COMPARATIVE STUDY OF MOOC LEARNING AND BLENDED LEARNING IN TEACHING LEARNING PROCESS

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Abstract

The purpose of this study is to find out the differences between MOOC learning and blended learning in teaching learning process. The sample was taken from the schools. This study has been done in Ghaziabad city. As we all know that in this present scenario schools are following MOOC learning because due to COVID-19 schools are not running physically. So Mooc learning is the only way to communicate with the students. MOOC is the abbreviation for **M**assive **O**pen **O**nline **C**ourse where in the following can be defined:
1) Massive: refers to mass enrollments
2) Open: refers to open for all
3) Online: refers to availability of course in online mode using Internet
4) Course: refers to course/subject
Blended learning is also known as Hybrid learning, be a learning model that includes both online and face-to-face traditional learning. Massive Open Online Courses (MOOC) has become one of the most prominent trends in higher education. Despite such notable features, the effectiveness has yet to be proven and the objective of this study is to give comparison in the effectiveness of learning with MOOC and Blended Learning.

Keywords: MOOC Learning, Blended Learning.

Introduction

MOOC is the abbreviation for Massive Open Online Course where in the following can be defined:

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3) Online: refers to availability of course in online mode using Internet
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From the above mentioned details, we can define MOOC as a Course which is available Online and Open to Masses. Apart from the traditional course materials like recorded interactive videos, Quiz, Coding Exercises etc, MOOC has also provided discussion forums which build an integrated community for all the stakeholders like students, professors, and teaching assistants (TAs). MOOC has been developed with the aim of achieving quality education and making it more efficient than the traditional education system.

The terminology "MOOC" was invented by Dave Cormier of the University of Prince Edward Island and Bryan Alexander of the National Institute for Technology in Liberal Education in the year 2008 referring to a course "Connectivism and Connectivity Knowledge" developed by Stephen Downes and George Siemens. The intention was to explore the possibility of interactions between masses made possible by online tools.

MOOCs are gaining popularity among students and working professionals as it helps them to study at their convenience and time. Websites like edX, CoursEra, UdaCity etc. enlist free online courses from various academic institutions across the world. India, after the US is dominating the global growth in enrolments. Seeing the growth of enrolment from the country and satisfying their need for education, India has started various projects for offering MOOC courses. Currently, NPTEL, mooKIT, IITBX, and SWAYAM are the platforms used in India for offering courses. India after the US, is dominating the global growth in enrollment, accounting for 8,83,400 (27%) users on edX, 1.5 million on Coursera, and 112,000 (13%) on Udacity, from India as in 2016. The massive enrollment is ensuring that the vast majority of the growth in of learners is occurring from India, and will surely increase in coming years.

In 2015, Prime Minister of India had launched MOOC Platform in India called 'SWAYAM'. The courses can be accessed free of cost. Today, other Indian institutes have collaborated with 'SWAYAM'. SWAYAM is a programme initiated by Government of India and designed to achieve

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the three cardinal principles of Education Policy viz., access, equity and quality. The objective of this effort is to take the best teaching learning resources to all, including the most disadvantaged.

SWAYAM seeks to bridge the digital divide for students who have hitherto remained untouched by the digital revolution and have not been able to join the mainstream of the knowledge economy. This is done through a platform that facilitates hosting of all the courses, taught in classrooms from Class 9 till post-graduation to be accessed by anyone, anywhere at any time.

The following are the few advantages of MOOC learning:
1. Convenience of learning and delivering quality education to masses, irrespective of their geographical location.
2. Cost effective: Students of the remote location of the world may also get access to the best of educational content either at very reasonable prices or free of cost.
3. Learners are able to clear their doubts and share their learning experience from one another with the use of discussion forums.
4. Learners, who are working professionals, can have access to formal higher education and enhance their skill sets.
5. Collaboration of learners and instructors on a single platform.
6. It enables better career opportunities.

