UNDERSTANDING THE ROLE OF ICT IN ACHIEVING EXCELLENCE IN HIGHER EDUCATION

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Abstract

Technology has become inseparable from higher education in today's world as it plays a vital role in next generation learning. The scenario of teaching and learning has been shifted offline to online over the years. Due to rapid change in technology there are so many changes in higher education like learning management system (LMS) which help student as well as faculties to share and use the resources easily. Modern technology have the potential to change the structure of higher education in coming years as it has disrupted conventional classroom mode of teaching. With the advent of high speed internet, students and faculties are no longer required to meet at the same place for learning as they can get in touch with each other through online medium and learn from anywhere in the world. This paper focuses upon the technological changes occurring in higher education and how it is helping students, academician to achieve excellence in higher education. It is a conceptually designed paper with secondary data sources to elaborate the role of technology adoption with respect to different stakeholders in higher education. From secondary sources (published reports, academic papers), it was found that technology plays indispensable role in achieve excellence in higher education as it is instrumental in performance management, remote accessibility and sharing resources.

Introduction

Technology plays the most important role in the development of an individual as well as for any sector or economy. The adoption of ICT is in the process of transforming higher education and provides students, academician an innovative learning environment to enhance the learning and teaching process.

The integration of technologies into education system has been encouraged by several universities to support students an academician. There are some students who can't afford higher education due to high fees of universities technology helps them to get higher education in low fees through online medium as technology change the scenario of higher education mostly students and academician shifted offline to online.

Innovation & Technology helps students in gaining learning experiences from worldwide where as an academician can deliver lectures and share their experiences worldwide through online medium and it can revolutionize the delivery and access of higher education for greater number of students at lower cost. Effective use of technology can help academician to structure and design the active learning opportunities so students engaged in learning process which help to motivate students and enhance learning outcome. With the rapid change in technology students and faculties are no longer to meet at same place for learning.

Students can access notes and lectures of any university from worldwide. Transformative approach of ICT in higher education has increased the country's requirements of higher education through online classes; it is used as a tool to overcome the most important issue like price, less no. of academician, time & distance barrier.

Literature Review

There is a major difference in the learning of students and teaching approaches because of ICT. Large no. of amount is invested for ICT infrastructure over the last 2 decades by western world and students use computers more frequently for a wide range of applications. (Volman, 2005).

Be it any sector,there are numerous things which are acting as hurdles in the path of wholesale take up in education. Few among them have been encircled as major factor like inadequacy of funding which supports the acquisition of technology in big and small organization, low morale

or motivation among people and other major challenge in adoption technological tools in education sector. (Starr, 2001).

Impact of technology is almost on every nook and corner of education sector starting from learning, teaching to analysis of data. (Yusuf, 2005). A big pile of data analyzed has proved the benefits of ICT to the standard of education. (Al-Ansari, 2006).

Collis (1989) on the basis of his research come up with the conclusion that present scenario has it's similarity with an image to which we call a "grim image." He categorized the use of data and communication within informative method into two broad categories- where one speaks about the benefits of ICT for education and other in education. The first category refers to them advancement taking place for teaching and learning theatres with respect to development of knowledge. While second focus on adoption of general elements of data and communication advancement within learning method

According to Zhao and Cziko (2001) impact of technology in education sector cannot be measured. To accept and explore full benefits of technology academicians have to manage and agree to three conditions in their learning and teaching theatres. Firstly, they should accept the effectiveness of the innovation and new technological tools. Secondly, beyond effectiveness they should see that innovation will not act as hurdle in delivery path. Lastly, academicians should have believe that they are over innovation and have full authority to make any changes in given set of technological tools.

Harris (2002) on the basis of studies conducted by him concluded that benefits of ICT can be explored to the fullest when academicians are ready or start investigating new upcoming opportunities and innovation taking place in education sector and also start practicing them in their study methods. (Wheeler, 2001).

According to Cabero (2001), "the flexibilization time-space accounted for by the combination of ICT into teaching and learning processes contributes to increase the interaction and reception of knowledge. Such possibilities suggest changes among communication models and the teaching and learning manner used by academician, giving way to new scenarios which favour both individual and collaborative learning"

One of the remarkable commitment of ICT specially for students is - ease of learning which speaks about use of digital media to get information on any subject. With the help of this tool name ICT students browse through digital books, test assessment papers, can also have access to earlier year papers for increasing their knowledge base. Apart from this, they have access to coaches, experts on various subjects, professionals and friends for guidance on various topics throughout the globe.. (Young, 2002).

