.Sairaj S. Suryavanshi

Kolhapur –India



Mr.Satyajeet S. Mandale

Kolhapur-India

