

Personalizing the MOOC: Insights from Experts Around Planet Earth

Curtis J. Bonk, Indiana University

cjbonk@indiana.edu

Thomas C. Reeves, The University of Georgia

treeves@uga.edu

Wisconsin DTL Conference, Madison, WI
August 10, 2016



Part I. Current Trends and Recent Cycles



Audience Poll #1: Who in here has taken a MOOC?



Audience Poll #2: Who has designed or taught a MOOC?



July 27, 2016 Class Central

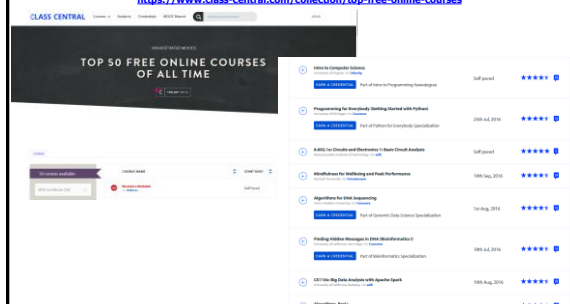
<https://www.class-central.com/collection/top-free-online-courses>

- Now there are close to 6,000 MOOCs from 600+ universities around the world. This can be daunting to the millions of learners around the world who have never done an online course before.
- That's why we came up with a list of *Top 50 MOOCs of All Time* based on thousands of reviews written by Class Central users.



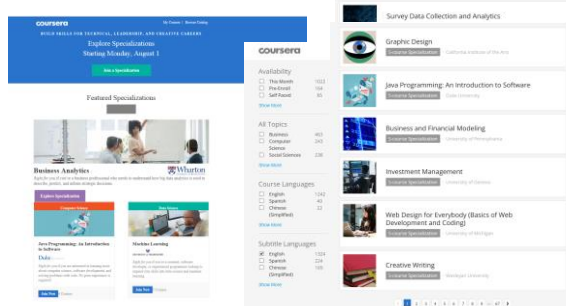
July 27, 2016 Class Central (Top 50 Free)

<https://www.class-central.com/collection/top-free-online-courses>



July 28, 2016

Coursera Specializations email
Starting Monday August 1st: 9 Top Specializations



July 21, 2016

The Scope of edX

Joshua Kim, Inside Higher Ed

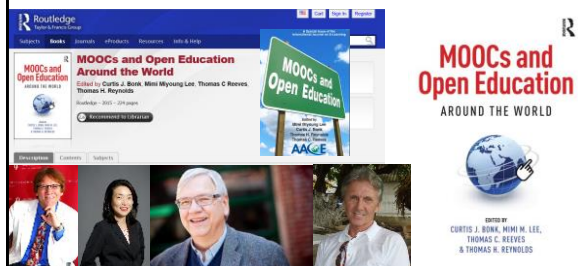
<https://www.insidehighered.com/digital-learning/article/2016/07/21/edx-scope>

Here are some edX numbers that blew us away:

- 8.3 million (unique) learners on the edX platform.
- Between 2012, when edX started, and today - there have been 27 million course enrollments.
- Over 1,000 courses have been offered.
- Over 2,300 faculty and staff have taught on edX.
- Over 840,000 certificates earned by edX learners.
- EdX has over 100 schools, institutes and organizations in the Consortium creating open online courses.

Part II.
MOOCs and Open Education
Around the World

<http://routledge-ny.com/books/details/9781138807419/>



Chapter 1: The MOOC Misstep and the Open Education Infrastructure

David Wiley, Co-founder and Chief Academic Officer, Lumen Learning

The Open Education Infrastructure

1. Open Credentials
2. Open Assessments
3. Open Educational Resources
4. Open Competencies



Chapter 13: Unbundling Higher Education and the Georgia Tech Online MS in Computer Science: A Chronicle
Richard DeMillo



Chapter 16: Collaborative Design and Development of MOOCs for Teacher PD
Bernard Robin and Sara McNeil, Univ. of Houston



COE Faculty Develop Massive Open Online Courses on Technology Tools for Teachers

Dr. Bernard Robin and Dr. Sara McNeil, professors in the Learning, Design and Technology Program in the College of Education have received a grant from the Office of Education, Innovation and Technology to design, develop and deliver an MOOC (Massive Open Online Course) that explores innovative technology tools that K-12 teachers can use in their classrooms to support active student learning. Each MOOC will be for one week long and will be delivered through Coursera.

