# Massive Open Online Courses: The Future of Training or MOOC Ado About Nothing?

Dr. Brian J. O'Leary
The University of Tennessee at Chattanooga

Presentation for the 9<sup>th</sup> Annual RCIO Conference October 26, 2013

#### Praise of MOOCS

- "The future of education"
- "It will be transformational"
- "The death of the brick and mortar university"
- "Democratizing education"
- "Instruction for masses knocks down Campus walls"

#### So....What's A MOOC?

#### Oxford Dictionary says:

- "...a course of study made available over the Internet without charge to a very large number of people: anyone who decides to take a MOOC simply logs on to the website and signs up."
- MOOC providers argue that they are attempting to democratize education.
- The stated motivation is altruism (what's this got to do with business?!)

#### MOOCs are Global!



MIT's first MOOC - Circuits and Electronics

154,763 enrolled, <5% completed (7,157), <3% participated in discussion boards (Breslow et al., 2013)

#### **MOOC Providers**

- Coursera (<u>www.coursera.com</u>)
- EdX (www.edx.org)
- UdaCity (<u>www.udacity.com</u>)
- Blackboard (<u>www.blackboard.com</u>)

#### Coursera

- Founded by Stanford Professors (\$22 M+ in investments)
- We believe in connecting people to a great education so that anyone around the world can learn without limits.
- Coursera is an education company that partners with the top universities and organizations in the world to offer courses online for anyone to take, for free. Our technology enables our partners to teach millions of students rather than hundreds.
- We envision a future where everyone has access to a world-class education that has so far been available to a select few. We aim to empower people with education that will improve their lives, the lives of their families, and the communities they live in.

#### Udacity

- Founded by Other Stanford Profs (\$21 M+ Investment)
- Our mission is to bring accessible, affordable, engaging, and highly effective higher education to the world. We believe that higher education is a basic human right, and we seek to empower our students to advance their education and careers.
- Higher education is broken with increasingly higher costs for both students and our society at large. Education is no longer a one-time event but a lifelong experience. Education should be less passive listening (no long lectures) and more active doing. Education should empower students to succeed not just in school but in life.

#### EdX

- Supported by Harvard and MIT (\$60 M investment)
- EdX was created for students and institutions that seek to transform themselves through cutting-edge technologies, innovative pedagogy, and rigorous courses.
- Through our institutional partners, the XConsortium, we present the best of higher education online, offering opportunity to anyone who wants to achieve, thrive, and grow.
- We are committed to research that will allow us to understand how students learn, how technology can transform learning, and the ways teachers teach on campus and beyond....

#### Blackboard?

- Traditional Learning Management System (LMS)
- Blackboard has been dedicated to improving every aspect of the education experience for millions of learners and educators around the world. We work with thousands of higher education, K-12, professional, corporate, and government organizations, providing them with tomorrow's education experience today.
- The company announced at its 2013 annual conference here that it would create a new MOOC platform that colleges could use free if they were existing Blackboard customers.
- http://bb4.utc.edu

## The "Flipped Classroom"

- "The majority of *learning* happens not with a professor lecturing the students but by giving students access to course materials and having them probe, discuss, and debate issues with fellow learners as well as the professor" (Meister, 2013).
- http://youtu.be/r2b7GeuqkPc
- Problem: MOOCS are designed to run themselves. Grading is done by peers or a computer. Assignments are not mandatory.
- What flipped?

## **Learning & Education**

- Learning refers to a relatively permanent change in human capabilities that can include knowledge, skills, attitudes, behaviors, and competencies that are not the result of growth processes (Gagne & Medsker, 1996).
- Education refers to the process of receiving or giving systematic instruction, especially at a school or university (Oxford Dictionary).

#### The Goals of Education

"...education...involves both training and socialization. The knowledge one acquires is not just concepts and skills to become a good employee but also values and mores to become a good citizen — of a society or an enterprise."

Gianpiero Petriglieri (Harvard University, 2013)

#### Why Do *Universities* Care about MOOCS?

- 1. Everybody's doing it...we can't be left behind!
  - The train has left the station
  - The boat has left the dock
  - The question remains...
  - Who's steering, ,where are we headed, and how will we know when we get there?
  - "Trustees and board members...are pushing college presidents to innovate because they don't want their colleges and universities left behind. I call this "me too"-ism, where innovation itself becomes the goal without a clear and compelling *strategic* purpose" (Greenstein, 2013).
- 2. Revenue

## Why Does TN care about MOOCs?

#### The "Drive to 55"

- Bring the percentage of Tennesseans with college degrees or certifications to 55% (from current 32%) by the year 2025.
- Tennessee now lags far behind the national average for higher education, ranking 42nd in working adults with a two-year degree or higher.
- Reaching our goal will involve increasing the number of two-year and four-year degrees as well as technical certifications in important fields such as welding and mechatronics.

