

MOOCs inside Universities

An Analysis of MOOC Discourse as Represented in HE Magazines

Steve White, Manuel Leon and Su White

Web Science Centre for Doctoral Training, University of Southampton, University Road, Southampton, U.K.

Keywords: MOOCs, Content Analysis, University Stakeholders, HE Magazines.

Abstract: Digital news media discourse on MOOCs has been pervasive in educational publications over recent years, and has often focused on debates over the disruptive potential of MOOCs at one extreme, and their survival at the other. Whether such articles reflect the concerns of academics and other internal university stakeholders is difficult to ascertain. This paper aims to determine the main concerns of internal university stakeholders in terms of their MOOC development and implementation work, and whether these concerns are reflected in the mainstream educational media. The study combines data from 2 previous studies (a content analysis of MOOC literature, and a grounded theory case study of internal university stakeholders) to establish key themes of concern for those working on MOOCs in Higher Education. An analysis of these themes in 3 educational media publications is then conducted for the year 2014. The findings indicate a clear focus in education media and among university stakeholders on new teaching practices and working dynamics in Higher Education as a result of involvement in MOOC development work. We argue that for many working on MOOCs in Higher Education, the debate about the future of MOOCs is over, and that more practical concerns of appropriate implementation and effective working practices are of greater importance.

1 INTRODUCTION

Discourse on Massive Open Online Courses (MOOCs) has permeated digital news media, especially in Higher Education publications (Bulfin, Pangrazio, & Selwyn, 2014). Although some events may reflect a decline in the interest of news media in MOOCs (Kolowich, 2014a) since Pappano's famous announcement of the "Year of the MOOC" (2012), there seems to be a sustained feed of MOOC stories in all sorts of written media. This is especially so in digital media, as suggested by Downes' (2014) tracking of MOOC mentions since 2012.

In many Higher Education Institutions, discussions of MOOCs are no longer confined to educational technology departments. Instead, these conversations have spread to faculties at all levels. Beyond the debates over their disruptive potential on one extreme, and their survival on the other (Hollands & Thirthali, 2014; Kolowich, 2013), MOOCs are often the topic of everyday conversations in many universities, since they are no longer a subject of speculation and prediction, but a matter of present practice.

MOOCs have effects not only on the learners who take them, but also on the highly varied teams of university staff involved in their creation and delivery. As soon as the governance body of a university makes the decision to go ahead with a MOOC project, a number of concerns and conversations arise within the institution. An action plan is designed, often in the absence of protocols and previous experience. The allocation of budgets, roles, and responsibilities becomes a task which is new to most members of the MOOC team. Universities often share experiences of these processes in interim reports (Edinburgh, 2013; Ithaka, 2013; London, 2013), explaining the organisational challenges and implications encountered when embarking on MOOC development and delivery. These implications for institutions are also explained in a number of white papers (Voss, 2013; Yuan and Powell, 2013), containing sets of recommendations for faculty boards and other decision making bodies.

This study aims to inform both practitioners and decision makers about the main current concerns in universities regarding MOOCs. The intention is to provide an account of these concerns in terms of

what motivates universities to attempt to incorporate MOOCs into their educational offerings, and how this motivation is changing or evolving as understandings of MOOCs change, and as the courses themselves evolve. It will also attempt to determine the main perceived implications of embarking on such an endeavour, and what aspects of MOOC implementation are most discussed both in the media and in HEIs.

2 RELATED WORK

Much meta research exists which reviews different aspects of the state-of-the-art of MOOCs by systematic analyses of the publications on MOOCs, both academic and non-academic. Perhaps one of the most cited is Liyanagunawardena et al. (2013), which classifies and categorizes 45 peer-reviewed studies on MOOCs, and identifies important research gaps such as assessment and intercultural communication issues. Further to this study, Mohamed et al. (2014) ran a template analysis on a broader set of papers, identifying assessment and accreditation as key issues. BIS (2013) included journalistic articles, academic papers and blogs to explore perspectives on the impact of MOOCs on both institutions and learners, identifying a high degree of both enthusiasm and skepticism. Other studies focus on more popular sources, such as Bulfin et al. (2014), which analyzed news media discourse related to MOOCs to examine the acceptance of this form of education among professional communities and a more general audience.

