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The effects on MOOCs on Non-Educated & Third World Students

Massive Online Open Courses, or MOOCs, are courses where students participate through materials that are distributed through the web. These materials often consist of video lectures, reading materials, problems sets, and online quizzes and tests. MOOCs often provide interactive forums or online discussion groups to help connect students to other students as well as teaching assistants to aid them in their course. Some notable distributors of MOOCs are Coursera, Khan Academy, and Udacity with many universities partnering with these organizations to provide classes on each platforms. Although many MOOCs were created by universities, few offer accreditation for a student's competitions of a course although some MOOC distributors are offering their own certifications for students. Due to their increasing popularity and ease of access, MOOCs are often aimed at large scale participation, often times upwards of hundreds of participant at a time. Advocates of MOOCs hail them to be a revolution in education, giving less educated and third-world students the chance to study materials from the world's top universities. However, more studies need to be done in order to validate such a claim. Although there is currently a plethora of studies concerning MOOCs, most focus on the general MOOCs users which are generally not representative of the less educated and third-

world students. This research aims to perform such a study aimed at this demographic in order to aid fulfill such needs and to prove whether providing online open courses would help these students.

Current studies of MOOCs have focused mostly been focused on the general MOOC participants. These studies have returned very clear trends concerning MOOCs as a whole. By studying the trends that exists on their platform, The HarvardX Research Committee and the Office of Digital Learning at MIT found that computer science courses are, in general, the most popular courses to take and have become gateway for students to not only other computer science courses but courses in other curricular areas as well (Ho et al. 2015). In addition, Christensen, Steinmetz, Alcorn, Bennett, Woods, and Emanuel found that nearly half of MOOC students report their reason for enrolling in a course as "curiosity, just for fun" (Christensen et al. 2013). Independently, these results may seem fair assessment of MOOC students as a whole. However, another study has found that these conclusions might be heavily biased. DeBoer, Stump, Seaton and Breslow conducted a study regarding the diversity in MOOC students' background and found that only twelve countries, most of which are large western countries, individually account for greater than 2% or all participants (DeBoer et al. 2013). They also found that the most of the students were highly educated with 36.63% having Bachelor's degree and 27.87% having a Master's or Professional Degree. Because of this proportionalities, any overarching study of students who participate in MOOCs will generally skew towards these demographics. Hence any study that focuses on general trends will miss the mark on the demographic that MOOCs should try to expand in, which is the less educated and third world

students, which is why this study will focus on these demographics rather than the MOOCs as a whole.

The research will be broken down into two parts, one focusing on less educated students and the other on students of third-world countries. The first section of research will involve finding areas with high dropout rates leading to lower educated communities. According to the National Center for Education Statistics, the states with the lowest graduation rates in 2013 are Oregon at 69% and New Mexico at 70% with Washington D.C. being the lowest at 62%. Thus narrowing down suitable areas within these states would be most efficient. The second section of the section will involve traveling to third-world countries to find potential students. Some countries to consider are Mexico, due to their vicinity to the U.S. and Brazil and India which, along with Mexico, are part of a group emerging markets that were mentioned in the research done by Christensen et al. The study itself will consist of providing students fulfilling the targeted demographics with either the physical means to access these courses, such as loaning students laptops or establish local internet infrastructure, or by providing incentives to persuade these students to participate in these courses. Some possible incentives would be working with local educational institutions to create certifications based on MOOCs taken or by offering rewards in the form of money or other goods. Some data to be collected from the study would be general study patterns (How long do these students spend on a lesson/problem set/course/etc), preferences of teaching materials (Video lectures vs. written materials, quizzes vs. problem sets, etc), and overall experience with online learning as compared to any previous educational experience. In addition, to supplement the study done by the HarvardX Research Committee and the Office of Digital Learning at MIT, one focus of the

study would be on which areas do these students choose to focus themselves and whether or not it agrees with their findings. This research will most likely last for 2 years, one year to focus on each demographic, which will provide ample time to find prospective student and for the students to try multiple courses and be exposed to different MOOC platforms.

In order to fully understand the possible impact of MOOCs, research needs to be done targeting different demographics rather than the normal demographic that MOOCs are currently appealing to. Especially if advocates of MOOCs hope for it to help increase education within the less educated and third world countries, then studies need to be done focusing on those demographics. This research will hopefully help prove the possible positive impact that MOOCs can have on society as whole as well prove whether the general trends that have been studied in other research encompass all demographics or if they are just a byproduct of the current proportions of MOOC students.

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