

A Case Study :

ICT in Modern and knowledge era

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In ICT there are three alphabet I, C and T, each alphabets has specific meaning, I stands for Information C stands for Communication and T stands for Technology, so, ICT is the combination of three, information, communication and technology.

ICT refers any product that will store, retrieve, manipulate, transmit of received information electronically in a digital form. For example, personal computers, digital television, email, robots.

Creativity and innovation should be viewed as an integral part of a approach to education and we know that each and every individual has the capacity to be the creative and innovative. Much of our progress is the result of ability and willingness of an individual to think and act on creativity. Such expression is especially valuable in our democracy. ICT provides new opportunities for education and training, as it enhances learning and teaching and facilitate collaboration, innovation and creativity for individuals and organizations

ICT is often categorized into two broad types of product:

Traditional computer based technologies:

Traditional computer based technologies are the technologies based on using computer at home or at work. There are two sub-divisions in traditional computer based technologies.

Standard applications: these are as follows-
Word processing:

e.g. Microsoft word: Write letters,

Reports etc.

Spreadsheets:

e.g. Microsoft excel; Analyse financial information, calculation, create forecasting models etc.

Database software:

e.g. Oracle, Microsoft SQL Server, Access, managing data in many forms, form basic lists (e.g. customer contacts through to complex material (e.g. catalogue).

Presentation software:

e.g. Microsoft power point; make presentations, either directly using a computer screen or data projector, Publish in digital format via email or over the internet.

Desktop publishing:

e.g. Adobe indesign, quark Express, Microsoft publisher; produce newsletters, magazines and other complex documents.

Graphics software:

e.g. Adobe photoshop and illustrator; Macromedia freehand and Fireworks; create and edit images such as logos, drawings or pictures for use in publications.

Special applications : These are as follows-
Accounting package:

e.g. Sage, Oracle; Manage an organizations accounts including revenues/sales, purchases, bank accounts etc.

Computer aided design:

Computer aided design is the use of computers assist the design process like

architectural, engineering, electronics and roadways.

Some other packages:

like SPSS, Mathematica etc.

Digital communication technologies:

Digital communication technologies are used to communicate and share information digitally. This is often achieved via networks of sending and receiving equipment, wires and satellite links. There are two-sub divisions of digital communication technologies:

- Internal network (LAN)
- External network (WAN)

Thus, we can say that in modern and knowledge era, stress should not be given on traditional practices, stress should be given on latest trends and practices or we can say that instead of giving stress on otiose methods and practices, stress should be give on the methods which are helpful to retrench our weaknesses.

Role of ICT in teaching and learning:

– The use of ICT in education and training for enhancing reflective thinking is a real opportunity for innovation in education.

– Inflexible curricula (esp. with regard to time) can be an obstacle for developing creativity. Flexibility is important for creativity, perhaps we should introduce one hour per day for creative activities.

– A change in teacher training is needed: teacher training needs to be more innovative to attract talented students. The mobility of teachers should be promoted.

– Some teachers are still too scared of ICT due not knowing how to use it constructively in their teaching.

– Involvement of parents in e-Learning is essential, but some parents lack ICT skills. Acquiring them can be a problem for parents, as the face work pressure and pressures to be efficient.

– ICT has already become an important tool in education, but it has the potential to become a key instrument for lifelong learning, innovation and learner-centred forms of education.

– ICT based systems are based on data gathering and sharing of findings which are used in many research fields and could also have potential for learning process.

– The main tasks for policy makers are to provide the framework conditions, objectives, motivations and incentives for educational system development. At the

same time education practitioners need to be encouraged to participate actively in the development process, making the best of their knowledge and practical experiences.

– Schools are still following a traditional paradigm in training and learning. Only when this change will ICT-based innovations are seen as an added value. So, a reform of educational paradigms is essential.

Conclusions:

Every human being requires information in all spheres of activity, be it in education, agriculture, industry, specialized profession or even in the day-to-day activities. With the advent of technology, information is within the easy reach of almost everyone. New technologies and especially social computing provide new opportunities for education and training, as they enhance learning and teaching and facilitate collaboration, innovation and creativity for individuals and organizations. The benefits of deploying social computing and ICT for learning depend on the learning approach used, emphasizing the role and the skills of the teacher and the need for supportive settings for both learners and teachers. So, we can conclude that without ICT, no profession, no field, no area can progress. Everybody should be familiar with the ICT, for attaining professional repute.

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