ROLE OF INFORMATION AND COMMUNICATION TECHNOLOGY IN DISTANCE EDUCATION

Dr. Raja Sahu Dept.of Economics
K.V.Science college Uchchaith,Benipatti
L.N.M.University Darbhanga

Abstract

The Information and Communication Technology (ICT) can be one of the important tools while teaching at under graduate and post graduate level and Education is a very socially oriented activity and quality education has traditionally been associated with strong teachers having high degrees of personal contact with learners.ICT has become an integral part of today's teaching learning process.It is being popular at education sector because of their different modes of operations. Since, the education includes regular, online, distance and part time education, so there are a number of applications based on ICT are available in the real world. Effective use of technology can motivate students, make our classes more dynamic and interesting and renew teacher enthusiasm as they learn new skills and techniques. The role of ICT in Distance education is becoming more and more important and this importance will continue to grow and develop in 21st century. In this paper, the emphasis is given on the use of ICT by teachers and its effects on the teaching methods with their different perspectives. The use of ICT in education not only improves classroom teaching learning process, but also provides the facility of e-learning. The adoption and use of ICTs in education have a positive impact teaching, learning and research. The use of ICT will not only enhance learning environment but also prepare next generation for future lives and careers . The paper has also focused on the certain important issues related to the effective implementation of ICTs at educational level and provides suggestions for effectively use of ICT at Distance education level for distance education.

Introduction

The concept of distance education was introduced near about 1960 in India for making the changes in the education system for those who are not directly able to study at outstation and According to Dr.Babasaheb Ambedkar (Bombay ,Legislative council Debate,27 july,1927), " The university is a machinery whereby education facilities are provided to all those who are intellectually capable of using those facilities to be the best advantages but who cannot avail themselves of those facilities for want of funds or for other handicaps in life".

It has opened the door to provide wider opportunities for the students to undertake Distance education. The distance education is very helpful for the student and the people who cannot involve in regular courses. The distance education system not only reduced the initial fear of students but also opened various dimensions of correspondences in education field.

It has been noticed that around 30 percent students takes admissions in distance education every year in different field. The distance education institution may be the best option for increasing the literacy rate in education. Technology is also helping the students to understand any abstract concepts clearly.

ICT has become an integral part of today's teaching learning process. The integration of ICTs in teaching in general and teacher education in particular is the need of the day. The use of ICTs can make substantial changes both for teaching and training mainly in two ways; firstly, the rich representation of information changes learner's perception and understanding of the context.

The distance education institution may be the best option for increasing the literacy rate in education. Broadley, T., J. Downie and D. Gibson. (2015) have given the concept of evolving learning paradigms by re-setting the baselines and collection methods of information and communication technology in education statistics. European Commission (2013) has done survey of schools in which they have given the idea of ICT in education. Adomi, E.E. and E. Kpangban (2010) explained the application of ICTs in Nigerian secondary schools.

Secondly; the vast distribution and easy process access to information can change relationships between teachers and taught.ICT can also provide powerful support for educational innovation. In the last few decades, we have seen an increasing number of youngsters gaining access to Distance education .

There are various functions performed at Distance education with the help of ICT tools. The ICT can be used for enrolment of students in any course of distance education in the University or educational institutes. In the distance education system, the ICT can be used for making better management of records by the preparation of complete database of all the students for various courses.

This phenomenon reflects a trend at a global level ,which is largely due to the democratisation and development of societies, the improvement of living conditions and structures ,the demand for a more highly qualified performance both in professions and citizenships we have, therefore witnessed a change both in terms of quality as well as quality in the student population ,reflected in the gradual loss of the elitist and formal character of Distance education through the

admission of individuals from all social classes(Soares and Almeida,2002).

A number of ICT tools are available that can be utilised at Distance education level like Computer, LCD, Smart Board, Projector, mobile for communication etc. These systems provide various facilities like Software and Hardware use, Short Message Service (SMS), Interactive display, online tutorials and many more. Mobile phone is one of the major ICT tool and can be used for different purposes. The information like Exam dates can easily be sent to the student through SMS by Institutes concerned. Even more the enrolled students can be provided username and password for using various online services and resources in the form of academic repositories. The instructional material may be uploaded at the Institutional web portal and CDs of lectures can be provided to the students in place of printed paper or hard copy of educational material. Online fees payment is also possible on the portal of concerned Institute. The use of ICT can be helpful to sort out the problem of the delay in declaration of results of different exams by the institutes. "The emancipatory and transformative potentials of the ICT in Distance education in India has helped increase the country's requirement of Distance education through part- time and distance learning schemes. It can be used as a tool to overcome the issues of cost, less number of teachers and poor quality of education as well as overcome time and distance barriers." The advantages of using ICT tools include saving of lot of paper work and help the environment by making it pollution free. This system can also bring the transparency in the whole system functioning. Nipper S. (1989) has told about third generation distance learning and computer conferencing related issues. Nyirenda, J.E., Indabawa, S.A., & Avoseh, M.B.M. (1999) has discussed about developing professional adult education programmes in India.

