A Personal Reflection on Developing a Digital Accessibility MOOC Compared to Developing a Traditional Course

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**Abstract.** This paper presents a personal reflection on developing a ‘Digital Accessibility’ MOOC as part of the Erasmus+ MOOCAP project and comparing the process to developing a traditional course on the same topic. The few people who currently teach about accessibility on expensive face to face courses at a few universities are currently only reaching a very small number of people whereas many tens of thousands can learn through a MOOC.

**Keywords:** digital, accessibility, MOOC, reflection,

1. Introduction

There are various types of MOOCs[[1]](#footnote-1) but they are all online courses freely available to anyone and have too many learners for a teacher to be able to interact with or assess individually. Therefore to retain students, engagement needs to be enhanced by inter-student interactions facilitated by educators and moderators and features such as Peer Review, liking and following posts. While there are a few online courses teaching accessibility and some publications describing the technical aspects of developing a MOOC there does not appear to be a publication reflecting on the issues and differences encountered by an academic member of staff. This paper fills this gap in the literature through a personal reflection on developing a ‘Digital Accessibility’ MOOC as part of the MOOCAP project[[2]](#footnote-2) and comparing it to developing a traditional course on the same topic.

1. Digital Accessibility MOOC

There are many resources describing what a MOOC is[[3]](#footnote-3), the benefits of a MOOC[[4]](#footnote-4), the history of MOOCs[[5]](#footnote-5), the technical aspects of creating a MOOC[[6]](#footnote-6), handbooks on how to create a MOOC [1] or the costs and benefits of developing a MOOC [2]. Draffan et al. [3] have described the practical process involved in developing the Digital Accessibility MOOCAP project MOOC currently being developed by 8 partners from 7 European countries with Erasmus+[[7]](#footnote-7) funding. Recent research has shown that many MOOC platforms had accessibility issues [4], [5] and it is very important that the platform and content selected for our MOOC is as accessible as possible. All partners have had extensive experience running their own conventional courses at their own institutions that teach various aspects of digital accessibility through face to face lectures, seminars, workshops, assessments as well as providing some online material. Very few of the professors in the project consortium however had previous experience of participating in a MOOC which makes it difficult to take the MOOC student experience into account when developing a MOOC. In contrast when developing and teaching face to face courses at university, professors are generally still using very similar teaching methods to those they experienced themselves as university students and so it is easier for them to design and develop and teach such traditional courses. Over the past 2 years I have enrolled in about 30 MOOCs on 7 different platforms to experience a MOOC from a student’s perspective and other MOOCAP project partners were encouraged to enroll on at least one MOOC so they could also gain similar experience. Also very few of the professors had experience of developing courses with other partners from other institutions and countries or of running purely online courses and only one Partner University had previous experience of developing and running MOOCs. One of the most important issues for a MOOC is how to get very busy people to agree give up their valuable time to participate as learners as when people pay nothing they feel they have nothing to lose if they don't participate. A large proportion of the people who enroll on MOOCs do not even start and every week a large percentage of the learners drop out with less than 7% on average completing the MOOC [6]. A participant of a face to face course has to plan when to make time in their busy schedule to participate, however for a MOOC they need to be very motivated and engaged to make it a priority over their many other interests and commitments. All the information we provide in the MOOC is also being made available as Open Educational Resources (OER) and so we must provide more than just information to engage students in the MOOC.