The current study drew on commonalities in the findings of a content analysis of grey literature on MOOCs (León, 2013) and a grounded theory study of internal HE stakeholders involved in MOOC development (White, 2014) to establish a set of 12 themes related to MOOC development in HE. A keyword search of a corpus of educational media articles published in 2014 was then conducted, and the search results analysed for their relevance to these themes. This study focuses on Higher Education Institutions, showing primarily their perspective. As such, the perspectives of learners, or other stakeholders such as platform providers (Coursera, Futurelearn, EdX) are outside the scope of this study.

3 METHODOLOGY

This study was carried out in two stages, as shown in Figure 1 below. The first stage involved an examination of two independent studies in which a convergence was identified. This convergence consisted of a set of themes that fed the second stage. The second stage involved a quantified examination of the occurrences of these themes in a corpus of specialist HE magazine articles in 2014.

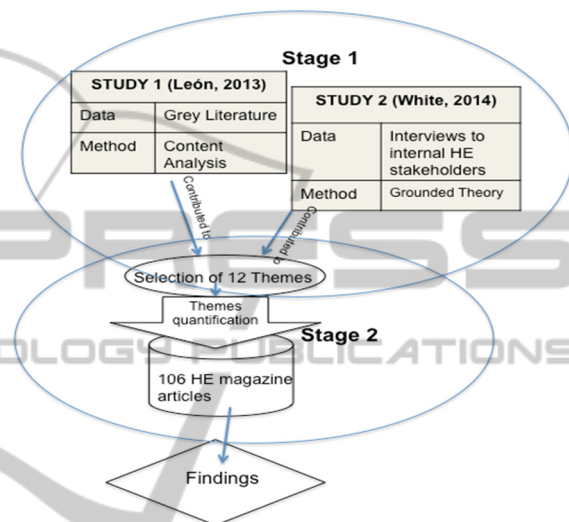


Figure 1: Stages of the methodology

3.1 Desk Study, Content Analysis

In summer 2013, a desk study was carried out in order to identify current debates on MOOCs at that time (León, 2013). By then, there was already a broad body of literature, both grey and academic peer-reviewed that contributed to a polarised debate between enthusiasts and skeptics (BIS, 2013). The main search strategy used for this study consisted of following reputed learning technologists in a social site called Scoop.it, and gathering their curations. In this way, all sources had already passed at least one filter of relevance and rigour. Those identified by Daniel (2012) as being written with an intention of promoting MOOCs for profit rather than offering objective accounts of their pedagogical potential were disregarded.

Once the sources were gathered, they were analysed with a method inspired by Krippendorf's (2012) Content Analysis, and Herring's (2010) recommendations for carrying out content analysis on literature published online. The themes identified in the project were MOOC quality, sustainability,

and impact, and debates were explored in a corpus of 60 articles in total.

3.2 Interviews, Grounded Theory

The interview-based study used grounded theory analysis of interview data to explore motivations behind MOOC creation and implementation at the University of Southampton from the perspective of internal (university staff) stakeholders in the development process (White, 2014). The university currently runs 8 MOOCs and has been a member of the FutureLearn consortium, a profit making MOOC venture with a current membership of 40 institutions (FutureLearn, 2014), since its launch in September 2013. In the study, 12 individuals were interviewed as representatives of four main internal stakeholder groups: management, content specialists (lecturers), learning designers, and course facilitators and librarians. A two-stage process for stakeholder identification (following Chapleo and Sims, 2010) was used.

In the absence of formal institutional policy on the specific aims of MOOC development, stakeholders were interviewed in order to reveal their perceptions of the aims of the university in developing MOOCs, and the stakeholders' own aims in participating in the development process.

3.3 Theme Selection

Similarities and differences exist in the aims, procedures and applications of grounded theory and qualitative content analysis. However, as recognised in Cho and Lee (2014), commonalities exist in terms of coding and categorising data, and identification of underlying themes. Examination of the desk study and grounded theory interview data at this level of analysis revealed 12 common themes relevant to institutional motivations in MOOC development and the implications of these developments:

- *MOOCs as impact on teaching practice:* A frequently cited idea was that the development and implementation of MOOCs will have some influence on the way teaching is conducted in HEIs (whether online or face-to-face).
- *MOOCs as HEI's social mission:* Different HEIs (and the media which comment on them) perceive a range of ways in which an institution can fulfil its social mission, for example by disseminating knowledge, supporting learning, or fostering research.
- *MOOCs as institutional strategy for keeping up*

with HE evolution: Perceptions of institutional motivations for MOOC development were varied, but were often seen as simply a way for institutions to keep pace with broader developments in higher education.

