To MOOC or not to MOOC: Strategic lessons from the pioneers

An analysis of administrator and faculty motivations

Our goal was to inform the decisions of institutions considering MOOCs

"MOOCs have done much to capture our attention and curiosity and have fostered a great deal of positive discussion and debate. ACE and InsideTrack are pleased to be able to contribute to the conversation from an evidence-based perspective."

- Cathy Sandeen, vice president of education attainment and innovation, American Council on Education

"To MOOC or not to MOOC is a question many institutional stakeholders are asking right now. Our goal is to support them in making more informed decisions by arming them with insights gathered from peers who have already travelled the MOOC road."

- Dave Jarrat, vice president of marketing, InsideTrack

This study combined interviews with senior leaders and a survey of faculty all with first-hand MOOC experience

One highlight of the study is the level of alignment it uncovered between administrators and faculty on the motivations and considerations for pursuing MOOCs

- Sharing knowledge more broadly and advancing pedagogical development are key motivations for both groups

- Neither groups sees MOOCs as an immediate path to revenue or cost savings

- Both groups see MOOCs as a way to enhance the on-campus experience, not replace it

- Both groups acknowledge the significant investment involved in pursuing MOOCs and the limitations of measuring the returns

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Leadership and Advocacy

Insights from discussions with senior leaders

We conducted interviews with senior decision makers leading their institutions' MOOC strategies

Participants represent the broad landscape of "MOOC leaders"

- Interviewees were the senior-most person responsible for MOOC strategy at each institution – Chancellor, President, Provost, Vice Provost or Vice President

- Interviewees represented 9 institutions (4 public, 5 private) across 6 states (CA, FL, IN, MD, PA, TX), with student populations ranging from <3000 to >50,000 students

- Interviewees represented institutions using a variety of MOOC platforms, including edX, Coursera, Udacity and home-grown systems

- Interviews were conducted by phone and averaged 30 minutes each

"What were the original motivations behind your MOOC strategy?"

Participants demonstrated general consensus around key goals:

- Share knowledge and showcase faculty/research/institution to a global audience
- Engage faculty in pedagogy improvement and content development to apply in existing teaching modalities
- Develop infrastructure – processes and expertise, not necessarily technology – to support continuing evolution of the institution

Many shared other key objectives

- Prepare students to succeed in credit-bearing courses
- Learn how to personalize educational experience at scale
- Raise awareness and encourage young people to explore overlooked fields and professions
- Keep alumni connected to institution through lifelong learning opportunities
- Provide access to the best professors in the world

"What were the original motivations behind your MOOC strategy?"

We have amazing instructors and wanted to share them more widely, give them more exposure, and show people the great research we're doing.

The residential experience is an important part of our future, but there's a lot technology can do to enhance the educational experience on and off campus. MOOCs are one of many ways we're exploring for bringing technology to the classroom.

We want to experiment in three areas: faculty engagement, building our online infrastructure, and our thinking about online education in general.

We can track everything and understand what's really happening to drive student learning.

There's also some fear of being left behind, but we're not convinced this is where the future of higher ed is going as far as mainstream education.

Our faculty have lots of discussions about open access publishing, they're deeply committed to principles of open access. This is an opportunity to showcase their work to a global audience.

It takes too long to accumulate enough data teaching just 35 students at a time.

The division of labor on a MOOC platform makes sense, they build the market and scale it while we pay attention to what matters most to us - human capital and content.

The publicity serves as a good carrot for faculty engagement.

"How have your motivations evolved after some experience with MOOCs?"

Many respondents felt that it was too early to revisit their motivations, but expressed how surprisingly positive outcomes were reinforcing the decision to pursue MOOCs

- Faculty enthusiasm and student response is more positive than expected, encouraging the acceleration of MOOC activity
- The volume of insights is greater than expected, more attention is being paid to how best to leverage all of the data being collected
- MOOCs are serving as a low-risk way to test new ideas, looking more closely at how to design MOOCs specifically to maximize research and innovation value to enhance the traditional residential experience
- Exploring how MOOCs can be used to keep incoming students engaged prior to start
- Using MOOCs as a way to keep faculty engaged in discussions about the long-term strategy of institution
- Experimenting with MOOCs beyond STEM fields, with promising results in in the Humanities

"How have your motivations evolved after some experience with MOOCs?"

We decided to make our MOOC strategy even more aggressive to engage more faculty across a wider range of disciplines as early as possible.

We're looking more at how our other online programs can compliment what we do on campus.

We didn't jump in to make money. The business model is intriguing but we didn't go in with those expectations and that remains the same.

We reached people we wouldn't have otherwise, and for every student who enrolled there were 10 times as many who looked at us. It's become a great platform to promote the brand of our institution and aligns with our mission to share knowledge.

It was a real highlight for us to see what a global audience we reached.

I was very impressed by the very California / Silicon Valley attitude of learning by doing rather than trying to make it perfect before launching.

Online students don't mind telling you what they really think. It's become a great mechanism for collecting feedback from an incredibly diverse range of students, from high-school dropouts all the way to PhD's.

If anything, it's allaying concerns about cannibalizing our full-time, degree-seeking students.

We're providing opportunities for high school students to understand what will be expected of them in college, wherever they go.

We see an opportunity to stake out a role as a leader in this space, thoughtfully but aggressively.

"*How are you measuring the success of your MOOC strategy?*"

Institutional leaders are hesitant to define detailed success measures before experimenting a little, for fear of constraining innovation, but are looking at several key metrics

- Satisfaction and engagement level of students and faculty
- Value of insights generated to enhance credit-bearing courses
- Rate of course and content development, progress towards establishing processes and infrastructure to support faculty
- Comparing success in credit-bearing courses between those who took a remedial/preparatory MOOC and those who did not
- Growth in overall inquiries and enrollment

"*How are you measuring the success of your MOOC strategy?*"

We didn't try to outline a set of specific learning outcomes, that seemed premature.

First and foremost, we want to offer a good course. Sure, we'd like higher than average retention, but the discussion of retention in a MOOC is totally different. For example, I personally have 8 MOOCs on my dashboard and I'm not going to finish them, but I still got something from them.

We don't have any specific goals or metrics we're looking for, we are working to formalize the process as we move forward.

