

Role and Significance of ICT in Education

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Abstract:

There is a significant role of ICT and internet in our life, especially in the educational activities, education authorities should be wise enough in implementing the strategies to empower ICT in supporting the teaching and learning process in the classroom. ICT is not just the bloom of the educational activities, but also it will be the secondary option to improve the effective and meaningful educational process. The main purpose of the Strategy for Information and Communication Technology Implementation in Education is to provide the prospects and trends of integrating information and communication technology (ICT) into the general educational activities.

Keywords: Computer, Communication, ICT, Internet, Technology

1. Introduction

Including computers and technology in education will open many doors for the students. Because of the huge role computers and technology play in the lives of people, it is vital to include computers and technology in student education. Preparing students to enter the world of technology after high school is not an option. "Learning in the Digital Age," "The digital revolution is as near as a cell phone and as far away as the spacecraft Voyager. Students are the beneficiaries of both the knowledge explosion and the communications bonanza. For them, "texting" and "pixing" are as commonplace as note-passing in other eras. What's on the horizon for learning with digital technologies?" This statement highlights the need and importance of computer technology in education.

2. Integrating Technology into Curriculum

Computer education is a part of many schools' required curricula. Computer and technology classes are one way to ensure students have exposure and gain experience in using technology. Technology and computers can also be integrated in the instructional classroom. When technology is properly integrated in educational curricula, students will learn more than just the core subjects; technology learning and application will take place.

3. Proper Integration

Technology properly integrated into curriculum needs four components of learning. These four components, as explained on the Edutopia website, are active engagement, participation in groups, frequent interaction and feedback, and connection to real-world experts. Technology, when properly integrated in classroom instruction and curriculum, can be used to address different learning styles and abilities of students, creating a differentiated and more effective learning experience.

4. Ways to Differentiate

Using technology to differentiate student learning will provide an enjoyable and educational experience for both the student and the teacher. Verbal-linguistic learning-style students will

benefit when given tasks such as note taking, reading for information, listening, researching and writing using the technology available. The logical-mathematical student will benefit by tasks such as gathering data, solving problems, predicting, classifying and sequencing. Providing opportunities to improve their particular learning styles will help students to understand why they can perform some tasks more easily than others.

5. Enhancing Lessons and Lectures

Technology can be used to enhance lectures and transform dull lessons into attention-grabbing and motivating learning experiences. Color, animated graphics and sound can be used to capture and maintain student attention. Computers and technology can be used for interacting and participating in the lecture and lesson.

6. A Positive Learning Environment

While it is challenging to create a perfect learning environment for every child, the use of technology can assist teachers in creating a more positive and motivating environment for students to learn and excel in. Technology in the classroom will provide the students with a well-rounded education and help well prepare students for a competitive job market.

7. Role of Information Technology in Education

Information technology plays an important role in modern education which is as follows.

7.1 Accessibility

Mobile devices that utilize information and communication technology give students and teachers more sources of information, which makes learning nearly anything more accessible. By connecting to the information and people on the Internet, students can collaborate with their peers both in the classroom and around the world, leading to a more interactive and rich learning experience.

7.2 Organization

Digital ink is a major advance in information technology, and could potentially save schools money while making it easier for faculty and students to complete tasks. Teachers can enter grades and assignment updates on-line, rather than in a paper grade-book. Libraries with a digital database in place of a traditional card catalog make their resources available for students to search anywhere with an Internet connection. Staff members can find and send transcript information and other records quickly by accessing a digital filing system, saving time and paper.

7.3 Literacy

With advancements in information technology like multimedia applications and interactive software, teachers can increase literacy and understanding in any subject. Lessons with audio and video components that directly engage students reach more types of learners in comparison with traditional lecture methods of teaching, encouraging more students to participate in class and raising their level of understanding. New technology also helps disabled or disadvantaged students participate in subjects they were once unable to join, thanks to assistive programs and devices.

7.4 Potential

Information and communication technology opens the doors for better distance learning programs, allowing those in disadvantaged areas to have access to the same education as the privileged. Because this technology makes information accessible from nearly any location with

a mobile device or laptop, courses can be more flexible; meaning those with full schedules who may not have the time or opportunity to further their education can choose to enroll in courses on-line and complete assignments on their own time.

7.5 Expert Insight

The Griffin Technology Advantage, a program launched by Seton Hill University, aims to provide all students and faculty members with laptops and tablet computers to be used both in and out of the classroom. The university claims to focus on "creative literacy---teaching you not just how to find the information you need, but how to process it in the way that allows you to make sense of the information, apply the information to actual situations, and solve problems."

8. Conclusion

The teachers should be the main motivator and initiator of the ICT implementation at schools. The teachers should be aware of the social change in their teaching activities. They should be the agent of change from the classical method into the modern one. They must also be the part of the global change in learning and teaching modification.

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