ICT In education – Role of MOOCS in school education
A review Article

Author: Rakhi Chitnis, Dr. Sanjay Rathore

Abstract

School Education is no more restricted to the class room now days. With the help of technology it is possible for every learner to participate in teaching learning process irrespective of place and distances.

The purpose of this review article is to focus on the role of Massive Open Online courses (MOOCS) in education especially in school education. MOOCS are the platform that provides open opportunity of learning to a large group of students. This article reviews over the current status of MOOCS in education especially in school education-its advantages, disadvantages and challenges. This paper is done by the method of systematic review of literature.

Finally, through the literature research, it is suggested that MOOCS are the innovative method of learning but it can be supplement to class room teaching where the teachers are the facilitators in school education system.

Introduction

Education is the most important part of human resource which gives the vision to the mankind. Education system in India is the most complex system. It has wide variety of languages and concepts. In ancient education system where students has to go to gurukul to learn values of life. In 1830s Morden education system was introduced in India with English as one of the language along with other subjects. Students were taught with all different subjects in class room with various teaching aids. As per the National policy of education, educational strategies, curricula, pedagogical schemes and evaluation methodologies are introduced in the education system.

In past few years of 21st century, there has been an incredible development in technology that has given remarkable educational changes. With the introduction of technology, Indian education has turned up with all new prospects. As especially in school education system information and communication technology plays a major role. Information and communication technology has a potential to give a drastic change in the education system. ICT in education system has not only benefited classroom teaching but also encourages a distance education programme which signifies the improvement in education system.

Massive Open online courses (MOOCS) are the biggest revolution in concern with distance education. Started in 2008, MOOCs has been introduced first in higher education system. MOOCs give round the clock online support to the learner on computer or mobile. To promote the awareness, Government has also taken initiatives to build the platform of MOOCS which provides truly flexible and digital experience in education systems. Study shows that there is remarkable rise in the enrolment of students for various courses in higher education. But if we survey over school education, though MHRD has initiates free online course structure, still there is large group of people who are unaware of this development.

Till July 2011, MOOCS are dominated more over higher education where more number of students is getting enrolled for various courses in order to get benefited from the cost of higher education. In India, there are many universities which provides learning platform for online learning. But if we focus on the school education system, still they are engaged in regular class room teaching.

In order to achieve the goal of National Policy on ICT, to introduce technology in school education system, Govt. has introduced online digital platform. At the same time there are many private companies are also emerging with the same ideas

Literature Review

Ebba Ossiannilsson, Fahriye Altinay and Zehra Altinay (August 2016), has conducted qualitative literature research to points out the merits of the innovative use of mooks in higher education. The study shows that MOOCs can enhance the innovations in higher education because of their valuable learning and pedagogical innovations. The study also revealed about various challenges related with the validity issues, evaluation, grading etc. However, despite of challenges, Moocs provide remarkable changes in teaching learning process and education becomes more flexible.

Massive open online courses (MOOCs) has open many avenues in the field of librarary sciences (LIS) (Shamprasad M.Pujar, Feb 2016). According to study many faculty and researchers are taking interest in MOOCs offered by various universities and institutes. Study shows that this digital form of education can bring opportunities to LIS schools on India

Ezekiel J. Emanuel(2013) revealed that most of the students enrolled for these courses are well educated. This educational disparity is particularly stark in Brazil, Russia, India, China and South Africa, all of which are prime candidates for MOOC education. In those countries, almost 80% of MOOC students come from the wealthiest and most well-educated population. Most of the students are using these courses to upgrade their professional skills.

Faizul Nisha and V. Senthil(2015) provides an overview on massive Online courses(MOOC) for distance learning in concern with India. Birla Institute of Technology and Sciences (BITS) Pilani has collaborated with the university & Harvard's MOOC platform edX to supply MOOCs to its own on-campus and off-campus students moreover as students outside BITS on-line education company Coursera had conjointly proclaimed Coursera Learning Hubs that offered folks physical areas wherever they'll access its MOOCs for gratis. In India, Coursera has alliance with woman Sri Ram faculty (New Delhi), Learning Links Foundation and Bluebells faculties International (New Delhi). Such associate degree initiative cracks well in India, wherever an oversized population still don't have access to reliable net connections. Jaaga, a Bangalore-based company had begun Jaaga study, a annual course on programing, that uses MOOCs from varied sources (Codecademy, TeamTreeHouse, CodeSchool, Udacity, Stanford, Harvard and MIT) on-line to manage categories offline. Visvesvaraya Technological University (VTU) in alliance with Microsoft analysis had conjointly started the trial of provision free on-line certification to Engineering students on algorithmic rule, style and analysis.28 The Indian Institutes of Technology (IITs) metropolis, Delhi, Guwahati, Kanpur, Kharagpur, metropolis and Roorkee and also the Indian Institute of Science city (IISc Bangalore) as a section of a project National Program on Technology increased Learning (NPTEL) funded by the Ministry of Human Resource Development (MHRD) have joined hands to deliver MOOCs.29 NPTEL has conjointly launched the NPTEL on-line Certification (NOC) together with Google and National Association of package and Services corporations (NASSCOM). it's equipped with 2 new courses nowadays, namely, 'Introduction to Programming in C', and 'Electrical Circuits'. These courses are unpaid. The individual IITs can give associate degree no obligatory certificate for them on the idea of the scores no inheritable in on-line assignments by paying bit of fee. For promoting MOOCs, The National Virtual Academy for Indian Agriculture was launched on 05 Sep 2014 at the International Crops analysis Institute for the Semi-Arid Tropics (ICRISAT) that facilitates access to quality agricultural education. The MOOCs are going to be increased through the National Virtual Academy for Indian Agriculture, a web platform created on OSS 'Open edX,' to integrate the necessities significantly of India's agricultural education system, wherever quite seventy maximize the population is concerned in agriculture directly or indirectly and out there resources are deficient comparative to the very giant public.

