A University of Glasgow Guide to MOOCs

Sarah Honeychurch & Steve Draper

What is a MOOC?

- Massive: big numbers
- Open: no fees; no HE certificates
- Online: no required face to face time
- Cohort: Finite duration, synchronised group learning





Types of MOOC

XMOOC

- Peer interaction is haphazard
- Instructivist (broadcast)
- Didactic
- Online versions of traditional courses (but bigger)
 - Video lectures
 - Recommended reading
 - MCQs
 - Discussion forums
 - Peer assessed assignments
 - Badges/statement of achievement (free/paid)

CMOOC

- Peer interaction is fundamental
- Connectivist
- Collaborative learning
- Social networking
- Facebook/G+
- Twitter
- Blogs
- "The community is the curriculum"
 - → syllabus decided by learners not the teacher

MOOC like entities

MOOCs are multiple: we can no longer define them either as a single 'transformative' entity or clearly position them in terms of the previously dominant cMOOC/xMOOC binary. Bayne and Ross 2014 http://tinyurl.com/q47krzm

- SPOC: Small Private Online Course: http://www.bbc.co.uk/news/business-24166247
- COOC: Community Open Online Course http://coocs.co.uk/
- DOCC: Distributed Open Collaborative Course http://femtechnet.newschool.edu/docc2013/
- Headless courses: http://ds106.us/
- ZombieMOOC: https://p2pu.org/en/courses/882/content/2987/
- And lots more ...

Demographics

- Maximum educational qualification of MOOC students:
- 40% a postgraduate degree
- 30% an undergraduate degree.
- 16% college or additional training qualifications,
- Less than 13% are only educated to school level. http://hdl.handle.net/1842/6683
- Many participants have already done other MOOCS
- Many participants are simultaneously participating in multiple other MOOCs

Why do a MOOC

Learner

- Lifelong learning.
- Addicted to learning.
- Brush up on subject knowledge.
- Want to find out if a subject is right before enrolling in formal education.
- Find out if there are any useful hints for one's own teaching.
- Find out what MOOCs are like.
- Getting a certificate.
- Career enhancement/CPD.
- No local resources.

Teacher

- Potential to connect with a huge audience of enthusiastic learners.
- Potential to connect with other subject specialists.
- Commitment to widening access and widening participation.
- Potential for alpha or beta testing: finding out what really works so one can implement it in one's own classes.
- Cram all of one's teaching into one short, intensive burst to free up time for other more interesting work.

Institution

- Build a reputation for innovation, originality, great showcase teaching: marketing (advertising and recruitment).
- Commitment to widening access and widening participation (outreach).
- What can be learnt about teaching in HE? (Lessons that can be applied elsewhere).
- Get experience of online teaching and prepare materials.
- Chance to collaborate with partner institutions (potential for huge grants!).
- Possibility of monetisation.
- Not being left out.

What should we think about MOOCs?

Knee jerk reactions

- Dawn of a golden age
- Free Life Long Learning
- We're all going to lose our jobs

Other reactions

- Valuable prompt for rethinking L&T
- Research opportunities
- Prompt for considering paid online courses

"Attrition" rates

Completion means something different in a MOOC

The average completion rate of xMOOCs is 7.6%, with a minimum of 0.67% and a maximum of 19.2%. The 19.2% appears to be an outlier from Ecole Polytechnique Fédérale de Lausanne, although it may be worth figuring out how they got their rate so high.http://halfanhour.blogspot.co.uk/2014/03/like-reading-newspaper.html

What should we be comparing: registering = browsing a course brochure?

Is completion relevant?

- nobody says the restaurant has failed if a person doesn't eat all the foods in a buffet
- nobody says a map has failed if a person doesn't look at or reference every street name in the gazetteer
- nobody says that a hockey or football game is a failure if you didn't watch every play
 from every player beginning to end
- nobody says a grocery store is a failure because a person doesn't complete the food selection available
- nobody says a television channel is a failure if people don't watch the entire run of programming from sign-on to the national anthem
- nobody says a Lego set is a failure if a person does not build every model in the guidebook

http://halfanhour.blogspot.co.uk/2014/03/like-reading-newspaper.html

Challenges (that can't be swept under the carpet any more!)

MOOCs dodge 2 challenges, raise too more.

Traditional teaching tends to sweep all 4 under the carpet, but online teaching must face all of them.

- Peer interaction: hope for the best!
- Scaling assessment: MOOCs ignore this.
- Range of abilities/engagement: see below
- The business model: there isn't one for MOOCs!

Interesting questions

- The quality of the learning experience will be mainly dependent upon the quality of the peer interaction because with one teacher for thousands of learners, personal interaction with the teacher must be negligible. So if a course is to be different from just buying a book, or a DVD set, then it must have interaction. (But how is this different from large lectures?)
- 2. What are the learner experiences so far? The main message is: some are absolutely terrible, some are really good. The same informant typically has had experiences of both kinds.

- 3. There is a gigantic range of degree of "engagement" amongst the learners on a given MOOC. 3a) Engagement as in effort and so time spent on learning. 3b) Pre-requisite knowledge.
 - This is the same issue as actually exists in GU's level 1 courses but <u>much</u> bigger. The Harvard SPOC is one way of addressing this: requiring no fees but to write an acceptable essay as an entrance requirement (measures commitment of effort perhaps more importantly than capability: no tourists).
- 4. We might argue that the real mega-MOOCs are a) Video Games; b) Wikipedia. These are pre-existing, socially important, enterprises which involve even more participants than any MOOC to date, with a large collaborative element, and which at bottom are all about learning.
- 5. MOOCs as a research stimulus:
- a) How would your recommended course design do if it had 5,000 students?
- b) Do your students ever discuss conceptual matters with peers? What are you doing about this?
- c) If you had an hour or a week to teach the most important stuff you know to students, what would it be?Why aren't you doing this now?
- d) Learners learn most from doing tests (Karpicke & Roediger). How are you going to scale up "assessment" without expanding staff costs?
- e) [CPD] We do a good job on many students in getting them addicted to academic knowledge. How are we going to feed this created need after they graduate? (Part of the clamour for Open Access to research papers is driven by this: and so is almost all the demand for MOOCs.)

References

Honeychurch, S. & Draper, S. (2013) *A First Briefing on MOOCS* http://www.psy.gla.ac.uk/~steve/localed/docs/moocReport1.pdf

Other papers on MOOCs (written since our paper)

Bain, S. & Ross, J. (2014) *The pedagogy of the MassiveOpen Online Course: the UK view* http://www.heacademy.ac.uk/assets/documents/elt/HEA_Edinburgh_MOOC_WEB_240314 .pdf

Blogs

Dave Cormier: http://davecormier.com/ Stephen Downes: http://www.downes.ca/

Martin Weller: http://nogoodreason.typepad.co.uk/

Other papers

Karpicke & Roediger