The use of ICT can be helpful for collecting knowledge sources and be an open learning source. The use of technology is one of the major tools that can be utilized only to remove the barriers and challenges present in the existing system. The ICT can provide the opportunity of job training and continuing education for teachers in a convenient and flexible easy manner. Ongoing training can be possible using ICT for the teachers training and students learning. ICT can be applied in their teaching practices as well as for delivery for these trainings. In order to successful implement in the ICT-driven distance education programmes, the teachers must by initially understand and be comfortable with the technologies use. They must be given opportunities and training for acquisition of a new knowledge. This can be possible by promoting computer-training programmes for Distance education teachers. Use of ICT in education is very much required for the content designing and delivering. The International Society for Technology in Education (ISTE) has designed and prepared the most comprehensive system of ICT standards for teachers, students and administrators of the educational institute.

The ICT can be helpful in quality education and distance learning for Distance education by implementing it in various phases of education. It can be employed in formal and Non-formal types of education and may be socially useful part of the society. By employing ICT for the teachers training can save a lot of money of the institution and university. Good quality content is one of the major issues in distance learning which can directly affects the standards of education and quality. By the use of ICT effectively, a lot of quality improvement can be done after careful and planned implementation of ICT in education.

Objectives of the Study

The aim of this paper is focussed on the following points:

To study and evaluate the use of ICT at Distance education distance

learning The use of ICT by teachers for distance education

To overcome the challenges of ICT barriers at Distance education leve

To address ICT benefits for Distance Education Institutions

Research Methodology

The effective use of technology at different educational organizational systematic functioning is directly associated with the intertwining of technical and social elements (Friedman, 1998; Heracleous & Barrett, 2001; Kling, 2000; Mulkeen, 2003; Senteni, 2006). On the basis of teacher and student perspective, the survey of factors has been done which affect teachers teaching with the use of technology for distance learning.

The aim of this survey is to examine factors that may directly or indirectly impede teachers' efforts to teach with technology Distance educational level. The survey study include –
a) Teachers' confidence in ICT use.

b) Teachers' knowledge of Computer Software.

c) Teachers' behaviour towards the use of ICT

d) Use of technology by teachers' for their personal purposes

Benefits of ICT in Distance 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 ICT:-

 1.Motivating Factor:-

The internet can act as a motivating tool for many students. Young people are very captivated with technology. Educators must capitalize on this interest excitement and enthusiasm about the Internet for the purpose enhancing learning. For already enthusiastic learners, the internet provides them with additional learning activities not readily available in the classroom.

2 .Fast communication:-

The internet promotes fast communication across geographical barriers. Students can join collaborative projects that involve students from different states, countries or continents.

3 .co-operative learning:-

The internet facilitates co-operative learning, encourages dialogue and creates a more engaging classroom. For example, a LISTER V for our class will allow students to get involved in class discussions through e-mails in a way not possible within four walls of classroom.

4. Locating Research materials:-

 Apart from communication, research is what takes many people to the internet. There are many resources on the internet than the school library can provide.

5 .Acquiring varied writing skills:-

If students are required to publish their work on the internet, they have to develop hypertext skills. These skills help students gain experience in non sequential writings.

ICT initiatives in Distance Education

 Various initiatives in the recent past portrayed the significant role that ICT plays in the realm of Distance education development. Several projects have reduced the costs, and it also has increased transparency. India has taken up major initiatives in terms of content delivery and furthering education through Information and Communication technology. For example Gyan Darshan was launched in 2000 in broadcast educational programs for school kids, university students and adults. Similarly Gyan Vani was another such important step with broadscast programs contributed by institution such as IGNOU and IITs .Under the UGC country wise classroom intiative, education programs are broadcast on Gyan Darshan and Doordarshan

national channel every day. E-Gyankosh which aims at preserving digital learning resources is a knowledge repository launched by IGNOU in 2005.Almost 95% of IGNOU's printed material has been digitized by uploaded on the repository. The national programme for technology enhanced learning (NPTEL) launched in 2001 is another joint initiative of IITS and IISC which education through technology. Sristi, the society for research and initiatives for sustainable technologies and institutions is facilitating the use of ICT for strengthening the capacity of grass roots inventors, innovations and entrepreneurs engaged in conserving bio diversity and developing ecofriendly solutions to local problems.

Recommendations

 The quality of programs as measured by fitness for purpose should continue to grow, if the stakeholders perceive the various educational programs as meeting their needs and expectations. ICTs serve to provide the means for activities to realize the potential in human resources. Furthermore, adequate funds must be provided to initiate, develop, promote, review and implement ICT policies in the educational sector to bring about an improvement on ICT utilization, through computer apprentices courses taught in vigerian tertiary institutions. In this period of economic recession, the price of ICT equipment and materials will continue to the astronomical. It becomes highly imperative for all stakeholders of education to entice industrial establishments, politicians, big businessman and entrepreneurs, non-governmental organizations and the community at large to assist the institutions in the provision of ICT equipment and materials and well finished computer laboratories.

