MOOC Platforms: A Nordic Approach to Research Informed Education in Higher Education

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Abstract. Due to a growing demand for flexible lifelong learning, many universities will need to transform their educational strategies to meet societal demands to stay in business in a market where global competition with new technological tools such as educational Massive Open Online Course (MOOC) platforms can transform the industry. In this article, we discuss a future approach for courses in Higher Education Institutions (HEIs), inspired by the Nordic welfare state model, and MOOC platform technology. Contrary to many earlier MOOC initiatives, where access was free of charge and open to all, we see a commercial freemium trend on MOOC platforms. Now we see a trend towards short, free, "teaser" courses that encourage learners to pay for a certificate and to undertake quality assured and accredited micro-master courses hidden behind paywalls. This trend aligns with the principle of paid access to courses on campus in Higher Education in many countries. In this paper, we argue that MOOC platforms should be a vehicle to promote transparency, i.e. open access to high quality, research informed and instructionally designed course content, regardless of the nature of the course. In doing so, universities could contribute to strengthening the quality of content available to all learners on the Internet in the short term (e.g. Facebook Google, and YouTube) and in the long term (democracy, equity and academic thinking). The approach we propose is based on our contribution to a strategic policy document for further education at a larger Nordic university in 2018.

Keywords: Open Access, MOOC Platforms, Online Learning, University Business Models.

1 Transforming Higher Education

1.1 The move from LMS to MOOC platforms

Higher Education Institutions (HEIs) have a long and resilient history of research and education that has contributed substantially to knowledge and learning in society [1]. Though, it can be argued that many of the current business models adopted by universities need to evolve further given the changing educational market [2], it is within this context that this paper discusses Massive Open Online Course (MOOCs) in

relationship to the Nordic welfare state model. While the use of Learning Management Systems (LMS) is generally synonymous with Higher Education teaching and learning, MOOCs have taken center stage more recently with HEIs allocating generous amounts of funding towards their development. The understanding of how institutions can embrace new technologies, and what continuing and further education may look like needs further discussion that is embodied in sound educational practices. Many institutions have invested in LMS to organize students and educators in manageable groups for learning on campus since the 1990s. However, a number of institutions, and particularly Nordic institutions, have been cautious to engage in MOOCs since the concept was first coined in the late 2000's (originally with the intention to bring together large numbers of people for rich discussion). With the realization that new models and approaches are needed in HEIs and that there is some urgency to address societal needs, this paper draws upon the original intentions of MOOCs and the need for new approaches to learning online and together. To illustrate the urgency of access to education, a query conducted by Deloitte Norway in 2018 [3] suggests that within one generation, competences acquired in continuing education will be outdated after 4.5 years, as opposed to a previously acknowledged 26 years, reinforcing the need for continuing educational opportunities in a rapidly evolving interconnected world.

Consequently, HEIs are scaling up their further education to meet the demands for highly skilled and knowledge informed workers in all sectors of society. There are political and financial reasons for taking MOOC-platform technologies seriously, considering that the five biggest platforms share a reach of 100-150 million learners. According to Belleflamme and Jacqmin [4], MOOCs play a key transformative role in the Higher Education (HE) sector by supporting evolving teaching and learning practices, as opposed to replacing incumbent institutions. Resistant institutions, where education is conducted with a minimal adoption of new technologies and online learning, may risk falling behind or even going out of business in a competitive global market for lifelong learning. Acknowledging the existence of online, on campus and blended learning deliverables, HEI need to rethink their frameworks for education in line with laws and regulations in their local and national contexts. In the following paper, we present the outline of an approach to education, prior to discussing the Nordic approach to courses in HEI, focusing on open access to educational content on MOOC platforms.

