The Role of Effective Integration of ICT in Education

Dr.Kirti Thakar
Associate Professor
Department of education,
VNSGU, Surat

Abstract

Today, several technologies are present throughout the world so the integration of ICT into the classroom is also important for the development of the education system. In the classroom, the teacher and the manual are not the only sources of information. Several choices are available to students. The integration of ICT into the classroom can allow a teacher to instruct students and to socialize more concerning websites. To integrate ICT into the classroom teachers must change their way of teaching based on several kinds of technological devices. To enable students to get by in all areas where they need ICT, it is necessary to inform them about these technological tools. In the present paper, the researcher has discussed how to use technologies in the classroom. 1. Integration of ICT directly related to class work. 2. Integration of ICT linked to the syllabus work. A teacher can use different types of technologies to integrate ICT into the classroom such as Basic computer software, Subject specific software, Web browsing software, Blogging, Integrated learning modules, Wikis, Podcasting, Online photo galleries, and Enhancements for Browsers.

Key Words: Integration, ICT, Education, Blogging, YouTube channel

Introduction

The use of information and communication technology (ICT) such as Internet applications, CD-ROMs, video technology, various computer attachments, and software programs have caused many changes in society. These changes have not just been technical but more importantly of a structural nature. Many of the major institutions of our society have changed and the way we live our daily lives has been impacted. There is a growing interest in the integration of information and communication technologies (ICT) into classrooms as it is assumed that successful integration will offer a wide spectrum of valuable benefits for teaching and learning (Cope & Ward, 2002). However, although the availability of ICT use in schools has increased, all the gains that were envisaged were not always achieved (Gobbo & Girardi, 2001). This is because as ICT enters the social-cultural setting of the school, it may trigger changes in the activities and the learning environment, and is reciprocally affected by the very changes it causes. Therefore, research studies on the use of ICT need to shift their attention towards the integration of ICT in education.

What is the integration of ICT?

The integration of ICT into the system means that the necessity to equip people with the capacity to understand and utilize the potential of such environments is no longer an option, but is imperative.

Nowadays several schools are approaching the integration of ICT with a commendable investment in hardware and software. This integration has taken many forms. Some teachers in schools take the initiative and use ICT in the classroom. Sometimes their effort is acknowledged and a time allocation is sometimes given to help out other teachers. Gradually the school sees the benefit of this good work a greater allocation is given and the person becomes an ICT Integrator within the school. Now the question becomes what can these integrators do to help teachers and students? The first thing is to give ideas on how to use the facilities that you may have. Secondly, then some ideas on what traditional and emerging learning technologies can be used and how to use them in the classroom.

How to use the technology in the classroom

1. Integration of ICT directly related to class work.

In this approach, a teacher has the lesson for each fortnight with designed activities directly related to what she will do in the classroom. She must be a little more adaptable and flexible in her approach. This gets trickier when she has two classes in the same year group of different abilities. Students who are well organized can cope with this well while others sometimes don't bring together the products of the ICT activities with their classroom work.

2. Integration of ICT linked to the syllabus work.

Here the teacher will develop a set of activities that guide the students through the Syllabus Statement linked to the class work and the overall unit of work. Once the students have worked on the syllabus then, through activities, the class work is linked to the syllabus statements. By doing these they know the syllabus terms and are less confused when they have to link what they have learned to external examinations with questions in syllabus language.

The types of technologies to use in the classroom

This is depending on the skill level of the teacher and the students. When we compare the skills of students over the years the skill level increases down the age groups as each year goes by. Some generic activities can be used and applied to the classroom situation.

1. **Basic computer software**

The use of word, Excel, Access, PowerPoint, and Outlook can all be implemented to enhance the learning of the content covered in class. A simple task of providing word documents on a network with questions for the students to download. Students will answer these questions relevant to the unit of work they are

studying. They can learn with this simple activity such as being able to log on to their profile, use a username and password to access the file, and save a document to their profile or home directory.

2. Subject-specific software

The specific subject software such as Data Logging for Science, Mathematics software games, GIS for Geography, image manipulation software for Visual Art, and special programs for Languages to name a few. For example, the ICT skills learned by using image manipulation software will teach the students a lot about manipulating the size of images for which the network manager will be eternally grateful.

