Mentoring at Scale: MOOC Mentor Interventions Towards a Connected Learning Community

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Abstract: The "Understanding Language: Learning and Teaching" MOOC produced by the University of Southampton/British Council attracted a large number of enrolments (almost 30,000 active participants) and incorporated a design structure aimed to promote social learning. This combination of high participant numbers and 'learning as conversation' approach (Ferguson & Sharples, 2014) posed a significant challenge in terms of course mentoring. This article explores the novel approach to course management and facilitation used on the MOOC, with a particular focus on the training, management, and intervention strategies of course mentors. The paper outlines a cloud based, flexible and collaborative system for managing and connecting mentors which was useful in organizing a geographically distributed group of five mentors. Further, in the context of social learning at scale, a role of 'mentor as connector' is proposed to align with the affordances of the MOOC platform and the particular course design

Key words: massive, open, online course (MOOC), scale, learning as conversation, mentoring, mentors as connectors, facilitation

Introduction

In November 2014, the seventh University of Southampton MOOC, entitled "Understanding Language: Learning and Teaching" (UL MOOC) was launched. It was developed and delivered in partnership with the British Council. Nearly 60,000 learners enrolled, of which almost half participated in some way. More than 140,000 comments were posted in discussion fora during the four weeks of the course. Such a large volume of activity and participants presented a significant challenge to the five members of the mentoring team, as this course placed more emphasis on learner support than other MOOCs run by the university. The MOOC was hosted on the FutureLearn platform, which is designed to promote social learning and is inspired by Laurillard's conversational framework (Laurillard, 1993; Sharples & Ferguson, 2014). However, the platform on its own may not fully engage the learners through the course, and many of them may feel unsupported and isolated. In order to foster a fully social and connected learning experience, mentors have an essential role to play.

This paper will explain how the mentoring team addressed the challenge of such massive numbers, by adopting a novel approach to course management using cloud computing and emphasising the role of mentors as connectors

The course

The UL MOOC was a course designed to promote reflection on how languages are learned and taught and was aimed at both language teachers and learners. The course was divided into four weeks, each of which reflected on language learning at a different level of analysis: individual, classroom, Web and global levels.

Interaction in the course

Table 1 shows the total number of comments, replies, and mentor interventions made in the course. Approximately one in five comments received a reply from the learning community, and 3.6% of these replies were mentor interventions.

Total comments (within course dates)	145,426
Replies	27,669 (19%)
Mentor Interventions (reported, only team)	994 (3.59% of the replies)
Total mentor hours	147.5 (6.7 interventions/hour)

Table 1. Interaction figures

Mentors replied to nearly 1000 comments at an average rate of 7 interventions an hour. Although there were no strict directions on how many interventions should be made in each shift, it was decided to dedicate more time to the quality of the interventions, rather than the quantity. The mentors would then leverage the platform affordances for adding visibility and impact to these interventions. For example, learners were encouraged to follow mentors. Also, taking into account that Futurelearn contains a discussion forum for each "step", predictions were made on which discussion spaces needed more attention and which needed less. For example, there was a step that received nearly 10000 comments but required fewer interventions, as it consisted of an

opportunity for learners to say where they were from and they would see their names in a map. However, there were other steps, namely the "reflection" section of each week, where more time from the mentors was devoted (see chart below for number of comments by step).

