

## **A CASE FOR MOOC'S**

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## **ABSTRACT**

Many people have heard of a revolutionary trend in education – Massive Open Online Courses, or simply MOOCs, and they have created quite a bit of controversy. They were initially hailed as a savior from higher education costs a few years ago when several universities transformed traditional courses and put them online for free. The class sizes are limitless and anyone with a computer, internet access and a desire to gain knowledge—anywhere in the world—could join in. However, when the notion began that participants in these courses should be given college credit for them, controversy erupted. While the MOOC movement has seen a good deal of success and numerous other colleges have joined in, the dropout rate in MOOCs has been staggeringly high. This presentation entitled “A Case for MOOCs” will provide an overview of MOOCs, how they originated, their current state, and where this trend might be headed.

## **INTRODUCTION**

Knowledge is something that people all over the world have a basic thirst for. They seek information to solve a problem, to better their life circumstances, to accomplish some goal. But circumstances often prevent them from obtaining it. It may be a lack of money, distance to an educational facility, time, a shortage of teachers or books, peer influences, or a host of other barriers that prevent them from obtaining the knowledge they so badly need or desire. Recent developments in education have however put that knowledge only a click away.

The National Cybersecurity Institute (NCI) at Excelsior College in conjunction with Canvas Network developed an eight-week MOOC entitled: An Introduction to Cybersecurity. This

course, the first MOOC to be a primer to cyber security, introduces participants to the fundamental concepts of cyber security, including an overview of the evolving and dynamic field of cyber security. NCI is an academic and research center located in Washington, D.C. dedicated to increasing knowledge in the cyber security discipline.

## **RESEARCH TRENDS**

Many people have heard of a new and growing trend in education – Massive Open Online Courses, or simply ‘MOOCs’ (rhymes with dukes). A few years ago several of the top tier colleges in the nation, including Stanford, MIT and Harvard decided to start offering what was essentially free education. They took several of their traditional, basic, classic courses, developed and transformed them into online courses, and put them on the Internet for everyone to participate in – free. Vardi, (2012) writes that “...the current wave started in the fall of 2011 when about 450,000 students signed up for three computer-science courses offered by Stanford University.” (p. 5) [1]. Baggaley, (2013) reports that “...traditional universities across North America, Australia, Asia, and Europe are adopting the massive open online course.” (p. 368) [2]. Writing on the vast interest in them, De Coutere, (2014) notes that “More than 10 million people have taken a MOOC.” (p. 18) [3].

The class size of MOOCs was limitless and anyone with a computer, internet access and a desire to gain knowledge, anywhere in the world could join in. Knowledge had become free for many that previously did not have access to it.

However, as MOOCs were gaining popularity the point of these online courses began to get muddled. While the initial purpose was to spread free and accurate information and knowledge, some began to argue that since colleges were offering these courses, shouldn’t people ‘taking’ them get college credit or, at the very least some sort of certificate? Rich, (2013) writes that “But

the movement brings up many issues, including whether free MOOCs should bestow college credits". (p. 1) [4]. Kolowich (2013) reports that a movement is underway to prove a path for credit for MOOCs and writes that "In what could be a major step toward bridging the gap between Massive Open Online Courses and the credentialing system that they are supposed to "disrupt," the American Council on Education last week endorsed five MOOCs for credit". (p. 2)[5]. The notion of giving college credit for MOOCs set off a firestorm of protest from educators. College professors across the nation contended that there was no way to determine who was actually taking the classes, what the content was or if those taking the MOOCs were actually learning. Kolowich, (2013) in an article for the Chronicle of Higher Education, reports on the protest against MOOCs for credit and writes that "...at Duke's undergraduate college, professors drew a line in the sand last month on online education: Massive online experiments are fine, but there will be no credit-bearing online courses at Duke in the near future." (p.4) [6]

He also writes of the protest at San Jose State noting that "Philosophy professors at San Jose State University last week wrote an open letter saying they refused to use material from an edX course, taught by a famous Harvard University professor, for fear that California State University administrators were angling for a way to eventually gut their department." (p.4) [6]

While defense of their positions and a perceived decline in the quality of education was a concern, other complaints arose as well.

