

TEACHING & LEARNING THROUGH ICT: ISSUES AND CHALLENGES

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ABSTRACT

Covid-19, as a global pandemic, has resulted in social distancing. In literal words, people have to maintain distance from each other which makes them to stay indoors. Due to sitting at home for a long time, most of the people have been stressed out. COVID-19 has given us 'a new normal'. The concept of E-learning has gained worldwide attention and popularity. In the age of innovation and productivity, most countries focus on ways to improve knowledge production and exchange, the creation and diffusion of new technologies. It was duly recognized in this scenario that the introduction and uptake of ICT in a country at all levels would certainly contribute to and improve its productivity, efficiency and growth. ICT are inevitable for all sectors and segments in all regions. The COVID crisis has accelerated the use of technology in education.

Keywords: COVID-19, ICT, E-learning, Crisis, Technology

Introduction

Schools and colleges have switched to online learning during lockdown. It is a virtual type of learning which offers flexible schedule. In this system, learners use Internet technology to communicate virtually with their fellows and teachers. Students of rural areas are also benefited through this system. It is basically concerned with work from home. It has proved to be cost effective for a large number of people. It is easily available in any location throughout the world, with an internet connection. ICT provide the opportunity to share information across traditional boundaries, give voice to traditionally unknown people and provide valuable information that improves economic, health and educational activities. The role of ICT cannot be undermined given its relevant uses. ICT are useful in education. for digital literacy and the development of all kinds of resources; in infrastructure development; in logistics management; in the healthcare system; for the creation of livelihoods and the empowerment of the masses; for electronic governance; in administration and finance; specialized commercial and industrial uses; agricultural uses; in research and development as well as for economic growth and poverty reduction. ICT play a direct role in the education sector. It can bring many benefits to schools, educational institutions, and the community.

Here are some objectives of introducing this system:

- To continue education even after the closure of schools/universities.
- To highlight various measures taken by the government in the field of education during lockdown.
- To enlighten pros and cons of E-learning and to put appropriate suggestions for its improvement.

The process of Online Learning:

ICT are the convergence of information, communication and content technologies. It has drawn the attention of academia, business, government and communities to use in innovative and profitable proposals. In order to be competitive in a global competitive environment, a highly skilled and well educated workforce with skills and competencies in the use of ICT is inevitable for all nations. ICT are a potentially powerful tool for expanding formal and informal educational opportunities to rural, dispersed populations who previously lacked services. These groups have traditionally been excluded from education for cultural or social reasons, e.g. B. ethnic minorities, girls and women and people with disabilities children. with special needs and elderly people as well as everyone else who cannot enrol on campus due to cost or time reasons. The use of ICT will catalyse the cause and achieve the goals of inclusive education

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in schools. There is no conclusive research to show that student performance is superior in using ICT in education, be it in developed or developing countries. However, there is general agreement among professionals and academics that integrating ICT into education has an overall positive impact on the learning environment.

Due to Covid-19, the entire nation has been into a critical situation. Complete lockdown has been imposed all over the world. Education sector has also been worsened. It led to cancellation of board examination. But, to improve the education system, it was necessary to introduce the concept of E-learning. So, Indian government did the same. State governments have agreed to take advantages of this project. Information technology (IT) sector has played a substantial role in this situation. It has provided digital platform to the people all over the world.

ICT are important in schools and educational institutions as they help carry out their activities and functions such as record keeping, research, educational purposes, presentations, financial analysis, results of management reviews, communication, oversight, MIS, teaching-learning activities and school administration. Functions.

IT Sector has provided some online platforms to meet virtually like- ZOOM, GOOGLE MEET, MICROSOFT TEAMS, SKYPE, YOUTUBE etc. These applications are free of cost and are helpful for learning as well.

Pros of E-learning:

- It is cost effective and easily affordable and feasible.
- It promotes productivity as it helps in utilisation of time.
- It is beneficial for physically challenged people as they can easily learn at home.
- It is beneficial for developing countries like- India, as it makes the country technically advanced.
- It is helpful for future learning as well. The lectures delivered can be easily saved.
- It is flexible as well as accommodative, it can be used while travelling.

Cons of E-learning:

- It can be harmful for children as more and more use of mobile phones, internet can make them vulnerable.
- It is not beneficial for those people who lack skills and appropriate knowledge about the working.
- It is not beneficial for poor people and those who have low income level as they are unable to afford internet access.
- It is not accessible in remote areas because of low internet connection.