Unlike a conventional class we can't engage participants through real time interaction (questions, answers, debate, eye contact, facial expressions etc.) between teacher and student or students and other students. A teacher learns the ability to judge the pace of their class from the reactions and body language of their students and can slow down or speed up as required to ensure students understand the concepts presented. That may be one reason why, while students can remain engaged with a teacher in a class for many tens of minutes, research has shown that to engage students in a MOOC most videos should last about 6 minutes [7]. To create such short engaging and informative videos involves careful editing rather than simply recording normal class presentations. In my traditional course when I teach about making videos accessible I show a video in class without any sound or captions and then show it again with captions and then show it again without any picture or audio description and then finally with audio description and then discuss with the class the issues involved in making videos accessible. This can take about 25 minutes of class time. When developing the content to teach about this topic in the MOOC it was decided for copyright reasons we would need to script and film our own video content and add a narration and motion graphics and also employ and film a sign language interpreter to demonstrate on-screen signing. The resulting video was 7 minutes and 31 seconds long and took many hours to script, film and create but provided an enhanced learning experience compared to simply watching the much longer recording of my class presentation.

In my traditional course I typically invite external guest lecturers, rearranging the schedule and order of teaching of topics to fit in with their availability. For the MOOC we filmed the guest lecturers answering questions and then edited their answers to fit the most appropriate place in the MOOC. A teacher can set and mark coursework or exams to assess individual learners’ understanding whereas a learner’s understanding on a MOOC is normally assessed only through multiple choice questions or automated peer review where learners provide feedback on each others’ work. Multiple choice questions can also be used to engage learners and stimulate thought and introduce new material through the answers. To help participants engage actively in the MOOC we pose questions and invite them to complete surveys and publish answers and present current issues and the state of the art as well as carry out tasks and share their findings.

Every MOOCAP professor had their own preferred approach to teaching and for pragmatic reasons it was agreed to split the 5 weeks of the Digital Accessibility MOOC into topics. This inevitably required compromise and negotiation, as did agreement on the title ‘Digital Accessibility’. We developed user stories about 9 typical disabled people to help engage participants and tie the separate weeks together to show the barriers and solutions in work, learning, leisure, daily activities and travel-ling.

One challenging question we pose in our MOOC is “Why should we care about Accessibility?” as every learner can contribute something to this discussion without having great expertise in the topic.

Copyright of images has not been seen as a serious issue by teachers who regularly copy and paste images found on the web into their presentations they show to their classes. Universities who have not been involved with putting resources on MOOC platforms appear to not have involved their legal departments in ensuring that all Open Education Resources produced by members of their staff have obtained the required copyright clearance. A few MOOCAP partners preferred their material only to be available for non-commercial use through Attribution-NonCommercial-ShareAlike CC BY-NC-SA while the majority of partners wanted the materials to also be available for commercial use through the Attribution-ShareAlike CC BY-SA. The MOOC platform also required the resources to have the CC BY-SA license as although MOOCs were free, participants could buy certificates and because of this requirement one partner decided to leave the consortium.

1. Conclusion and Planned Activities

Collaborating with professors in universities in many countries to design and develop a course on Digital Accessibility can be frustrating as compromises need to be made but it is stimulating as it encourages expert discussions and valuable as it provides the learners with a wider range of views. This collaborative approach however needs a great deal of effort and thought to ensure the coherence of the experience for the learner. Developing a MOOC is also challenging as it involves an excellent under-standing of copyright regulations as well as how to engage and support learners and we benefitted greatly from the support and previous experience of the MOOC team at the University of Southampton. Everyone in the world would benefit from knowledge about accessibility whether they create content or specify design, build, test, evaluate, use or buy technology or advise or influence those who do. The few people who currently teach about accessibility on expensive face to face courses at a few universities are currently only reaching a very small number of people whereas many tens of thousands can learn through a MOOC. The large amount of data obtained from the learners’ answers to the questions in the polls in the MOOC can also provide a valuable scientific contribution.

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2. http://gpii.eu/moocap/ [↑](#footnote-ref-2)
3. https://www.youtube.com/watch?v=eW3gMGqcZQc [↑](#footnote-ref-3)
4. <https://www.youtube.com/watch?v=rYwTA5RA9eU> [↑](#footnote-ref-4)
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6. http://universityofreddit.com/class/67829/how-to-make-a-mooc [↑](#footnote-ref-6)
7. http://erasmus-plus.ro/ [↑](#footnote-ref-7)