Effective eLearning through MOOC: Lessons learnt in selecting a MOOC

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Abstract: Perspectives of eLearning is changing with the introduction of Massive Open Online Courses (MOOC). The pedagogy introduced by MOOC has identified as more effective than typical eLearning courses. However MOOCs are facing challenges due to the lower course completion rates. There have been many MOOCs introduced to the community within last two years. However not all the MOOCs meet the goals of learner or provide effective learning. Hence it is important to identify the factors affecting effective learning in MOOCs. In this research, author as an active MOOC participant for a period of 2 years in 16 attempted courses with 5 different platforms gathered and analyzed data from interviews, observations of students' behavior using Grounded theory. The research found 10 dimensions affect to an effective learning to take place in MOOC. Careful attention to these dimensions will increase the users' sustainability in the MOOCs. The results will be a benchmark and a guide to any MOOC user or MOOC developer attempting to produce or participate in an effective eLearning experience.

Keywords: Massive Open Online Course, MOOC, effectiveness, eLearning, eLearning Participants

1. Introduction

Massive Open Online Courses (MOOCs) are the trends in eLearning. It is an open eLearning concept where any interested participant's access & participate in courses free of charge. This leads thousands of participants signing up to MOOC courses every day. At the same time numbers of MOOC providers increases due to the demand and the interest towards the highly emerging concept. According to recent literature MOOC is buzzing since 2012 and attract widespred attention. Some recently emerging MOOCs are edX,Udacity, FutureLearn, Open2learn, Udemy, NovoEd, Iversity and Coursera. Coursera was developed by Stanford University entered into partnerships with 62 world class universities (Daniel, 2012). In a typical MOOC course, sometimes enrollments are between 40,000-100,000 students of whom only 50 to 60 percent return for first lecture. About half of those who attend the first lecture submit the assignemnt for grading. Only 5 percent those who enrolled gets the staments of acomplishments (Koller, Ng, Do, & Chen, 2013). There have been researches in exploring the reasons for the dropouts in MOOCs, but the significant researches to find the effective MOOCs are yet to emerge (Chamberlin & Parish, 2011). Even though MOOCs have been widely accepted, they are still learning the needs of the participants. Catering to the needs of the participants are very important as it is one of the main reason for low student retention (Clow, 2013; Lewin, 2013).

It is the responsibility of acedemic commuity to clear the path for an effective learning through this phenaominal change of education in MOOC. As it ripes through the time, problems occure, we as a part of MOOCs community should work to find solutions to the developing problems. Working towards this direction, as an active users in MOOCs community we explore an important problem caused by many platforms entering to the community. Participants are yet to adapt themselves into the MOOCs platforms and the new concepts. With the little they know about MOOC, selecting the right platform and learning effectively from it, is often challaging. Selecting the right platform would reduce the time and effort in learning. This research will explore the factors affecting to an effective learning expereince through MOOC.

2. Background of the Study

The problem of high dropouts in MOOCs has been researching & according to Wang (2013), three major areas affect students to retain in MOOC. Those were explored under social and cognitive perspectives, namely lack of self-efficacy, lack of self-regulation and lack of self-motivation. However another research claims dropping out is often challenged by different viewpoints and suggested that it is merely failing to achive personal aims (Liyanagunawardena, Patrick, & Williams, 2014). Nevertheless it is important to find about the user's needs in a MOOC environment to retain the students until they complete the course. Student retention problem was researched by Cormier & Siemens (2010) & Russell, et al.,(2013) & identified key values of a course in a education system and at the same time Mackness, Mak, & Williams (2010) states about the question of how to design a course which will provide satisfaction to the participiants. More researches on this directions, Masters (2011) discuss how the roles of instructor have changed while Xu & Jaggars (2013) examine the extent to which students perform in online & face to face situations. However MOOCs represent latest technology opportunity where the potential pedagogycal impact need to be researched (Fox, 2013).

