Explore a New Learning Frontier – MOOCs (Jul 11)

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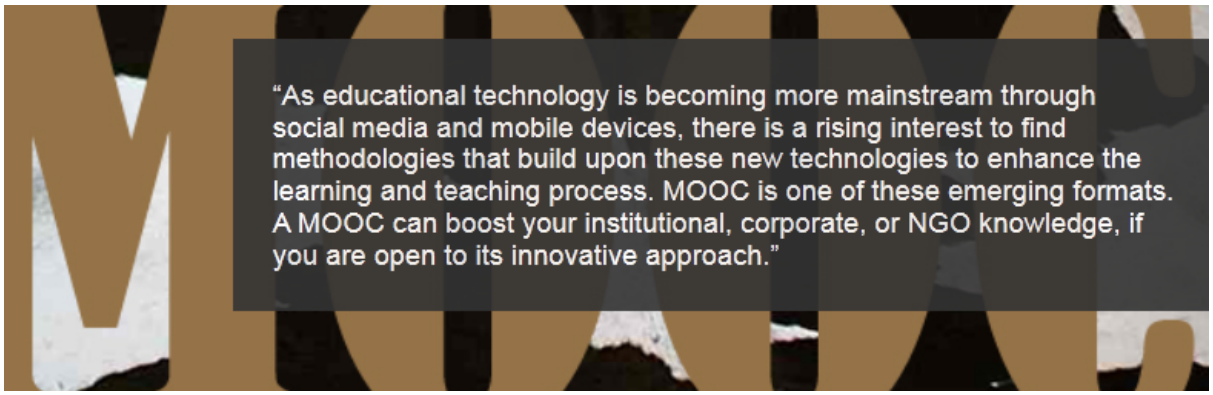

A MOOC is a Massive Open Online Course. It is a gathering of participants, of people willing to jointly exchange information and collaboratively enhance their knowledge.

Over 10,000 learners worldwide have participated in MOOCs on a variety of topics. MOOCs appeal to knowledge workers, trainers, and teachers. Why? Because MOOCs enable a high-end knowledge exchange to occur. It is a learning model that fits expert training, interdisciplinary learning, ad hoc education — any type of learning that allows information to flow within a network of peers.

MOOCs fit the contemporary shift towards networked learning. George Siemens, one of the pioneers in this area, wrote, "Learning is now happening through communities of practice, personal networks, and through completion of work-related tasks," in an environment in which, "know-how and know-what is being supplemented with know-where (the understanding of where to find knowledge needed)" (2005, p. 4).

Use of educational technology is becoming more mainstream through social media and mobile devices. Thus there is rising interest in finding methodologies that build upon these new technologies to enhance the learning and teaching process. MOOC is one of these emerging formats. A MOOC can boost your institutional, corporate, or NGO knowledge, if you are open to its innovative approach.

MOOCs are organized on the Internet. They can be organized for a short period or take up several months. MOOCs started out as Web-based courses, but following the mobile learning MOOC of 2011 (MobiMOOC), a quest started to see if MOOCs can be delivered and followed through mobile devices or in a ubiquitous environment as well.

In this article, I will describe the benefits of a MOOC, its learner demands, the facilitator options, and of course the tools needed to set up a MOOC. Those hungry to know more after reading this can also have a look at the MOOCguide in Wikispaces.

History of MOOCs

The term MOOC seems to be the brainchild of two individuals: Bryan Alexander and Dave Cormier. The Connectivism and Connective Knowledge (CCK08) course, first organized by George Siemens and Stephen Downes in 2008, picked up the label. They are seen as the MOOC pioneers.

The idea of connecting to others in order to gain knowledge derives from the Connectivism theory. "In connectivism, the starting point for learning occurs when knowledge is actuated through the process of a learner connecting to and feeding information into a learning community" (Kop & Hill, 2008, p. 2). This idea of collaborative knowledge growth comes from the old idea that we should "stand on the shoulders of giants" to reach outstanding results, as Bernard of Chartres and, later on, Newton suggested.

Benefits and challenges of a MOOC

Because a MOOC is a new learning and teaching methodology, it unavoidably has its own evangelists and bashers. This results in fruitful debates clarifying what does and does not work. Here are some of the benefits and challenges of MOOCs:

12 benefits of a MOOC

1. All you need is an Internet connection and a device that can connect to it.
2. A MOOC can be organized at low cost, using free tools to build the course.
3. You can move beyond time zones and physical boundaries.
4. You can organize it in any language you like.
5. You can use any online tools that are relevant to your target region, or that your target population is already using.
6. It can be launched as quickly as you can inform the participants (which makes it a powerful format for priority learning – for example, in aid relief).
7. All can share contextualized content.
8. Learning happens in a more informal setting.
9. You can connect across disciplines, and, if needed, across corporate/institutional walls.
10. You don't need a degree to follow the course, only the willingness to learn.
11. MOOCs add to your own personal learning environment and/or network.
12. Lifelong learning skills will be improved, for participating in a MOOC forces you to think about your own learning and knowledge absorption.

Possible challenges of a MOOC

1. It feels chaotic as participants create their own content.
2. It demands digital literacy.
3. It demands time and effort from the participants.
4. It is organic, which means the course will take on its own trajectory.
5. Participants need to self-regulate their learning.

To guide or not to guide: a MOOC trainer is a guide on the side

A MOOC is a peer-to-peer knowledge exchange or learning method. This means you do not necessarily have to have one or more facilitators. However it can be useful to provide some guidance during the course to keep most of the interactions focused.

An overall facilitator or coordinator can function as the glue of a course. An overall course facilitator is ideally someone with content expertise and great communication skills. They also need to be social-media savvy to keep on top of the MOOC.

