

## Informal and Self-Directed Learning from MOOCs and Open Education: Learner Characteristics, Motivations, and Challenges

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## October 19, 2015 MOOCs Are Still Rising, at Least in Numbers

(398 new MOOCs started in October alone)  
Ellen Wexler, Chronicle of Higher Education  
<http://chronicle.com/article/MOOCs-are-still-rising-at-least-in-numbers/2322>

### Growth of MOOCs

Since the first blockbuster MOOCs debuted in 2011, the cumulative number of courses started or scheduled has reached nearly 4,000.



## Audience Poll: Who is Learning from OER and MOOCs? (raise hands)



Frank Basile, an aircraft technician, took an MITx course on circuits and electronics to increase his knowledge.



Joe Alfonso, a financial adviser from Oregon, is taking the online finance course as a "refresher."

## April 20, 2015

### 250 MOOCs and Counting: One Man's Educational Journey, Chronicle of Higher Education

<http://chronicle.com/article/250-MOOCsCounting-One/229397/?cid=at>  
If the MOOC movement has faded, nobody told Jima Ngei. Mr. Ngei, who lives in Port Harcourt, Nigeria, has completed and passed 250.



Jima Ngei: "I had this unrelenting fear that this miracle of free access might evaporate soon."

## August 1, 2015 Can You Really Teach a MOOC in a Refugee Camp?

Steve Kolowich, Inside Higher ed

<http://chronicle.com/blogs/wiredcampus/can-you-really-teach-a-mooc-in-a-refugee-camp/54191/>



Two men living in Dadaab, a refugee camp in Kenya, would watch lecture videos and take online quizzes at a nearby United Nations compound. (InZone)

## September 22, 2015

### Who's Benefiting from MOOCs, and Why

Chen Zhenghao, Brandon Alcorn, Gayle Christensen, Nicholas Eriksson, Daphne Koller, Ezekiel J. Emanuel, Harvard Business Review  
<https://hbr.org/2015/09/whos-benefiting-from-moocs-and-why>

#### The Career Benefits of MOOCs

As reported by those who stated career benefits as their primary reason for completing a MOOC.



SOURCE COURSEERA SURVEY DATA

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## Need More Research on the MOOC Learners and Experiences

Recent research on MOOCs to understand:

- who the learners are in MOOCs,
- their learning goals,
- time commitments,
- aspects of the learning experience that are most and least beneficial,
- the decision making involved in completing or exiting a MOOC.

(e.g., Liu et al., 2014; Wiebe, Thompson, & Behrend, 2015).

## Need More Research on the "Invisible" MOOC Learners and Experiences

- Social networks outside of the MOOC experience,
- Emotions related to the online experience,
- Notetaking and overall study strategies,
- Family life flexibility, and
- General learning goals.

Veletsianos, G. (2015, May 27). The invisible learners taking MOOCs. *Inside Higher Ed*. Retrieved from <https://www.insidehighered.com/blogs/higher-ed-beta/invisible-learners-taking-moocs>

Veletsianos, G., Collier, A., & Schneider, E. (2015). Digging deeper into learners' experience in MOOCs: Participation in social networks outside of MOOCs, notetaking and contexts surrounding content consumption. *British Journal of Educational Technology*, 46(3), 570-587.

## The Problem...

Data analytics and clickstream forms of data do not inform us of the saliency of learner choice and personal agency when signing up for a MOOC.

Veletsianos, G., Collier, A., & Schneider, E. (2015). Digging deeper into learners' experience in MOOCs: Participation in social networks outside of MOOCs, notetaking and contexts surrounding content consumption. *British Journal of Educational Technology*, 46(3), 570-587.

## A Solution...

Qualitative research such as learner interviews, focus groups, and content analysis can be equally, if not more, informative about learner self-directed online learning pursuits.

Veletsianos, G. (2015, May 27). The invisible learners taking MOOCs. *Inside Higher Ed*. Retrieved from <https://www.insidehighered.com/blogs/higher-ed-beta/invisible-learners-taking-moocs>

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## MIT OpenCourseWare (OCW)

<http://ocw.mit.edu/index.htm>



## Study #1.

### MIT OpenCourseWare (OCW) Study

- E-newsletter subscription 156,000 people
  - ◆ 1,429 completed surveys
    - ◆ 613 completed open ended items
  - ◆ 50% over age 40
  - ◆ 76% males
  - ◆ North America (44 percent); Asia (23 percent); Europe (14 percent); South America (10 percent); Middle East (3 percent); Oz (2 percent).
    - ◆ Top countries in the MIT OCW subscriber list were the United States, India, China, Brazil, Nigeria, Pakistan, Iran, Canada, the UK, Taiwan, Indonesia, Mexico, and Egypt.

## Study #2. Blackboard (CourseSites) MOOC

<http://events.blackboard.com/open>



## Blackboard MOOC Sample

- Survey notice sent to 3,800 MOOC participants
- 159 completed surveys
  - ◆ 49 completed open ended items
  - 72% over age 40
  - 73% females
  - North America (81 percent); Asia (2 percent); Europe (6 percent); South America (1 percent); Middle East (2 percent); Australia/NZ (7 percent); Africa (1 percent)

## Open-Ended Questions

- (28) Can you describe your most interesting or successful informal learning experience? What did you accomplish?
- (30) Why did you want to do this learning activity or task? What was your **purpose or goals**? Please describe what captured your interest.
- (31) Has your life changed in a small or big way as a result of this informal learning activity or experience? If so, how?
- (32) What was the key moment when learning informally with technology where you felt a personal change? If so, please describe that moment, as best you can.
- (34) Did you face any **obstacles or challenges** during this time when learning informally with technology? If so, how did you overcome them?