3. Web browsing software

Browsing software is a very powerful instrument. Knowledge management aside the management of bookmarks should be the first thing taught to students. This way they can learn to navigate to where they need to be quickly and efficiently. Once they have done this they can learn to make use of functions on the internet that can collate their needed data and store information they have and interact by using for example My Space.

4. Blogging

Blogs are like online journals with posts that are date-based, archived, and enable a degree of interaction through the use of comments, pingbacks, and trackbacks. Students can either use blogs to search for information using blog search engines or manage the updates using software such as Blog lines. Accordingly, there can be official blogs of organizations used for the teaching and learning of certain topics in a variety of subject areas.

5. Integrated learning modules

Open source software has enabled the development of Learning Management Systems (LMS) and content management systems such as a Module which have to capacity for forums, instant messaging, and online submission of work and the marking of such work. These will require greater involvement of the technical support of the institute such as the network manager to get such a system operational and streamlined for teaching and learning.

6. Wikis

We have heard of Wikipedia, we can create our wikis and use them for teaching and learning. A wiki can be set up where groups of students can add information on a topic and different students writing their chapters. Every student can edit and add to other students' work with different levels of permission.

7. Podcasting

The use of audio files is not new but with the development of digital recorders, iPods, and mp3 players it has become easier to create, stream and listen to audio files. Podcasts are the broadcasting of audio files

using software supported by RSS feeds. Students can use these audio files for revision, as part of project work and integrated into units of work.

8. Online photo galleries

These galleries are often used if we want to integrate all of our blogs online. Photos on blogs need to be on the internet as well. With the addition of an automatically generated script, we can also have a little gallery on our webpage or blog. This would be very useful for adding an extra dimension to web pages constructed by students. Also, galleries can be used to share photos.

9. Enhancements for Browsers

Increasingly web browsers are adding functionality for their users. This enables us to store our favorites online and then access them from whatever computer rather than having them stored on a dedicated computer. The value of this is in students being about to move around different computers and have access to their Bookmarks/Favorites.

10. Use of YouTube channel

Millions of people are seizing the opportunity to learn new things and tackle tasks they used to outsource. Watch time trends around learning on YouTube are proof of this. Teachers can make their YouTube channel and uploads their content-related lectures on it. Students can access it whenever they have time and mood for learning. It can be useful in the following way. The first teacher should ask his students to create 'About Me' videos and share them with the class. The teacher will create a playlist of videos that are going to use in lessons. Teachers should encourage their students to subscribe to relevant subject-related channels or playlists. Teachers can showcase student work by creating a course channel.

Conclusion

The teacher has to update her technology knowledge and motivates her students to learn through ICT. Some certificate courses can be introduced for teachers so they can use different types of technologies in the classroom to integrate ICT into the classroom. It is important to attract the interest of students from multiple sources of reliable and organized. ICT allows students to have access to more comprehensive sources of information.

References

1. Begum, A.J., Natesan, A.K. & Sampath, G. (2011).*ICT in Teaching Learning*. New Delhi: APH Publishing Corporation.

2. Cope, C. & Ward, P. (2002). Integrating learning technology into classrooms: The importance of teachers' perceptions. *Educational Technology & Society,* 5(1), 67-74.

3. Gobbo, C. & Girardi, M. (2001). Teachers' beliefs and integration of information and communications technology in Italian schools. *Journal of Information Technology for Teacher Education,* 10(1&2), 63-85.

4. .Harichandan, D. & Pandya, S.R. (2012). *Teacher Education and ICT*. New Delhi: APH Publishing Corporation

5. Mangal, S.K. & Mangal, U. (2011). *Essentials of Educational Technology*. New Delhi: PHI Learning Private Limited.

6. Saxena, J., Saxena, M. & Gihar, S. (2010). *ICT in Professional Education*. New Delhi: APH Publishing Corporation.

7. Siddiqui, M.H. (2010).*Technology in Higher Education*. New Delhi: APH Publishing Corporation