The University of Houston System recently launched its first three MOOCs on Coursera, offering unlimited participation and open access free of charge.

Usually MOOCs are created by teams of faculty, instructional designers and technologists, but the Learning, Design and Technology program MOOCs are being designed and developed by a team of UH College of Education graduate students who are working with Dr. Robin and Dr. McNeil to create the first two MOOCs. These MOOCs are going through final development in summer 2014 and are set to be delivered in Coursera in the fall of 2014.

One MOOC focuses on the educational use of digital storytelling and is currently accepting enrollment (<https://www.coursera.org/course/digitalstorytelling>) and the other MOOC deals with the use of emerging technologies for instructional purposes and will be available in the fall. Both

Chapter 19: Harnessing the Power of Open Learning to Share Global Prosperity and Eradicate Poverty

Sheila Jagannathan, World Bank, Washington DC
MOOCs on Climate Change (e.g., impacts of climate change on farmland) and Risk and Opportunity (reducing the risk of childhood mortality)



Part III. Ideas for Cultural Sensitivity



Chapter 2: USA/Georgia Tech: Karen Head

- Be careful with: hand gestures (e.g., finger pointing—use at least two fingers), body movements, English dominance, political issues.
- Jokes and humor can easily be misinterpreted.
- Be aware of shifting political climates impacting resource access such as YouTube in China.
- Many cultures do not have a linear approach (e.g., from A to B) to communication.
- Using visual rhetoric (e.g., visual images) to communicate can be a minefield of problems.



Chapter 3: Japan/The Open U Kumiko Aiko

- Make subtitles available in multiple languages based on intended audiences.
- Avoid references to current events that may only be shared by a small subgroup.



Chapter 5: Australia Carina Bossu

To ensure inclusiveness (including cultural, ethical, and religious), one should openly license all educational materials developed for MOOCs, so as to guarantee the permissions and freedoms required for translation, adaptation, re-use, redistribution, and repackaging.



Chap. 6: South Africa Laura Czerniewicz

- The single most important requirement is that MOOCs and MOOC resources be made available under Creative Commons licenses or other open licenses which allow for re-use and adaptation. It is essential a broadcast model be employed.
- The agency for and ownership of local resources needs to be in the hands of those who best understand local conditions, and therefore they need to be able to create and adapt as they see fit.



Chapter 8: New Zealand and Ireland

Mark Brown

- Create MOOCs on indigenous cultures and unique languages other than English (e.g., Irish).



Chapter 9: Scotland U of Edinburgh

Amy Woodgate

- Intermittent Internet access on one's mobile phone will not help to stream HD videos.
- Simple course designs (e.g., talking heads with minimal hand gestures) helps to make content more available for international audiences. More engaging content is more difficult to convert.



Mobile MOOCs (e.g., mobile courses on smartphone)



Chapter 11: India and Canada/COL

Sanjaya Mishra

- Be culturally sensitive to music and pictures while designing content for global audience.
- Consider technology used to develop the content (does it assist reuse and remixing?).
- Instead of focusing too much on the cultural sensitivity of MOOCs and raising costs, try to allow for reuse and remixing of content. Use open source technologies and content.



Chapter 12: Netherlands/Open U

Fred Mulder and Darco Jansen

To be mindful of:

- Different levels of digital literacy skills
- Local resources by locals
- Legal differences and barriers
- Gender, age, and disability issues
- Device-specific pedagogy and interface



Chapter 14: USA/Stanford

Paul Kim and Charlie Chung



- Encourage students to download lecture videos and translate them to other languages and perhaps add captions and make available in their local cloud services.
- Encourage students to create low bandwidth versions of videos for those in low bandwidth areas.
- Encourage students to translate videos and add nuances and words understandable in local languages.
- Encourage students to meet locally in teams to share materials and take care of "sensitive matters."