The following are the few disadvantages of MOOC Learning:
1. MOOC can't provide for personalized courseware and attention to masses from the lecturer.
2. Difficult to keep track of assignments and involvement of masses. As the time passes while pursuing any of the courses, the interest of a large number of students in pursuing the course is generally lost, which results in dropout from the course.
3. High speed internet connections are required for undergoing any course under MOOC as the content delivered through MOOC like video, audio etc requires good bandwidth. The Internet with good bandwidth is not so easily available in a developing country like India, especially in rural areas as the availability is broadly confined in the urban areas.
4. To achieve the prime motive of MOOC i.e. to deliver the courses online to masses in India is a challenge due to its multi-cultural society. If you decide to provide courses in a common language like English then there is a possibility that the number of enrolments from other parts of the country may be low. On the other hand, if we decide to develop and provide courses in

regional languages then the cost of the developing such system will go high.

Blended Learning

Blended learning is also known as Hybrid learning, is a learning model that includes both online and face-to-face traditional learning. It provides an opportunity to an individual to enjoy both types of learning in the same course which results in better output from an individual. It is learnt that students associated with blended learning can share information and work with others directly in a collaborative manner, having more enriched learning experience.

The blended learning mostly depends on analysis of the learner's requirements, the level of understanding, the nature and location of the learners and resources available. The blended learning has changed the way of learning activities like perceiving and delivering the information. The advantages of this model are that the passive learning environment will become an active learning environment. It brings learners together along with instructors to support collaborative learning through interactive content. Even corporate bodies are moving from classroom training methods to blended learning because of the benefits, costs and savings, optimizing resources, scale, speed and throughput. The advances in technology have an impact on emerging models of blended learning.

The following are the few advantages of Blended learning:
1. It improves the ability of Learning and face to face clarification of Doubts led to good output.
2. Easily keep track of assignments and involvement of students
3. Better use of time as going through eLearning modules prior to a face to face session can be a good opportunity for students to get content and knowledge before the session, so that it can be explored and discussed in depth during the face to face session.

The following are the few disadvantages of Blended learning:
1. Offering the courses in Blended mode is a costly affair than the MOOC, as it also includes the cost of constant engagement of human resources during the complete course life cycle.
2. Limited enrollments as students of remote locations are unable to get access to face to face traditional learning.
3. Delivering courses in Blended mode also requires considering diversification of Indian Society to a certain extent as multiple regional languages exist in India. The students enrolled might belong to any of this society and therefore there will be a tradeoff in quality & financial

implications. Whether to consider instructors & course materials/assignments in a common acceptable language or to have them in few of the broadly spoken regional languages.

There are various models of Blended Learning and few of them are mentioned below:
1. The Rotation Blended Learning Model.
2. The Flex Blended Learning Model.
3. The A La Carte Blended Learning Model
4. The Enriched Virtual Blended Learning Model

Literature Review

According to Siemens et al. (2015), online learning means is a form of distance education where technology mediates the learning process, teaching is delivered completely using the Internet" and blended learning is "the practices that combine (or blend) traditional face-to-face instruction with online learning" Meanwhile, distance learning, more converging on achieving knowledge, has close meaning with distance education, which "is teaching and planned learning where the teaching occurs in a different place from learning" (p. 101). Distance learning has supported people who have difficulty attending classes by giving them a chance to learn. Students learning from distant locations were given instructions, assignments, and feedback through correspondence methods, typically through the mail (Holmberg, 2005). Methods for distance learning changed and expanded with technology advances and have included the use of radio, cinema, telephone, television, and other technological delivery methods. In the twentieth century, online learning was getting popular, along with computer networking (Harasim, 2000). Moving on to the late twentieth and the early twenty-first centuries, the emergence of new technology and the Internet accessed through World Wide Web (Berners-Lee, Cailliau, & Groff, 1992) facilitated the two-way online communication between instructors and students via email, computer conferencing, and synchronous and asynchronous discussions (Holmberg, 2005). Learning on the Internet from a distance enhanced both independent learning of those who prefer learning individually as well as collaborative learning through group activities (Harasim, 2000; Holmberg, 2005), and blending online and face-to-face learning offered students more fruitful channels of getting linked with peers. An exploration of higher education teaching in Second Life in the context of blended learning.

R Ata - explores teaching experiences of educators within the virtual world of Second (SL) and pedagogical practices adopted. A blended approach is applied by using physical classrooms, Blackboard TM, web-based resources, and the virtual world of SL in an Information Literacy (IL) class for 1st year undergraduate students at an institution in the A Case study was employed as well as a parallel qualitative component, interviews, was added to the study that provided another source of insights to articulate perspectives of.

