

# Offering cMOOCs collaboratively: The COER13 experience from the convenors' perspective

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**Abstract:** Over the last few years, the intense interest in Massive Open Online Courses (MOOCs) has opened up a range of possibilities and pitfalls for Higher Education Institutions (HEIs). Many universities have seen the opportunities that MOOCs present and working with education companies, now offer learners the opportunity to earn university credit. Using a case study approach, this paper examines the experience of validating and delivering the UK's first undergraduate MOOC for credit. Focusing on the validation process, including issues of teaching and assessment, student engagement and the delivery platform, it explores the impact of accreditation and quality assurance on existing MOOC pedagogies. In so doing, the paper reveals the 'disruptive' potential of this 'one of a kind' module, while highlighting how the regulatory framework that assures quality can transform our understanding of MOOCs.

## Introduction

Open Educational Resources (OER) are sometimes regarded as the most important impact made by the internet in the educational sphere (Brown & Adler 2008) and are promoted to "leverage education and lifelong learning for the knowledge economy and society" (Geser 2007, 12). In German speaking countries, however, the OER movement is still lagging behind international uptake of the OER concept (Ebner & Schön, 2011; Arnold, 2012). This paper describes the design and implementation of a Massive Open Online Course (MOOC) aimed at increasing awareness of OER and reaching a larger audience. The "Online Course on Open Educational Resources" (COER13) was offered in a joint venture in spring/summer 2013 by eight convenors from Austria and Germany with affiliations to five different institutions. The course was planned as a community-oriented cMOOC (as opposed to an xMOOC using the widespread distinction between two different types of MOOCs, introduced by Daniel 2012), i.e. it heavily relied on participants' contributions (reflections, insights, task solutions and questions) and course convenors saw their roles as facilitators as well as content experts. All materials were published with an open license aiming to generate an OER on OER with the course itself.

In their systematic literature review of research on MOOCs, Liyanagunawardena, Adams and Williams (2013, 217) concluded that the most significant gap in the literature was the scarcity of "published research on MOOC facilitators' experience and practices." Likewise, Anderson and Dron (2011) emphasized the importance of studying distance education pedagogy that is grounded in different learning paradigms and contexts. This paper thus presents qualitative data about the experiences of convenors of COER13. To collaboratively design and implement the innovative format of a cMOOC is challenging.

To offer a course on an equally innovative topic such as OER to an open audience increases the complexity even more. To do so in an emerging, newly formed project team, comprising different institutional backgrounds, adds yet another layer of complexity to the challenge. Therefore, this paper focuses on the perspective of the COER13 convenors and attempts to unpack the collaboration process, and identify successful practices and lessons learnt during COER13. The results will inform and support future (teams of) convenors of MOOCs.

## COER13 – Online Course on Open Educational Resources

Course design and timeline: COER13 ran for 12 weeks in spring/summer 2013. There were no course fees or any other prerequisites for participating. The course comprised an introductory week followed by five thematic units that lasted two weeks each, and a closing week for summarizing and evaluating the learning experiences within COER13. The course was offered entirely online: The central course website provided instructional videos, reading materials and relevant web links for each unit. All materials were gradually added as the course evolved. One or two synchronous "online events" per unit with expert talks or panel discussions, offered via live classroom software, were key structural design elements. An introduction as well as a summary at the middle and the end of each unit was sent as a newsletter to all registered participants and also archived on the website. The interaction amongst students and between students and convenors was planned to take place via the integrated discussion forum or via tweets and blog entries that were aggregated on the course website by means of the course hashtag "#coer13". Additionally, during the course some participants started a COER13 Facebook group (105 members),

and others discussed COER13 issues within the already existing OER Google+ group (136 members). Furthermore, each unit presented a clearly circumscribed task that was meant to promote the production and usage of OER across educational sectors. Participants were asked to share their work on the tasks with the course community and to document their work on the course website in case they wanted to obtain online badges. Online badges served as an alternative means of certification and were offered on two different levels.

Collaborative planning of COER13: The idea to offer a MOOC on OER stemmed from prior experiences with open courses in German-speaking countries (Bremer & Thilloßen, 2013) as well as from fundamental work on OER through European projects (Schaffert, 2010; Schaffert & Hornung-Prähuser, 2007) and national initiatives (Ebner & Schön, 2012). An informal discussion about MOOCs and OER at a conference in November 2012, at which four of the eight organizers met, can be considered as the starting point. By the end of 2012 there were eight convenors: three researchers from the e-learning information portal “e-teaching.org”, three faculty members from the universities of Munich (Applied Sciences) and Tübingen, and the University of Technology of Graz, as well as two representatives of NGO’s involved in promoting OER. The eight convenors joined the team to promote OER, to gain experience in offering a MOOC, or for a combination of the two motives. All planning activities were done via synchronous online meetings that started in January 2013, comprising different members of the team (the whole team could not find a time to meet), accompanied by an email exchange. Decisions and tasks were documented in a closed wiki. Each thematic unit was assigned to one member of the organizers’ team so that he or she took responsibility for that unit, including the design and the organization of the online event. Once the course started, organizers occasionally discussed residual questions after the online events but email was the primary communication channel.

