

24. Role of ICT in Transforming Education System

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ABSTRACT

ICT stands for Information Communication Technology. ICT play meaningful and essential role in today's Modernizing education system. ICT performs various functions in today's educations such as communication, learning tools, administration, information sources, online learning, evaluation, performance measurement. ICT is possible to use in any subject like, social sciences, sciences, commerce and management, arts and so on. With the ICT it is possible to link schools, colleges internationally. E-learning plays a huge part in ICT in education. ICT can empower both teacher and learners.

Keywords: Areas of ICT in Education, ICT Tools, Benefits of Using ICT, Limitations of ICT

Introduction

Education plays an important role in enhancing the economic growth of the country. In Modern World, traditional (Classroom) teaching system needs to be replaced with ICT teaching. With a changing scenario, students are becoming more technology oriented and therefore in this changing environment, it is important to think and use the latest technologies to incorporate in the teaching and learning process.

For two years, due to COVID- 19 pandemic situation drastic changes have been made in existing education system. ICT tools not only use in teaching but also in learning process, conducting examinations, performance evaluation, taking practical's etc. today's education systems are going through rapid transformations to cater the needs of globalization, to face pandemic situations. Information communication Technology (ICT) includes electronic communication devices or applications like computers, mobile phones, tablets, CD's and DVD Players, monitor screens, hardware and software, projector, web camera's, internet network etc. ICT is useful in any sector like business, agriculture, trade, banking, education, healthcare etc. ICT widely contributes in education field i. e. primary, secondary, higher education & university education.

This research paper focuses on education and the role of ICT in education, its uses, benefits, new approaches of teaching through ICT & limitations. By making ICT more affordable to implement in education sector students across the globe can develop various skills which are required to compete and to get successes in today's competitive & information world.

Objectives

In this research paper, researcher explains how ICT plays a vital role in higher education, its uses, new approaches, benefits & limitations.

Methodology

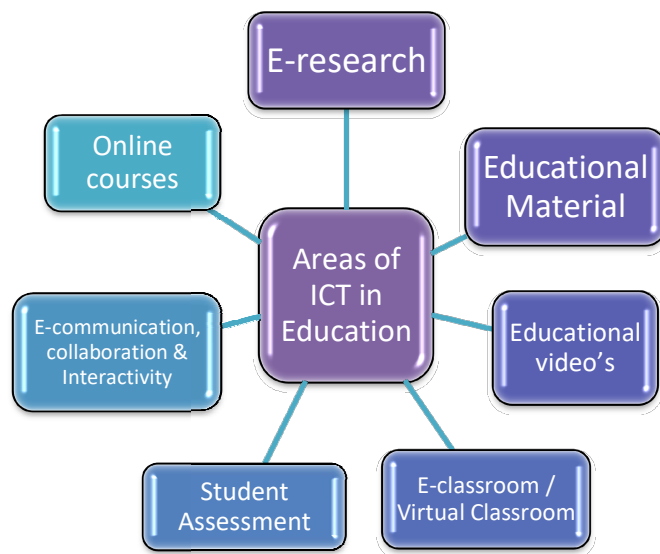
This research paper is based on secondary data collected from various books, journals, articles & websites.

Role of ICT in Higher Education

It is commonly saying that 'Knowledge is at the tip of one's finger'. It is true in case of today's educational system with ICT. In traditional method of teaching, teachers were relay upon only

on the text books but scenario gets changed with the use of ICT and use of internet. But now a days teachers and students can use ICT & internet facilities in teaching and learning. Even if in evaluation process there is a use of ICT. Following are some areas in education with ICT to improve quality of education.

Areas of ICT in Education



- Educational Material
- E-classroom / Virtual Classroom
- Educational video's
- Science practices & experiments
- E-communication, collaboration & Interactivity
- Student Assessment
- LMS
- Educational software
- E-library/Virtual Libraries and Laboratories
- Online courses
- Following effective tools of ICT are used now a days to enrich teaching & learning, -
- Computers,
- Smart Boards,
- I -Pads,
- Laptops,
- Smart- phones,
- Tablets,
- LCD projectors,
- Educational software,
- Use of PPT,
- Interactive Multimedia,
- Devices etc.

Various educational institutions introduced latest ICT technologies on their day to day working. Not even in teaching but also in attracting students, admission procedure, managing administration, examinations, reducing cost of infrastructure, evaluation of students etc. It not only reduces the cost but also increases the quality of education and modernizing the teaching-learning methods.

Benefits of Using ICT in education

1. **Economical**– use of ICT in education is economical. It makes work of teaching and learning easier, speedily and less costly.
2. **Creativity and Innovation**– ICT tools stimulates the creativity and Innovation among the students.
3. **Wider reach** -ICT learning has wider reach; learners make assess of data from a single location.
4. **More updated learning materials**– with a one click; we can gather information which we want to get. Internet is one of the fastest ways of getting information. Teachers and students both get more, accurate, precise and updated information by the way of using an internet.
5. **No more expensive books**- Books are real assets for teachers and students. With one tip we can get e-books. Which save our time and expenses on materials?
6. **End user satisfaction**– ICT in education gives satisfaction to end users. Because, it is economical, user-friendly and time saving.
7. **Increase freedom to learners**- It give freedom to learners to learn at any place, like at classroom and at home too. ICT are flexible to use.
8. **Access**– ICT in education allows all the types of learners to access of it.students and teachers can use the ICT tools in learning and teaching.
9. **Better communication** – ICT techniques provides an opportunity for teachers and students, parents to communicate with each other. Some of the ICT tools commonly used now a days for better communication i.e. Group Chats, Forums, Email, Blogs, Video-conferencing etc.
10. **Use of Multiple Technologies** – teacher can use multiple technologies for teaching. This makes teaching more effective.
11. **Motivated learning process** – so many technological learning options available for students to learn. Many programs arranged for learners and it motivates students to learn for awards and rewards.

Limitations of ICT in Education

1. **Lack of Knowledge**- old teachers refuses to use ICT techniques in teaching due to the lack of knowledge of ICT. That's why they cannot use ICT in their teaching.
2. **Lack of ICT awareness**- Proper training programs needs to be organized for teachers about how to use ICT effectively in education. But there is lack of ICT awareness programs & training sessions organized from institutions.
3. **Highly Economical**- many educational institutions cannot afford the costly set up of ICT, especially unaid and small educational institutions cannot afford it.
4. **ICT in rural areas**- In rural areas problems are so many like, network issues, load shading, unavailability of smart teachers, lack of interests in rural students etc.
5. **Over-reliance on ICT**- Teachers and students over depends upon ICT and it limits their critical thinking and analytical skills.

6. **Physical Side-effects-** ICT based learning has negative side effects upon the health of teachers and students. For ex. Vision problems, back problems etc.
7. **Lack of privacy-** personal information has stolen from stalkers.
8. **Misleading information-** Information from websites and technology is not correct all the time, sometimes it is misleading learners.

Conclusion

Today's Modern Education is Student Centric. There are many ways of teaching and learning process. But Primary it gets divided into Classroom face to face teaching, Online Learning and Blended Learning. But, to cope with today's COVID 19 situation it is desirable to use ICT and internet in teaching and learning. This paper describes some benefits of implementing ICT in education. It is not an easy and simple process to implement. There are many issues and problems which should be addressed. Those are educational institutions culture, finance, curriculum, teachers' barriers, students' barriers etc. But along with that benefits are so many. And it is the need of today's education system to adopt latest ICT techniques in education to enhance the quality of education.

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