Objective of the Study

The main objective of this study is to find out the comparison between MOOC learning and blended learning.

Sample

The sample of the study consisted of 80 students with the age group of 13 to 15. The sample was drawn from schools. A total 20 close ended self made questionnaire were sent to the students. 70 questionnaires were completed in all manners, giving a response rate of 95%.

Variable

There are two variable in this research
1. Dependent variable - School students
2. Independent variable - MOOC learning and blended Learning

Research Methodology

The present research is normative survey research.

Result and Discussion

In this research we used a google form to find out the results. We have to find out that blended learning is better than MOOC learning because it includes traditional and online methods. In this research 80% students will be in the favour of blended learning. The result shows that blended is the best approach of teaching for learners.

Comparison between MOOC Learning and Blended Learning

1. MOOC learning is a relatively new revolution in existing web based learning that comes out with online classes to the masses. Blended learning, on the other hand, uses technology to enhance traditional learning environments. However, blended learning has an overhead over MOOC as it requires both stakeholders i.e. academic educators/instructors and learners to be computer literate and technology accepted.
2. MOOC is better suited to such learners who are self driven and motivated, however, in a blended approach, when you are being monitored they may not be self driven and hence their learning may end up at certain extent while acquiring additional skill sets when you are in your workplace.
3. There is a trade-off between the MOOC and Blended Learning in terms of quality of education being delivered specially for the

Technical Professional Courses which requires practical aspects.

4. The Ongoing COVID-19 Pandemic since March'2020 onward has increased tremendous interest in online education, more of towards MOOC Learning having kept Blended Learning on a minimal level. MOOC Learning has received drastic growth during this period. Although during COVID-19 Pandemic, millions of people have lost their jobs in various domains but it has also boosted job performance in MOOC domain as it has helped many people to start new Online Learning Platforms and also improve their existing Applications by hiring more skilled manpower.

5. Govt. of India has also taken many measures to promote MOOC Learning during the COVID pandemic period as this was the only way to sustain the Academic Sessions although there have been various limitations like lack of hardware & network infrastructure. However, many private providers have adopted ethical strategies by offering learning content for free or at a great discounted price during the pandemic period.

6. Most of the stakeholders had to push back or had kept hold of the Blended Mode of Learning although this was not the case with the MOOC Learning.

Conclusion

1. Blended Learning, in which a combination of online learning and a traditional classroom can be followed, would be the best approach to sustain the quality and efficacy of the learning. This method shall not only accelerate academic achievements, but it will also develop practical skill sets as well. For any person, to succeed in their workplace, the required skills can be acquired only through personal interactions which are essential.

2. Having said that the blended strategy is better than MOOC (which is purely 100% online training based) or the traditional classroom that adopts only one technique, it may not be better to use in-class and online tools simply for the sake of providing both options. Instead, we should design and develop Blended MOOCs which shall use both the benefit of the classroom and the power of the Internet. In blended MOOCs, professors may use classroom time to interact with students and use the MOOC (using Internet) to deliver lectures, typically as web videos.

3. Blended MOOCs shall bring learners and instructors together in a collaborative learning environment wherein interactive content may be created having high interest, accountability and real assessment. Even Corporate bodies have already implemented such systems by adopting Blended MOOCs learning which has resulted in benefits like cost saving, optimizing resources, throughout etc. Blended MOOCs shall also provide increased access and more flexibility for learners, increased level of active learning, and achieve better student experiences and outcomes.

Conflict of Interest

There is no conflict of interest between the authors of this manuscript.

References

1. Chauhan, Jyoti, (2017). "An Overview of MOOC in India". https://researchgate.net.

2. Pandey, N., (2016). "Open online course providers upbeat as enrolments jump". http://www.thehindubusinessline.com/news/education/open-online-course-providers-upbeat-as-enrolmentsjump/article8850328.ece.

3. Shah, D., (2016). "How has the MOOC space grown this year? Get the facts, figures, and pie charts", https://www.classcentral.com/report/mooc-stats-2016/.