If my own kids were taking a MOOC, I'd say it's better than watching TV. For some people it's a form of entertainment. It's OK if the commitment level is low.

We'd like to build international student enrollment.

We established specific targets for our rate of course development and the number of pilots that can be derived from the project. The success measures also include the productivity of our research.

If we're able to identify needs within specific communities and take steps to address them while the stakes are low, that's a good outcome.

We're seeing how students practice the skills necessary for success - engagement, note taking, critical thinking, etc., - and become more receptive to using resources.

It would be nice to measure increases in name recognition, but we haven't figured out a way to measure and track that yet.

I see MOOCs as doubling down on residential education

"*What lessons and best practices have emerged from your experience with MOOCs?*"

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Leadership and Advocacy

Leaders point to the importance of engagement, careful consideration and adequate investment:

- Engage faculty early and work closely on course selection, content creation and delivery

- Do not focus on revenue generation, produce high quality courses first and allow for experimentation; expect to invest

- Invest in the infrastructure – content production, course design, assessment and feedback mechanisms, etc. – to support faculty

- Optimize content for the MOOC platform, then repurpose it for the traditional classroom

- Develop a clear process for faculty to propose courses that is fair and widely representative

- Assess how you can leverage data collected from MOOC students in overall efforts to predict student success

- Leverage existing knowledge and infrastructure from online, professional, and/or continuing education units

"*What lessons and best practices have emerged from your experience with MOOCs?*"

We realized we needed to collaborate more with the faculty senate to select courses.

We learned we're lacking some of the know-how and technology to do this. We had to turn to our extension for their expertise.

Enlist a few enthusiastic faculty to launch your first few MOOCs and let them convince their colleagues through peer-to-peer discussions.

It takes thought to determine the appropriate learning outcomes for a MOOC or any course and that can only be done by faculty.

Fear is a poison to innovation, so create a system for faculty input without making it a policy decision by faculty.

There's the predictable over-hype and silliness at first, knee jerk policy reaction and predictable backlash against that… MOOCs are either the savior or an evil foisted upon the academy. Let's substitute rhetoric with experience.

You do an effective class without spending hundreds of thousands. Experiment without risking too much.

A big learning was how to take course notes and put them into the right production format, using pre-populated notes, for example, makes it more efficient and legible.

There's lots of value in alumni relations. The outcomes people are fixated on like course completion don't make sense if the students get what they're looking for.

"*What are your plans to expand the use of MOOCs?*"

Most senior leaders feel that it is too early to say, but plan to continue at the current pace as they evaluate results. Many also predict that:

- MOOCs will get folded into the overall educational experience, and the lines between ground, online, hybrid, MOOC, flipped, etc. will become increasingly blurred

- They will expand their use of MOOCs for specific internal purposes, such as preparing students for specific courses and generating content for use in a flipped classroom

- They will move MOOCs in-house, off of third-party platforms

- Some focus will shift to developing MOOCs for executive, continuing, and graduate education

"*What are your plans to expand the use of MOOCs?*"

One goal is to develop material with an eye toward extracting maximum educational value, especially for application on campus. We're looking at a program of flipped courses as introductions to STEM classes.

We're intentionally selecting Humanities courses for development because we already have so much data on STEM fields where machine grading is already commonly used.

We're looking to disaggregate the content – use it like modules addressing specific topics. I see enormous value here for conventional, residential education.

I see MOOCs following the decomposition of the publishing market, more like a replacement for textbooks, not faculty.

It's possible we'll turn to MOOCs for more remedial courses. But, the interaction between student and instructor is so important and you can't fully replicate that in a MOOC. The highest quality student experience is face-to-face. We see integration of MOOCs, but not using them on a wide scale.

We're going to re-evaluate after this first round is delivered. We'll probably continue, but be more strategic about it. This first round was about experimentation.

MOOCs will likely become a permanent part of our recruiting and marketing strategy, even if credit is never granted.

It's clear they're no substitute for a residential learning experience.

Most leaders agree MOOCs are not about replacing the status quo, but enhancing it. Specifically, they suggest

- Engage faculty and other stakeholders in discussions about why to pursue MOOCs, be intentional in your pursuit

- Reinforce the value and relevance of your existing face-to-face and online offerings, focus on how MOOCs can enhance these

- Provide adequate support to develop high quality MOOCs and avoid over-burdening faculty

- Don't overreach, overhype or set unrealistic expectations about what this medium can accomplish

- Don't succumb to pressure from the Board, the technophiles or the luddites – focus on your university's future role in higher education

- Empower faculty who support the concept to engage their colleagues and dialog peer-to-peer

- Keep an open mind and foster an environment of experimentation

"*What advice would you give to other senior leaders considering a MOOC strategy?*"

Involve faculty in the decision-making process, it will make a huge difference in the success of the program

Technophiles look at this as a quick fix. We need to reject that notion, and the luddite inclination to hunker down and resist at all costs.

Embrace that technology is actually drawing attention to pedagogy in general, it's an opportunity to rethink what the best way is to teach students and that healthy.

Make sure you have the infrastructure to support it, it's not just putting a little camera on your desk and recording.

If anyone has intentions that this will replace faculty, let them know they are totally wrong!

Do it to inform what you might do beyond MOOCs.

Some of the hysteria around this is based on suspicion that bureaucrats will force this on faculty. Don't overreach. Stay slow and steady and only make big moves if faculty are behind you.

Like making a big budget movie and finding out no one wants to see it – if you try to generate revenue out of the gate, you WILL lose money!

The status quo is no longer an option. We have a responsibility as leaders to take some calculated risks.