## Three Research Questions

1. What are the general characteristics of MOOC participants?
2. What are the motivations of the MOOC participants in terms of informal and self-directed online learning?
3. What are the challenges and issues perceived by these MOOC participants?

## Qualitative Data Analysis

- **Round #1:** Analysis by question: Too difficult.
- **Round #2:** Looked at each participant across all 15 answers, treating answers as one short interview. This second round of coding produced much more useful results.

## Informal Learner Characteristics

- Strong intrinsic motivation, pride themselves being a "self-directed learner" ---"my own pleasure" and values autonomy, considers it empowering.
- Considers sharing as important part of educ/learning
- Takes pride in creating and contributing.
- Enjoys the community of people with similar interests--- but not necessarily the human f2f interaction.
- Learners thrived on being recognized by their peers as an expert; new identity.



### Informal Learner Characteristics: Values SDL

"I continue to research my interests for my own pleasure, especially on sites like Amazon for books and e-books, and have ongoing email alerts for journal content. I also use online sources for job hunting and professional networking."



### Informal Learner Characteristics: Self-Reliant

"Knowing that I did not need to ask an actual person for help was life changing. I am an introvert by nature, and I prefer to figure out things on my own. Knowing that I can research informally on the Web is reassuring."



### Information Seekers (DIYers): Personal Identity

"Today, we were trying to install a pool filter--we got instructions off You Tube. I also just bought a recumbent exercise bike--I looked at online reviews before making a choice." She then added, "Knowing that I did not need to ask an actual person for help was life changing. I am an introvert by nature, and I prefer to figure things on my own. Knowing that I can research informally on the Web is reassuring."



### Learner Self-Respect Quote

"Yes, indeed, on a personal level, I developed self-respect for my own self; I started realizing the potential I had and I found out that I can make an impact in the society with the knowledge I gained."

### Joining a Learning Community

"My key moment came when I discovered a community of like-minded scholars from around the world. I no longer felt isolated or disconnected. This has become my most valuable support network and I am grateful."



### Sharing Expertise in Community

Some of my friends tell me that they love the nuggets of information that I share with them when talking about things I learned during short commutes, etc. They have started listening to podcasts and share similar nuggets about the fields that they care about.



## Joining a Learning Community (social and intellectual capital)

"Socially the impact was great as well because now I have friends I can talk technology with a lot."



## Goals and Motivations (Blackboard MOOC)

- Improve their job prospects.
- Pursue personal interests or hobbies.
- Seeking certification of some type
- Information seeking.
- Means to expand one's formal learning and improve job performance.



## Respect at Home and Work

"It has made my job much easier and it's been easier for me to execute certain tasks, making me more willing to take on bigger challenges. It was also shown me how enjoyable it is to learn a computer language. It opened my mind to considering possibilities in this area. It also made my husband respect my ability around computers a bit more."



## New Opportunities

"Without the opportunity to learn informally, my options within my doctoral program would be limited to the ideas and experience of the three instructors in my program track. I would be graduating with a firm grasp of 20-year old dated ideas!"



## Key Challenges

- Discerning quality of information.
- Need for "something to sort, filter and connect."
- Information overload.



## MOOC Challenges: Finding Appropriate Ones

"I think the hardest part is finding a MOOC that would work. It is not like there is a directory of MOOCs. You get out what you put in - the more you put in - in terms of writing and connecting the more you will get out of the experience. While the experience is informal - you need to give it more of a formal importance in your daily schedule."



## More Challenges and Issues

- Informal learning not taken seriously by their superiors (i.e., failed to translate into job advancement).
- Certificates and badges may reduce sense of fun and learning enjoyment.
- Informal experiences can require more formal routines to take advantage of it.



## Learning for Enjoyment Versus Credentials and Badges

"Just play around with ideas for alternatives to printed texts and don't be afraid to create your own, even if they're amateurish...I think we need to de-emphasise formal assessment and accreditation and encourage our playful side to see what is possible. Too much informal learning wants to get itself 'badged' or validated too quickly and this means its losing its genuine amateur status."



## Summary Recap:

### Aspects of Successful MOOC Learner

- Self-motivated.
- Enjoys sense of creating.
- Shares their creation.
- Delights in wide range of info resources.
- Takes pride in learning on their own.



## Implications...if better understand MOOC participants learning approaches, study habits, technology access issues, motivations, etc.

- Instructional designers can create more effective instructional aids, guidelines, and other scaffolds for open education.
- New academic partnerships can be formed between higher ed and corp world.
- Better policies and laws might be passed.



## Future Directions

- Collect more life stories.
- Better understand cultural sensitivity in MOOCs.
- Learn about instructor MOOC personalization practices.
- Experiment with different qualitative methods.

## Any Questions...

Slides posted at: [TrainingShare.com](http://TrainingShare.com)  
MOOCs and Open Ed book: <http://moocsbook.com>

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