COER13 implementation: There were 1090 registered participants from many different strands of the educational sphere (e.g. higher ed lecturers 21%, school teachers 23%, freelancers 18%, students 15%). The website received more than 15.000 site visits and nearly 78.000 page views during the course offering. Course interactions took place on the discussion forum (673 posts), as well as on different social media platforms, e.g. via Twitter (2247 tweets by 363 people), blogs (316 posts from 71 aggregated blog feeds), a Facebook group and an OER Google+ group. The ten online events attracted between 40 and 134 live participants each and between 111 and 2953 views of the recordings. 89 of the participants stated that they were interested in a badge when the course started; 56 of them met the requirements at the end.

## Methodology

The convenors’ perceptions of collaborative planning and implementation of COER13 are presented in this paper on the basis of semi-structured interviews with five of the eight convenors. The semi-structured interview protocol was based on elements of teaching presence in distance education pedagogy (Anderson & Dron, 2011), and contained questions about individual roles, collaboration in the planning and design of the MOOC, implementation, facilitation, and evaluation as well as perceptions of challenges and lessons learnt. The interviews were conducted by a researcher who had not been involved in the design or implementation of the MOOC and did not know four of the five convenors interviewed, which contributed to the trustworthiness of the data collection process. Interviews lasted between 30 and 40 minutes, and were conducted either on Skype or by phone. The researcher transcribed and open-coded (Mayring, 2010) the interviews without input from the participants.

## Findings

Interview findings are organized here according to convenors’ perceptions of a) collaborative planning of COER13 b) implementation of COER13 and c) lessons learnt.

Collaborative planning of COER13: All the convenors highlighted the planning phase as crucial to the design and implementation of the MOOC. They expressed satisfaction with the planning process during which they took decisions on MOOC design and implementation. They stated that having multiple convenors had worked very well for them. They described the collaboration as “unproblematic,” and that it “sometimes involved long-drawn discussions, but was pleasant”. It was easier for them to design, implement and manage the MOOC as a group, instead of as individuals, because each convenor brought different strengths to the MOOC - to the extent that some felt they could not possibly have offered the MOOC on their own. For example, one person was able to set up and manage the online learning environment while another took responsibility for Twitter interactions. Decisions about design and content were taken as a group and the first unit was designed collaboratively, but afterwards, each convenor took responsibility for designing and planning content for specific thematic units. This made the MOOC more manageable to one convenor who expressed relief, “I didn’t have to do everything. I also didn’t have to know everything about everything.” Another convenor stated that the exposure to different perspectives was valuable not only for MOOC participants, but also for the convenors themselves.

Implementation of COER13: All the convenors interviewed reflected that the structure (offering two-week thematic units, online events, expert interactions, short

videos, and badges) had worked well. The biggest theme that emerged from the interviews about the implementation of the MOOC was the multiple technologies or virtual spaces used for interactions (with participants and among participants). Convenors discussed their choice of specific virtual spaces, their “following” of the content of interactions in those virtual spaces, and the management of those virtual spaces where interactions occurred. In order to address the technical skills of all learners, and based on prior experiences of two of the convenors, a discussion forum was included in the course website for interaction. The convenors mentioned the discussion forum as having worked very well for interactions. This surprised a couple of convenors who felt that the interface was clunky and that participant use of the forum indicated the low learning curve and low familiarity that users had with online discussion forums as opposed to Twitter or Google+. The convenors’ choice and use of the virtual spaces depended on their own familiarity and comfort level with the technology used. If a convenor decided not to use a certain technology, such as Facebook or Twitter, they were sometimes unaware of conversations and interactions taking place in the virtual spaces that they did not use, which one convenor perceived as highly problematic. Other convenors mentioned that they would have liked to keep up, but time and workload prevented them from following all conversations and interacting in all virtual spaces. Convenors typically facilitated interactions and “followed” interactions more closely during their assigned thematic units, and only stayed informed using aggregated conversations during the other weeks. This way, some of them felt they were realizing the key principle of cMOOC participation themselves: to select and prioritize which conversations to follow and which not. Facilitation strategies also differed from one convenor to the other, leading to each thematic unit offering a different learning experience despite the basic common design. All the convenors reflected on the challenge of managing multiple virtual spaces and following the conversations that participants had in those virtual spaces. Sometimes, there was redundancy and repetition in the conversations that occurred in the spaces, but including multiple virtual spaces enabled participants to choose their virtual spaces for discussions. Given the nature of an open online course, the convenors could not predict the profile or background of the type of participant who would be interested in the course and thus had to offer multiple options that allowed participants the autonomy to choose.

