


MOOC Instructor Motivations, Innovations, and Designs: Surveys, Interviews, and Course Reviews

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MOOC Trends and Recent Data



Invasion of the MOOCs
The Promise and Perils of Massive Open Online Courses

Edited by Steven D. Krause and Charles Lowe

December 25, 2016
A Review of MOOCs Stats and Trends in 2016, Dhawal Shah, Class Central
<https://www.class-central.com/report/mooc-stats-2016/>

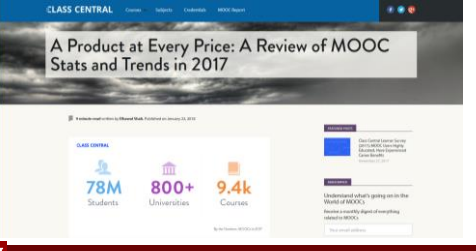


58M Students
700+ Universities
6850 Courses

MOOCs in 2016: Analysis by Class Central

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January 22, 2018
A Review of MOOCs Stats and Trends in 2017, Dhawal Shah, Class Central
<https://www.class-central.com/report/moocs-stats-and-trends-2017/>



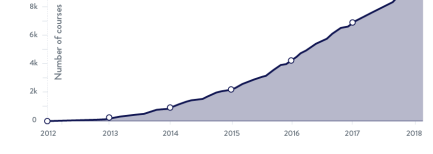
78M Students
800+ Universities
9.4k Courses

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January 22, 2018
A Review of MOOCs Stats and Trends in 2017, Dhawal Shah, Class Central
<https://www.class-central.com/report/moocs-stats-and-trends-2017/>

CLASS CENTRAL

Growth of MOOCs



By the Numbers: MOOCs in 2017


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A Review of MOOCs Stats and Trends in 2017, Dhawal Shah, Class Central
<https://www.class-central.com/report/moocs-stats-and-trends-2017/>

Here is a list of the top five MOOC providers by registered users:

Providers

1. Coursera — 30 million users.
2. edX — 14 million users.
3. XuetangX — 9.3 million users.
4. FutureLearn — 7.1 million users.
5. Udacity — 5 million users.

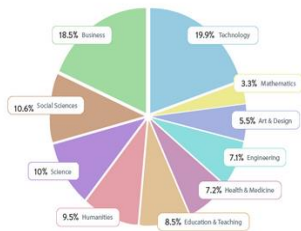


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Subject areas (January 22, 2018)

CLASS CENTRAL

Course Distribution
by Subject

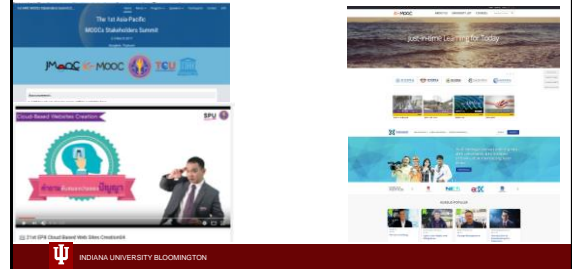


By the Numbers: MOOCs in 2017

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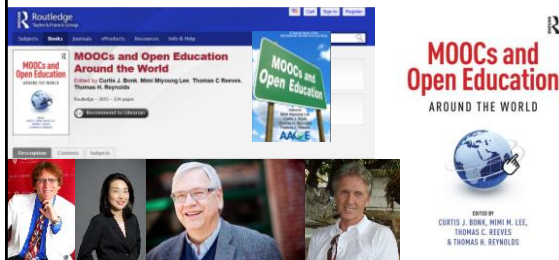
June 15, 2017

Massive List of MOOC Providers Around The World, Class Central JMOOC, K-MOOC, and T-MOOC? <https://www.class-central.com/report/mooc-providers-list/>



MOOCs and Open Education Around the World (2015)

<http://moocsbook.com/>



Research Background

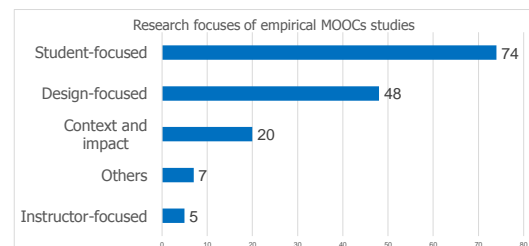


Research Background

- MOOCs can be beneficial to both learners and instructors (Hew & Cheung, 2014)
- Instructors are one of the five main components of MOOCs; the other four are learners, topic, material, and context (Kop, 2011)
- Few studies have examined instructional design from MOOC instructors' perspectives (Margaryan et al., 2015; Ross, Sinclair, Knox, Bayne, & Macleod, 2014; Watson et al., 2016)