Chapter 15: USA/U Michigan

Chuck Severance



- Avoid troublesome metaphors and examples (e.g., the baseball World Series in the USA).
- Never show lecturer's face (use audio only)—allows for complete overdubbing in the native language and avoid hand gesture problems.
- Make slides as word free as possible—where possible use symbols
- "Limit" to audio and "No" video OR keep the video "simple"



Chapter 19: DC/World Bank Institute

Sheila Jagannathan

- "Widen" and "increase" representations from more diverse groups and stakeholders (gender, non western, public and private, grass roots, etc.).
- Make the contents more culturally sensitive/relevant.



Chapter 20 Indonesia and Malaysia

Zoraini Wati Abas

- Do not expect Asian audience to quickly voice their opinions
- Treat Asian audience as an equal
- Avoid issues related to religion and politics.
- Minimize distractions and negative feelings (e.g., do not show visuals or give examples of prohibited types of foods or animals)



Chapter 21: U of Philippines Open U

Melinda Bandalaria

- Strictly avoid references to religion.
- Use acceptable dress code.
- Even when English is the primary or secondary language of the country, consider making MOOC content available in the major dialects of the country.



Chapter 27: Canada

Helene Fournier and Rita Hop



- "Personalize" the learning experience to offset the massiveness.
- Need to think hard about how cultural differences might be expressed and accepted in the MOOC platform.
- The road ahead hinges on personalizing learning experiences; the connectivist approach (i.e., cMOOCs) is which participants are in the driver's seat.



Chapter 28: UK/FutureLearn

Rebecca Ferguson and Mike Sharples



- Access. In many countries (e.g., in Africa, but also areas of Asia) mobile is the main means of access, so the courses need to be developed for a mobile-first experience, including pedagogy as well as interface.
- Provide transcripts of videos, preferably in multiple languages and multi-language subtitles.

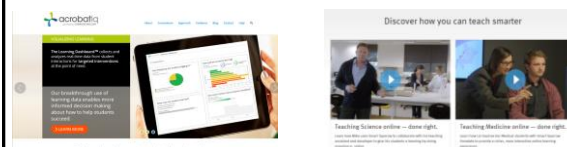


Part IV. Personalization of MOOCs



Foreword: Canada/USA George Siemens

- MOOCs are adopting CMUs OLI project (adaptive learning in stats) (e.g., Candace Thille at Stanford).
- Smart Sparrow (adaptive learning company connected to ASU) has started running personalization in MOOCs. One personalized/adaptive MOOC with Australian univ.



Chapter 18: Canada/COL Balaji Venkataraman

- In the Mook on mobiles for development the course team received requests from two groups of learners in Sierra Leone and Zambia for the course materials on DVD.
- AgMoocs initiative (<http://www.agmoocs.in/>) uses MookIT platform designed for access in low bandwidth conditions. It includes a functionality for a learner to hear the voice track on a basic mobile phone.

May 20, 2016 agMOOCs (India)

<http://www.agmoocs.in/>



May 20, 2016 agMOOCs (India)

<http://www.agmoocs.in/>
<https://www.facebook.com/ccapatanzania/posts/1540201329627397>



September 15, 2015 GROOCs are MOOCs for Social Impact

Social Learning for Social Impact, edX

Join the world's first GROOC – a MOOC for groups – to collaborate with others globally and create social change.

<https://www.edx.org/course/social-learning-social-impact-mcquilln-groocx>
<https://www.youtube.com/watch?v=368k-v-WNc-SJFAMdI>





Chapter 18: Canada/COL Balaji Venkataraman

In the Pacific COL supported the U of South Pacific with a specially constructed MOOKIT platform. Social media was integrated with it. Any interested learner can add his or her SM profile to the profile in the course. This will enable a learner to follow the discussions on the course forum in real time using just the smart phone. This bandwidth is cheaper in most Pacific island countries than bandwidth available for laptops. This facility greatly contributed to increased course participation often overwhelming the team of instructors.

May 19, 2016 Facebook Schools MOOCs on Engagement

Jason Schmitt, EdSurge

<https://www.edsurge.com/news/2016-05-19-facebook-schools-moocs-on-engagement>



Chapter 18: DOCC/USA Radhika Gajjala

Doing a "Collaborative" course requires that we engage the context - not just talk to it.... We start by dialogue and engagement with the students - the sensitivity would emerge through interaction and skype conversations and discussion and debate.



