

Instructor Efforts to Address Cultural Diversity in MOOC Design and Application

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Concerns Regarding the Emergence of MOOC

- Learners are heterogenous (Watson, Ho, & Raman, 1994)
- Misunderstanding might occur due to language barrier & communication style (Callaway, Matthew, & Felvegi, 2014)
- Different cultures have different communication pattern (Hofstede, 1986; McLouglin, 2006)

Concerns Regarding the Emergence of MOOC

- Different learning preferences & styles may vary in different cultures (Fail, 2011; Hofstede, 1983, 1986; Kim & Bonk, 2002)
- Thus, it is important to consider cultural diversity in designing MOOC (Ahn, Yoon, & Cha, 2015; Speece, 2012)

The definition of Culture

- Beliefs, value, norms, mores, myths, and structural elements that represent on how a group interprets/reacts to its surrounding (Watson, Ho, & Raman, 1994)
- Collective programming of the mind that explain the complexities of culture that include attitude, goals, symbols, practices, & values (Hofstede & Hofstede, 2005)

The Need to Understand Culture

- Culture affect people's communication (Ford & Kotze, 2005; Hall, 1976)
- Technologies are not culturally neutral (Qayyum, 2016)
- There are various ways to address cultural issues, e.g., use a common language like English but encourage subtitling and transcripts, be considerate when using symbols, provide use easy-to-digest examples, understand time differences among participants, engage in role modeling, and build cultural awareness and sensitivity among the learners of the course (Wendler et al, 2002; Yousef et al, 2014)

Why Instructors?

- Instructors are one of the five primary elements (instructors, learners, topic, materials, and context) in MOOCs (Kop, 2011)
- Few studies leverage instructor perspectives to better understand such personalization and cultural sensitivity (Veletsianos & Shepherson, 2016)

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 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.





Chapter 11: India and Canada/COL Sanjaya Mishra

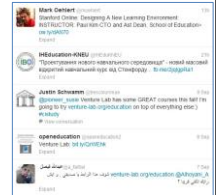
- Be culturally sensitive to music and pictures while designing content for global audience.
- Consider technology used to develop the content (does it assist reuse and remixing?).
- Instead of focusing too much on the cultural sensitivity of MOOCs and raising costs, try to allow for reuse and remixing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



Chapter 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 15: Learning about MOOCs by Talking to Students

Charles Severance, University of Michigan
Chuck Severance, U Michigan/Coursera) in Barcelona
<http://www.youtube.com/watch?v=JzNHvMsv8TI>
Chuck Severance, University of Michigan
<https://www.coursera.org/course/pythonlearn>



Chapter 18: Changing the Tune: MOOCs for Human Development? A Case Study Balaji Venkatataraman and Asha Kanwar, COL



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.
- There are deep-seated cultural differences related to: the value of expert vs learner-originated knowledge; deference to experts; willingness to engage in discussion and critique.

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.
- Carolyn Rose at CMU recently ran a “Super Heroes” MOOC together with Smithsonian that used personalization approaches through “intelligent agents” to foster dialogue and collaboration.



Chapter 18: Canada/COL Balaji Venkataraman

- In the Mooc 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/>



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.



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.



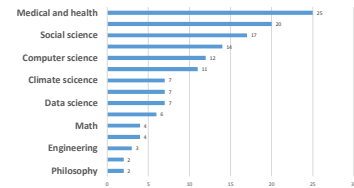
Chapter 25: USA/Illinois Ray Schroeder

- 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.

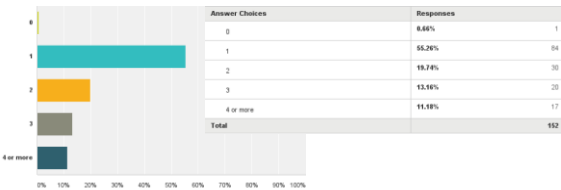
MOOC Personalization Survey Results



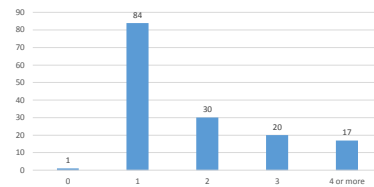
What is the MOOC you are offering?