The role of senior leaders is to put technology in front of faculty in an intelligent way and let them make decisions about the appropriate educational uses.
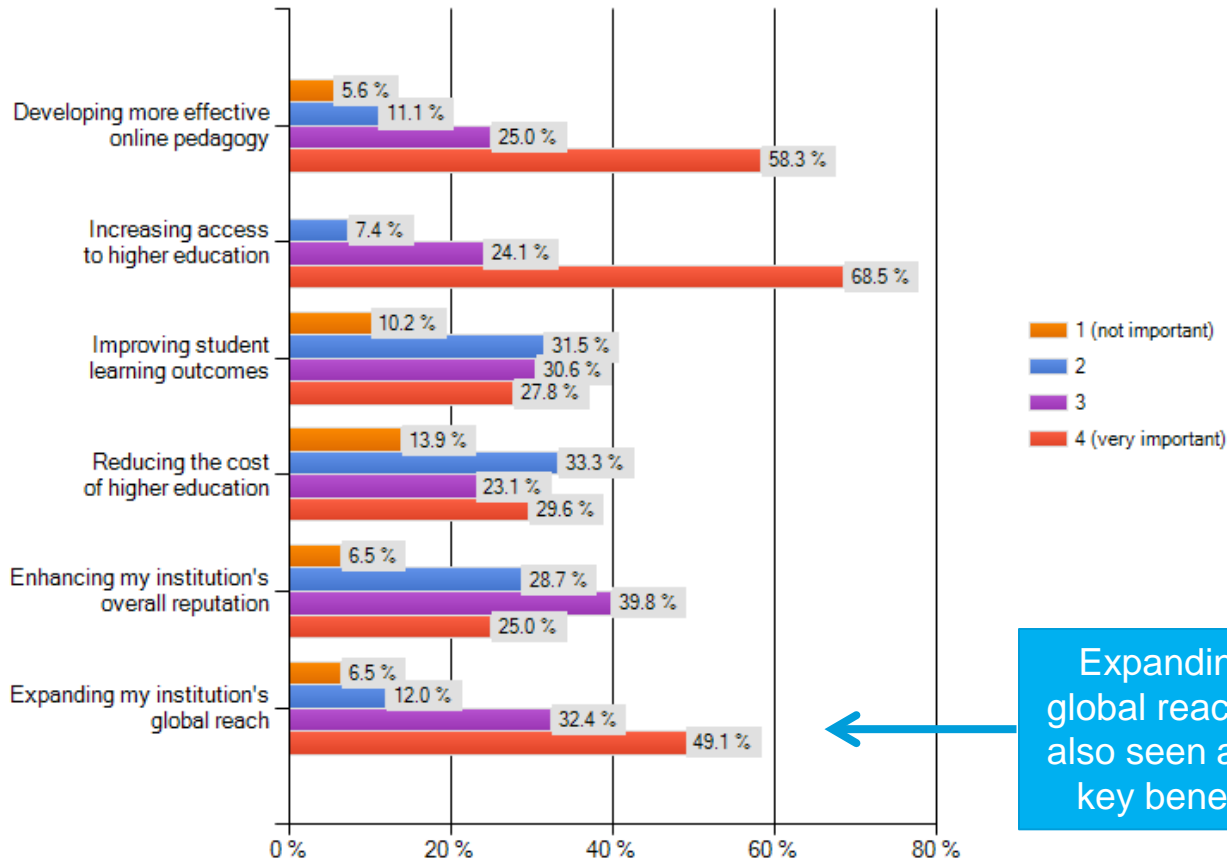
Faculty Survey Results

This survey was the largest conducted to date exclusively of faculty involved in teaching MOOCs

Respondents represent the broad landscape of "MOOC faculty"

- Survey sent to 446 faculty members actively involved in teaching MOOCs, 108 (24%) responded

- Respondents include faculty teaching MOOCs at public and private universities of various sizes throughout the country

- Respondents include faculty teaching on a variety of MOOC platforms, including edX, Coursera, Udacity, Canvas Networks and home-grown systems

- Respondents include faculty teaching their first MOOC, as well as those who have been teaching MOOCs for many years

Faculty see MOOCs as critical to expanding access and advancing online pedagogy

On a scale of 1 (not important) to 4 (very important), how important are MOOCs to making progress in the following areas:

Developing more effective online pedagogy
- 5.6 %
- 11.1 %
- 25.0 %
- 58.3 %

Increasing access to higher education
- 7.4 %
- 24.1 %
- 68.5 %

Improving student learning outcomes
- 10.2 %
- 31.5 %
- 30.6 %
- 27.8 %

Reducing the cost of higher education
- 13.9 %
- 33.3 %
- 23.1 %
- 29.6 %

Enhancing my institution's overall reputation
- 6.5 %
- 28.7 %
- 39.8 %
- 25.0 %

Expanding my institution's global reach
- 6.5 %
- 12.0 %
- 32.4 %
- 49.1 %

Legend:
- 1 (not important)
- 2
- 3
- 4 (very important)

Expanding global reach is also seen as a key benefit

"What was your original motivation for teaching a MOOC?"

Respondents offered a broad range of motivations for teaching MOOCs:

- Expand access to higher education / the reach of my institution
- Internationalize / globalize the student makeup of my class
- Innovate / experiment / satisfy curiosity
- Develop professionally / improve pedagogy
- Fulfill a mission / serve the profession
- Respond to an invitation / request / mandate
- Recruit students to my field
- Help reduce costs / increase options for students
- Promote / market / brand my institution
- Prove that my discipline can be taught online / in MOOC format
- Build the foundation for generating revenue down the road

"What was your original motivation for teaching a MOOC?"

I wanted to re-think my on-campus courses and refine the quality of my instruction.

I wanted to be out in front of a trend, as opposed to reacting to one.

I saw an opportunity to offer a more convenient and less expensive version of introductory courses for students with the skills and motivation to succeed in the online environment.

My goal was to evangelize my (fringe) discipline and recruit potential graduate-level students for degree programs at my institution.

I wanted to help globalize the curriculum by exposing my university students to students around the world.

It's about creating a global community around our topic that no current institution or government can do.

I was motivated by the idea of being part of a collaborative, innovative team of colleagues, who would help design and implement one of the earliest writing-based MOOCs out there.

I simply wanted to provide learning opportunities to as many people around the world as possible.

Nearly all MOOC faculty claim the experience has been beneficial for them

Would you say that teaching a MOOC has been beneficial to you personally/professionally?