Lessons learnt from collaboration and implementation of COER13: In terms of lessons learnt about planning a MOOC collaboratively, all the convenors emphasized the importance of the planning phase for a MOOC learning environment where it was difficult to anticipate the type of learner who would participate, as well as learners’ expectations, incoming technical skills and content knowledge. In designing such a MOOC, two convenors highlighted the importance of building resources for learners

with at least two sets of expectations or two levels - those who wanted an introduction to or overview of the topic and those who wanted to gain in-depth understanding of the topic. Given the diverse group of learners who participate in MOOCs, it was important to consider both those who wanted to learn at a basic level and those who want to learn at an advanced level in choosing resources and structuring instruction.

The convenors had previously identified clear responsibilities for thematic units, but they had only rudimentarily discussed the management of the different interaction spaces (e.g. the discussion forum, blogs, the emergent social media groups and Twitter), they had not clearly defined the roles and responsibilities for managing those interaction spaces and interactions in those spaces. One lesson learned was to clearly define roles and responsibilities not only in terms of design and implementation, but also virtual space management and interaction management. Another lesson learned was that the tools and infrastructure used for the MOOC influence the interactions that take place, therefore it is important to be very thoughtful about the technology and how it would be used. Further, convenors had developed their content for their thematic units individually, and did not have the time to share their units ahead of time with their co-convenors, which led to occasional overlaps in resources or experts who were considered for those weeks. They thus suggested that the pre-planning should involve content development to as large an extent as possible. Likewise, prior discussion about facilitation strategies as well as more active facilitation during the MOOC were suggested by one convenor as a way to decrease the drop-out rate in such courses. With respect to implementation, a regular synchronous meeting of convenors throughout the course was proposed by one convenor who stated that it was important to collaborate intensively during the planning phase, but it was as important to meet during the implementation about how things were going and what needed to be changed.

## Discussion

Collaborating: It is not uncommon to have more than one convenor of a cMOOC, but the number of convenors in COER13 was rather high. An informal collaboration across five different institutions is also a special circumstance for collaboration. Taking into account that all planning and implementation was done collaboratively online, it is quite remarkable that convenors seemed to be quite content with the collaboration process and felt that it went smoothly. The initial planning phase seemed to have been of great significance, especially the process of clearly assigning leadership roles for different thematic units. The convenors shared the assessment that it would have been hard (or nearly impossible) for any one of them to offer such a MOOC by themselves. This might also have contributed to a positive perception of the overall collabora-

tion process, in addition to the mutual feeling of belonging to a team that successfully offered a relevant course on a highly relevant educational topic. The wish, mentioned above, for even more intensive planning and exchange of feedback during the course evolution might be related to different participation patterns within the units. As with many MOOCs, participants were much more active in the first units and their engagement decreased somewhat towards the end. Perhaps the different degrees of participants' involvement were also related to the content itself. The initial thematic units targeted teachers and lectures whereas the latter units were more relevant for educational managers, policy makers, and alike. It would be worthwhile to investigate whether these different key audiences might have benefitted from different ways of convening and facilitating. In any case, these differences could have instigated the wish for more or closer collaboration when the course was already up and running. Interestingly, the degree of similarity in convenors' perceptions of both course and collaboration came as a surprise to some of the convenors. They thought that the perceptions within the team would render a much more diverse picture. The shared sense of achievement amongst the team might have overshadowed nuances in perception – or the similarity points to some inherent limitations of our methodological approach: As all interviewees knew that findings would be discussed afterwards, even if anonymously, this approach might have prevented them from raising any points that could have caused conflict. Convenors with an NGO background were the ones who did not participate due to time restrictions. As these interviews are completed, attention will be paid to whether the similarity of opinion among convenors decreases.

“Digital habitats”: The frequently mentioned theme of diverse and emergent virtual discussion spaces within COER13 and the challenge of facilitating and convening within them brings Wenger et al.'s (2009) notion of “digital habitats” to mind: The choice of technologies to support online learning is not only a question of choosing the right tools but also of providing a sense of “home” within the virtual spaces they afford. The diversity of virtual spaces planned for in COER13 and the use of emergent social media spaces like Facebook and Google+ meant changed “digital habitats” for some convenors. In particular, those more used to teaching online in clearly prescribed virtual spaces, like closed learning management systems, might have felt somewhat “unsettled” when suddenly exposed to a rather “nomadic” setting for facilitating and convening.