According to Plomp, Pelgrum and Law (2007), ICT has blessed the individuals with the opportunity to get information on any subject matter with the most advanced and new technological tools. Making of new computerized and digital libraries have increased the morale of academicians and have given them chance to look into material and course material from wherever and whenever they want from any nook and corner throughout the globe.(Lim and Chai, 2004). (Bhattacharya and Sharma, 2007; Cholin, 2005). Such establishment of computerized libraries have licensed the professionals, educationalists and experts to increase sharing of knowledge by escaping duplication of work. (Cholin, 2005)

ICT act as an umbrella which provides total learning atmosphere to learners of various stages , consequently requiring a varied range of abilities to be beneficial or fruitful. Aptitudes , basic reasoning and research are developing and highlighting new paths of expanding volumes of information. (New Media Consortium, 2007)

According to Alexander and Jonassen , ICT somewhere acting as a mediator between dynamic learning system and higher request thinking approach. (Alexander, 1999; Jonassen, 1999). It might encourage co usable learning and reflection to the extent with respect to subject or substance. (Susman, 1998).

According to the studies conducted by the (Becker 2000, Coates et al. 2004), ICTs especially new technological tools and methodologies adopted has highlighted new ways of instructing and learning's methods rather than focusing only on the things done in past in superior manner by academicians. It also put emphasis on the huge amount of time invested outside classroom to upgrade the commitment.

Research Methodology

The methodology adopted for this paper is conceptual in which secondary sources are utilized like published reports, articles and research papers. Literature review is done to identify various stakeholders like students, academicians and administrative staff in the ambit of higher education and papers are analyzed in the way how technology is getting leveraged and can further be put to use to achieve excellence in the higher education by the institutions.

Findings and Discussion

It's a conceptual paper so findings are that technology plays an important role in higher education as it helps students, faculties, as well as administrative staff to gain excellence in higher education.

Through latest technology sharing resources, communication become so easy that we can communicate with each other from anywhere in the world.

ICT helps in improving teaching process and with latest technology thousands of students availing the benefits of online learning from all over the world.

In today's world technology is so fast that many universities conduct online exams only which enhance the skills of students. Through ICT the quality of education is improved and it reaches too many students in the world.

Education is a dynamic process with the changes in the economy it has been upgraded and it becomes easy with the help of technology and it helps in quality education and better learning.

It helps faculties as they can share their knowledge to students easily through online medium which can be access to students worldwide as technology changes so faculties need to update the same timely so they can share it with students.

With the adaption of technology in education sector it helps in enhancing the quality of education and many industries also helps universities to adopt new technology which helps in growth of economy and helps in achieving excellence in higher education.

As the technology is changing with the great pace so it is also beneficial for the students and faculties to adapt those changes easily.

Technology helps students to do their projects , assignments helps in preparation for various competitive exams, etc for faculties/academician technology helps in research work and they can share valuable information to students easily for administrative staff it helps in conducting exams, pay online fees and share the information with students and faculties ,etc easily.

ICT helps teachers to get trained themselves with the recent changes in technology as upgraded technology is always beneficial for students. ICT helps in maintaining and upgrading the standard of education in universities.

Excellence can be achieved in higher education by implement technology in a systematic manner in education.

Conclusion

Right to education is envisaged as one among the six fundamental rights granted to people of India by the constitution. It is a nation building activity and is necessary to reach till the deprived sections of the society. India being a developing country in which still two –third of its 1.31 billion population lives in villages with an average literacy rate of 74.04%, the importance of instilling technology in education from primary to higher education is immense and is an absolute necessity.

Although this paper only caters to technology in higher education but it is highly essential in all the spheres of educational activities. Technology is one tool through which education can be delivered easily and can reach masses with minimal investment. Thus it is an important ingredient in achieving excellence in academic institutions.

References

- Al-Ansari, H. (2006). Internet use by the faculty members of Kuwait University. The electronic library, 24(6), 791-803.

- Alexander, J. O. (1999). Collaborative design, constructivist learning, information technology immersion, & electronic communities: a case study. Interpersonal Computing and Technology Journal, 7(1), 1-28.

- Becker, H. J. (2000). Pedagogical motivations for student computer use that lead to student engagement. Educational Technology, 40(5), 5-17.

- Collis, B. (1989). Using information technology to create new educational situations. Higher education policy, 2(4), 63-70.

- Jonassen, D. (1999). Computers as mindtools for engaging critical thinking and srepresenting knowledge.

- 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.

- Ophus, J. D., & Abbitt, J. T. (2009). Exploring the potential perceptions of social networking systems in university courses. Journal of Online Learning and Teaching, 5(4), 639-648.

- Pegu, U. K. (2014). Information and communication technology in higher education in india: Challenges and opportunities. International Journal of Information and Computation Technology, 4(5), 513-518.

- 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

- Starr, L. (2001). Same time this year. Education World

- Susman, E. B. (1998). Cooperative learning: A review of factors that increase the effectiveness of cooperative computer-based instruction. Journal of Educational Computing Research, 18(4), 303-322.

- Yusuf, M. O. (2005). Information and communication technology and education: Analysing the Nigerian national policy for information technology. International education journal, 6(3), 316-321.

- Zhao, Y., & Cziko, G. A. (2001). Teacher adoption of technology: A perceptual control theory perspective. Journal of technology and teacher education, 9(1), 5-30.