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## Benefits and Challenges in Integrating ICT in Education

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*The aim of the paper is to discuss the benefits and challenges of ICT in education. The integration of Information and Communication Technology (ICT) in teaching and learning provides more opportunities for teachers and students to work better in an information age. This can help to improve quality education by providing curricular support in different subject areas. However, there is also some barriers that may discourage teachers to integrate ICT in the classroom. A number of different ICT tools and application may be integrated in teaching and learning. Some of these tools and application may be designed specifically for educational purpose only. Insufficient technical supports at schools and little access to Internet and ICT were considered as the major barrier preventing teachers to integrate ICT into the curriculum.*

Keywords: Barriers, Curriculum, Information, Communication Technologies.

### Introduction

Information and communication Technologies have been used in teaching learning and assessment for many years. Today varieties of ICT such as audio, video, computer and network technologies are combined to create a multifaceted instructional delivery system. We find a shift in traditional learning led by the teacher to independent learning facilitated by resource –based learning including utilization of ICTs. It is essential to use it properly for improving learning. We need to develop a habit of self-learning and positive attitudes towards potentials of various ICT, it can help us in learning effectively and efficiently from those ICT or other source of information.

ICTs can facilitate learning of learners. Various ICTs have been used to support learning which include traditional media (such as chalkboard, Textbook, overhead projector etc.) and electronic media (such as computers, interactive audio-video, multimedia system etc.). Technology such as Online/Internet is available for 24 hours a day. With the use of Internet, a wealth of learning materials in almost every subject can be accessed from anywhere at any point of time by unlimited number of learners.

The use of technology as a tool to develop different language skill has received great attention so that English language teachers are frequently exposed to new practices. Various workshops and short training programmes were introduced for new techniques and activities and promote new materials. The use of technology devices such as television, tape recorders and video recorders has been incorporated as a tool for teaching. There was evidence of many

problems in terms of technical skills at the beginning and at about a generation for the technical skill and the technical problem to be ignored out. However, teachers are faced with some barriers that prevent them to employ Information and Communication Technology. The process of using ICT in education is very complicated. The opportunities provided by ICT to support teaching are not problem free. The insufficient technical supports at schools, little access to Internet and ICT shortage of class time were the major barrier for the teachers to integrate ICT into curriculum.

On the other hand, ICT provides teachers with new sources of information and knowledge. Teachers can easily explain complex instruction and ensure students comprehension. Through ICT teachers are able to create interactive classes and make lessons more enjoyable which would also improve student's concentration. ICT will provide greater opportunities for teacher to teacher and student to student communication and collaboration. Among the student's ICT create a greater enthusiasm and provides additional resources to assist resource-based learning.

### Benefits of ICT in Education

Information and Communication Technologies have recently gained ground swell of interest. ICT have positive impact on students' performance schools with sufficient ICT resources achieved better results than that are not well equipped. Many pupils considered ICT tools very helpful in that it helps them to do assignments. ICT helps teachers to work in teams and share ideas related to school curriculum. There are some Effectiveness of ICTs in Education.

### Motivating Factors

The internet can act as a motivating factor for many students. Young people are captivated with technology. The Internet allow you to provide them with additional learning activities not readily available in the classroom.

### Fast Communication

The Internet promote fast communication. Students can join collaborative projects that involve students from different states or countries. This is a unique learning experience very essential for each student as the world is becoming one big community.

### Cooperative Learning

The internet facilitates cooperative learning, encourages dialogues and create a more engaging classroom.

### Locating Research Materials

Apart from communication research is what take many people to the Internet. There are many more resources on the internet than the school library provides. We can encourage student to take advantages of this wealth of resources for their resources.

Here are also some of the advantages/benefits which ICT brings to education:

### General Benefits

- Greater efficiency throughout the school.
- Communication channels are increased through email, discussion group and chatroom.
- Regular use of ICT across different curriculum subjects can have a beneficial motivational influence on student learning.

