Integration of ICT in Curriculum: Expected Achievements and Challenges

Integration of ICT in Curriculum – The Pakistani Perspective

Asma Tanveer

Oct, 2010

Abstract

In this age of information and technology, educational institutions not just impart knowledge to individuals, but strive to change them into lifelong learners. ICT challenges the traditional method of teaching and learning through its potential as a source of knowledge. Like other developing countries of the world, a computer revolution has taken its due place in Pakistan as well. Both in public and private sectors, computers are fast becoming an integral part of our socio economic life. In order to compete with the developed countries, our schools must also promote acquisition of knowledge and skills in such a way so as to turn our students into life-long learners. Effective use of ICTs as educational tools would enable Pakistan to expand access to, as well as, raise the quality of education.

Integration of ICT in Curriculum: Expected

Achievements and Challenges

Integration of ICT in Curriculum – The Pakistani Perspective

Globalisation and technological changes are taking at a rapid pace in the world. All these changes are taking at such a pace that I, as a teacher, believe that schools and educational systems have to change the conventional methods of learning. In this age of information and technology, the educational institutions need not just impart knowledge to individuals, but enable them to change into life long learners. For this purpose ICTs which include radio, television as well as recent digital technologies such as computer and internet, are being used because they are capable of bringing about an educational revolution. ICT changes teaching and learning through its potential as a source of knowledge, a medium to transmit content, a means of interaction and dialogue (Jenkins 1999).

Keeping in view the importance of integration of ICT in education, this paper seeks to examine what has been done in Pakistan to integrate ICT in its educational setup. It also attempts to examine the expected achievements and the challenges it may have to face for its successful integration into the curriculum. The role of public-private partnership regarding integration of ICT will also come under consideration. Subsequently, I would like to suggest some future action plans for public as well as private Pakistani schools. The paper concludes by reviewing the outcomes of integration of ICT and the impact it will have on its learners.

Achievements

According to a UNESCO report, there have been a number of experimental projects to encourage computer education in school. "The Pakistan Association for Computer Education in Schools" is spreading computer literacy to the younger generation. Since 2000, the Government of Pakistan has encouraged private companies to supply computer equipment to public schools in order to provide students with access to computer classes. As a result, over 4000 schools have been equipped with computer labs.

Similarly, technology has been used to transform teaching in the Federally Administered Tribal Areas. The Ministry of Education has entered into a partnership with Microsoft to help update its secondary school curriculum and to train its teachers.

An advisory committee for the national strategy on education has also been formed. It regularly holds meetings with academicians, educationists and technocrats, to develop a long tem plan for improving quality of education. Their objective is to formulate a strategy that would enhance teaching, learning and education administration through the use of ICTs.

In the ICT context, Beaconhouse School System, the largest network of private schools in Pakistan, takes precedence over its contemporaries like Lahore Lyceum and City School. It realizes the importance of ICT as an essential tool for teaching and learning. For this purpose, it has established IT labs at most of its campuses. As the effective usage of the ICT tools depends on the teacher, special teacher training programmes like E-TAC ambassador have been introduced. Once the teachers have become ICT trained, they would be expected to facilitate learning through use of ICTs, and make knowledge meaningful to individual

learners rather than just provide knowledge and skills. An ICT centred classroom would have flexibility and the provision of self-directed learning. It would promote increased participation amongst learners through online communication. It would lead to easier management of large classes and provide access to a wider student body in different school branches across the country.

On post graduate level, Beaconhouse National University (BNU) aims to provide quality education and training to teachers with a nominal fee structure. For this purpose, the services of a foreign trained faculty have been acquired. Amongst the other courses being offered, a specially designed ICT module aims to make the learners familiar with the achievements and challenges faced by the teachers and educational institutions in the integration of ICT in the curriculum within the country and abroad.

Challenges

According to a recent research done by UNESCO, Pakistan is severely constrained in developing the use of new technologies in education. There is a need to expand primary and secondary education as well as raise its quality. These are the priorities that take precedence over proposals to expand the use of ICT in Pakistan.

Pakistan lack funds to embark on a full scale computerization. There is an irregular supply of power and other infrastructural facilities needed to support the efficient and effective introduction and development of the technology. Most teachers at all sectors of the education system have negligible or no ICT skills and hardly use existing opportunities to develop them.

The implications faced by the private sector, especially Beacon house School System, regarding integration of ICT is not just of resources but of technical expertise as well. Although the situation is changing rapidly, the shortage of computers and the high cost of connection to the Internet is a problem for most schools. The main difficulty lies in transforming teaching. Teachers face large psychological barriers in trying out and using ICT. They believe that their competence in working with ICT is inferior to that of their students.

Recommendations

The FATA experience demonstrates how governments can improve the effectiveness of ICT based curricula on a small scale and replicate this success else where.

The multinationals like IBM and Microsoft should be given more incentives to invest in the public and private schools. Moreover, large companies within Pakistan should be encouraged to donate computers to schools and other educational institutions.

The infrastructure of policy making should be improved at the government level. Proper researches and data should be collected for a solid footing. The expenditure on education and integration of ICT in curriculum should at least be doubled.

Similarly schools like Beaconhouse, which have a country wide network of schools, should provide at least one computer to each class. Parents and influential personalities can be asked to donate them. Similarly, the curriculum needs to be revised. If ICT is to be integrated then the conventional teaching methods have to change.

Most importantly, teachers' salary, both in public as well as private sector, should be made equitable as this issue undermines the efforts undertaken by institutions for improving the quality of education. If the teachers are paid well, it is most likely that they will accept all innovations with minimum resistance.

Conclusion

Effective use of ICTs as educational tools would enable Pakistan to expand access to, as well as, raise the quality of education. In order to compete with the developed countries, our schools must promote acquisition of knowledge and skills in such a way so as to turn our students into life-long learners. Keeping in view the efforts being made by the public and private sector, a change in the educational setup of Pakistan will eventually take place.

References

Perraton, H. Pakistan: ICT use in Education. Retrieved November 13, 2008, from http://www.unescobkk.org/fileadmin/user_upload/ict/Metasurvey/PAKISTAN.PDF

Olakulehin, F. (2007). Information and Communication Technologies in Teacher Training and Professional Development in Nigeria. Retrieved November 14, 2008, from http://tojde.anadolu.edu.tr/tojde25/articles/Article_11.htm

Jenkins, J. (1999). Teaching for Tomorrow ,the Changing Role of Teachers in the Connected Classroom. Retrieved November 13, 2008, http://www.eden-online.org/papers/jenkins.pdf