Designing an Educational Action Task Force for MOOCs and Online Course Production

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Abstract. Although the research literature on online courses, such as massive open online courses (MOOCs), has proliferated, surprisingly few studies have explored the organisational approach to a generic institutional strategy for supporting educators when developing online courses in higher education (HE). The goal of this paper is therefore to describe and conceptualise the outline of an infrastructure for organising the production of online courses in continuous and further education. Central to the infrastructure is the Educational Action Task Force (EATF), a network consisting of employees with complementary competences (c.f. technical, pedagogical and multimedia) that can coach, mentor and support educators through the entire online course production process in designated teams. In this article, we outline the design of the online course production process in the EATF teams. The design is stepwise and collaborative, and aims to contribute to a seamless and quality-assured strategy that caters for the various goals that content creators may have within the scope of the strategic goals in the organisation.

Keywords. Online courses, MOOC, organisational design, network, coaching

1 Introduction

The rationale for designing an Educational Action Task Force "EATF", a flexible, collaborative and networked support unit that will support faculty to make online courses, is based on research and experiences acquired at a large Norwegian university. This research shows the increased need for putting focus on how online courses are made [1, 2]. There is a demand for a technological infrastructure, and pedagogical support for faculties that wish to make high-quality online courses. At our university, MOOC initiatives are short-lived and significantly rely on project funding and enthusiasts to survive. Even so, there has been no centralised strategy for producing certified online courses and MOOCs for continuous education. Such factors inhibit scalability and flexibility in online course production. Consequently, the need for an institutional support unit that can assist educators and assure the quality in (massive, open) online course production, other than ordinary courses delivered on the learning management system (LMS), has emerged.

2 Inspiration for establishing an EATF

In research on MOOCs, we find few studies focusing on the essential requirements and conditions for supporting faculty in their production of a quality-assured MOOC for the first time. For example, little research addresses the implications related to the collaborative production process, the choice of platform, the planning of the course design and the video production time involved, which are essential. In fact, a MOOC production is a collaborative activity that can last for months. Moreover, we argue that ideas about making high-quality MOOCs are often scrapped, partly due to the commitment that educators must make and partly due to the lack of technical and pedagogical support in higher education (HE). Instead, a prolific MOOC research literature has emerged, focusing on the analysis of the activities and outputs in MOOCs, like decomposition of user groups [3], video engagement among learners [4], drop-out rates [5] etc., overlooking the efforts to make one. In a recent research review, Sanchez-Gordon and Luján-Mora [6] suggest that researchers need to redirect their focus towards developing clearer strategies and standards for MOOC course design, which supports our claim that the strategic and organisational aspects of faculty's MOOC production processes must be highlighted. Their argument is supported in a recent study on the design of online learning opportunities associated with MOOCs where they found that the quality of instructional design across 76 MOOCs was limited [7].

The proposed outline for the EATF for MOOC and online course production is a lasting, non-project based organisational construct that can support faculty, who will share their subject-specific expertise in a MOOC or an online course. The EATF is organised around three core principles: collaboration; distributed network online; and a stepwise production process design.

First, the adoption of cloud-based services for teaching and learning facilitates scalable and flexible courses. The EATF is a collaborative endeavour, based on a formalised partnership between the educator(s) and designated EATF-team members during the production period. Together, they form a network of some 3 to 7 participants, who meet at regular intervals to discuss, learn and inform stakeholders in the different stages in the MOOC production process. Each meeting has a fixed agenda to ensure progress. Second, the EATF performs all internal and external activities and assignments in a distributed network online. This implies that the EATF is mainly cloud-based and that meetings and collaboration to a large extent are online. This allows for a more flexible and transparent workflow. An overall goal is to coach and mentor faculty in digital collaborative spaces (Office 365, Skype, etc.) instead of having many face-to-face meetings on campus. Consequently, the EATF networked design is closely related to what Groth calls "ad-hoc organizations" [8]. Third, the EATF aims to establish and maintain a coherent and stepwise course production process design, a "virtual assembly line" that contributes to transparency and course content quality assurance. Transparency is also a cornerstone for continuity and quality performance in the EATF over time.