Conclusion

 ICT play vital role as a strong agent for change among many educational practices i,e conducting online exam, pay online fees, accessing online books and journals. Thus ICT in Distance education improves teaching learning process, provides the facility of online learning to thousands to thousands of learners who cannot avail the benefits of Distance education due to several checks, such a time, cost, geographical location etc. Once again ICT serve to provide the means for much of this activity to realize the potential it holds.

it is found that if the knowledge of technology and training of the software tool is given to the teacher for teaching purposes, the result would definitely be better.

References

 1. Ajit Mondal and Dr. jayanta, 2012. ICT in Distance Education. Bhatter college
journal of Multidisiplinary studies. 4(5) .pp 123-130.

2. Lalitbhushan S, Arunita T Jagzape, Alka T Raweker. 2014. Role of Information communication technology in Distance Education: Learners perspective in Rural medical schools. Journal of clinical and Diagonostic Research 4(5). Pp 163-169

3. Manisha, Anju 2014.The Role of ICT in Distance Education in India. International journal of enhanced research in management and computer application. 3 (11) pp: 16-19.

4. Mc Gorry, S. Y (2002), online but on target? Internet based MBA courses: A case study, The Internet and Distance Education. 5 (2) pp 167-175

5. Ozdemir, Z.D and Abrevaya , J 2007. Adoption of technology mediated Distance Education: A longitudinal Information and Management, 44(5), 467-479.

6. Yusuf Musibau Adeoye, Ayolabi Festus, Loto Antonia, 2013. Appraising the role of Information communication technology (ICT) as a change agent for Distance education in Nigeria. International journal of educational administration and policy studies.5 (8), pp 177-183.

7. Uttam Kr Pegu .2014. Information and Communication technology in Distance Education in India: Challenges and oppurtunities . International journal of Inormation and Communication Technology, 4(5) pp 513-518.

8. Broadley, T., J. Downie and D. Gibson. (2015). "Evolving learning paradigms: Re-setting the baselines and collection methods of information and communication technology in education statistics post- 2015". Montreal: UNESCO Institute for Statistics.

9. European Commission (2013). "Survey of Schools: ICT in Education. Benchmarking Access, Use and

Attitudes to Technology in Europe's Schools" Belgium: European Commission.

10. Adomi, E.E. and E. Kpangban (2010). "Application of ICTs in Nigerian Secondary Schools". Retrieved

from: http://www.webpages.uidaho.edu/~mbolin/adomi-kpangban.htm

11. Nipper S. (1989), Third Generation Distance Learning and Computer Conferencing, in MASON R. & Al., Mindweave: Communications, Computers and Distance Education, Perrgamon Press, Oxford.

12. Nyirenda, J.E., Indabawa, S.A., & Avoseh, M.B.M. (1999). Developing Professional Adult Education Programmes in India. University of India: Windhoek

13. Osin, L. (1998) Computers in Education in Developing Countries: Why and How? Education and Technology Series. 3(1):1-14. Washington D.C. Worldbank.

14. Paist, E. H. (1995). Serving Students with Disabilities in Distance Education Programs. In The American Journal of Distance Education, 9 (1). 61-70.

15. Peters, O. (1998). Learning and Teaching in Distance Education: Analysis and Interpretations from an International Perspective. London: Kogan Page.

16. Perraton, H. (2000). Open and Distance Learning in Developing World. London. Routledge.

17. Perry, W. (1976). The Open University, Milton Keynes: Open University.

18. Peters, O. (1989). The Iceberg Has not Melted Further Reflections on the Concept of Industrialization and Distance Teaching. Open Learning, 11 (1), 51-54.

19. Rogers, E. (1995). Diffusion of Innovations 4th ed. New York. Simon & Shuster.

20. Rowntree, D. (1992). Exploring Open and Distance Learning. Kogan Page.

21. Rumble, G. (1997). The Costs and Economics of Open and Distance Learning. London. Kogan

Page

22. Rumble, G. (2001). Just How Relevant Is E-Education to Global Educational Needs? Open Learning. 16(3): 223-232.

23. Saints, W. (1999). Tertiary Distance Education and Technology in Sub-Saharan Africa. Washington D. C.: Working Group on Distance Education, Association for the development of Education in Africa, The World Bank.

25. Shale, D. & Garrison, D. R. (Eds.) (1990). Education at a Distance: From Issues to Practice.alabar, FL: Kreiger.

26. Sewart, D. (1993). Student Support Systems in Distance Education. In open Learning, 8 (30), 3- 12.

27. Wills, B. (1993). Distance Education: A Practical Guide. Englewood Cliffs. NJ. Educational Technology Publications

28. Von Euler, M and Berg, D. (1998) The Use of Electronic Media in Open and Distance Education. Paris: UNESCO.