- *MOOCs as the avant-garde of new online education provision:* Some observers of MOOCs perceive them as an opportunity to experiment and be creative in higher education, rather than as a more instrumental means to some strategic goal.
- *MOOCs as learner data providers:* The interviews and articles touched on the potential value produced by various kinds of learner data represented in MOOCs.
- *Learning analytics inform learning design:* This theme focuses on a more specific use of learner data than the above. The potential for leveraging learning analytics was cited as a motivation in the development and use of MOOCs.
- *New relationships between departments, new work dynamics:* A wide range of changes in the way individuals, departments, and institutions act and interact as a result of MOOC development were cited in the literature review and interviews.
- *MOOCs as new business models:* This concern was widely cited in interviews and the literature, although limited levels of consensus or certainty emerged.
- *MOOCs as means to engage with large numbers of learners:* HEIs are attempting to grapple with the challenges of massive learner numbers and learn from the experience. Although massiveness has regularly been cited as an obvious attraction in terms of business models, it was also seen as an important and distinctive feature of MOOCs in more general educational terms.
- *MOOCs as marketing:* The potential of MOOCs to act as marketing tools was cited in the previous studies as a key institutional driver for MOOC development, and linked to the general sense of 'hype' surrounding them.
- *MOOCs and accreditation:* Mention was made in the literature and interviews of the options for and challenges of providing accreditation for MOOCs, and the uncertainty that exists in this area.
- *MOOCs and completion rates:* Completion rates for MOOCs were a concern that arose in the previous studies, though opinion varied on the importance of completion rates for this kind

of course, and the comparability of MOOCs and more traditional courses in this respect.

3.4 The Sample

The study focused on articles from 3 mainstream educational media publications which have high visibility on the Web (rather than peer-reviewed journal articles). These media (Times Higher Education, The Chronicle of Higher Education, and Inside Higher Education) are widely seen as “authoritative sources on higher education” (Bulfin et al., 2014), and provide insight into the extent to which concerns of HE professionals related to MOOCs are reflected in mainstream media.

All magazine digital editions contained a search engine, which facilitated the task of searching for the keyword “MOOC” in each. Only articles which included some substantive focus on the relevant MOOC themes were included - those which contained only passing references to MOOCs, or no discussion of the selected themes were disregarded. In total, a corpus of 106 articles from the three magazines was analysed.

4 FINDINGS

Figure 2 depicts the frequency with which each selected theme occurred in the corpus of articles. The overwhelming majority of instances relate to teaching practice (detected in 57 articles - more than half of the sample). There were frequent discussions of the perceived pedagogical benefits for institutions when engaging in MOOCs. For example, Levander (2014) reports how Rice University has developed a portfolio of over 40 MOOCs motivated by what they call assets, both in terms of materials and teaching experience: building high quality content that can be reused and repurposed, and providing valuable experience of how to develop and deliver these materials. Talbert (2014) also shares his experience of screencasting for flipped classrooms as a novel pedagogical approach in university lectures. Many of the articles in which this theme was identified report in one way or another how teachers are adapting their teaching practices to cater for new audiences, delivering through new communication channels and platforms, and attempting to overcome the different challenges that MOOCs pose to educators.

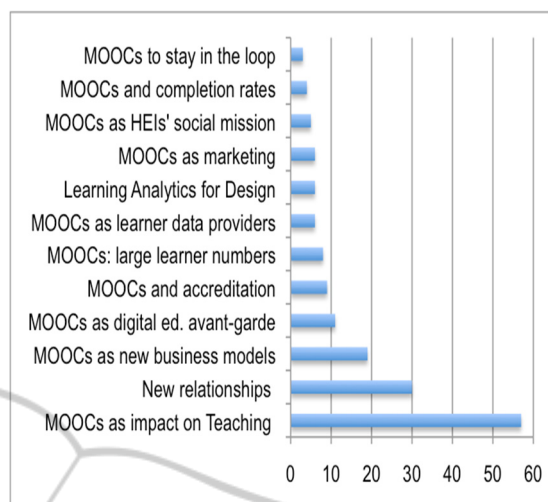


Figure 2: Theme frequencies in article corpus.