ICT benefits schools in several ways: (i) improving classroom learning; (ii) improving school management and related tasks; (iii) improving the accountability, efficiency and effectiveness of school activities; (iv) the introduction of the use of PowerPoint and web presentations.

The literature shows that ICT in schools, when used well, have the potential to improve the teaching and learning process in a number of ways. ICT are student-centered and therefore lead to active student participation in the learning process. Students are motivated when learning activities are challenging, authentic, multisensory, and multidisciplinary. Schools tend to have increased attendance, levels of motivation, academic performance and effective communication due to ICT programs and projects. Teachers also benefit from ICT initiatives. They see ICT as useful for both teaching and personal and professional work. The use of ICT in the classroom makes teaching more innovative, interesting, interactive, easier and more effective. It complements the traditional learning process of teaching while sending.

Internal barriers to the implementation of ICT in rural schools include:

- **Lack of Qualified Teachers:** A major obstacle to the use of ICT in rural education is the lack of knowledge and skills. There is a shortage of dynamic teachers formally trained in ICT. In addition, teachers involved in ICT training are rarely offered high quality training on a regular basis.

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- **Bad organizational culture and bad attitudes and beliefs:** In developing countries, educational organizations and school administrations often fail to recognize the importance and seriousness of the role of ICTs in improving education. In addition, the attitudes and beliefs of teachers are outdated and orthodox. They are oblivious and rigid and unwilling to adapt to change. They mistakenly believe that ICTs are primarily aimed at young people and are skeptical about the effectiveness and usefulness of ICT in school education.
- **Time constraints:** In schools, teachers often have to multitask in addition to the classroom. In addition, they have to teach all kinds of subjects besides ICT. You don't have time to design, develop, and integrate technology into teaching and learning.
- The teacher needs time to collaborate with other teachers and learn to use hardware and software while staying on the cutting edge of technology.
- **Insufficient resources:** The availability of adequate and up-to-date hardware and software facilities determines the effective and efficient use of technology. In developing countries, the implementation of technology in education systems is a difficult task as it requires a large amount of resources, infrastructure and support facilities.
- **Language and content challenge:** Much of the educational software produced on the global market is in English. Most of the online content is available in English. English proficiency is not high in developing countries, especially outside urban areas, which is a serious obstacle to maximizing the educational benefits of ICT.

The main external obstacles to the introduction of ICT in rural schools are:

- **Lack of equipment:** lack of computers and IT resources such as printers, projectors, scanners, etc. in public schools in rural areas. The computer / student ratio is insufficient. The possibility of private schools is very rare or even non-existent in these regions. There is a mismatch between complementary resources and an inadequate mix of ICT resources, resulting in reduced technology diffusion and poor understanding of ICT in these educational institutions. Lack of reliability of equipment: Even basic ICT equipment and computers in rural schools are unreliable and unreliable. Schools do not have up-to-date hardware and software. Old and obsolete devices are the main obstacles to the adoption and use of ICTs.
- **Lack of technical support:** There is a lack of technical knowledge, ICT service centers and trained technical personnel in village schools. Regardless of whether they are provided by school staff or external service providers, or both, technical support professionals are crucial to the continued use of ICT in a particular school. Without on-site technical support, technical breakdowns can be a waste of time and money. One of the main obstacles to optimizing computer use in schools is the lack of timely technical support.
- **Resources and Internet Problems:** Village schools often have supportive infrastructure, uninterruptible power, multimedia, projectors, scanners, smart boards, etc. It faces challenges in terms of availability of ICT related resources such as additional resources. ICT, the Internet is missing in most rural schools. Most schools cannot afford the high fees charged by Internet service providers, and even when the Internet is available, slow or dotted connections destroy the essence and impact of ICT.
- Other external factors hindering the use of ICT in rural schools are social and cultural factors specific to these regions, lack of initiative of community leaders, corruption and raids.

Conclusion:

The information and communication technology revolution has reduced national boundaries to meaningless lines on maps. In this scenario, education was identified as one of the services that should be opened to free trade between countries. India is growing as a knowledge-based economy and cannot function without the support of ICT. The gap between education supply and demand has forced government and institutions to devise strategies for cheaper ICT use.

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