Methodological reflections: Possible limitations of our methodological approach are already mentioned above. In general, the participation of three interviewed convenors as authors of this paper could be perceived as conflict of interest. However, the convenors were not aware of the questions that would be asked during interviews. Furthermore, including an insider view and being able to go through a process of communicative validation after

the qualitative interviews added to trustworthiness of the data as much as the systematic, external, non-involved view of the fourth author who led the interviews.

## Conclusion

For future convenors of cMOOCs the following issues should be considered:

- An intensive planning phase as to the basic design of the course and assigning leadership roles for certain units eases the process of collaboration, finding one's own role as convenor and the actual implementation of the MOOC;
- A structure for ongoing collaboration or exchange of feedback while the course is running can support the convenors in taking up their leadership roles;
- Virtual communication spaces must be designed carefully, including being prepared for emergent new spaces that are set up by participants;
- It could be helpful to discuss a system of distributed responsibilities for convenors to contribute to different discussions in the various virtual discussion spaces used;
- It might be worthwhile to adapt virtual discussion spaces as well as facilitation methods across different thematic units, depending on the relevance of the content for different sub-groups of participants;
- It remains an open challenge to balance collaborative planning with “playing-by-ear” facilitating in newly emergent situations;
- Further research into any one of these issues seems rewarding – as much as offering a cMOOC collaboratively is a rewarding learning experience.

## References

- Anderson, T. & Dron, J. (2011). Three generations of distance education pedagogy. *The international review of research in open and distance learning*, 12(3), 80-97.
- Arnold, P. (2012). Open Educational Resources: The Way to Go, or “Mission Impossible” in (German) Higher Education? In: Stillman, L.; Denison, T.; Sabiescu, A. & Memarovic, N. (Eds.): CERN 2012 Community Informatics Conference: ‘Ideals meet Reality’. Monash: CD-ROM.
- Bremer, C. & Thilloen, A. (2013). Der deutschsprachige Open Online Course OPCO12. In: C. Bremer & D. Krömker (Eds.). *E-Learning zwischen Vision und Alltag*. Münster: Waxmann, 15-27. <http://www.waxmann.com/?eID=texte&pdf=2953Volltext.pdf&typ=zusatztext>.
- Brown, J.S. & Adler, Richard P. (2008). Minds on Fire: Open Education, the Long Tail and Learning 2.0. In: *Educause Review*, Vol. 43, Nr. 1, 16-32.

Daniel, J. (2012). Making Sense of MOOCs: Musings in a Maze of Myth, Paradox and Possibility. *Journal of Interactive Media in Education*, 3. <http://www-jime.open.ac.uk/jime/article/viewArticle/2012-18/html> (2013-09-01).

Ebner, M. & Schön, S. (2011). Offene Bildungsressourcen: Frei zugänglich und einsetzbar. In K. Wilbers & A. Hohenstein (Eds.). *Handbuch E-Learning. Expertenwissen aus Wissenschaft und Praxis – Strategien, Instrumente, Fallstudien.* (Nr. 7-15). Köln: Deutscher Wirtschaftsdienst (Wolters Kluwer Deutschland), 39. Erg.-Lfg. Oktober 2011, 1-14.

Ebner, M. & Schön, S. (2012). L3T – ein innovatives Lehrbuchprojekt im Detail: Gestaltung, Prozesse, Apps und Finanzierung, *Book on Demand*, Norderstedt.

Geser, G. (Ed.) (2007). *Open educational Practices and Resources. OL-COS Roadmap 2012.* Salzburg: Salzburg Research/EduMedia Group. [http://www.olcos.org/cms/upload/docs/olcos\\_roadmap.pdf](http://www.olcos.org/cms/upload/docs/olcos_roadmap.pdf) (2012-10-01)

Liyanagunawardena, T. R., Adams, A. A., & Williams, S. A. (2013). MOOCs: A systematic study of the published literature 2008-2012. *International Review of research in open and distance learning*, 14(3), 202-227.

Mayring, P. (2010). *Qualitative Inhaltsanalyse: Grundlagen und Techniken.* XX: Beltz

Schaffert, S. (2010). Strategic Integration of Open Educational Resources in Higher Education. Objectives, Case Studies, and the Impact of Web 2.0 on Universities. In: U.-D. Ehlers & D. Schneckenberg (Eds.). *Changing Cultures in Higher Education – Moving Ahead to Future Learning*, New York: Springer, 119-131.

Schaffert, S. & Hornung-Prähauser, V. (2007). Thematic Session: Open Educational Resources and Practices. A Short Introduction and Overview. Full paper in the Proceedings of the Interactive Computer Aided Learning Conference (ICL) in Villach (26-28 September 2007).

Wenger, E.; White, N. and Smith, J.D. (2009). *Digital habitats: stewarding technology for communities.* Portland, OR: CPsquare.