93.5 %

6.5 %

- yes
- no
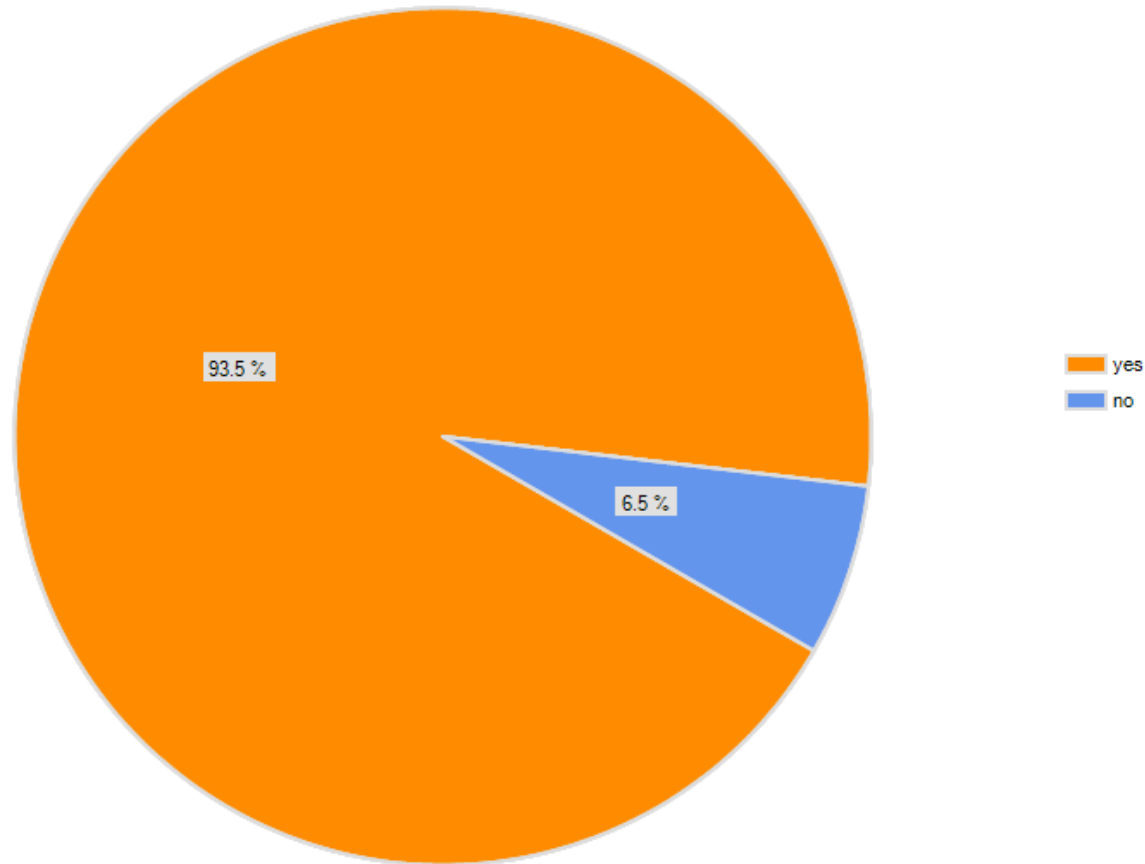
Nearly all MOOC faculty plan to teach as many or more MOOCs in the future

How is the volume of MOOCs you teach likely to change over the next 2-3 years?

- 48.1 %
- 8.3 %
- 43.5 %

Legend:
- Increase
- Decrease
- Remain the same
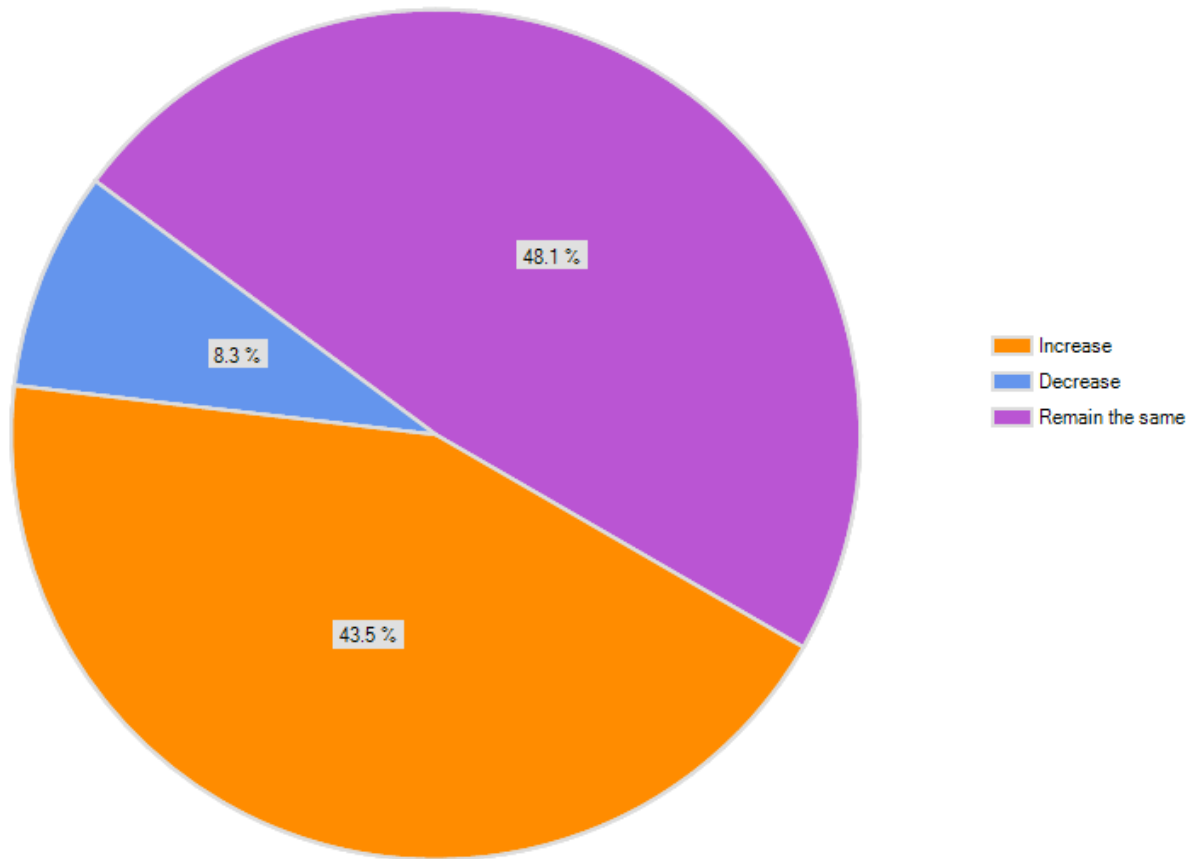
"Now that you have taught a MOOC, how has your motivation evolved?"