## Training and Development

- Training refers to a planned effort by a company to facilitate learning of job-related competencies, knowledge, skills, and behaviors by employees.
- Development refers to formal education, job experiences, relationships, and assessment of personality and skills that help employees prepare for the future.

#### The Goal of T&D

- Transfer of training refers to trainees effectively and continually applying what they have learned in training to their jobs (Broad & Newstrom, 1992).
- That is, it improves performance
- No transfer = wasted money
- Does a MOOC improve transfer?

## Why Business Should Care about MOOCs (Meister, 2013)

- Semi-synchronicity: MOOCs allow students to go through the course as a 'semi-synchronous' cohort. Each week the group receives the same assignments or discussion threads, but progress is self-paced.
- Course design: Flipped classroom
- Credentials: Can offer college credit or certificates of completion – increases motivation to complete and perceived legitimacy
- Oh, and did I mention it's free?

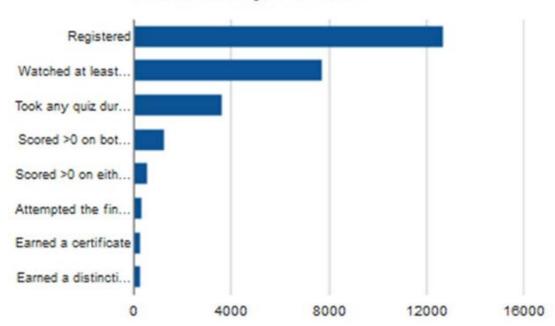
#### The Dark Side....

- "No one really knows if students learn anything in a MOOC. Scant existing research suggests that the success rate of online education, in general, is poor" (Marcus, 2013).
- a coalition of faculty-advocacy organizations asserts that online instruction "isn't saving money—and may actually be costing students and colleges more," but that "snappy slogans, massive amounts of corporate money, and a great deal of wishful thinking have created a bandwagon mentality that is hard to resist" (Campaign for the Future of Higher Education, 2013).
- Conservatively, 90% of students fail to complete courses (Inside Higher Ed)
- Tremendous upfront time investment
- Copyright issues

#### Issues with Student Success

A new debate over how to judge completion rates





Source: Duke Center for Instructional Technology

#### **Existing Empirical Research on MOOCS**

[enter your study here]

## What Really Matters

#### 1. Conducting Needs Assessment

Organizational Analysis
Personal Analysis
Task Analysis



2. Ensuring Employees' Readiness for Training

Attitudes and Motivation
Basic Skills



3. <u>Creating a Learning</u> **Environment** 

**Learning Objectives** 

**Meaningful Material** 

**Practice** 

Feedback

**Community of Learning** 

**Modeling** 

**Program Administration** 

#### 5. Developing an Evaluation Plan

Identify Learning Outcomes Choose Evaluation Design Plan Cost-Benefit Analysis



4. Ensuring Transfer of Training

Self-Management Peer and Manger Support



6. Selecting Training Method

**Traditiona** 

**E-Learning** 



7. Monitoring and Evaluating the Program

**Conduct Evaluation** 

**Make Changes to Improve the Program** 

#### The Bottom Line

- Limited research on efficacy of MOOCs mostly case study
- MOOCs are a medium, not a method
- Success in a MOOC is dependent on same criteria as in any educational medium
- In current form, best for employee selfimprovement
- May provide benefit for generic topics such as soft skills, computer skills, and compliance
- If it's free, you may get what you pay for

#### Links

- All Hail MOOCs! Just Don't Ask if They Actually Work | TIME.com
- How MOOCs Will Revolutionize Corporate Learning And Development Forbes
- How MOOCs Are Training Tomorrow's Workforce | Inc.com
- The Potential for MOOCs in the Training and Development World | The EvolLLution
- MOOCs in the Corporate World | Learning Technologies | Training Industry
- Higher ed leaders urge slow down of MOOC train | Inside Higher Ed
- State systems and universities in nine states start experimenting with Coursera | Inside Higher Ed
- The MOOC Moment | Inside Higher Ed
- Essay on context behind the MOOC experiments | Inside Higher Ed
- Hot Topic: MOOCs, Are They Right for Corporate L & D?
- Recent Developments in Online Education Wood Handout.pdf
- SF2.pdf
- SWOT Analysis mooc.2013.0008
- Why Every University Does Not Need A MOOC | Inside Higher Ed
- MOOCs, Large Courses Open to All, Topple Campus Walls NYTimes.com
- edX
- Advance Your Education With Free College Courses Online Udacity
- Distance MBA | Online MBA | Distance Learning | Online Degree University | Online Certification & Training Courses : EduKart.com
- Your Courses | Coursera
- Blackboard Learn @ UTC Online
- Massive open online course Wikipedia, the free encyclopedia
- CFHE Working Papers Archives Campaign for the Future of Higher Education | Campaign for the Future of Higher Education
- Muse University | The Muse