Chapter 19: DC/World Bank Institute Sheila Jagannathan

- We try to do badging etc. to give motivation and personal incentives such as champion or expert.
- We try to customize the discussion forums with regional and very level forums, topics and moderators.
- Google hangouts are also used to customize and personalize at country or institutional levels.



Chapter 21: Philippines Open U Melinda Bandalaria

- ...one feature that we have integrated into our MOOCs which I think is one effort to personalize learning is the "**Multiple Paths to Learning**" or the "Learning on the Go." Through this feature, the learner can choose whether to learn through the video lessons, text lessons or podcast.
- In terms of gadgets to use, of course, we made sure that the courses are accessible whatever device especially mobile devices, the learner has access to.



Chapter 25: USA/Illinois Vickie Cook

- Personal notes within the MOOC from either other students or the instructor that the MOOC takes on a personalized emphasis...communications that do not use my name, or are generic to be reused—feel quite cold and impersonal.
- Theory of "heutagogy" – basically learning that is self-determined and available in a mobile interface, I think it is important that personalization also create the desire to return to the MOOC for more.



Chapter 25: USA/Illinois Ray Schroeder

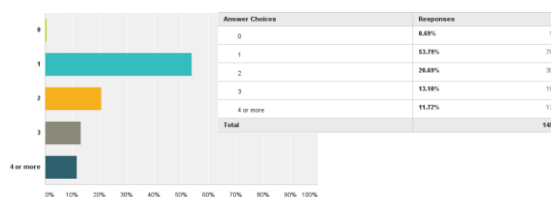
- Most obvious way to personalize is to include group projects, allowing students to self-select into interest areas to conduct collaborative projects that are relevant to the MOOC topic
- One of the easiest and most effective ways is to build self-reflection into each module of a MOOC.
- Motivated self-determined learners (such as many MOOCers are) do naturally adapt, build upon and scaffold MOOCs to meet their personal learning needs and desires.

Part V. MOOC Personalization Survey Results



Q2: 1. How many MOOCs have you taught (including any that you are currently teaching)?

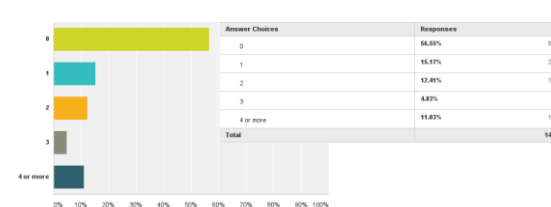
Answered: 145 Skipped: 10



Powered by SurveyMonkey

Q4: 3. How many MOOCs have you completed as a learner (including any that you are currently enrolled in)?

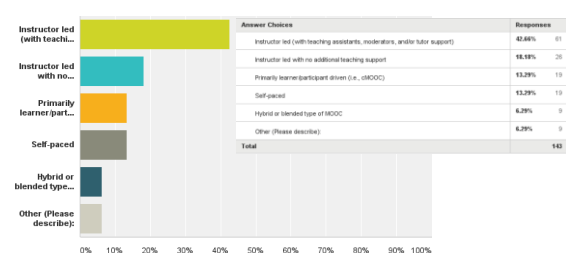
Answered: 145 Skipped: 10



Powered by SurveyMonkey

Q8: 7. What is the delivery format of your most recent MOOC?

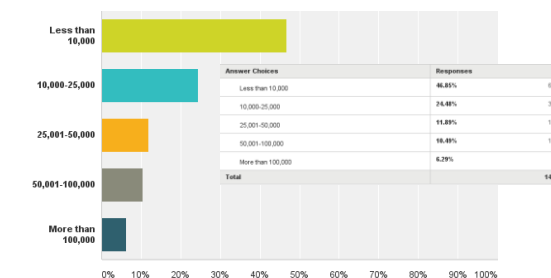
Answered: 143 Skipped: 12



Powered by SurveyMonkey

Q9: 8. How many people signed up for your most recent MOOC?