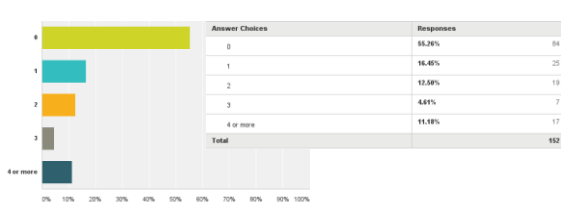
1. How many MOOCs have you taught? (N = 152)



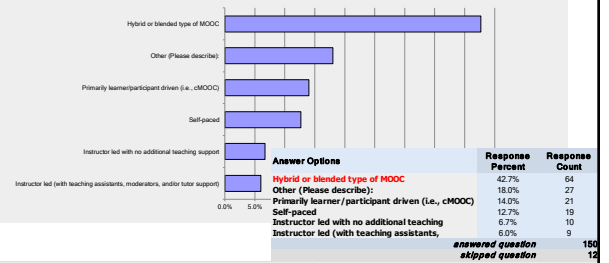
How many MOOCs have you taught (including any that you are currently teaching)?

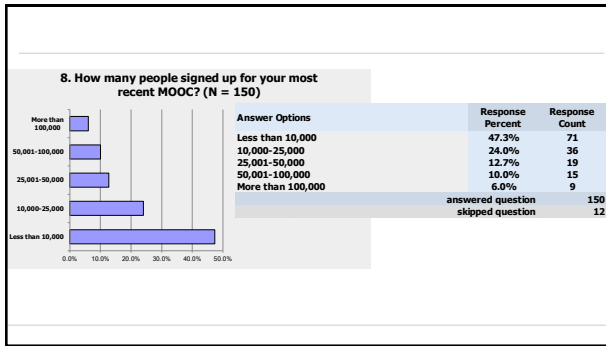


3. How many MOOCs have you completed as a learner (N = 152)



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



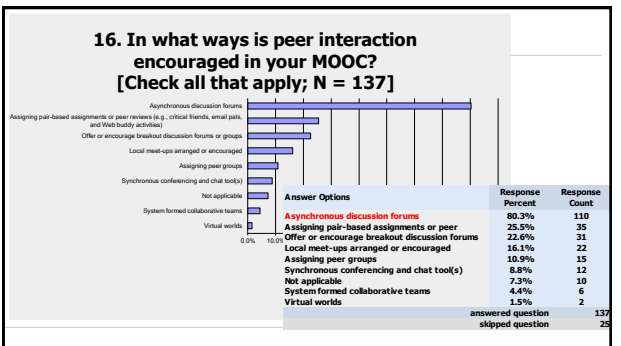


13. How do you address students' varying competencies and needs?[Check all that apply]

Answer Options	Response Percent	Response Count
Establish learner-based discussion forums	81.0%	115
Embed supplementary course materials (e.g., readings, Post timely course announcements and emails	78.2%	111
Record video tutorials or walkthroughs (e.g., Screencasts, YouTube	63.4%	90
Emphasize project-based learning over exams	40.8%	58
Using preexisting online videos (e.g., Lynda.com, TED talks, YouTube,	34.5%	49
Other (Please describe):	32.4%	46
Hold synchronous lectures, meetings, and events (e.g., Skype, Google	25.1%	37
Establish study groups	23.9%	34
Establish learner reflection journals or blogs	19.0%	27
Schedule virtual office hours and meetings	16.2%	23
Offer face-to-face meet-up opportunities	14.1%	20
answered question		142
skipped question		20

14. What types of learning resources can participants select from in your most recent MOOC?[Check all that apply]

Answer Options	Response Percent	Response Count
Discussion forums or threads	91.5%	130
Video lectures and tutorials	76.8%	109
Readings (including textbooks, literature, scientific & tech reports)	76.1%	108
Practice quizzes and exams	57.7%	82
Interactive assessments	50.7%	72
Expert interviews	50.0%	71
PowerPoint and other presentation slides	47.0%	68
Instructor lecture notes	44.4%	63
Animations and other types of animated or interactive contents	43.0%	61
Visuals (e.g., concept maps, diagrams, flowcharts, timelines, etc.)	42.3%	60
Video examples (e.g., TED talks, YouTube, etc.)	39.4%	56
Social media (e.g., Facebook, Instagram, Snapchat, Twitter, Pinterest, etc.)	28.9%	41
Popular media (e.g., news stories and videos)	28.2%	40
Wiki-style documents	18.3%	26
Podcasts	15.5%	22
Instructor blogs	14.8%	21
Simulations and games	14.1%	20
Jobs aids and study guides	12.0%	17
Mobile applications	12.0%	17
Learner blogs	9.9%	14
Other (fill in the blank - optional)	9.9%	14
Virtual conferences and summits	4.9%	7
answered question		142
skipped question		20