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Systematic Review of Research Methods in MOOCs (2014-2016) (Zhu, M., Sari, A., & Lee, M. M., 2018)



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Systematic Review of Research Methods in MOOCs (2014-2016) (Zhu, M., Sari, A., & Lee, M. M., 2018)

	Quantitative	Qualitative	Mixed methods
Student-focused	39	9	26
Design-focused	19	12	17
Context and impact	9	6	5
Instructor-focused	0	3	2

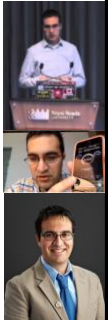
Quotes: Veletsianos et al. (2015-2016)

"To gain a deeper and more diverse understanding of the MOOC phenomenon, researchers need to use multiple research approaches (e.g., ethnography, phenomenology, discourse analysis) add content to them." (p. 583.)

Veletsianos, Collier, & Schneider (2015, May). Digging deeper into learners' experiences in MOOCs: Participation in social networks outside of MOOCs, notetaking and contexts surrounding content consumption. *BJET*, 46(3), 570-587.

"*Dependence on Particular Research Methods May Restrict our Understanding of MOOCs.*"

George Veletsianos & Peter Shepherdson's Study (2016). Systematic Analysis and Synthesis of the Empirical MOOC Literature Published in 2013-2015. *IRRODL*. <http://www.broad.org/onlinealpha/irrod/withdocview/2458/2555>



Research Purpose and Questions



MOOC RESEARCH

Research Purpose

This study explores instructor motivations for offering MOOCs and the design innovations in MOOCs to better understand MOOC design practices and to provide suggestions for future MOOC instructors.

Research Questions

1. What motivates instructors to offer MOOCs?
2. What instructional innovations do MOOC instructors perceive?
3. What do instructors perceive as the strengths of their MOOCs?
4. How would they redesign the MOOC?

Research Design



MASSIVE

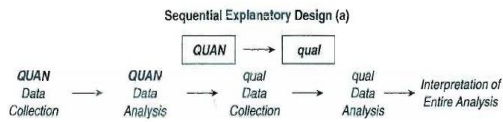
OPEN

ONLINE

COURSES

Research Methods-Design

Sequential mixed methods design (Creswell & Clark, 2007)



Research Methods-Data collection

Data Collection:

(1) surveys, (2) interviews, and (3) course reviews.

Participants:

- 143 survey participants (10% response rate)
- 12 interviewees

Research Methods-Data collection

MOOC instructors interviewed

No.	Countries	Subject areas	Platforms
1.	The U.S.	Language and Literacy	Coursera
2.	The U.S.	Education	Coursera
3.	The U.S.	Education	Canvas
4.	The U.S.	Chemistry	Coursera
5.	UK	Public health	FutureLearn
6.	UK	Language and Literacy	FutureLearn
7.	Hong Kong	Math	Coursera
8.	Mainland China	Math	Coursera
9.	Canada	Psychology	Coursera
10.	Australia	Public Health	Open2Study
11.	Sweden	Computer Science	edX

Research Methods-Data analysis

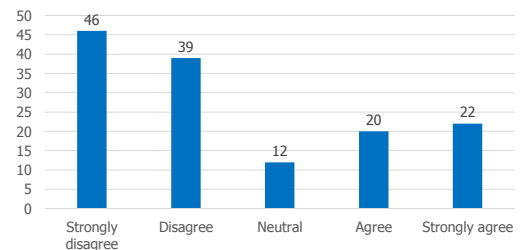
RQs	Data Sources	Data analysis
RQ1	Survey Interview MOOC review	Descriptive statistics Content analysis (Elo & Kyngäs, 2008)
RQ2	Interview MOOC review	Content analysis
RQ3	Interview MOOC review	Content analysis
RQ4	Interview	Content analysis