### Benefits for Teachers

- ICT facilitates sharing of resources, expertise and advice.
- Greater flexibility in when and where task is carried out.
- Gains in ICT literacy, skills, confidence and enthusiasm.
- Easier planning and preparation of lesson and designing materials
- Access to up-to-date pupil and school data anytime and anywhere.

### Benefits for Students

- Higher quality lesson through greater collaboration between teachers in planning and preparing resources.
- Gain in understanding and analytical skill including improvement in reading.
- Development of writing skill (including spelling, grammar, punctuation etc.)
- Development of higher-level learning styles. Opportunities to address their work to an external audience.

### Benefits to Parents

- Easier communication with teachers.
- Greater access to more accurate attendance and attainment information
- Increased knowledge of children's learning and capabilities, owing to increase in learning activity being situated in home.

### Challenges in ICT

The use of Internet for education is not problem free. Therefore, one should expect the problem to be encountered in using the Internet in teaching. It is difficult for teachers to change according to the requirements. The teacher's insufficient ICT knowledge and skills the difficulty

of integrating ICT in instruction and insufficient teacher time are some of the limitations in integrating ICT in education. Lack of personal confidence and insufficient access to ICT resource were also the challenge. The most important barrier in use of ICT were lack of insufficient number of computers, free time for learning lack of classroom time for students to use computers.

### Challenges related to Infrastructure

In many educational institutions there was no appropriate rooms to house the technology. In many institutions, there were old buildings poor ventilation, less safety and security. Another important necessity in the availability of electricity and telephony. There are areas still without a reliable supply of electricity and the nearest telephones are miles away. Challenges with respect to capacity building various competences must be developed throughout the educational system for ICT integration to be successful.

### Teachers

Teacher's professional development should have

- Skill with particular application.
- Integration into existing curricula.
- Curricular changes related to the use of ICT.
- Changes in teacher role.

ICT are swiftly evolving technologies however and so even most ICT fluent teachers need to continuously upgrade their skills and keep update of the latest technology. Teacher anxiety over being replaced by technology or losing their authority in the classroom as teaching learning process become more learner centered.

### Education Administrators

For ICT integration programs to be effective and sustainable administrators themselves must be competent in the use of the technology and they must have a deep understanding of the technical, curricular, administrative financial and social dimension of ICT use in education.

### Technical Support Specialist

Whether provided by in school staff or external service providers or bot, technical support specialist is essential. While the technical support requirement of an institution depends ultimately on what and how technology is deployed and used, general competencies that are required would be in the installation, operation and maintenance of technical equipment, network administration and network security/Without onsite technical support much time and money may be lost due to technical breakage.

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## Teaching aids

Teaching ICT is impossible with up-to-date equipment and supplementary materials. Vital elements include computers and accessories and appropriate software to assist in their use and application, educational database, a well-equipped computer laboratory library and internet connections. All of these should be available in quantities that allow every student to take full advantage of the opportunities IT provides.

## Limitation/Disadvantages of ICT in education

- Computers limits students' imaginations.
- Computer based learning has negative physical side-effects such as vision problem.
- Over reliance on ICT limits students critical thinking and analytical skills
- Students often have only a superficial understanding of the information they download.
- Students tend to neglect learning resources other than the computer and the internet.
- Students may be easily distracted from their learning and may visit unwanted sites.
- Students may have less opportunity to use oral skills and hand writing.
- Use of ICT may be difficult for weaker students, because they may have problems with working independently and may need more support from teachers.

## Conclusion

In a nutshell, not all lessons can be incorporated into the Internet. In teaching using Internet we have to convince that using the net adds something new some read value to our teaching. But also, students should be trained to use the available technology efficiently. We should collaborate with other teacher in the school and in system because cooperation and mutual understanding is important especially when the school has few Internet access. The integration of Information and Communication Technologies as a teaching aid is more complicated in that it demands more specific skills from teacher. In order to integrate ICT into curriculum teachers training institutions should provide appropriate and sufficient support for teachers. On the other hand, teachers are aware of what is happening in the classroom and what changes are occurring. Therefore, positive effective uses ICT can be applied in teaching and learning which eventually lead to the improvement of educational programs.

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