# Chapter 2

# Massive Open Online Courses and Completion Rates: Are Self-Directed Adult Learners the Most Successful at MOOCs?

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### **ABSTRACT**

Millions of adults have registered for massive open online courses, known as MOOCs, yet little research exists on how effective MOOCs are at meeting the needs of these learners. Critics of MOOCs highlight that completion rates can average fewer than 5%. Such low completion rates raise questions about the effectiveness of MOOCs and whether all adults have the skills and abilities needed for success. MOOCs have the potential to be powerful change agents for universities and students, but it has previously been unknown whether these online courses serve more than just the most persistent, self-directed learners. This study explored the relationship between self-directed learning readiness and MOOC completion percents among adults taking a single Coursera MOOC. By examining self-directed learning - the ability to take responsibility for one's own educational experiences - and MOOC completion rates, this research may help to confirm the knowledge and skills needed to be a successful adult learner in the 21st century, as well as how to improve online education offered to adult learners.

# INTRODUCTION

Online courses for adult learners have traditionally suffered from lower course completion rates than face-to-face classroom courses (Rovai, 2002). Dropout rates for online university courses have been found to be 10% to 20% higher than traditional college classroom courses (Carr, 2000). Barriers to completion of university and continuing education online courses for adult learners are often linked to

DOI: 10.4018/978-1-5225-0522-8.ch002

feelings of isolation, lack of support from the learning community and instructor, and challenges with persistence (Rovai, 2002). Massive open online courses, called MOOCs, are a new platform and online course structure being used to deliver instruction simultaneously to thousands of learners. Yet, completion rates for MOOCs are not nearly as high as what has been found for similar university classroom or online courses (Watters, 2012).

There are three unique features of MOOCs that may contribute to the low completion rates and corresponding high enrollment numbers that other online courses offered at universities do not have. First, in terms of cost, MOOCs are free of charge, which removes the barrier that higher education is only available to the wealthy. When examining the universities that offer MOOCs, such as Harvard, Massachusetts Institute of Technology (MIT), and Stanford, it seems likely that MOOC learners now have access to education from Ivy League universities that many may have never thought possible (Pappano, 2012). Second, MOOCs are usually taken asynchronously when individuals have time, making them a flexible education option for working adults, parents, and anyone with a busy schedule. However, MOOCs are still only available for a scheduled period of time. If a leaner registers, but has scheduling conflicts during the MOOC period, then that learner cannot complete the course. Third, MOOCs are open and accessible to anyone with an Internet connection, making them available to adults located across the globe. Given these three criteria alone, MOOCs may be the beginning to the various challenges facing universities today. However, while these three factors may be some of the reasons why MOOCs are attracting large numbers of registrants, they may also offer insight into why low numbers of learners complete MOOCs.

Though millions of adult learners have registered for MOOCs, there are few empirical studies at this time that examine MOOCs and their value for learning. Critics cannot help but point out that MOOC completion rates can average fewer than 5% of those registered (Kolowich, 2012; Pappano, 2012; Balch, 2013). A recent unofficial study examined enrollment and completion rates of MOOC learners from data made available to the public. This study reported enrollments for MOOCs were typically around 50,000 learners with most MOOCs having completion rates lower than 10% (Jordan, 2013). Such evidence raises questions about the effectiveness of the MOOC learning environment for adult learners, and whether all adults have the skills and abilities needed to succeed within MOOCs.

Different theories exist to explain these low MOOC completion rates. For example, adult learners may find MOOCs challenging because the courses are massive, meaning that one course can contain hundreds of thousands of learners. Because of these enormous class sizes, the design of MOOCs may not allow for a single instructor to direct, guide, or assist the participants, leaving learners to take charge of the learning environment for themselves. Fortunately, self-directed learners are often able to take responsibility for their own learning, and these self-guided learners may not always need the physical presence of an instructor to direct the learning process (Knowles, 1975). However, adult learners who are not familiar with how MOOCs are structured or how to manage their own learning experiences with self-directed learning are likely to struggle within such environments (Koutropoulos & Hogue, 2012). In one study, some learners expressed the desire for more direction and guidance throughout their MOOC experience (Kop, 2011). Kop (2011) also noted that to be successful at MOOCs participants needed confidence in their abilities, competence with the technology tools, and the capability to take charge of their own learning experience. If MOOCs are not designed to support and motivate learners with varying degrees of self-direction then, given the low threshold for entry compounded with the struggles some may face with these courses, dropping out could be a predicable outcome for the majority of learners (Balch, 2013).

A more thorough investigation of the traits of MOOC adult learners is needed. By studying self-directed learning, new strategies may be identified to increase MOOC completion and learning. Knowing

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