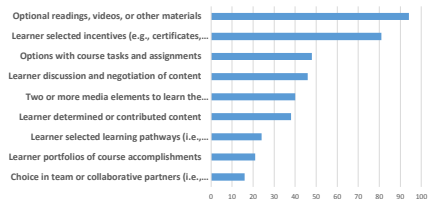
17. How did you design your course to be suitable for students from different cultures and/or linguistic backgrounds?[Check all that apply]

Answer Options	Response Percent	Response Count
Offer transcripts of video or audio content	66.2%	88
Add subtitles to video content	63.9%	85
Be careful with language use and hand gestures	51.9%	69
Simplify the language used	42.1%	56
Slow the pace of speech	36.8%	49
Simplify the course content and navigation	27.1%	36
Limit text by relying more on pictures	19.5%	26
Encourage participants to translate and localize content	18.0%	24
Other (Please describe):	15.8%	21
Translate the content to different languages	11.3%	15
answered question		133
skipped question		29

18. Does the structure of your most recent or current MOOC provide any of the following? [Check all that apply; N = 126]

Answer Options	Response Percent	Response Count
Optional readings, videos, or other materials	74.6%	94
Learner selected incentives (e.g., certificates, badges, course credit, etc.,	64.3%	81
Options with course tasks and assignments	38.1%	48
Learner discussion and negotiation of content	36.5%	46
Two or more media elements to learn the same content	31.7%	40
Learner determined or contributed content	30.2%	38
Learner selected learning pathways (i.e., different routes to learn the	19.0%	24
Learner portfolios of course accomplishments	16.7%	21
Choice in team or collaborative partners (i.e., self-formed teams)	12.7%	16
answered question		126
skipped question		36

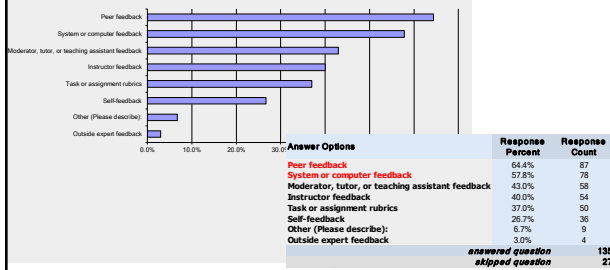
Does the structure of your most recent or current MOOC provide any of the following?



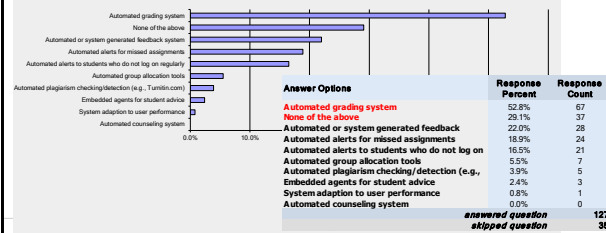
19. How is student progress/participation monitored or tracked? [Check all that apply; N = 137]

Answer Options	Response Percent	Response Count
Self-monitoring and self-evaluation	42.3%	58
Modular or unit based progress	34.3%	47
Weekly or daily reports offered by learning analytics	24.8%	34
Moderator, tutor, or teaching assistants feedback	23.4%	32
Not applicable (learner progress is not monitored or tracked in this MOOC)	14.6%	20
Hybrid system of two or more of the above	13.9%	19
Peer or group member reports	13.1%	18
Other (Please describe):	11.7%	16
Personal tracking from tutors, moderators, and teaching assistants	9.5%	13
Personal tracking from instructor	7.3%	10
answered question		137
skipped question		25

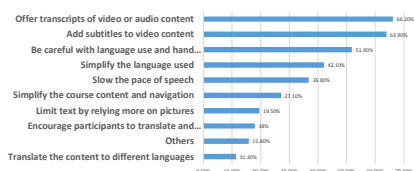
20. In what ways do students get feedback in the course? [Check all that apply; N = 135]



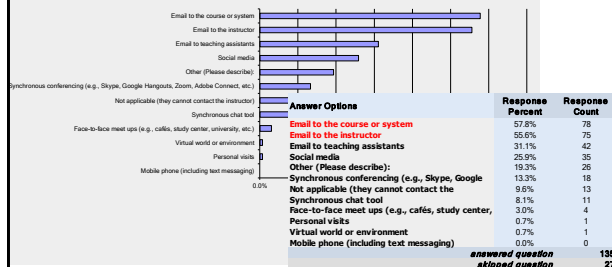
21. Does your most recent (or current) MOOC utilize any of the following? [Check all that apply; N = 127]



How did you design your course to be suitable for students from different cultures and/or linguistic backgrounds?