The theme of MOOCs as catalysts of change in relationships between departments and work dynamics in universities was also frequently cited (30 instances). Descriptions of developments in the ways educational materials are collaboratively produced within institutions were common, with MOOC projects requiring cooperation between teaching staff, educational technologists, researchers, librarians, media producers, legal advisors and others. Dulin Salisbury (2014), for example, highlights the need for “team-based course design”, whilst Straumsheim (2014a) reports on work to involve local community stakeholders in some aspects of course design at the University of Wisconsin.

Discussion of MOOC business models was the third most frequent theme in the sample literature (in 19 articles). Articles included discussion of more flexible and open MOOC provider platforms (Straumsheim, 2014c), possible approaches to the use of advertising in MOOCs (Kim, 2014c) and more critical views of the commercial imperatives behind MOOCs and their impact on higher education (Straumsheim, 2014d). The fourth most frequent theme concerned the role of MOOCs as a field for experimentation and innovation in online education. A number of articles (n=11) explored opportunities for creativity in education via MOOCs. Parr (2014a) for example describes efforts by the Open University to focus on social elements of MOOC course development, and also explores the possibility for creating “nanodegrees” involving very short courses on specific subjects.

The theme of MOOCs and accreditation was mentioned in 9 articles, and was addressed in a number of ways. Straumsheim (2014b) discussed the potential flexibility in course offerings and accreditation which MOOCs may afford, while Kim (2014d) notes the possibility for competency based assessment and credentialing.

Two related themes were mentioned in the same number of articles: 'MOOCs as learner data provider' and 'Learning analytics informs learning design'. These themes were mentioned in 6 articles respectively, some in the same article (Eshleman, 2014; Kim, 2014b). Eshleman (2014) highlights the value of qualitative learner data for use in a case study of her own institution, whilst also recognising the contribution which learning analytics can make to track student activity online. Kim (2014a) argues that blended and online learning can provide valuable data for learning analytics studies into the learning process, and that this is a far richer source of data for education research than a simple focus on pass rates or other similar learning outcomes. Straumsheim (2014d), however, cautions against reliance on an abundance of data produced in MOOCs, as interpreting such raw data can be difficult and time consuming.

The theme of MOOCs as marketing for HEIs was also mentioned in 6 articles. Kolowich (2014b) notes the possibility of raising the profile of Rice University among pre-college students, while Tyson (2014) speculates about the relationship between international student recruitment for US institutions and MOOCs.

5 DISCUSSION

Perhaps the most salient result of this study is the prominence of mentions of the impact of MOOCs on teaching practice in universities. Findings in similar studies place the pedagogical dimension of MOOCs in a lower position in terms of presence in analysed corpora. For example, in the ranking of MOOC issues in media by Bulfin et al. (2014), pedagogy occupies sixth position, behind other issues such as the Higher Education marketplace and the free and open nature of MOOCs. The above study, however, analysed a broader sample which included non-specialist newspapers, and included articles from 2013. A reason for this shift in focus could be our institutional perspective and focus on MOOC phenomena: as mentioned in the introduction, this project has been carried out in a university, it is

addressed at universities, and seeks to understand what happens in universities. An alternative interpretation could be that of a tendency towards the end of a debate on the disruptive nature of MOOCs.

Changes in departmental relationships and working dynamics was also an important theme identified in both the stage 1 studies and stage 2 corpus analysis of articles from 2014. In the 2014 article corpus analysed in stage 2 of this study, discussions of the new relationships between departments and new work dynamics of institutions involved in MOOC development were identified as the second most frequently occurring theme. This perception of MOOCs as a dynamic for internal institutional change was also identified as a significant concern in interviews with university stakeholders in the grounded theory study from stage 1 of this research. This seems to reflect a recognition that undertaking MOOC development projects influences the way individuals, groups and departments interact and collaborate on such ventures. The corpus of educational media sources report quite widely on these issues, elaborating on examples of collaborative practice or the ways in which individual or departmental interactions have changed or need to change in future. For universities, these changing work dynamics are perceived to be an important implication of participation in MOOC development, perhaps because of the relative novelty of MOOC development processes and initiatives. The focus on this issue in the educational media perhaps reflects further emphasis on MOOCs as a practical concern, rather than a more speculative debate over their potential disruptiveness or survival in HE in the short-term.