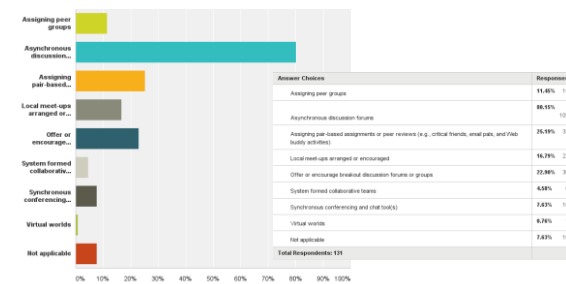
Answered: 143 Skipped: 12



Powered by SurveyMonkey

Q17: 16. In what ways is peer interaction encouraged in your MOOC? [Check all that apply]

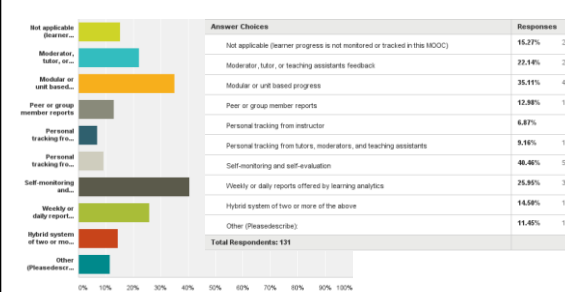
Answered: 131 Skipped: 24



Powered by SurveyMonkey

Q20: 19. How is student progress/participation monitored or tracked? [Check all that apply]

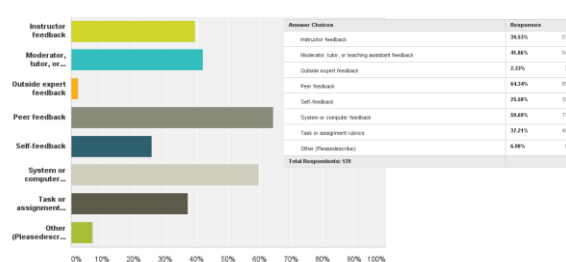
Answered: 131 Skipped: 24



Powered by SurveyMonkey

Q21: 20. In what ways do students get feedback in the course? [Check all that apply]

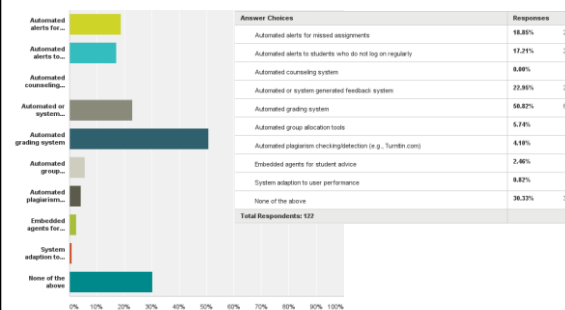
Answered: 129 Skipped: 26



Powered by SurveyMonkey

Q22: 21. Does your most recent (or current) MOOC utilize any of the following? [Check all that apply]

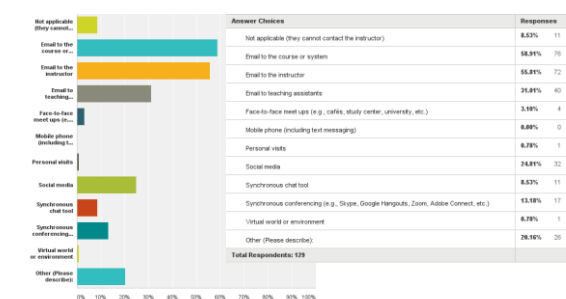
Answered: 122 Skipped: 33



Powered by SurveyMonkey

Q23: 22. How do participants in your MOOC contact you if they have questions, concerns, or suggestions? [Check all that apply]

Answered: 129 Skipped: 26



Powered by SurveyMonkey

Open-ended question 1: Can you provide one or more ways that you attempt to personalize the MOOC experience for those enrolled in the course?

Answered: 36 Skipped: 119

Mainly, we ran moderated peer discussion through Piazza. Students, teachers, and the moderator commented on student contributions.

To give more different case studies and examples, considering different backgrounds and interests. To have high order and low order assessments, considering the personal interest for deepening into content.

I adjust some of the content based on early discussion in the course to better meet the needs of the recruited cohort. Some of the material was co-created and labelled geographically.



Replying personally to asynchronous discussion messages to explain or reference materials to students as well as to refer to peers. Retweeting and commenting on learners social media posts.

Its all about expectations and communication. From the first day of 'launching' we have moderators & academics assigned to welcome and encourage learners to ask questions and post comments for peer-to-peer feedback, etc. We also list specific times when different academics and experts will be online (various times/dates due to international reach) to have 1-2-1 and group discussions where applicable.