22. How do participants in your MOOC contact you if they have questions, concerns, or suggestions? [Check all that apply; N = 135]



On a scale of 1 (low) to 10 (high), how much effort was placed on addressing the needs of individuals from different cultural backgrounds and languages in your most recent MOOC?

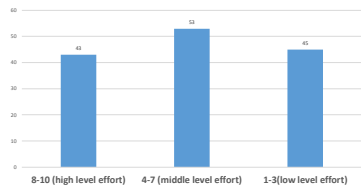


Table 2: Approaches employed by MOOC instructors to enhance access for learners with different backgrounds and technology access.

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Category	Subcategory	Count
Materials presentation	All videos and documents had captions and transcripts.	32
	Provide pdf and text version of materials.	2
	Provide any needed visual aids.	2
Captioning	Closed captions for all video and audio.	2
	Provide any needed audio.	1
Technical assistance	Offering support in technical matters.	8
	Creating content that is accessible for various devices.	2
	Keep content accessible in case of device dropping and providing the content.	2
Content	Materials are designed to accommodate different learning styles.	2
	Have content easy and clear to use before the meeting.	2
	Offering content in multiple languages.	1
Language	Use multiple languages in the content.	2
	The content is kept in a non-urgent form.	2
	Use multiple versions of the content.	1
Course structure	The content work is open, allowing one to choose to work at their own pace.	1
	Provide the background and the expectation of the content.	2
	Do not assume on language or grammar when communicating.	2
Feedback	Use multiple languages in the content.	2
	Work with various experts to develop a more international office.	2
	Use with international students.	1

How MOOC instructors design their courses with the consideration of students' background and technology access (Top 4 ways):

1. Providing captions and transcripts to all videos and screencasted materials
2. Offering supplemental or optional materials
3. Making sure that all materials can be viewed on various devices, including computer, tablet, or smartphone
4. Keeping the materials at the level of a non-expert

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.

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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.

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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.

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WHAT'S NEXT

October 23, 2016
Ben Gose, The Chronicle of Higher Education
<http://www.chronicle.com/article/When-the-Teaching-Assistant-is-a-Robot/238114>

When the Teaching Assistant is a Robot



By Ben Gose | OCTOBER 23, 2016 #robot

August 31, 2016
Samsung ticks forward with new Gear S3 smartwatch
 Edward C. Baig and Eli Blumenthal, USA TODAY

<http://www.usatoday.com/story/tech/2016/08/31/samsung-ticks-forward-new-gear-s3-smartwatches/89644266/>



Samsung Pay on the Gear S3. (Photo: Eli Blumenthal, USA TODAY)

Samsung is hoping to have 10,000 apps by the time the Gear S3 launches this fall.

September 2, 2016
Humans, the Latest MOOC Feature
[Introduction to Philosophy: God, Knowledge and Consciousness](https://www.insidehighered.com/news/2016/09/02/massachusetts-institute-technology-experiments-instructor-grading-massive-open)
 (\$300 USD for an identity-verified certificate)
 Carl Straumsheim, Inside Higher Ed

<https://www.insidehighered.com/news/2016/09/02/massachusetts-institute-technology-experiments-instructor-grading-massive-open>



September 2, 2016
 by Carl Straumsheim

MIT experiments with instructor grading in massive open online courses as a way to expand teaching and learning opportunities for students and instructors.

One of the Massachusetts Institute of Technology's most popular massive open online courses is adding a feature not seen in any of its other humanities MOOCs: instructors grading essays.

MOOCs and Open Education Around the World

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



Any Questions or Comments?

Slides at: TrainingShare.com
 Papers: PublicationShare.com
 Free book: <http://tec-variety.com/>
 Email: cjbonk@indiana.edu