6 CONCLUSIONS

This study has shown the main concerns of internal university stakeholders regarding MOOCs as reported in specialist media. It seems that recent media articles show greater concern with what universities might do *with* MOOCs than what MOOCs will do *to* universities, as has been a concern in the past. An active rather than passive attitude has been identified among educators and within universities more broadly, as if educators have tired of speculating on what will happen to Higher Education as an industry with the advent of MOOCs, and decided to get their hands dirty by experimenting with new pedagogical approaches.

2012 was described as the year of the MOOC (Pappano, 2012). Other ed-tech commentators have described 2013 as the year of the anti-MOOC (Waters, 2013; Bates, 2013). From what has been found in this study, 2014 could be described as the year of MOOC pedagogy.

MOOCs are not only building new relationships between learners and educators, but also between different roles and departments at universities. This paper has shown that the media is also reporting new work dynamics as a consequence of the inclusion of MOOCs in the educational offerings of universities. MOOCs seem to require the creation of new teams and roles that had not previously existed, while more established roles are being altered at various levels of the organisational hierarchy of universities.

Media articles on academic activity do not, of course, necessarily portray accurately the realities of academic practice. However, the convergence found in this study between the views of internal university stakeholders and broader opinion in the educational media seems to suggest that developing MOOCs is currently more strongly associated with educational innovation than marketing, democratisation, or new business models.

