The Role of ICT in Higher Education in India

Manisha¹, Anju²

^{1,2}Research Scholar, Institute of Management Studies and Research (IMSAR), Maharishi Dayanand University, Rohtak – 124 001, (Haryana), India

Abstract: Information and communication technologies (ICT) have become commonplace entity in all parts of life. Across the past twenty years the use of ICT has fundamentally changed the practices and procedures of business and governance, education. The role of ICT in education is becoming more and more important and this importance will continue to grow and develop in the 21st century. Use of ICT in education field leads to more student-centred. This paper highlights the various impacts of ICT on higher education and explores various potential future developments.

Keywords: Information and communication technologies, online learning, student-cantered learning, higher education.

Introduction

Information and communication technology (ICT) is a force that has changed a lot of aspects of the life. If one compare fields such as education, banks, medicine, hotel and tourism, travel, business, law, and architecture, the impact of ICT across the past two or three decades has been massive. The way these fields operate today is vastly different from the ways they operated in the past. But when one looks at education, there seems to have been an uncanny lack of influence and far less change than other fields have experienced. A number of people have attempted to explore this lack of activity and influence (Soloway and Prior, 1996; Collis, 2002).

Review of literature

The demand for education in any country like India has skyrocketed for motive that education is perceived as an important means for the social, economic and political upward mobility (Amutabi and Oketch 2003).

There exist lots of hurdle in general education system in all over the world as well as in India like lack of availability of learning materials, lack of skilled teachers, high dropout rate etc (UNESCO,2002). Thus the overall position of higher education in india is depressed. There are numbers of barriers exist for people who inclination to pursue higher education such as socio-economic, cultural, time and geographical (Bhattacharya and Sharma, 2007). ICT has the approaching to remove the hurdles that are roots the problems of low rate of education in any country like india. It can be used as an instrument to hit the issues of poor quality of education, less number of teachers, cost, and time and distance barriers (McGorry, 2002). According to Hawkridge et. al. (1990) ICT might advance teaching, performance and administration and have a positive impact on education as facilitate in liberation and transformation.

Benefits of ICT in Education

Use of ICT in education presents a unique opportunity to solve multitude of challenges quickly as well as at low rate. Here is an overview of advantages of an online system.

• Improve Quality of Education

- Support collaboration among students, teachers and institutions
- A reliable grading system to measure and assign rank to Students, Teachers, Schools and Universities
- All round development of students
- Promote educational ideas
- Continuous improvement by feedback

• Improve Accessibility

- Acessible anytime from anywhere to everyone
- Bring the books & other resource within reach of students
- Promote education in rural areas
- Provide online courses to students.
- 24×7 schooling system for those students who cannot attend regular schools during daytime

• Reduce the cost of education

- Provide services at lower cost through online solutions
- Promote "learn yourself" and "community learning" via online system, etc.
- Assist teachers for conducting exam and offer courses material
- ICT opens the doors for girls to get education from home for e.g. online learning if social & cultural reasons are preventing them.
- ICT promote vocational courses as well as self paced learning for the adults
- ICT bring culturally diverse India on a common learning platform which is offered in all languages

Challenges of Education in India

Education in India faces many challenges which involve following:

- ICT Infrastructure: The major challenge before ICT is availability of ICT infrastructure i.e. non-availability of buildings, electricity & Communication infrastructure.
- Quality: Maintaining standard of education is a big challenge. Access Due to infrastructural constraints and social issues, it becomes very harder to make education accessible to all parts of the society.

• Cost: The cost of education is very high for the people (who belong to lower class) and places where it is accessible. Social & Cultural Issues: due to Cultural diversity it is very difficult to offer education tailored to specific social segment in India. For example educating the children who belongs to poor families because they are forced to work and miss out learning opportunities

Conclusions

ICT play vital role as a strong agent for change among many educational practices i.e. conducting on line exam, pay on line fees, accessing on line books and journals. Thus the developments of ICTs in education have a strong impact on. Thus ICT in education improves teaching learning process, provides the facility of online learning to thousands of learners who can not avail the benefits of higher education due to several checks, such as, time, cost, geographical location, etc. Ozdemir & Abrevaya (2007) asserted that ICT reducing the costs per student and expanding the enrolments and makes the provisions for employers and supports enduring learners (The upshot of all this activity is that we should see marked improvements in many areas of educational endeavour. Learning should become more relevant to stakeholders' needs, learning outcomes should become more deliberate and targeted, and learning opportunities should diversity in what is learned and who is learning. At the same time, quality of programs as measured by fitness for purpose should continue to grow as stakeholder groups find the offerings matched to their needs and expectations.

