Original Paper

Basics of ICT in Teaching & Learning Process

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Abstract

ICT—Information and Communication Technology is an extensional term for Information Technology (IT) that stresses the role of unified communications and the integration of telecommunications (telephone lines and wireless signals) and computers, as well as necessary enterprise software, middleware, storage, and...

ICT helps teacher to pass information to students within a very little time. ICT helps teacher to design educational environment. ICT helps teacher to identify creative child in educational institute. ICT helps teacher to motivate students and growing interest in learning. The paper envisages the maximum or at least optimum utility of ICT for the process of teaching and learning.

Keywords

ICT–education, other side, need of the hour with respect to ICT

1. Introduction

Information and Communication Technologies (ICT) have become commonplace entities in all aspects of life. Across the past twenty years the use of ICT has fundamentally changed the practices and procedures of nearly all forms of Endeavour within business and governance. Within education, ICT has begun to have a presence but the impact has not been as extensive as in other fields. Education is a very socially oriented activity and quality education has traditionally been associated with strong teachers having high degrees of personal contact with learners. The use of ICT in education lends itself to more student-centered learning settings and often this creates some tensions for some teachers and students. But with the world moving rapidly into digital media and information, the role of ICT in education is becoming more and more important and this importance will continue to grow and develop in the 21st century. This paper highlights the various impacts of ICT on contemporary higher education and explores potential future developments. The paper argues the role of ICT in transforming teaching

and learning and seeks to explore how this will impact on the way programs will be offered and delivered in the universities and colleges of the future.

2. Other Side of ICT

One side the impact of ICT is indispensible but it has other side also with prevailing on go. There have been a number of factors impeding the wholesale uptake of ICT in education across all sectors. These have included such factors as a lack of funding to support the purchase of the technology, a lack of training among established teaching practitioners, a lack of motivation and need among teachers to adopt ICT as teaching tools. But in recent times, factors have emerged which have strengthened and encouraged moves to adopt ICTs into classrooms and learning settings. These have included a growing need to explore efficiencies in terms of program delivery, the opportunities for flexible delivery provided by ICTs. The capacity of technology to provide support for customized educational programs to meet the needs of individual learners and the growing use of the Internet and WWW as tools for information access and communication.

3. Major Components of ICT

- ✓ Over Head Projector
- ✓ CD ROM
- ✓ LCD Projector
- ✓ Audio Visual Aides
- ✓ Smart White Board
- ✓ Integrated (Smart) Podium

Above are some of the major ICT tools were in use and are getting used for teaching and learning process be it higher education or primary to higher secondary education.

4. Government Role and Policy

Centre launches "Operation Digital Board". It envisages Digital Board for five lakh class rooms in three years. The digital or smart board will be in the form of TV monitor, projector with inter face or computer. UGC (University Grant Commission) will function as an implementing agency at the cost of 10 thousand crore. The state government would share the cost with centre in the ratio of 40:60.

It adopted a policy that the traditional classrooms will be converted into digital classrooms and, in addition to availability of e resources at any time and any place to students, these boards will enable students in personalized adaptive learning. Further it also facilitates the intelligent tutoring by using emerging technologies like AI (Artificial Intelligence) and data analytics.

163

5. What Undone to Be Done Is the Need of the Hour in ICT

At various level of discussion, hue and cry, analyzing pros and cons still there are some voices for traditional class room. It is true; we cannot shun it away fully because there is nothing untrue in their argument. We may conclude this argument this way; when traditional class room mingled with digital class room, then the process of teaching and learning would be effective. If the higher education has to be strengthened then primary and secondary education has also to be constructed strong equally. Base has to be paved properly for furtherance to take on. Hence it is the duty of the educationist and educational officials to deal out various measures, right from syllabus to funding, to expedite digitalizing the class rooms. Accreditation councils and other quality management bodies may encourage academia to digitalize their schools and colleges so that they can get star value. New schools and colleges and courses to be started, digital class room may be made compulsory.

6. Conclusion

Plus and minus we would get at all aspects because the design of this globe is like that. In the case of ICT it can never replace a human teacher but it enhances the quality of teaching and learning surely. For every experiment, while real-time not coming handy, the ICT coming handy is sure and cannot deny it. There the ICT stands and takes the vital role. The problem now we are facing in country like India is infrastructure, polity, and culture. However ICT is the need of the hour and a class room without technology is rare in next ten years.

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