Demographic Information



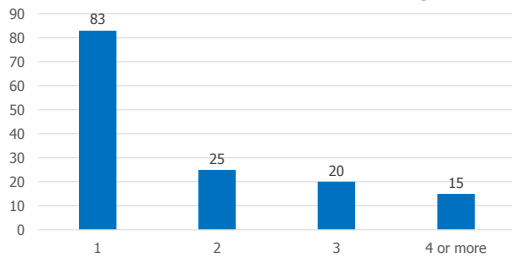
Prior Online or Blended Experience

I Have Many Prior Experiences Related to Designing Full Online or Blended Courses Prior to Designing the MOOC



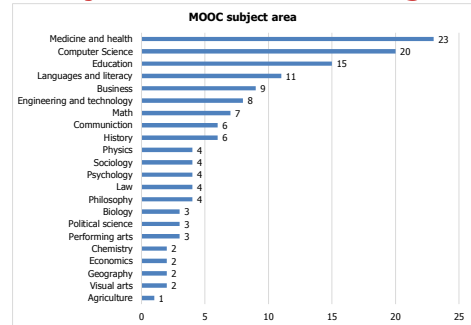
Prior MOOC Experience

The Number of MOOCs the Instructor has Designed



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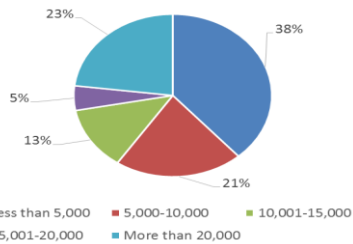
Subject Area of MOOC Taught



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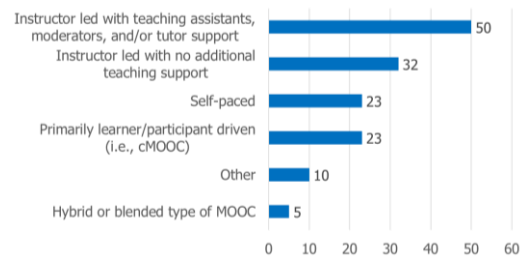
MOOC Enrollments

The Number of Learners Enrolled in Recent MOOC



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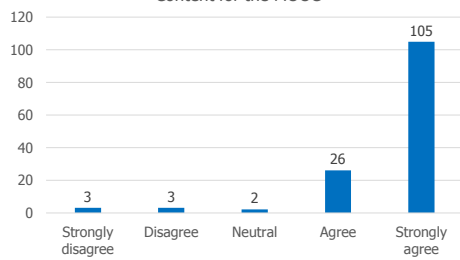
MOOC Delivery Format



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Involvement in Course Design

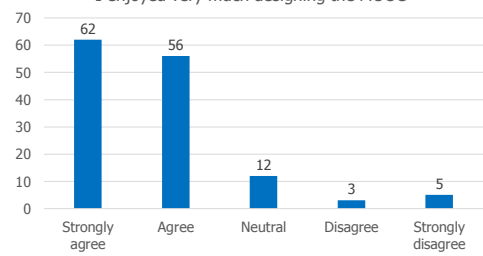
I was Fully Involved in Designing the Course Content for the MOOC



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Enjoyment in Designing MOOCs

I enjoyed very much designing the MOOC



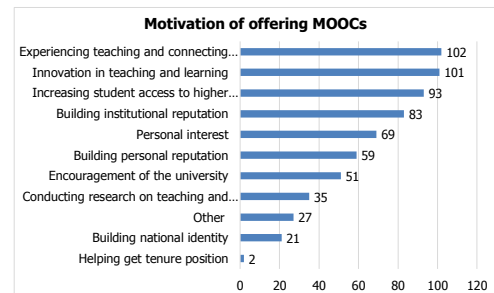
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Additional Findings



1. Motivational Findings

RQ1: What motivated instructors to offer MOOCs?



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1. Motivational Findings

RQ1: What motivated instructors to offer MOOCs?

Many of them wanted to experience instructional innovation with MOOCs.

As one instructor from Canada mentioned:

"I'm always interested in how you can provide a deep learning experience in untraditional ways. So when MOOCs came over, I didn't always understand it really well...I thought the best way to understand what was going on was to jump in. So more curiosity and wanting to learn about the world of MOOC."

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1. Motivational Findings

RQ1: What motivated instructors to offer MOOCs?