In the EATF, we aim at using *coaching techniques* to uncover faculties' initial motivation and intentions in order to support their aims and objectives. Coaching is an emerging research field that has been successfully used in health care, sports and private business to make performers stay on target, enhancing performance, self-esteem and intrinsic motivation [9]. Very little research has been conducted on the gains from

coaching in formal educational [10, 11]. We also aim at using mentoring to inform faculty of online course design, video production and platform technicalities. The details about how we envision our approach is outlined in the next section of the paper.

3 The EATF support process

Our experience, from MOOC production since 2013, is that online course production easily drags out in time terms. Educators tend to underestimate the workload and focus too quickly on video production. They base their idea of the online course on previous experience from teaching on campus and have little understanding of the pedagogical limitations of the platforms and of the difference between online and on-campus teaching. The latter is also reflected in studies that we have previously referred to in [7].

To enhance the quality of the instructional design and make the online course production process more efficient, the EATF works in a streamlined production process consisting of seven steps. The main goal is to form a growth spiral where the educator and the EATF team members collaborate in a network to complete the course production. The network typically consists of 3 to 7 members with complimentary competences in: 1) online course design and pedagogy; 2) multimedia production; 3) frontend representation and platform functionalities; and 4) expertise in the course content area. In each step, the network collaborates to understand and carry out tasks that have to be completed, before the team moves on to the next step in the production process. Information about the tasks in the various steps is also available online to support the educators between the meetings in the network, with a form that shows an overview of the activities and progress made.

The EATF makes use of coaching and mentoring as well as reflection-on-action [12] to motivate educators and help them understand the actions required to make an online course. Coaching is an emerging research field and can be described as questioning and listening techniques that may help educators see more clearly where they are, where they want to be when the online course is finished, and how to get there. Coaching is a method that has the capacity to motivate educators to stay on track to reach their goals. Research from the Erasmus+ COACH project [10] shows that coaching has positive benefits in educational environments. An important strength is what may emerge in terms of increased reflectivity, stronger cultures of collaboration, sharing of knowledge and greater engagement with professional development [9]. The GROW model, which is an acronym for Goal, Reality, Options and Will, has been used with great success in sports and corporate business. It is an approach that can be used to aid educators to positively reach their final goal through a series of supported steps. Mentoring is rooted in Vygotsky's theories of the "zone of proximal development" and can be understood as adult learners engaged in new learning and relearning in changing educational contexts that demand a new view on education [13].

Following, we outline some initial ideas of the potential content and composition in the EATF support process.

Step 1, Initial clarification of goals and motivation: The first step is to invite the educators to an initial meeting. The meeting intends to raise their awareness of the educational context and help them clarify the goal and the steps that will have to be taken

to reach their goal by means of coaching techniques. Also, the objective is to form an EATF team that can support the educators in the best way. The conversation initiates a formalised, collaborative networked process to support the educators so that they can reach their goal.

Step 2, Selection of platform and work flow: In this step, the educators make various decisions that are supported by mentoring. First, the educators are introduced to the EATF-team members and the result from the first meeting is discussed to contribute to further specify the conditions for the course production and inform all stakeholders. Second, the educators get a better understanding of the potential and limitations of the various course platforms and the nature of the support the other team members can offer. Third, the educators select an appropriate platform for the course. An important activity is to introduce the educators to a course on the platform, which serves as an example of what the course might look like. Fourth, the educators decide upon a work flow to commit to a timeline for the course production and to decide upon online collaboration software and when to meet next and whether to meet face-to-face.

Step 3, Course design: In this step, the educators are introduced to online instructional design. They are invited to reflect on learning objectives, the number of modules, types of activities and forms of assessment in the context of their chosen course platform. They explore the selected platform and discuss possibilities and limitations with more experienced platform users. An important activity in this process is to discuss what type of content is better suited as text, picture or video. At the end of the meeting, the educators have a clearer idea of what the MOOC will look like and is able to go to the next step with a draft or overview of how many pictures, animations and videos they will create and content that can be reused in the course.

Step 4, Multimedia workshop: In this step, the educators are invited to a multimedia workshop. The focus is on preparing the educators for the video production and support the multimedia course content. In the workshop, they are first introduced to video-production methodology and how to visualise knowledge in a video for an online audience. Educators come to the workshop with a written text, a treatment or a *draft that will be completed with multimedia content in collaboration with the team.* They will typically discuss different concepts like a talking head, two-dimensional (2D) animation, voiceover, slide layout, illustrations, etc., to support the written content that will be read on a teleprompter. In the workshop, the team finally outlines a detailed video production schedule for the next step.