3. Our Approach

3.1 Methodology

We used Grounded theory in order to identify the dimensions in students' perspective of MOOC's effectiveness. It is mainly due the fact that Grounded theory investigates the actualities in the real world and analyses the data with no preconceived ideas or hypothesis (Glaser & Strauss, 1967). In other words, Grounded theory suggests that theory emerges inductively from the data (Chesebro & Borisoff, 2007).

Our approach begins with broader research question of "what dimensions affect the effective learning in MOOC?" & our initial sampling gathered data from interviews and observations in forum posting, coursetalk social media blog while participating in 16 courses from Coursera, edX, NovoEd, Iversity for a period of 2 years. Sample size was above 100 participants and used purposive sampling technique.

Once we analyze the data & identified some coding, we began the theoretical sampling. We conducted in-depth interviews with selected active participants. According to the results of theoretical sampling data we refined 7 focus codes. After defining focus codes our analysis focused in theoretical coding. We broke down the major focus codes, which contributed to describe majority of data. As a result of theoretical coding process we synthesized 10 dimensions that affect the effective learning and at this time our study reached theoretical saturation. This often interprets as the situation when researcher does not hear anything new from the participants (Charmaz, 2006).
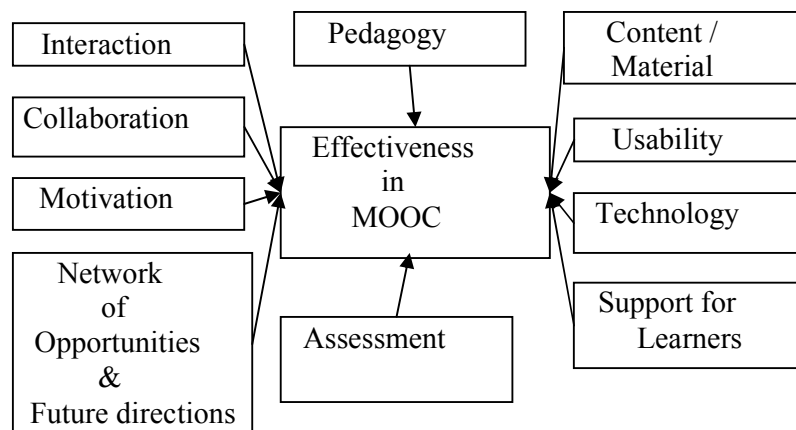
3.2 Results

Figure 1. The factors affecting to an effective eLearning resulted by the Grounded theory.

The results of Grounded theory expressed as a substantive theory as depicted in Figure 1, that a set of concepts related to each in cohesive manner. In our theory, we fleshed out each major code, examining the situation which they occurred and why it occurred. While analyzing the codes we reached theoretical saturation where we were able to cover the aspects of effectiveness according to participant's perspective. We did the diagram of design, written memos, rigorously searched the dimensions which not covered to eLearning. Our theory of 10 dimensions affecting the effective eLearning related to one another in cohesive manner & accounts adequately for all the data we have collected.

4. Discussion & Conclusion

We tried to elaborate a detail analysis of MOOC, an emerging phenomenon, which is wide spreading in educational reforms. The MOOC providers keep on rising with the demand for eLearning. These insertions of MOOC platforms cause quality issues with regard to experience by the participants. Hence it is important to identify the factors affecting the effective eLearning. In this research we explored answers using the methodology introduced by Gaser (1967), the Grounded theory. We found that there are 10 dimensions which a participant value as effective in eLearning. Those are namely interaction, collaboration, motivation, network of opportunity, pedagogy, assessment, content/material, technology, support for learners and finally usability. Our research uniquely found that the network of opportunity dimension is valued by majority of participants. This is due to the nature of MOOC being exposed to multicultural background and student's value opportunities in practicing what they have learnt. The 10 dimensions found in this research will be a guide and should be emphasized by any platform in order to provide an effective learning experience. At the same time it is important to keep identifying the changing patterns of behaviors in students while taking the MOOC courses where it will produce more affecting dimensions which will influence to produce an effective eLearning experience.

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