Designing Learner Centric MOOC

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Abstract: Massive Open Online Courses (MOOCs) have become popular for diverse learners to upgrade their knowledge and skills. New Instructors are creating MOOCs which focus on the use of technology features to create space of their classroom actions. It is necessary to be aware of the technology affordances at diversity level but it is more important to focus on the pedagogy of how to use the MOOC features effectively to promote student engagement and learning. Hence MOOC instructors need a set of design principles and guidelines to create a learner-centric MOOC. In this paper, we will discuss the Learner-Centric MOOC (LCM) model, and how to apply it to create effective MOOCs. It is implemented for some points in Power Electronics course Final year B Tech students and learning analysis was carried out to find its impact on learning.

Keywords: LeD, LbD, LxI, LxT, AQ, RQ

1. Introduction

MOOCs or Massive Open Online Courses are one way to make quality educational content accessible to a large number of learners. Many of us may have completed MOOC or may have been teaching assistants, while others may have created our own MOOCs but completion rate is low[1] and there is lack of engagement by learners, discussion is scattered in forums[2]. New Instructors to MOOCs try to focus on using the technology affordances of the platform in order to create scene of their classroom actions. While it is necessary to be aware of the technology affordances, that only is not sufficient. It is important to concentrate on the pedagogy to exploit the technology features in order to promote student engagement and learning. A learner-centric approach is broad pedagogic principle which is effective for student engagement and learning in various settings[3]. It incorporates principles of Active learning, Peer learning, Formative assessment and so on.

We will discuss how to embed learner-centric principles in a MOOC development and create a Learner-Centric MOOC for the course. MOOC should be instead of simply having videos for watching, there are activities that need to be done, there are discussions that need to be engaged in and so on.

Arrival of internet in the 1990s had brought in the opportunity for increasing access of education through online learning. The Alliance for Lifelong Learning, a non-profit initiative started by Oxford, Yale and Stanford University in 2000 is one of the earlier initiatives that tried to offer courses at scale through the online medium. The most widely talked about experiment in the massive open online course was the course 'Connectivism and Connective knowledge offered by Stephen Downes and George Siemens in 2008 in which 2200 participants worldwide.The next big revolution in the online offerings came in the year 2011, when the Stanford University offered three courses online. One of it was the course 'Introduction to Artificial Intelligence offered by Professor Sebastian Thrun along with Peter Norvig. This attracted 160,000 learners with around 20,000 of them completing this course.

Professor Thrun went on to create a MOOC platform Udacity in the year 2012, a year that also saw the birth of the most popular MOOC platforms like Coursera, edX, Future Learn, Open HPI, Eli Academy etc. India had also witnessed scaling up initiatives in the field of education during these years. With the Train 10,000 Teachers coming up with blended course offerings using its synchronous remote center model for content delivery and the National program on technology enhanced learning coming up with video repositories from professors of the premier institutes like IITs and IISc. Thus, MOOCs had become a common word by 2012 and the advantages of these courses in terms of access and flexibility that it provides for learners along with the scales that its reach was widely spread crossing all boundaries.

2. Why LCM

Many of us are familiar with learner centric in the classroom. We are used to hearing terms like active learning, group discussions, peer-learning and are aware of the benefits of incorporating such techniques in the classroom. We need to make learners go beyond simply listening to the lectures, taking notes, and executing prescribe procedures to immediate practice, figure things out, express their thinking and learn from peers. It needs to change from how well am I explaining the concept to how well be learners learning the concept.

Normally MOOC contains set of videos, a set of practice question, set of resources and a place for discussion. In this opportunities for micro-application are missing, formative assessment and customized feedbacks are missing for attention to learner and motivation. Also, if you just make a discussion forum available there are no explicit activities to foster peer-learning and there is no connection of the instructor to the learner.

Hence instructor has to design mechanisms which encourage students to go through all the resources