Step 5, Video production: In this step, the focus is on the actual video production process. The project team strives to create an atmosphere of trust, where uncomfortable and inexperienced educators are supported to make the best possible product.

Step 6, Uploading content to platform: In this step, the course content production is completed, and the educators are ready to start uploading the course to the platform. The EATF team informs the educators about technical platform support depending on the educators' technical competence. The team also discusses how to proceed with user testing, piloting, and feedback from peers on content quality when the course is online.

Step 7, Evaluation: In the last step, the team meets to finalise the online course and support the educators for launching and possible marketing. The educators are also invited to evaluate the EATF and pertaining pedagogy, methods and technologies to contribute to quality assurance. Feedback is essential, to improve the supportive network.

4 Conclusion

This paper intends to address a missing link in the MOOC research literature – how to organise support for educators who want to make MOOCs. Researchers have examined student user patterns and outputs but seldom cast lights on the efforts involved in making them. This paper attempted to outline some initial ideas on how HE institutions can organise support for educators, who want to produce MOOCs, in a conceptual framework for MOOC and online course production. The seven steps outlined contribute to a scaffolded technical, pedagogical and quality-assured process, which contributes to efficiency in online course production and quality enhancement for online learners. The introduction of an organisational approach to structuring support for online course production contributes to closing the gap in the MOOC research literature.

5 References

- Langseth, I. Haugsbakken, H.: Introducing Blended Learning MOOC A Study of One bMOOC in Norwegian Teacher Education. In T. Brinda et al. (Eds.) Stakeholders and Information Technology in Education: IFIP TC 3 International Conference, SaITE 2016, Guimarães, Portugal, July 5-8, 59-71, 2016. Springer, Heidelberg, Germany (2016)
- Jacobsen, D.Y.: Dropping Out or Dropping In? A Connectivist Approach to Understanding Participants' Strategies in an e-Learning MOOC Pilot. Technology, Knowledge and Learning. 1-21 (2017)
- Kizilcec, R.F., Piech, C., Schneider, E.: Deconstructing disengagement: Analyzing learner subpopulations in massive open online courses. In D. Suthers, K. Verbert, E. Duval, X. Ochoa (Eds.) Proceedings of the ACM International Conference on Learning Analytics and Knowledge, Leuven, Belgium (2013)
- 4. Guo, P.J., Kim, J., Rubin, R.: How video production affects student engagement: an empirical study of MOOC videos. Proceedings of the first ACM conference on Learning @ scale conference. ACM, Atlanta, GA, 41-50 (2014)
- Clow, D.: MOOCs and the funnel of participation. In D. Suthers, K. Verbert, E. Duval, X. Ochoa (Eds.) Proceedings of the ACM International Conference on Learning Analytics and Knowledge, Leuven, Belgium (2013)
- Sanchez-Gordon, S., Luján-Mora, S.: Research challenges in accessible MOOCs: a systematic literature review 2008–2016. Universal Access in the Information Society. 17(4), 775-789 (2018)
- 7. Margaryan, A., Bianco, M., Littlejohn, A.: Instructional quality of Massive Open Online Courses (MOOCs). Computers & Education. (80), 77–83 (2015)
- 8. Groth, L.: Future organizational design: the scope for the IT-based enterprise. Wiley, Chichester (1999)
- Horn, T.S.: Coaching effectiveness in the sport domain. In T.S. Horn (Ed.) Advances in sport psychology, 239-267,455-459. Human Kinetics, Champaign, IL (2008)
- Erasmus+: COACH (Coaching SchOols to fAce Change aHead). European Union, Brussels, Belgium (2017)
- 11. van Nieuwerburgh, C., Loma, T., Burke, J.: Editorial. Coaching. An International Journal of Theory, Research and Practice. 11(2), 99-101 (2018)
- 12. Schön, D.A.: The reflective practitioner: how professionals think in action. Basic Books, New York, NY (1983)

13. Fletcher, S., Mullen, C.A: Sage handbook of mentoring and coaching in education. Sage, London (2012)