The level of enthusiasm is higher for most, who now see the potential of MOOCs to support them in several areas:

- Refining content, pedagogy, gamification techniques, cross-cultural engagement, learning assessment
- Designing courses that only work in a large/global/online format
- Tailoring curriculum to the needs of working adults, international audiences without higher ed access and other groups
- Enhancing the campus experience by flipping classrooms, gamifying tutoring, integrating asynchronous discussions
- Reimagining the roles of professors and graduate assistants
- Leveraging a global collective of individuals interested in the same subject

The small number who claimed to have lost their motivation primarily cited the level of effort involved

"Now that you have taught a MOOC, how has your motivation evolved?"

Its deepened my appreciation for the craft of teaching. I am keen to push the boundaries of what can be done using technology to teach material in different ways.

My motivation now is primarily to work toward understand how MOOCs should be integrated into the experience of the University community, considering both its local and global mission.

I didn't think a "massive" course would allow for any real interaction with the learners, but I've had lots of satisfying, intellectually stimulating discussions with our MOOC participants, in discussion forums, on various social media sites, and occasionally via email.
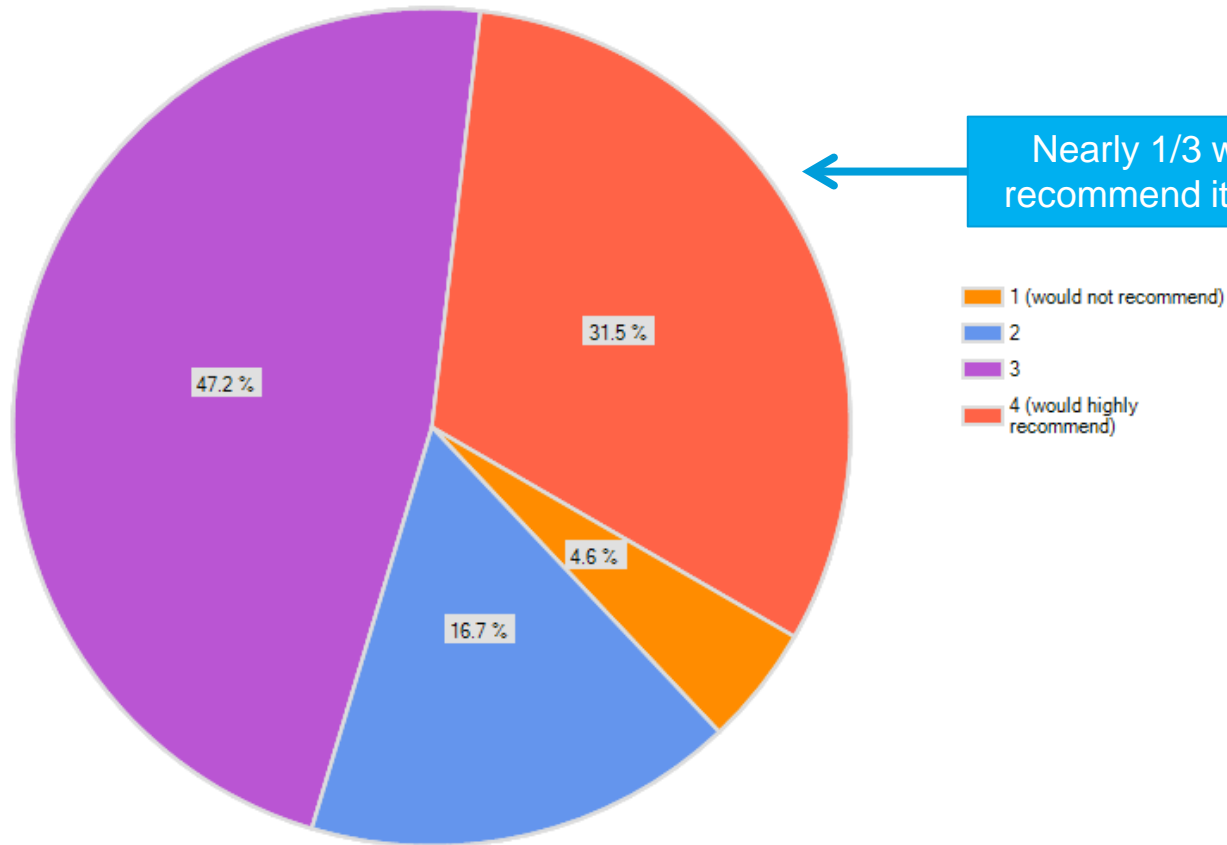
Preparing the MOOCs has made it possible for me to use a flipped classroom model for my on-campus courses

I have been struck by the genuinely international composition of the student body and by the students' lively, sometimes passionate, engagement with the course and with each other, as expressed in the discussion forums. I think it's great that so many people from so many different places are interested in my discipline.

I'm more convinced than ever about the potential for MOOCs to serve students who would otherwise never have the opportunity (e.g. the teenage girl in Pakistan who took and passed my advanced computer science class).

Most MOOC faculty would recommend the experience to a colleague

On a scale of 1 (would not recommend) to 4 (would highly recommend), how likely are you to recommend teaching a MOOC to a faculty colleague?

Nearly 1/3 would recommend it highly

47.2 %
31.5 %
4.6 %
16.7 %

Legend:
- 1 (would not recommend)
- 2
- 3
- 4 (would highly recommend)

"Based on your experience, what advice would you have for a faculty colleague preparing to teach his/her first MOOC?"

Nearly all cautioned about the time commitment involved and the need for technical and instructional design support. Other popular themes included:

- Get experience with flipped classrooms, online teaching and other's MOOCs before doing you own
- Don't try to design or teach like you're in a classroom
- Start simple, layer on the bells and whistles
- Enlist a support team and empower them
- Prioritize your ideas for engaging students – you can't do them all
- Beware of copyright infringement – your materials must comply
- Finish developing all of the materials before you start the course
- Don't just test the technology, practice your delivery – over and over
- Be prepared for very different students, with different motivations
- Be prepared to fail, learn and iterate – it won't go 100% right
- Be prepared to learn that your teaching style needs work

"Based on your experience, what advice would you have for a faculty colleague preparing to teach his/her first MOOC?"