## **CURRENT CONCERNS**

One of the biggest complaints against MOOCs is the extremely high dropout rate, often ninety percent. De Coutere (2014) writes that "typically half of the enrolled people never show up, levels of participation vary; a more or less stable community forms after two weeks, and 5 to 10 per cent of people will follow the whole MOOC until the end date." (p. 19) [3].

This extremely high dropout rate of over ninety percent has many concerned and efforts began to try to understand the underlying reasons for the dropouts and lower the rate. But the question is....should they be concerned at all? After all, the individuals who sign up for MOOCs are individuals of free will, they may or may not be seeking knowledge, and the MOOC is free. If they do drop out, nothing seems to be gained, but nothing is necessarily lost either. In fact, much may have been gained. The assumption is that by dropping out of a MOOC there is failure, but that may not be the case at all.

Consider that in many cases, adults are Self Directed Learners. By definition, a Self-Directed Learner is an individual who is seeking knowledge and takes the personal responsibility to seek out and obtain that knowledge as a stepping stone to achieving some goal. Grover & Miller, (2013) discusses Self-Directed Learning and notes that "...the intent of SDL is that an individual takes control of a personal desire to learn something and develops a strategy for reaching a particular, self-defined, level of competence." (p. 39) [6]

The same authors go on to add that "... research has suggested preferences for media-based, text-based, or social interaction-based learning. The selection of learning strategy is suspected to be based largely on the individual's preference, and might be driven by convenience, cost, personality, and availability. Self-directedness can also be an attribute of an individual's perceptions or motivations for images of self, as well as the result of personal goal setting." (p. 40).

With that in mind, an individual who signs up for a MOOC could very well be a Self-Directed Learner who is seeking some bit of information towards their individual goal. That information may come in the first or tenth week of the MOOC, and once obtained there is no reason to continue. Or, the individual may sign up for the course, quickly see that the course is not what

they need and drop it. A good analogy would be someone seeking a bit of knowledge in a book. They do not have to read the entire book, only the chapter that interests them. Once read, they put the book away. Educators and institutions may in fact be doing Self-Directed Learners a disservice by forcing them to complete courses or commit to a full class. In so doing they are removing the self-directedness from the individual and forcing them into a prescribed learning pattern that the individual may reject.

Another aspect that may account for the high dropout rate is simply the newness of MOOCs. Learners who sign up for the courses may not know what to really expect in an online course. Wang, et al. (2013) write that “A possible explanation is that students with more experience in taking online courses were also more familiar with the online learning settings. Therefore, they had more effective learning strategies in taking online courses, which then led to the higher levels of motivation toward their online courses”. (p. 317) [7]

While those learners who are experienced with online courses may stick it out, those new to the environment may choose to drop out after gaining the information they were seeking, or find the format not to their personal learning style.

Finally, one of the reasons for the high dropout rate may simply be that it is free. The old axiom is that you get what you pay for...and conversely you pay for what you get. People often have less respect for what is given to them, or is free for the taking than if they have to work for it, or pay from their own funds. If an individual signs up for the free course and decides to drop it, they have lost nothing financially since they have nothing invested. Some might suggest that a nominal fee would discourage casual enrollees, but that would also discourage those of very limited means, and this practice would not be aligned with the overall purpose of a MOOC: free knowledge and the opportunity to explore own interests with no cost

## CONCLUSION

The high dropout rate in MOOCs is a concern for educators and institutions that see these courses as a path towards enlightenment of the masses. Until recently higher education has been something reserved for those with the means to attain it and has been viewed by some as being guarded by ivy walls. MOOCs may be the answer to disseminating knowledge worldwide, but until answers are found to the inherent problems the issues will remain. Further studies need to be done investigating the demographics of those who sign up for MOOCs - who they are, where they are, their gender, age groupings, financial means, and why they sign yet do not sit for the courses. Perhaps they are Self-Directed Learners who need mentoring, perhaps they are new to online learning and need just need a bit of guidance, or maybe they just have made an error in judgment in signing for the course. Until a better picture of MOOC learners is attained, the questions may remain unresolved.

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