To ensure that the opportunities and advantages are realized, it will be important as it is in every other walk of life to ensure that the educational research and development dollar is sustained so that education at large can learn from within and that experiences and activities in different institutions and sectors can inform and guide others without the continual need for reinvention of the wheel. Once again ICTs serve to provide the means for much of this activity to realize the potential it holds.

References

- Amutabi, M. N. & Oketch, M. (2003). Experimenting in distance education: The African Virtual University (AVU) and the paradox of the World Bank in Kenya. International Journal of Educational Development, 23(1), 57-73. http://dx.doi. 1016org/10. /S0738-0593(01)00052-9)
- [2]. Bhattacharya, I. & Sharma, K. (2007). India in the knowledge economy an electronic paradigm, International Journal of Educational Management, 21(6),543-568.
- [3]. Blurton, C. (2002). New directions of ICT-use in education. [viewed 27 April 2011] http://www. unesco.org /education/educprog /lwf/dl/edict.pdf]
- [4]. Bush, M., & Mott, J. (2009). The transformation of learning with technology. Educational Technology, 49(1), 3–20.
- [5]. Hawkridge, D., Jawoski, J., & McMohan, H. (1990). Computers in the Third World Schools: Examples, Experiences and Issues, London.
- [6]. Kirkup, G. & Kirkwood, A. (2005). Information and communications technologies (ICT) in higher education teaching: A tale of gradualism rather than revolution. Learning, Media and Technology, 30(2), 185-199. http://dx.doi. org/10. 1080/17439880500093810 |
- [7]. Lim, C. P. & Chai, C.S. (2004). An activity-theoretical approach to research of ICT integration in Singapore schools: Orienting activities and learner autonomy, Computers & Education, 43 (3), 215–236.
- [8]. Ozdemir, Z. D. & Abrevaya, J. (2007). Adoption of technology-mediated distance education: A longitudinal analysis. Information & Management, 44(5), 467-479.

- [9]. Pajo, K., & Wallace, C. (2001). Barriers to the uptake of web-based technology by university teachers. Journal of Distance Education, 16, 70–84 |
- [10]. Plomp, Tj., ten Brummelhis, A.C.A., & Rapmund, R. (1996). Teaching and Learning for the Future. Report of the Committee on MultiMedia in Teacher Training (COMMITT). Den Haag: SDU.
- [11]. Plomp, T.; Pelgrum, W. J. & Law, N. (2007). SITES2006—International comparative survey of pedagogical practices and ICT in education, Education and Information Technologies 12(2), 83-92.
- [12]. Sharma, R. (2003). Barriers in Using Technology for Education in Developing Countries, IEEE0-7803-7724-9103.Singapore schools', Computers & Education 41(1), 49--63.
- [13]. UNESCO (2002). Information and Communication Technology in Education–A Curriculum for Schools and Programme for Teacher Development. Paris: UNESCO. |
- [14]. Volman, M., & Van Eck, E. (2001). Gender Equity and Information Technology in Education: The Second Decade. Review of Educational Research, 71(4), 613–634.
- [15]. Wood, D. (1995). Theory, training, and technology: Part I. Education and Training, 37(1), 12–16.
- [16]. Young, J. (2002). The 24-hour professor. The Chronicle of Higher Education, 48(38), 31-33.pap13
- [17]. Yuen, A.; Law, N. & Wong, K. (2003). ICT implementation and school leadership Case studies of ICT integration in teaching and learning, Journal of Educational Administration, 41(2), 158-170.
- [18]. Yusuf, M.O. (2005). Information and communication education: Analyzing the Nigerian national policy for information technology. International Education Journal, 6(3), 316-321.