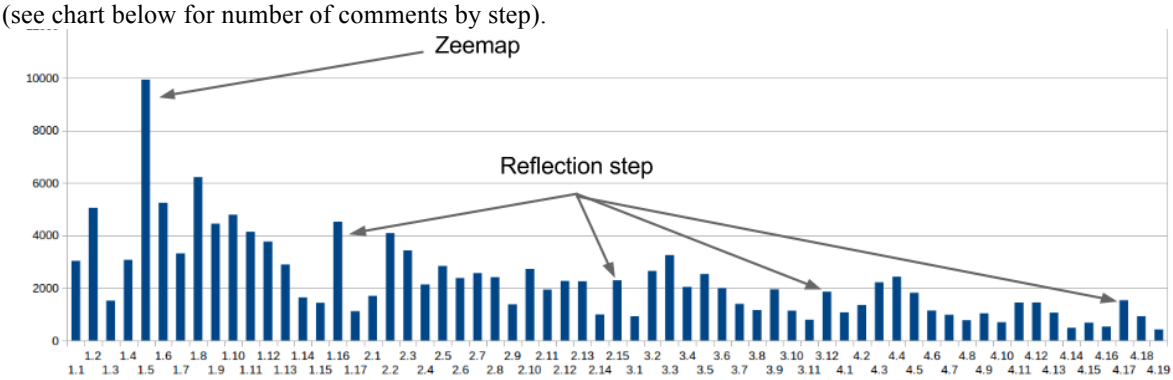

Chart 1. Number of comments by step

A Connected Mentoring Team

To promote a connected learning community and appropriately address learner comments, the mentoring team also needs to be well connected. The five mentors in the team shared similar backgrounds but were based in different locations and institutions (the University of Southampton and the British Council). Fluid communication was enabled using cloud computing technologies. This meant the course rota and the course map could be collectively accessed and edited. Also, a cloud based reporting system was set up so that mentors could fill a form each time they completed a shift, in which they would highlight interesting discussions made by the learning community. This allowed an agile way to identify key issues arising during the week that would feed in the weekly reviews. It also enhanced communication within the team, as all members would know in real time what interventions had been made in previous shifts. The resulting dataset from this form also became potentially valuable for further research, as it contains a high amount of reflections, gathered in a structured manner, from those who were in close contact with the learning community, namely the mentors.

Mentor training outlined the pedagogical, social, technical and managerial roles which are required of online mentors (Berge, 1995), but a further 'connector' role was identified in the UL MOOC to help align with the affordances of the platform, the course design, and the 'massive' number of participants. All members of the team were involved in editing and checking course materials (reported on a shared Google Doc), whilst also familiarising mentors with specific course content, and identifying spaces where intervention would be potentially most needed.

Mentoring towards a connected learning community

Following Anderson (2008), the approach to mentoring on the UL MOOC prioritised communication and interaction as the primary affordances of the Web for education (rather than information delivery, for example). The emphasis on "learning as conversation" in the FutureLearn platform (Ferguson & Sharples, 2014) and the specific course design/content also reflected this view of learning. However, Gasevic (2014) notes that an absence of social interaction in online courses can inhibit the effectiveness of online education. To promote social learning and close ties between participants, Kop (2011) highlights the importance of fostering "presence" in MOOCs, defined as the "illusion of non-mediation". She cites Garrison, Anderson and Archer's categorisation of teaching presence, cognitive presence and social presence as "three core elements for an educational experience" (2000:103). Mentors on the UL MOOC aimed to foster conditions in which experiences involving these forms of presence occurred. To this end, the mentor interventions in discussion forums were of 5 kinds:

1. Connecting the learning community
2. Providing links to suitable content
3. Fostering learning as a conversation
4. Encouraging development of external networks
5. Producing weekly reviews and suggestions for further study/exploration

1. Connecting the learning community

The first and second intervention types both aimed to use tools available in the discussion forum to increase the density of connections in the course. To develop connections between participants (and between participants and mentors), use of the 'like' function was encouraged, while the mentors attempted to 'like' useful or interesting comments which they encountered, and also link comments by participants on related or complementary topics. Users were also encouraged to use the 'follow' function on the course mentors' profile

pages to make mentor posts more visible to them within the platform forums. These interventions were primarily attempts to foster a sense of social presence, characterised in the literature as those exhibiting emotion, open communication or bonding within the group (Garrison, Anderson and Archer, 2000). Linking of posts on related topics might also, however, trigger the exploration and integration of new ideas which are markers of cognitive presence.

2. Providing links to suitable content

In addition to linking course participants, mentors tried to post links to particular steps, videos or resources as part of replies to participant comments or questions. These were aimed to foster cognitive presence, but also could be seen as attempts by mentors to develop understanding of new ideas or topics among participants, or instruct them on particular points (teaching presence).