1.2 A Nordic approach to learning in Higher Education

MOOC platform technology provide opportunities for HEIs and it should not be left to technology savvy platform providers to pave the way, create monopolies and make profit, much in line with what has happened in other sectors of society. Content on these platforms is provided by HEIs and courses and study programs on campus will necessarily be affected. One possible strategy is to de-bundle the existing study programs and the division between continuous and further education, to open up to a more transparent, flexible and scalable approach for HEIs, for the benefit of all.

The current generation of MOOC platforms distinguish between 1. short freemium courses with payable certificates and 2. more substantial, payable courses that can be

combined in low-cost micro-master credentials for learners. We propose a different approach (similar to the earlier intentions of MOOCs). We argue that research informed educational course content, found for example in master courses on campus and micromaster courses online, should be accessible to all learners on the platform. Simultaneously, we acknowledge that mentoring and accreditation related to courses on MOOC platforms can be behind a paywall to cover institutional expenses. At the micro-level, our approach intends to cater for access to learning within many Higher Education (HE) courses, i.e. flexible, scalable, transparent and quality assured courses that will stand out from a crowd of less serious actors in a life-long perspective on learning. It entails that continuing and further education will overlap and that debundling of further and continuing education is a prerequisite. Educators involved must be prepared to open their course content to the public. To support our argument, we have embedded the approach in the Nordic welfare state model, where state run continuing education is 100% state subsidized and free for learners. State run further education is either subsidized by the state, the student or other parties, or in a combination of external and internal funding in various deliverables. The authors realise that this notion of free open education has its implications for many HEIs due to various funding models in different countries. We argue that there is a need for HEIs to re-establish their trustworthiness through quality research informed courses that value the voice of the students and are not outsourced by third party online providers.

1.3 Combining three types of learning in one course

Our approach attempts to join three categories of course participation in the same course. The categories are described in studies on further education [5, 6, 7] as learners with different educational needs and motivation in a lifelong perspective on learning. These are referred to as informal learning, non-formal learning and formal learning and are elaborated upon as follows;

- Informal learning: online courses attract a large group of learners who are
 curious and want to drop in on a course and leave with pieces of knowledge
 gained because they are genuinely interested in certain aspects of the course,
 or the job requires the acquisition of a specific kind of knowledge. They may
 also drop out, if they find the course not suited to their purpose.
- Non-formal learning: online courses attract resilient people who are interested
 in the course content in general, but they do not need an accreditation. They
 are happy to receive badges or possibly a certificate to prove their attendance.
- Formal learning: Online courses attract a smaller number of participants, who
 want course accreditation. These are learners, who follow the normal
 progression in the three-cycle system, or for some reason or other, have not
 followed the normal progression, and want to continue or extend their formal
 education.

Each of these three categories of learners tend to vary greatly in numbers. Further, the types of courses that are offered to suit these categories of learners differ in terms of assessment and work load acquired, but not necessarily in terms of course design

and content quality, which is the unifying factor. For example, an online course can be equivalent to the full work load credit points of an existing face-to-face course and may cater for informal, non-formal and formal learners, while still being in line with course content traditionally offered on campus. In combining the various forms of online and on campus course participation, the approach aims to use MOOC platform technology to strengthen the advantage that HEI have in the educational market in terms of trust, accreditation and research informed course content. First, the model involves open access to the research informed course content online for on campus and online learners, which also contributes to transparency across silos and institutions in education. Secondly, for online learners, a course certificate is offered for free (or as user pay) upon satisfactory completion of a set of tasks in an automated process based on participation/contribution algorithms. Thirdly, online learners, who have completed the tasks, may opt for accreditation if they register as students and pass the final assessment in the course. Additionally, users may opt for mentoring, personal feedback and support within a learning community and supported by highly qualified and proficient academics who are experts in their field of chosen study. Universities can receive financial support for the development and implementation of courses through two possible ways; where students pay a fee to register for the assessment and secondly, where students choose to be part of a learning community which offers personalized learning opportunities a larger fee may be imposed.