Start with your worst case scenario on how much time it will take – now double it.

Prepare to be amazed at the excitement and diversity of your students. For the most part they are there for the sole reason that they want to learn the material. Thousands of them. Cultivate it.

Remember that most of the students who sign up are not committed to completing the course.

Do not underestimate the amount of contextualization a global audience requires.

Script everything and practice it. Very few people can talk and draw well at the same time.

Have a sense of adventure and fun. Have a good overall outline. Plan what you say or do in 10 minutes segments. When things don't go well, do them again.
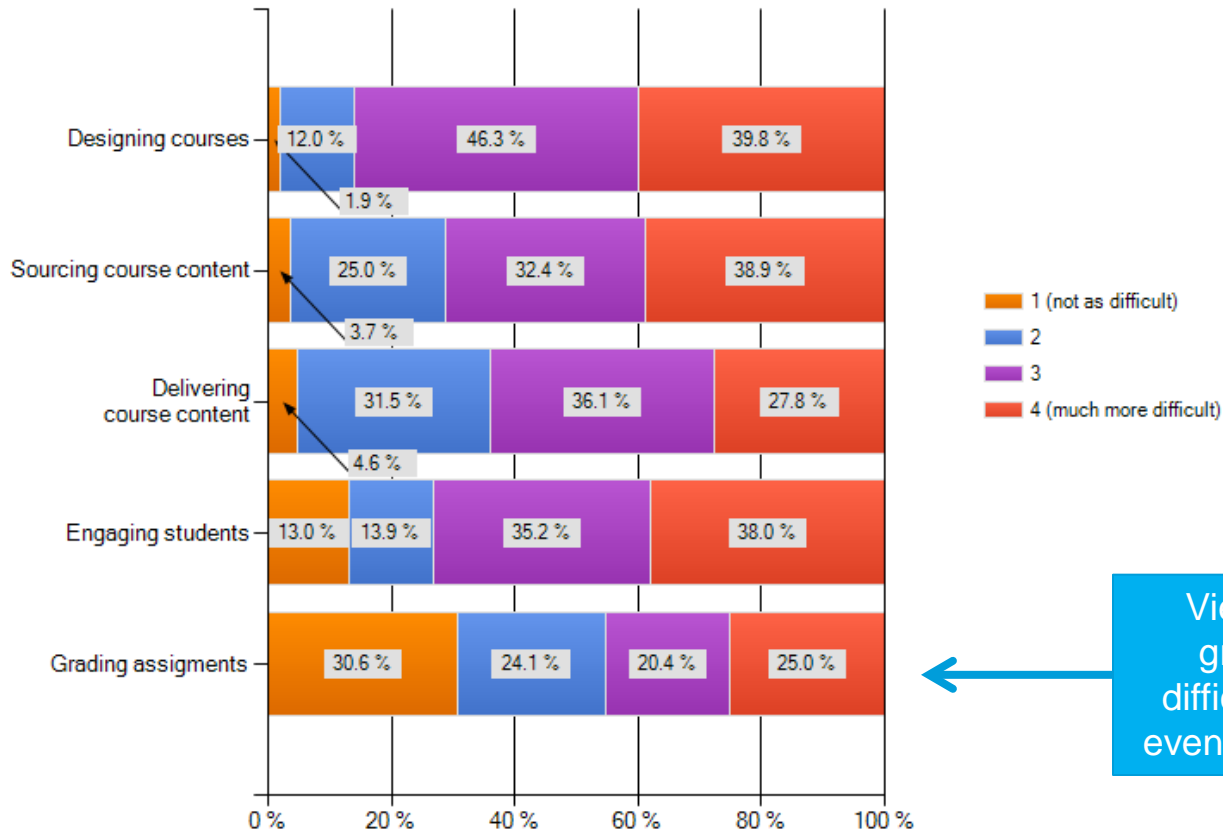
Be prepared for the inevitable backlash from critics, including your faculty colleagues. Be prepared to have your pedagogical assumptions challenged and stretched. Be prepared to do something new that moves you out of your comfort zone.

Have a clear plan for how you are going to incorporate feedback and improve over time.

You don't need to be a tech expert, just find people who are. Don't be afraid. Go for it.

Course design, content sourcing and student engagement are more challenging in MOOCs
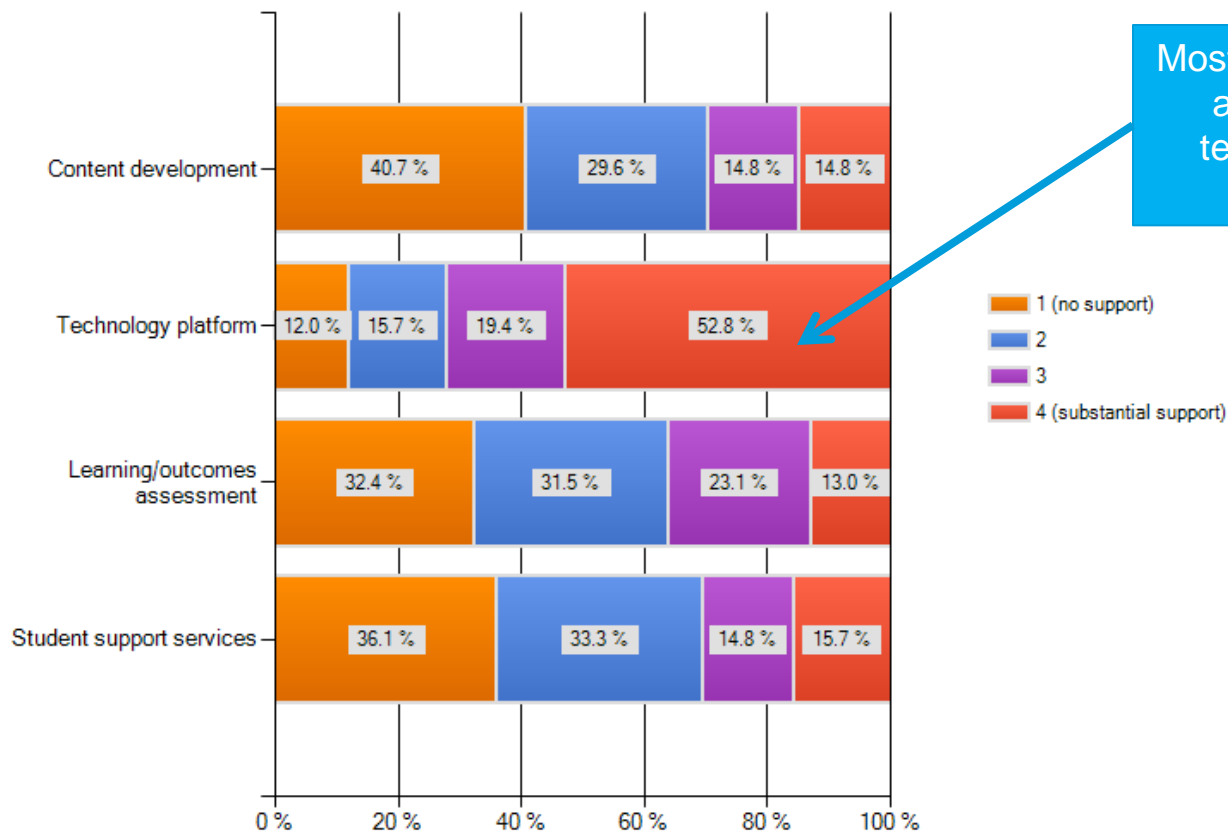
On a scale of 1 (not as difficult) to 4 (much more difficult), how does the difficulty of the following tasks in a MOOC compare to a traditional classroom:

Designing courses
- 1.9 %
- 12.0 %
- 46.3 %
- 39.8 %

Sourcing course content
- 3.7 %
- 25.0 %
- 32.4 %
- 38.9 %

Delivering course content
- 4.6 %
- 31.5 %
- 36.1 %
- 27.8 %

Engaging students
- 13.0 %
- 13.9 %
- 35.2 %
- 38.0 %

Grading assigments
- 30.6 %
- 24.1 %
- 20.4 %
- 25.0 %

Legend:
- 1 (not as difficult)
- 2
- 3
- 4 (much more difficult)

Views on grading difficulty are evenly divided

Faculty feel undersupported in areas outside technology

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Leadership and Advocacy

On a scale of 1 (no support) to 4 (substantial support), how much support did you receive from your institution and/or MOOC platform in managing the following aspects of a MOOC:

Most are getting adequate technology support

Content development: 40.7 %, 29.6 %, 14.8 %, 14.8 %

Technology platform: 12.0 %, 15.7 %, 19.4 %, 52.8 %

Learning/outcomes assessment: 32.4 %, 31.5 %, 23.1 %, 13.0 %

Student support services: 36.1 %, 33.3 %, 14.8 %, 15.7 %

Legend:
- 1 (no support)
- 2
- 3
- 4 (substantial support)

"What would you say is the primary motivation of your institution in offering MOOCs?"

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Leadership and Advocacy

Respondents generally attributed the institutional decision to marketing and/or financial motivations:

- Wanting to market the university, enhance the brand and/or recruit new students
- Wanting to avoid being left behind or missing out on a lucrative opportunity

Some acknowledged other motivations:

- Expanding access
- Reducing costs
- Eliminating course bottlenecks
- Experimenting with new content, pedagogies and technologies
- Preparing students for credit-bearing courses
- Increasing the impact of university research

"What would you say is the primary motivation of your institution in offering MOOCs?"

To expand the institutional "brand" more widely and eventually offer credit-bearing courses like this.

To not get left behind by the innovators and thought leaders.

To get a foot in the door in case MOOCs take off.

To increase institution prestige and recognition, as well as to support the scholarly impact of faculty wanting to have impact in this way.

My institution sees this as a way to display to the world the kind of teaching that goes on at a pre-eminent liberal arts college. It will allow us to expand and enhance our educational mission and global reach.

Increase access and exposure and better prepare students in skills needed for success in credit courses.

We see MOOCs as expanding our global presence and offering the faculty new ways to think about the relation between technology and teaching.

To provide a public good and encourage instructors on campus to improve their own teaching using this technology, and enhance the local student experience.

Reputation, ability to reach those who otherwise would not have access to our institution

*To be at the leading edge of a potentially exciting new mode of teaching.*

Most institutions do not grant credit for their own MOOCs

Does your institution grant credit to students who successfully complete your MOOC?

94.3 %

5.7 %

no
yes
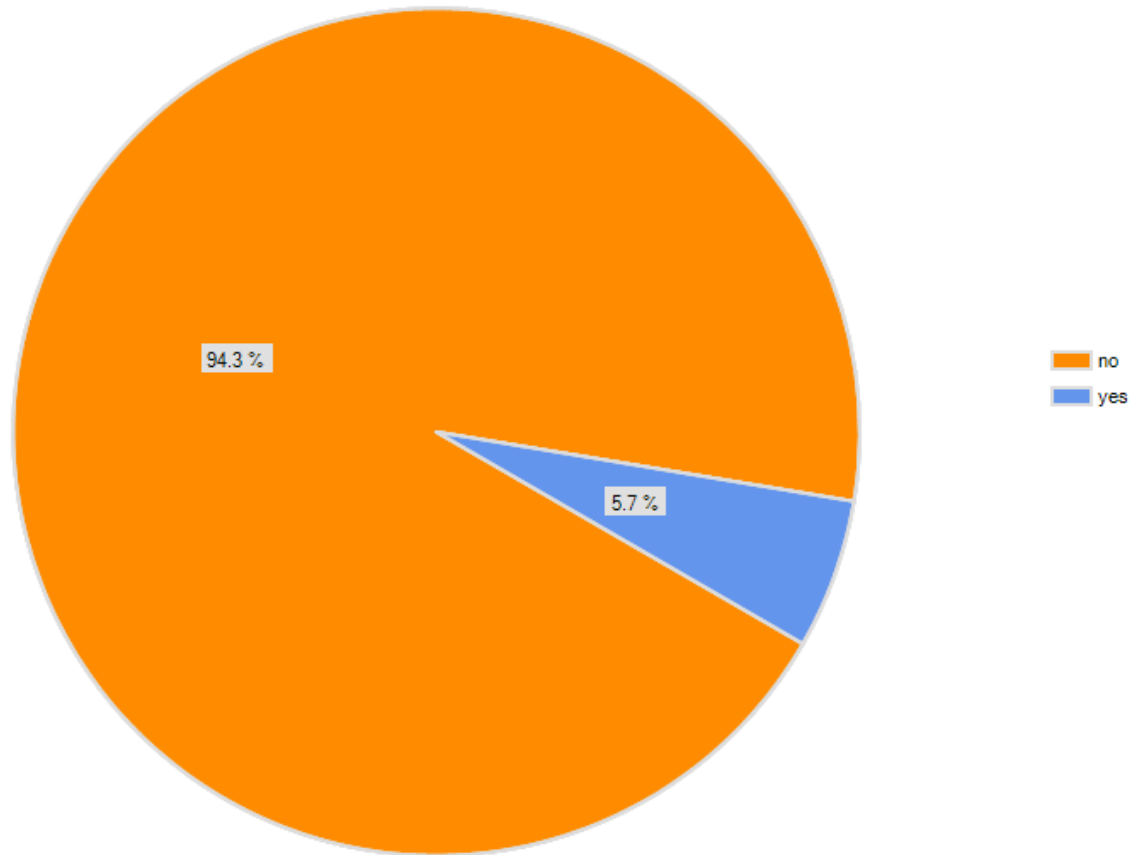
More than 1/3 of faculty who teach MOOCs think that their institution should grant credit

