Discussion: The Clustered Patterns of Learning Engagement in MOOCs and Their Effects on Teaching Presence and Persistence
Paper by: Jeonji Jung & Jeongmin Lee

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November 10, 2017

Audience Poll:
Have you ever dropped a MOOC?
Have you ever completed a MOOC?
http://elearnhero.com/moocs-completion-rates/

Improving MOOC completion rates

First we need to look at MOOCs completion rate differently

October 11, 2017
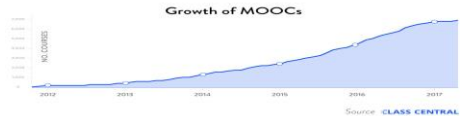MOOCs Are "Dead." What's Next? Uh-oh. One overhyped technology fades as another surges.
John Warner, Inside Higher Ed
https://www.insidehighered.com/blogs/just-visiting/moocs-are-dead-whats-next-uh-oh

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Research Background

The Numbers: MOOCS in 2016 (Dec 25th, Class Central)

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June 15, 2017
Massive List of MOOC Providers Around The World
ThaiMOOC / Thailand
Class Central, Dhawal Shah
https://www.class-central.com/report/mooc-providers-list/

June 15, 2017
Massive List of MOOC Providers Around The World, K-MOOC (Korea)
(Where to Find MOOCs: The Definitive Guide to MOOC Providers)
https://www.class-central.com/report/mooc-providers-list/

January 5, 2016
Use Of MOOCs And Online Education Is Exploding: Here's Why
Josh Bersin, Forbes
http://www.forbes.com/sites/joshbersin/2016/01/05/use-of-moocs-and-online-education-is-exploding-heres-why/#290acdda7f09

Most of the MOOC providers now offer such credentials (there are over 100) and they include tools like Nanodegrees (Udacity), Credentials of Readiness (Harvard), XSeries (EdX), and many more. It's not yet clear how well these credentials will be recognized by employers, but that's where this market is going.
Most of these companies focus on technical education – software skills, IT systems, and other technical topics.

Issues: 1. Participation, 2. Retention, and 3. Variable Learner Background

Why?
Addressing some of the 3 key issues impacting on MOOCs
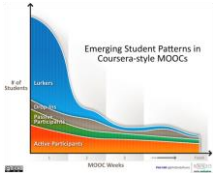
Nicola Morris
https://www.slideshare.net/nicolajmorris/spocs
https://www.linkedin.com/in/nicolamorris/

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Issue #1: Low Participation

Emerging Student Patterns in Coursera-style MOOCs

From Phil Hill: Emerging Student Patterns in MOOCs (March 10, 2013)
Emerging Student Patterns in MOOCs: A (Revised) Graphical View
http://mfeldstein.com/emerging-student-patterns-in-moocs-a-revised-graphical-view/

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Issue #1: Low Participation
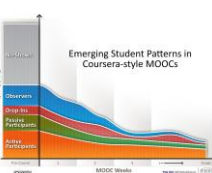
Emerging Student Patterns in Coursera-style MOOCs

Figure 1. Student activity patterns in xMOOC (Hill, 2013)
(Cited in Terry Anderson (2014, June 24, MOOCs and Distance Education Institutions.
http://terrya.edublogs.org/2013/06/24/moocs-and-distance-education-institutions/

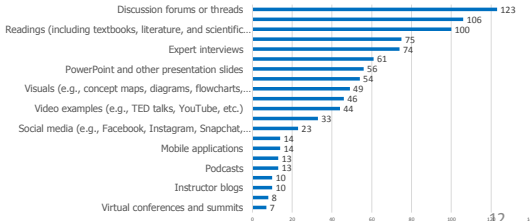10

Issue #1: Participation

Mapping Coursera's Global Footprint
Kris Olds, November 19,. 2013, Inside Higher Ed
https://www.insidehighered.com/blogs/globalhighered/mapping-courseras-global-footprint

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Findings (Zhu, Bonk, & Sari, 2017)

Learner-Content Interaction in MOOCs (out of 136)

Type	Count
Discussion forums or threads	123
Readings (including textbooks, literature, and scientific...	106
	100
Expert interviews	75
	74
PowerPoint and other presentation slides	61
	56
Visuals (e.g., concept maps, diagrams, flowcharts,...	54
	49
Video examples (e.g., TED talks, YouTube, etc.)	46
	44
Social media (e.g., Facebook, Instagram, Snapchat,...	33
	23
Mobile applications	14
	14
Podcasts	13
	13
Instructor blogs	10
	10
	8
Virtual conferences and summits	7