REFERENCES

- Bates, T. (2013). Look back in anger? A review of online learning in 2013. Retrieved from <http://bit.ly/1c9qvv0>.
- BIS (Department of Business, Innovation and Skills) (2013). *The maturing of the MOOC: literature review of massive open online courses and other forms of online distance learning*. Retrieved from <http://bit.ly/1c9qvv0>.
- Bulfin, S., Pangrazio, L., & Selwyn, N. (2014). Making "MOOCs": The construction of a new digital higher education within news media discourse. *The International Review of Research in Open and Distance Learning*. Retrieved from <http://bit.ly/1AYkD3r>.
- Chapleo C. & Sims, C. (2010) Stakeholder Analysis in Higher Education. *Perspectives*. 14 (1) pp. 12-20.
- Cho, J., & Lee, E. (2014). Reducing confusion about grounded theory and qualitative content analysis: similarities and differences. *The Qualitative Report*. 19 (64) pp.1-20.
- Daniel, J. (2012). Making sense of MOOCs: Musings in a maze of myth, paradox and possibility. *Journal of Interactive Media in Education*, 3. Retrieved from <http://bit.ly/19KGOzt>.
- Downes, S. (2014) Measuring MOOC Media. Retrieved from <http://bit.ly/1DGWvmc>.
- Dulin Salisbury (2014) Impacts of MOOCs on Higher Education. *Inside Higher Education*. Retrieved from <http://bit.ly/1nA2vYA>.
- Edinburgh, U. of. (2013). MOOCs @ Edinburgh 2013 – Report # 1 (p. 42). Edinburgh. Retrieved from <http://www.era.lib.ed.ac.uk/handle/1842/6683>.
- Eshleman, K. (2014) Are MOOCs Working for Us? *Inside Higher Education*. Retrieved from: <http://bit.ly/1BJXLq0>.
- FutureLearn (2014) *About*. Retrieved from: <https://www.futurelearn.com/about>.
- Herring, S. C. (2010). Web content analysis: Expanding the paradigm. *International handbook of Internet research* (pp. 233-249). Springer Netherlands.
- Hollands, F. M., & Thirthali, D. (2014). MOOCs: Expectations and Reality. Full Report. May 2014. New York, New York, USA. Retrieved from <http://bit.ly/1sLBfoH>.
- Ithaka S+R. (2013). Interim Report: A Collaborative Effort to Test MOOCs and Other Online Learning Platforms on Campuses of the University System of Maryland. Retrieved from <http://bit.ly/17AB5up>.
- Kim, J. (2014a) 6 Big Takeaways from the edX Global Forum. *Inside Higher Education*. Retrieved from <http://bit.ly/1r1cxUX>.
- Kim, J. (2014b) Here Come the Data Scientists. *Inside Higher Education*. Retrieved from <http://bit.ly/Vxh425>.
- Kim, J. (2014c) MOOCs and Bad Online Advertising. *Inside Higher Education*. Retrieved from <http://bit.ly/1AsogfW>.
- Kim, J. (2014d) Saltatory. *Inside Higher Education*. Retrieved from <http://bit.ly/1LjJJuu>.
- Kolowich, S. (2013). The MOOC "Revolution" May Not Be as Disruptive as Some Had Imagined. *The Chronicle of Higher Education*. Retrieved from <http://bit.ly/1v1HWTH>.
- Kolowich, S. (2014a). The Year Media Stopped Caring About MOOCs. *The Chronicle of Higher Education*. Retrieved from <http://bit.ly/1jFleeV>.
- Kolowich, S. (2014b). Competing MOOC Providers Expand Into New Territory—and Each Other's. *The Chronicle of Higher Education*. Retrieved from <http://bit.ly/1vP3gff>.
- Krippendorff, K. (2012). *Content analysis: An introduction to its methodology*. Sage.
- León, M. (2013) Reactions on the emergence of MOOCs in Higher Education Reactions on the emergence of MOOCs <http://bit.ly/1ztBu9C>. in Higher Education.
- Liyanagunawardena, T. R., Adams, A. A., & Williams, S. A. (2013). MOOCs: A systematic study of the published literature 2008-2012. *The International Review of Research in Open and Distance Learning*. Retrieved from <http://bit.ly/1v1I85o>.
- London, U. of. (2013). MOOC Report 2013. Retrieved from <http://bit.ly/1qaMvGY>.
- Levander, C. (2014). It's All About Assets. *Inside Higher Education*. Retrieved from <http://bit.ly/1nbGejR>.
- Mohamed, A., Amine, M., Schroeder, U., Wosnitza, M., & Jakobs, H. (2014). MOOCs A Review of the State-of-the-Art. In *CSEDU* (pp. 9–20).
- Pappano, L. (2012). The Year of the MOOC. *The New York Times*, 2(12), 2012.

- Parr, C. (2014a) Making MOOCs social is the next challenge. *Times Higher Education*. Retrieved from <http://bit.ly/1xk6Vq8>.
- Straumsheim, C. (2014a) All Things In Modulation. *Inside Higher Education*. Retrieved from <http://bit.ly/1sFk9tJ>.
- Straumsheim (2014b) A Platform For All Purposes. *Inside Higher Education*. Retrieved from <http://bit.ly/1pN6OQK>.
- Straumsheim (2014c) Data, Data Everywhere. *Inside Higher Education*. Retrieved from <http://bit.ly/1z5xScV>.
- Straumsheim (2014d) Profit or Progress? *Inside Higher Education*. Retrieved from <http://bit.ly/187FshT>.
- Talbert, R. (2014) Making Screencasts. The Pedagogical Framework. *The Chronicle of Higher Education*. Retrieved from <http://bit.ly/1DGYmr6>.
- Tyson, C. (2014) From MOOC to Shining MOOC. *Inside Higher Education*. Retrieved from <http://bit.ly/1vlJ1uL>.
- Voss, B. D. (2013). Massive Open Online Courses (MOOCs): A Primer for University and College Board Members. Retrieved from <http://bit.ly/1EdSO8j>.
- Waters, A. (2013) Top Ed-Tech Trends of 2013: MOOCs and Anti-MOOCs. Retrieved from <http://bit.ly/1jG6Cgl>.
- White, S. (2014) Exploring stakeholder perspectives on the development of MOOCs in higher education a case study of the University of Southampton. (MSc Dissertation) <http://bit.ly/1FDNJaz>.
- Yuan, L., & Powell, S. (2013). MOOCs and Open Education: *Implications for Higher Education*. CETIS. Bolton. Retrieved from <http://bit.ly/1AYIWzn>.