Nick Morrison(Jun, 2014) reported in a study that MOOCS are not about entirely changing the teaching and a complete shift to online learning for school students but can be a useful tool kit for teachers. Study shows that MOOCS are enthusiastically appreciated in higher education but as far as the students of age 11-18 is concern it is growing with a slow rate. Students of this age group are unable to handle these courses independently. Report suggested that MOOCs can be term as a supplement to the class room teaching, rather than a replacement for classroom teachers. It must be ensure that the teachers must be familiar with the course and able to monitor student's participation and progress.

Educational technology has enhanced the system of education. Yash Paul Sharma (Oct, 2015) in a study report has suggested that online courses have various advantages over traditional courses. It gives additional support to learner as well as teachers to develop various learning skills. It gives opportunity to access a good education from various sources. But at the same time validity of these courses is also an important issue.

Analysis

General

Massive open online courses (MOOCS), which are initiated in 2008, has transform the education system globally. It has reduced the gap in the educational opportunities that are available for the learner through out his life. It has opened the many areas of learning in higher education.

MOOCS has given platform to gain and share knowledge, and gives opportunity to learn from others and better understand the world. It is rapidly growing and accepted by many students world wide in higher education. But for school education, it provides additional support in teaching learning process.

Future of Massive open online courses:

There are many advantages of online courses as compare to standard educational pedagogy.

- Flexibility in class size: If number of students in the class room increases, it is difficult to move to bigger classroom. With in online classes it is possible to scale up the course batch size as per the requirement.

- Self-paced: many another studies have found that folks have totally different learning designs, and devour new ideas at variable paces. Self-paced courses permit one to review and learn at their own leisurely rate.

- Removal of other constraints: In India, still there are certain group of students those are not enough privileged and sufficiently financially endowed to go to higher studies. Online courses can help mitigate and remove all such systemic barriers, thus truly making education a universally available resource.

- MOOC encourages flipping the room. Teacher-student contact time typically used for lectures might be used otherwise, e.g. for discussions, experiments, project and group-work, operating with peers etc. Students watch lectures on-line reception and move with college concerning their doubts whereas in school. Lecturers get time to figure with students on a private basis.

   Though online courses have facilitated students with various options in the field of education, it has some limitations as well.

Technical difficulties are the main hurdle that each the schools and students bear. Moreover, there have been conjointly few reports of plagiarism that raises question on its believability. For any quite courses, quality matters the foremost then the institute of university providing the course should make certain to supply quality course. This conjointly brings interest among students to require up this course for higher studies. However, a correct analysis is important to avoid any quite mistake in a while**.**

Another issue that concern with the school education system is the validity of certificate after completion of course.

Conclusion:

MOOCS have opened flexible, easy access free or low cost courses for learner who wants to learn. It is readily accepted in higher education where the enrolled students have basic knowledge & are using these courses for their skill development. But in concern with school education systems, there are so many areas that need to be taken care off. MOOCS can be a additional resource for class room teaching for lower class. In higher secondary schools, educational videos and courses can use by the students who are unable to attend the regular school and can be benefited in distance education. In future days, if government issues policy for validation for such online courses, then MOOCS will bring a great revolution in school education system.

References:

Yash Paul Sharma (2015) Massive Open Online Courses (MOOCs) for School Education in India: Advantages,Challenges and Suggestions for Implementation
Microncosmos International Journal of Research

Li Yuan and Stephen Powell,(2013) MOOCs and Open Education: Implications for Higher Education
Centre for educational technology & interoperability standards

Inmaculada Maiz Olazabalaga,Carlos Castaño Garrido,Urtza Garay Ruiz(2016)
Research on MOOCs: Trends and Methodologies,*University of the Basque Country* ISSN: 1697-7467

Ebba Ossiannilsson, Fahriye Altinay and Zehra Altinay (2015) MOOCs as Change Agents to Boost Innovation in Higher Education Learning Arenas
Educ. Sci. 2016, *6*(3), 25; doi:10.3390/educsci6030025

Shamprasad M. Pujar , (Indira Gandhi Institute of Development Research, Mumbai, India)(2016)
MOOCs – an opportunity for international collaboration in LIS education: A developing country's perspective; volume117, issue 5/6

MHRD (2015) Distance Learning: Overview. (http://mhrd.gov.in/distance-learning).

Gupta, I. (2015) Online Education in India-Going the Right Way. http://www.iamwire.com/2015/03/
online-education-india/111949

Khan, A. (2015) School Science in the National Repository of Open Educational Resources (NROER): An overview of the developmental process of Physics content. *Microcosmos International Journal of Research,* 1(1): 1-5.