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# Role of Information and Communication Technology (ICT) in Education

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**Abstract:** With the development of scientific and technological innovations has effected every aspect of human life and field of education is one among them. ICT is providing different platforms for learners as well as educators in order to receive and share knowledge. These platforms are accessed by the learner's community so to pursue their education. Educational Technology offers cost effective ways to reach to learners and access their understanding in various ways. ICT tools have been widely used by learners and educators in COVID times as it compelled them to shift to online education. It has changed the notion of physical classrooms as education was propagating in time and space less dimensions. The paper will analyse the use of Information and Communication Technology by learners in order to achieve their goals in relation to education.

**Keywords:** ICT, Education, Learners, Digitization and Platforms.

## I. INTRODUCTION

ICT stands for Information and Communication Technology (ICT). It refers to range of technologies that provide access to information through telecommunication. It includes internet, wireless network, cell phones and other communicating devices. According to UNESCO "ICT is a scientific, technological and engineering discipline and management technique used in handling information, its application and association with social, economic and cultural matters". The rapid development in science and technology had changed the overall scenario of human life as well as society. The impact of ICTs is felt in educational institutions as it provide both teachers and learners with ample opportunities in adopting teaching and learning techniques in order to meet individuals needs. The overall changes in the world due to technological innovations have compelled learners to shift their education in line with Information and Communication Technology.



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## SOURCE

[https://www.google.com/search?q=ict+illustration&tbm=isch&ved=2ahUKEwj8tuLlif\\_AhWgKrcAHXvEAVQQ2-cCegQIABAA&oq=ict+illustr&gs\\_lcp=CgNpbWcQARgAMgUIABCABDYGCAAAQBRaEMgYIABAIEB4yBggAEAgQHjIECAAQHjIHCAAQGBCABDIHCAAQOGBCABDIHCAAQOGBCABDIHCAAQOGBCABDIHCAAQOGBCABD0ECCMQJzoKCAAQigUQsQMQQzoHCAAQigUQQzoNCAAQigUQsQMQQgwEQQzoLCAAQgAQQsQMQQgwFQuApY8D9gmU9oAHAAeAGAAYQliAHFJJIBDzAuOC4zLjIuMS4xLjAuMZgBAKABAAoBC2d3cy13aXotaW1nwAEB&scient=img&ei=rPaLZPpwOqDV3LUP-4iHoAU&bih=559&biw=1242#imgrc=GLeQlgZpz79A9M](https://www.google.com/search?q=ict+illustration&tbm=isch&ved=2ahUKEwj8tuLlif_AhWgKrcAHXvEAVQQ2-cCegQIABAA&oq=ict+illustr&gs_lcp=CgNpbWcQARgAMgUIABCABDYGCAAAQBRaEMgYIABAIEB4yBggAEAgQHjIECAAQHjIHCAAQGBCABDIHCAAQOGBCABDIHCAAQOGBCABDIHCAAQOGBCABDIHCAAQOGBCABD0ECCMQJzoKCAAQigUQsQMQQzoHCAAQigUQQzoNCAAQigUQsQMQQgwEQQzoLCAAQgAQQsQMQQgwFQuApY8D9gmU9oAHAAeAGAAYQliAHFJJIBDzAuOC4zLjIuMS4xLjAuMZgBAKABAAoBC2d3cy13aXotaW1nwAEB&scient=img&ei=rPaLZPpwOqDV3LUP-4iHoAU&bih=559&biw=1242#imgrc=GLeQlgZpz79A9M)

In the era of Globalization, technology has proven to be the backbone of everything happening in the world. By using Information and Communication Technology education has become much more effective than earlier. The use of ICT has enhanced the knowledge, ability and creative capabilities among the students.

## II. DIFFERENT TYPES OF ICT TOOL FOR PROMOTING EDUCATION

### A. *E- Learning/ Electronic Learning*

Any electronic source of information that aids in learning, teaching and education. It is characterized by the use of information networks, computers and other technological devices such as online education; You Tube based Learning, Webinars, virtual classrooms, Mobile learning and much more.

### B. *Blended Learning*

It is the combination of pedagogy, technology and students. In this process teachers create a learning dynamic process by providing E study material to students which enhances their interest in learning. This study provides students flexibility in time and space so to pursue their education.

### C. *Active Learning*

The use of ICT has enabled students to do appropriate analysis and serves as an active learning platform so that they can generate new information for their own use. ICT has turned traditional memory pedagogy into improved learning.

### D. *Collaborative Learning*

ICT promotes interaction among learners and teachers regardless of any discrimination such as caste, creed, religion and location. It creates and generates opportunities for all educational participants, assisting learners and improving communication skills and collective awareness.

### E. *Integrated Learning*

ICT are basically thematically focused classes and are delivered on internet. Content is integrated with language and facilitate learners to learn content through additional language. It persuades in – depth discussions and compels teachers to rethink, redesign and keep on updating their pedagogical models according to the theme.

### F. *Creative And Innovative Learning*

ICT has provided a common platform for all learners, educators and participants. The educator can share their creative and innovate ideas with their participants. Learning supported through ICT promotes innovation among educators so that they can connect available information and can recreate and reframe it and present it before learners. Use of innovate tools such as video conferencing, Google meet and Zoom educators are able to connect to learners so to share their views and experiences.

### G. *Evaluative Learning*

The use of ICT in education is highly different than traditional based education. It recognizes presence of diversified range of learning pathways and facilitates to explore new dimensions of content rather than to listen and memorize. New skills are required in this newly emerging society which is possible only through systematic evaluation of traditional and emerging pedagogy to meet the requirement.

### H. *Distance And Open Learning*

Distance and Open Learning is one of the effective ways to provide learning to learners who are scattered and are not able to become regular students. There is separation of teacher and learner in time and place. ICT is playing a crucial role in Distance and Open Learning. It is facilitating participants through various media platforms along with traditional pedagogy. It promotes two way communications between education and the learner through virtual classes.

It provides study content to both educators and learners and facilitating in conducting exams. This kind of learning is certified by recognized institutions.

### I. *Smart Gadget Learning*

Smart phones have emerged as a most competitive mode of learning. Mobile learning content design must consider the basic required outcomes, educational ethics, and cost – effective and futuristic pedagogy. In this type of learning integration, support and appropriate choices of tools are important elements of teaching pedagogy.



### III. CONCLUSION

The importance of ICT has been understood by learners and educators in a better way since COVID-19 Pandemic as it created such a situation for the people as they shift all their activities in an online mode. The education sector was affected greatly by this situation and many ICT tools helped both the educators and learners involved in the field of education. ICT provides new platforms for people which enabled beginning of online education. Time and space dimensions have been limited due to ICT as physical proximity is not necessary for pursuing education due to online education.

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