3. Fostering learning as conversation

The FutureLearn platform, it is claimed, reflects a social constructivist approach to education, and derives its learning design from Laurillard's conversational framework (Ferguson and Sharples, 2014). This design allows for multimedia resources, collaborative learning, and importantly "opportunities for tutorial intervention and guidance" (2014:100). Ferguson and Sharples (2014:108) claim that "conversational learning can and does scale" (though their 2014 study does not develop support for this claim in depth). On the UL MOOC, mentors tried to participate in and foster conversational learning by encouraging participants to reply to replies they themselves received, and by contributing to long discussion threads. Mentors often used the platform tools (likes, links) in relation to such discussions, and it was hoped that other participants following the mentors could later locate these discussions.

4. Encourage external networks

The British Council Facebook page was also used for 'live chat' sessions - an opportunity to develop teaching presence. During these periods, participants could post questions or comments to which a team of mentors attempted to respond. An unofficial, participant-created Facebook group was also established, showing the wider affordances of the Web for networked learning, collaboration and sharing of information and expertise. The group is still active at time of writing. Prioritisation of social interaction as part of learning is a common theme in much current literature on MOOCs, such as the 'participatory pedagogy' explored by Anderson and Ponti (2014), development of new literacies of participation (Stewart, 2014), or the influence of learner positions in social networks on learning outcomes (Gasevic, 2014).

5. Producing weekly reviews

Mentors recorded video reviews of important ideas, activities and participant responses for each week of the course. The key issues were identified from the forms mentors would complete after each shift. In the reviews (posted on YouTube near the end of each week), mentors were able to comment on and build on authentic participant contributions and questions. Ideas and resources for further study and exploration were suggested, and the comment function in YouTube was also open for participant responses. These reviews allowed connections to be made between participant comments, course content, and external resources, whilst also providing a more visual sense of social contact with mentors.

Mentoring challenges

Maintaining communication between mentors during the course

Because of the volume of participant comments, maintaining effective communication between mentors regarding emergent issues, problems, or common themes was challenging. Future iterations of the course may include some systems to share weekly reviews or updates of such emergent information that summarise the experiences of all mentors in that period.

Identifying key issues for participants

It was difficult to determine the most interesting, engaging or current issues for learners at this scale. There was also little time to determine a consensus on what these issues were among all mentors. Systems for sharing mentor impressions of the key themes (as reflected in participant comments) or identifying such themes through automated keyword analysis might assist mentors in supporting participants during the course.

Choosing which participant comments to address and link

Mentors had to make quick decisions about which participant comments to address. Attempts to link comments on related themes was also a challenge simply in relation to remembering and finding previous comments on similar topics. The platform does, however, record and give access to a list of mentors' own comments (on their

profile page), so perhaps increasing mentor awareness of this affordance might help improve performance in this respect.

Maintaining confidence in mentors' own content knowledge

Mentors were encouraged to make substantive comments on participant responses to course materials, suggesting related materials to explore or responding directly to the content of participant posts. With the volume and pace of comments generated by participants, mentors found it difficult to post comments rapidly and repeatedly, whilst maintaining confidence in the accuracy and quality of their own contributions. Ideas posted on the Web are both public and have some permanence, and knowing this adds pressure on mentors to some extent.

Conclusion

The UL MOOC attracted a large number of learners and attempted to implement a pedagogy of conversational learning at scale. The affordances of the platform and the course design and content were produced with this form of learning in mind. However, the mentoring team still had an important role to play in helping to foster conditions in which a connected learning community could develop. The management of the mentoring team included training for mentors which outlined their different roles on the course, and particularly the overarching role of connector which exploited the affordances of the platform and the Web more generally. Cloud computing was also used to help connect the team which was geographically distributed and had other professional commitments. Mentor interventions on the course focused on creating a connected learning community, mainly by encouraging use of and demonstrating the affordances of the platform for learning as conversation at scale.

Platforms such as FutureLearn and courses such as the UL MOOC are designed to address high numbers of learners by making learning scalable. In order to achieve such a goal, a mentoring plan designed towards a networked learning experience can be a highly useful complement to both the course content and the platform.

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