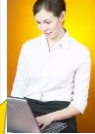
Powered by SurveyMonkey

Open-ended question 2: How do you use learning technology such as computer conferencing (e.g., Skype, Zoom, Google Hangouts, etc.) to personalize your MOOC?

Answered: 37 Skipped: 118

I held virtual office hours during each of the three offerings of my course. In several had teaching associates join in. In the last offering, I used the first part of the meet-up to share current nutrition related news and studies to help keep the course more up to date (we also posted news and studies). One challenge of the course is keeping content current in subsequent offerings without reshooting videos or redoing all the PowerPoint slides. Used announcements, resources and the meetups to provide updates.

Slack for group projects



Online office hours were available through Appointlet. Had an online whiteboard to share with students' during scheduled office hours. Used Skype or Google Hangouts to video conference during online office hours.

We didn't but I am working on another distance learning course now that is closed using Skype, Zoom and Webex. They are all good in different ways. The participants in the closed course have bonded much more as a cohort than any of the groups in the MOOC.

Google Hangouts are excellent - but they don't work in China. We also use WarpWire to allow student video presentations in private environment.

Powered by SurveyMonkey

Open-ended question 3: How did you design your MOOC to make it easier to access for students with different backgrounds and technology access?

Answered: 34 Skipped: 121

Follow UK accessibility compliance guidelines. Main course material pitched at entry level but more complex further reading provided to allow students to 'go deeper' as well as range of case study content to facilitate more in-depth analysis.

Our content covered examples from different political and religious contexts, across Europe, the Americas, the Middle East and Asia, designed in turn to encourage students from diverse backgrounds to share their own political experience.



Worked closely with university expert. Consulted with language dept. Talked with and piloted with our international students and friends from Jordan, China, Greece and Turkey.

There was scripts for everything ... videos mainly. There was also downloadable documents produced in different formats to make it easier depending on the technology they had available. The content was 'beginner' level so I think we naturally slowed down and covered the basics in a lot of detail - as well as providing links and documents with more information as different points.

Powered by SurveyMonkey

Open-ended question 4: In what ways, do you or your teaching assistants and moderators provide just in time support, feedback, and individualized learner attention?

Answered: 37 Skipped: 118

We had all of our academics who developed the MOOC...assigned a different section to deliver and then moderate. So during the few days before/after the 'official launch' of our sections, we were online at various times to provide comments and feedback. We also gave learners specific dates/times that we would be online to discuss synchronously and answer questions, etc. We had resident entrepreneurs and business experts who were asked to be online over certain dates/times to provide the 'practical' view. Finally, we also have a central 'digital learning team' who support all University MOOCs.

Tremendous amount of work here. We continuously monitor student performance and find where students are struggling. We then respond to struggle areas with forum posts and weekly updates.



Tremendous amount of work here. We continuously monitor student performance and find where students are struggling. We then respond to struggle areas with forum posts and weekly updates.

Constant, constant, constant attention to discussion forums.

Our computer technician checked every day for posts from students who were having technical problems and helped to correct them.

Powered by SurveyMonkey

Open-ended question 5: If you were to redesign the course for enhanced personalization within your most recent MOOC offering, what would you do?

Answered: 37 Skipped: 118

Introduce Google Hangouts. Develop alternative pathways for content. Allow students more space to share own competencies and knowledge levels (perhaps wikis etc.).

I would probably include one or two more items from non-western cultures and find an opportunity for students to share work in a different way.

I would hire some of our students and alumni to get involved - the students really loved the additional points-of-view and the interaction.



I would encourage study groups with 'pupil teacher' techniques... champions in the 'crowd' leading smaller groups who are struggling or who would like more social and tutor presence.

I would review the latest cognitive science evidence on how best to achieve this important goal and redesign the course and its production accordingly.

Change the videos - make them shorter and less formal. Give better instructions on use of discussion boards.

Powered by SurveyMonkey

Personalized MOOCs



Any Comments or Questions?

Slides at: TrainingShare.com
MOOCsBook: <http://moocsbook.com/>

Contact us:

Curt: cjbok@indiana.edu

Tom: treeves@uga.edu