Should your institution grant credit to students who successfully complete your MOOC?
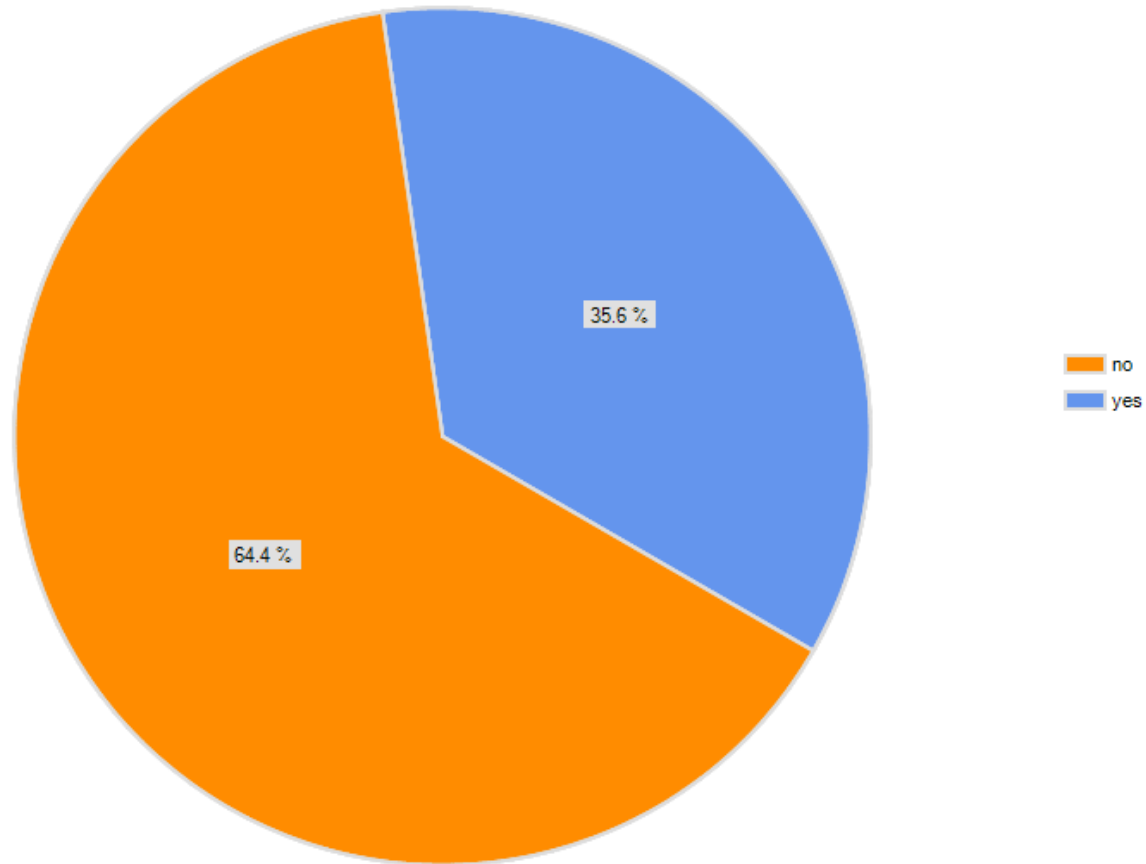
35.6 %

64.4 %

no
yes

"Based on your experience, what advice would you have for the senior administration at your institution relative to MOOCs?"

MOOC faculty advice for administrators primarily revolves around the need for support and realistic expectations

DO NOT
- View MOOCs as an alternative to classroom education
- Expect MOOCs to generate revenue or save money
- Underestimate the amount of effort involved in design or delivery
- Think you can create a solid MOOC without major investment
- Rush to monetize MOOCs or offer credit for them

DO
- Treat MOOCs as part of the "tool kit" to fulfill your mission
- Discuss, define and communicate your MOOC strategy broadly
- Set clear priorities and incentives for those responsible for MOOCs
- Invest in the infrastructure and resources (both technology and skills) to support MOOCs long-term
- Create an environment where failure and learning are expected

"Based on your experience, what advice would you have for the senior administration at your institution relative to MOOCs?"

Embrace change; while MOOCs are not the end all of anything, they are substantially different from the way we have operated for centuries. They provide a great opportunity to rethink our strategy, education practices and audiences.

Don't view MOOCs as either revenue generating or cost saving vehicles. They are neither.

Find the innovative and excited faculty who are going to do something really new and special, and support them. Fewer, but higher-quality MOOCs will do your institution's reputation and drawing power good.

Be clear in expectations and give feedback early on in the creation process.

Determine the value of MOOCs to the institution and to the faculty, then develop incentives and rewards for faculty members who get out of their comfort zone to try a MOOC.

Explore this technology in various and interesting ways and do not be afraid of some failures.

This is another tool that is not low cost, not easy, but can certainly be used to expand the repertoire of approaches we use in the classroom and in hybrid courses.

Decide why the institution should engage in MOOCs and provide real support to make it happen.

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