Many of them wanted to experience instructional innovation with MOOCs.

U.S.: decided to design MOOCs "just to experiment."

U.S.: "expose your university to broader world."

Sweden: "summarizes our way to teaching Computer Architecture and then I was very motivated to give a MOOC."

U.S. "The initial motivation was to make some video resources for my own students."

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2. Innovation Findings

RQ2: What instructional innovations do

MOOC instructors perceive?

- Cutting videos into small chunks.
- Integrating interactive media.
- Peer review.
- Problem-based learning.
- Service learning.

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2. Innovation Findings

RQ2: What instructional innovations do

MOOC instructors perceive?

One education instructor from the USA remarked about PBL:

"I think it is the problem-based learning. It's sort of, out-of-the-classroom learning, having them go out and do the assignment at their house, in their backyard, or on their sidewalk. So it automatically is integrated into their everyday life."

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3. MOOC Strengths Findings

RQ3: What do instructors perceive as the strengths of their MOOCs?

- The topic of the MOOC itself.
- The pedagogical methods employed.
- The impact on participants.



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3. MOOC Strengths Findings

RQ3: What do instructors perceive as the strengths of their MOOCs?

One interviewee from Canada claimed the strengths of his course is making it informal.

"...it is like we are sitting in the same room, having a chat...This is nothing I try to do but I have some comfortable, smile that makes it feel like we're having an informal discussion... A lot of the people that I get emails from say: 'I love the way you teach. I love the comfortable level, feels like we've been friends. You're welcome to my kitchen anytime.'"



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4. MOOC Design Findings

RQ4: How would they redesign the MOOC?

Overall, they were satisfied with the current course, especially with the structure.

One literacy instructor from the UK emphatically stated:

"Actually no. I'm quite happy with it and we've had good feedback from learners."



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4. MOOC Design Findings

RQ4: How would they redesign the MOOC?

- Adjusting the difficulty of quizzes.
- Adding lab experiences.
- Adding international perspectives.
- Cancelling peer-grading.
- Increasing instructor-student and peer-to-peer interaction.
- Inviting guest speakers.
- Making the length of the MOOC shorter.
- Using learning analytics before redesigning MOOC.



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4. MOOC Design Findings

RQ4: How would they redesign the MOOC?

Data from the platform

As one computer science instructor from Sweden explained:

"When I do the revision, I will for sure look at the detailed statistics...For example, you can get statistics [on] how much they rewind. That would be a sign that there is something that is not clearly explained. They have to listen [to] it again and again and then they get there."



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4. MOOC Design Findings

RQ4: How would they redesign the MOOC?

Data from the platform

He further added:

"I probably am a much better teacher than I was before...To think about that [i.e., less interaction with students when using prerecorded video] made me a different teacher. I'm sure I'm a different teacher after that. If you want to become a better teacher, you develop a MOOC."



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Discussion, Significance, and Conclusion



Discussion

1. Growth and relatedness needs were the primary instructor motivations for offering MOOCs.

Growth needs included curiosity about MOOCs and the exploration of new ways of teaching; such findings align well with the research from Hew and Cheung (2014).

2. Various pedagogical innovations were mentioned by the interviewees (e.g., guests, PBL, service learning, peer review, interactive media, etc.).

3. MOOC instructors interviewed were satisfied with the designs of their MOOCs, but did want to make major changes to their course. (Lacking time? And overly rely on positive student feedback.)



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Significance & Conclusion



1. This study provides a window into the decision making of more than 100 MOOC instructors. Few studies have tapped into such a database.
2. This study provides key insights into instructors' motivations for offering MOOCs as well as instructional innovations in MOOC design.
3. The results may inform MOOC stakeholders (i.e., institutions) of how to foster instructor motivation and instructional innovation in MOOCs.
4. This study can be used to train instructional designers on the design of MOOCs as well as the expectations of MOOC instructors that they may be working with.



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Future Research Might Explore...

1. The relationship between instructor motivation and the types of instructional innovations in MOOC design.
2. Changes in MOOC instructor motivation across several MOOCs.
3. MOOC instructor motivation by discipline. MOOC instructor motivation by country or region of the world.
4. MOOC instructional professional development and instructor teaching skill changes from designing MOOCs.



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Slides and Paper: <http://www.trainingshare.com>



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FULFILLING the PROMISE