Most of the time a MOOC will last for a couple weeks, with each week focusing on a particular subtopic related to the overall subject of the course. As such, many MOOCs have a different, specialized facilitator for each week. This approach ensures high-quality content on expert topics.

Social media are at the center of any MOOC

A MOOC is delivered online. This opens up a variety of online tools you can use to set up your MOOC. The choice between the different tools depends on the dynamics you have in mind. If you know your target audience, you can use those social media tools and internet options that your MOOC participants are already using. If you do not know your MOOC participants upfront, you might want to think about using the most accessible communication tools available. Keep it simple.

So which social media tools could you use?

Any social media tool could be used to build the architectural design of a MOOC, but the five most commonly used at the moment are:

- **A wiki** (*e.g.,* Wikispaces) – The ideal tool to set up your course syllabus.
- **A discussion group or list-serve** (*e.g.*, Google groups) – Enables sharing discussions online and through e-mail while keeping the topics nicely grouped based on their title.
- **Microblogging** (*e.g.*, Twitter) – Allows a quick exchange of resources and thoughts.
- **Social bookmarking** (*e.g.*, delicious) – participants share resources on the Web that can be retrieved later on.
- **Virtual classrooms** (*e.g.*, Elluminate) – Enable synchronous sessions (live meetings) so that people can put forward different questions. Virtual classrooms also allow more human, immediate interaction to occur, and they are ideal to give an expert the floor to express her/his framework of ideas.

The MOOC guide mentioned earlier offers a wider variety of useful tools.

Self-regulated learning is crucial

A MOOC is built around a learner-centered approach. This means that the participants are responsible for their own learning. As such, it's important to make MOOC participants aware of self-regulated learning and its challenges.

Downes (2007) emphasized that in order for a network to support knowledge development it needs to be "diverse, open, autonomous, and connected." This open exchange of information through the use of social media results in a massive amount of shared content, due to the participant interactions. Even beginning with only a few formal resources, the discussion threads, the reflections shared by the participants about a topic, and the additional resources suggested by the participants and/or facilitators will result in a feeling of information overload. This overload sometimes results in participants dropping out of a MOOC, especially if no accreditation or reward is offered at the end of the course.

On average, older or more experienced learners are better equipped to stay on top of the information flow within a MOOC thanks to their lifelong learning experiences. Here is a list of guidelines on how to cope with the information overload.

How mLearning fits MOOCs

In many emerging regions of the world, mobile access is the main way to access the Web. This makes a mobile MOOC very interesting as a way to keep in touch with a large learner audience spread all around the globe. There is also an ongoing shift towards ubiquitous learning, allowing people to access information no matter what device they are using.

But it is not only the ubiquity that makes MOOCs a good method for enhanced mobile learning (mLearning). A MOOCs informal nature, and the fact that a MOOC is not constricted by time or space, brings it very close to the general specifics of mLearning. As such it only takes a small step to open up the MOOC format for mobile devices as well.

Make your resources mobile accessible

If you consider starting a mobile MOOC, remember that you will be limited in the type of resources you will be able to use. With mLearning, you also have to take into account the data transfer cost. Mobile internet access can bring along high costs for the user, depending on their region or mobile subscription. Make sure you have a solution to keep mobile costs limited, and inform your target population on how to do so.

Mobile social media tools

Because mobile devices are getting smarter all the time, most of the Web-based resources listed earlier are also mobile accessible (*e.g.*, Google groups, Twitter, YouTube, Facebook). Only the wikis and virtual synchronous classrooms are not always very mobile friendly. Nevertheless, you can work around these limitations, for instance by using YouTube to publish reformatted recordings from synchronous sessions. Here is how you could do the reformatting.

Another limitation occurs when you want to put all your MOOC spaces into a one-page mash-up (e.g. pageflakes, iGoogle). This will demand a bigger screen to keep an overview of all the content. Nevertheless, a mobile MOOC is possible, taking into account current mobile limitations.

The MobiMOOC Case: the first MOOC to look at mLearning

MobiMOOC was a course that ran from April 2nd until May 14th 2011. The course focused on the subject of mobile learning and was delivered over six weeks, each of which had a different angle and a specialized facilitator:

- Introduction to mLearning (Inge de Waard),
- MLearning planning (Judy Brown),
- MLearning for development (Niall Winters),
- Leading-edge mobile innovations (David Metcalf),
- MLearning in a mobile-connected society (John Traxler), and
- MLearning in K-12 settings (Andy Black).

To get an idea of what this MOOC was like, feel free to have a look at the resources: the course syllabus, the mLearning discussions, bookmarks, and the recordings of the synchronous sessions. MobiMOOC allowed all of the participants to connect no matter what their expertise, age, or mLearning background was. The collaborative effort of exchanging questions and discussing them transformed all the participants' ideas into new mLearning insights. This sometimes resulted in new, full-blown mLearning projects that transcended the course.

Join the Change, MOOC!

As MOOCs are new, lots of research still needs to be done. With this challenge in mind, George Siemens, Stephen Downes, and Dave Cormier have put together the "Mother of all MOOCs," called Change, which will run for nine months (September 12, 2011 to May, 2012)! Feel free to join, as a participant or as a researcher.

Conclusion

The effect of a MOOC is not to be taken lightly! Many participants who went through a MOOC have had a powerful learning experience, which, in some cases, resulted in strong personal or professional projects with impact. On the other hand, the dropout rate in a non-credited MOOC is high, and some participants simply do not like the chaos of a MOOC. Nevertheless, it is a worthwhile method to explore!

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