A further advantage of this approach is related to courses that have only a few on campus students and where they can be combined with online students who are willing to pay for the further personalized learning options offered through the university. The administrative burden of registering online students that have no intention of completing the course is also minimized in this approach. The approach intends to cater for a maximum number of internal and external students to pass the course assessment.

2 Discussion and Conclusion

2.1 Open access to education and research

One fundamental question arises when developing a successful approach for the digital transformation of online learning with MOOC-platforms: Is HE a commodity for individual learners with the means to pay for it or a joint investment in society at large? It can be argued that HEIs have two main deliverables: research and education. In theory, MOOC platform technologies provide the opportunity to share academic publications (research) and research informed educational content online for free, without substantial additional costs related to a higher number of self-organised learners engaging with the material. In practice, there is, on the one hand, a vivid ongoing discussion with regards to open access to research, which involves all forms of published research output that is distributed online and free of cost or other barriers for learners in HEIs [9]. On the other hand, there are voices arguing for open access to education (teaching and learning) [9], which in general terms englobes webinars, open content, open educational resources (OER) open courseware and MOOCs, all shared under a creative commons (CC) license that allows for de-bundling and re-bundling of

educational content. In our approach, open access to both educational content (courseware) and research in courses on MOOC platforms is a prerequisite. It also ensures that highly qualified academics from the institution are focused on the delivery and applied pedagogical approaches, as opposed to being outsourced to external content providers that can struggle to provide the expertise and experience needed. The higher workload and digital competency associated with the development and implementation of MOOCs by academics needs to be acknowledged in a similar way that research contributions are recognized in higher education.

For learners, the transformation to open access implies that they can move away from content of a highly variable quality which is easily accessible via social media platforms like YouTube and Google, to research informed, and high-quality content provided by experts in the field. This would be delivered on platforms designed for learning from anywhere at any time, provided that learners have access to the Internet. The underpinning idea is that open access to knowledge, in the form of research and education, builds on transparency, which can enhance quality, and contribute to building resilient institutions and democratic societies.

2.2 Concluding remarks

The traditional approach for further education, where courses are offered to smaller groups of ad-hoc learners on campus, is currently under pressure and needs to change and become more flexible and transparent to meet the needs of the changing demographic of lifelong learners. Likewise, HEIs are facing competition from global MOOC platform course providers competing for students in the three-cycle system on campus. In this paper, we have outlined the Nordic approach to continuing and further education that can contribute to equity in education by applying the principle of open access to online course content within an approach that could be adopted by other institutions.

In doing so, we also recognize that there are many aspects to consider when transforming HE and the approach presented here does not distract from the many other important factors that need to be considered in the transformational process. Importantly the notion of open access and the body of work licensed under creative commons cannot be ignored. Other factors include professional digital competence development among staff, the selection of suitable platforms for online education, adherence to current laws and regulations (cf. General Data Protection Regulation -GDPR) and improved user friendly and pedagogically focused online tools. Transforming a traditional course catalogue demands more teachers and more teacher training, while requiring many teachers to change or adopt new digital identities. Teachers would be required to be flexible and agile to seamlessly work across different modes: e.g. online and blended learning scenarios, tutorials, laboratories, workshops, webinars and seminars. Inevitably, many teachers need access to further professional learning opportunities. Enabling a diverse group of teachers, who work at different times, in different locations and teach very different subjects, to study the core skills of being an effective educator who understands how to help others learn, in their time, when they want and when they can, is a complex challenge.

Quality online teaching entails exploring and investing in cutting edge platform technology and instructional design. Additionally, institutional routines and regulations need to be continually revised for a digital transformation to be successful. For example, digital forms of enrolment and assessment and national and institutional laws and regulations must adhere to the GDPR, which was introduced in Europe in 2018. If access to education is a question of equity, then the question is not if, but rather, how to make it happen and at what price. We hope this article contributes to further reflection on MOOC platforms in a form that HEIs enable lifelong learning for all, while ensuring that they remain a viable and valuable part of society.

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