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Issue #2. Dropout (i.e., retention) Concerns
MOOCs @ Edinburgh 2013– Report #1
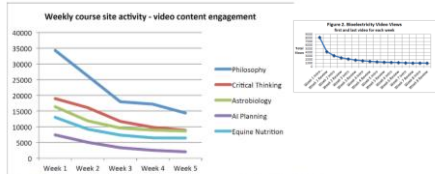
Issue #3: Cultural Diversity
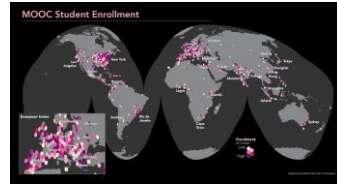
Mapping a MOOC Reveals Global Patterns in Student Engagement (CHE),
Anthony C. Robinson, January 11, 2016
https://wp.chs.harvard.edu/sunoikisis/2016/01/13/mapping-a-mooc-reveals-global-patterns-in-student-engagement-che/
http://www.chronicle.com/img/photos/biz/TotalEnrollment_hex-01.png

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Specific Focus of MOOC Research (2014-2017) (Zhu, Sari, & Lee, 2017)

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"…as the learners in MOOCs are usually allowed a lot of autonomy, there has been raised the necessity to examine the different patterns of participants in engaging in MOOCs and construct the personalized instructional strategies based on the patterns"

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Concerns and Comments #1

- Who determines the level of learner autonomy?
- How is autonomy determined here?
- Or is it just assumed?

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"…the purpose of this study is to cluster the learners' multidimensional engagement in MOOCs to provide customized treatment for each cluster.."

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"...this study was to investigate the
differences of each cluster on learning
persistence.."

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"...the participants in this study were 179
learners who took the course called *Digital
Storytelling* on K-MOOC (Korean-Massive
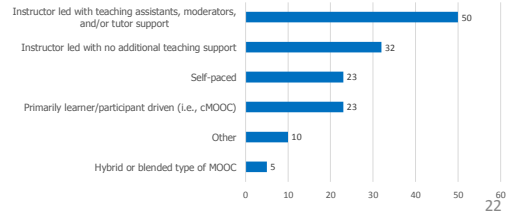Open Online Courses) in Fall 2016.."

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Concerns and Comments #2

- Is 170 learners enough for generalizations?
- What if they had taken an cMOOC? Might the
  personal interest and internal motivation change?
- Self-report data.
- Convenience sampling.
- 76.5% were female.
- Most were university students age 20-29.
- 41% had prior experience with MOOCs.

Context (Zhu, Bonk, & Sari, 2017)

MOOC Delivery Format

Instructor led with teaching assistants, moderators, and/or tutor support	50
Instructor led with no additional teaching support	32
Self-paced	23
Primarily learner/participant driven (i.e., cMOOC)	23
Other	10
Hybrid or blended type of MOOC	5

0   10   20   30   40   50   60

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- Face validity from 4 educational technology
  experts.
- Cronbach's alpha (internal consistency of
  the items is strong)

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Concerns and Comments #3

- Where is the instrument used?
- What were some of the items?

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"...this study aims to provide specific implications for instructional and learning strategies that can be utilized to facilitate learning engagement and persistence in MOOCs..."

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Cluster 1: LEADers
Cluster 2: DOers
Cluster 3: THINKers

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Concerns and Comments #4

▪ Is LEADers the right word? How about "committed achievers"?
▪ Are these the only 3 clusters? What about learning repeaters, learning socializers, learning experimenters?

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Cluster 1: LEADers pursue personal interest and internal motivation.
Cluster 2: Doers want to earn academic credit.
Cluster 3: THINKers want to supplement and further their study; they also want to prepare for exams or job interviews.

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Cluster 1: LEADers high on all areas of learning engagement.
Cluster 2: Doers watched more videos and updated their opinions; i.e., they "did" stuff.
Cluster 3: THINKers high in cognitive engagement.

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"This study conducted one-way ANOVA twice to examine the differences of each cluster on teaching presence and learning persistence..."

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Concerns and Comments #5

- How was teaching presence measured?
- How was learning persistence measured?

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"...for more effective customized feedback, there is a need to develop a prediction model for each cluster and suggest individual feedback in detail..."

What's Next?

Any Questions or Comments?

MOOCsBook: http://moocsbook.com/
Slides at: TrainingShare.com
Papers: PublicationShare.com
Free book: http://tec-variety.com/
Email: curt@worldisopen.com