MOOCs in Higher Education Magazines: A Content Analysis of Internal Stakeholder Perspectives

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Abstract. Higher Education magazines have echoed the rapid spread of MOOCs in Higher Education Institutions (HEIs) since 2012. In their pages, MOOC related articles are proliferating. The focus of such articles has often been the disruptive nature as well as the survival of this new form of open online education, especially the first years. However, there is also a great deal of mentions of how internal stakeholders in HEIs perceive the advent of MOOCs. These perceptions are the object of analysis in this article. Using the Content Analysis (CA) method, MOOC related sources in three Higher Education magazines during 2014 have been analysed against a set of key themes. These themes have been established by combining data from two previous studies: a Content Analysis of MOOC related academic literature, and a set of interviews to internal stakeholders using grounded theory. As the findings indicate, in 2014 the main concerns of internal stakeholders have been the new teaching practices and new work dynamics resulting from the incorporation of MOOCs in their working routines. It is argued that educational media no longer focuses on the debate of the future of MOOCs. Rather, the debate is on how MOOCs should be best implemented from a practitioner's perspective.

Keywords: MOOCs · Content analysis · University stakeholders · HE magazines

1   Introduction

Higher Education (HE) magazines could be considered as valuable sources of information about the latest developments in Universities. Although they may not have the academic rigour of peer-reviewed publications, they contain up-to-date accounts of the main concerns of universities staff members, especially regarding new technologically supported approaches such as MOOCs. In these magazines, journalists can reflect the opinions of internal stakeholders with a much shorter publication time span than other publications. HE magazines are also more likely to arrive to audiences who may not belong to the area of expertise of the articles. This is specially the case of the representation of MOOCs in this kind of publications. The MOOC scene changes so quickly that academic publications struggle to provide fresh portraits of the situation. HE magazines and news media have echoed the spread of MOOCs with a dramatic increase of MOOC related articles in their pages [1]. Although some events may reflect a decline in the

interest of news media in MOOCs [2] since Pappano's famous announcement of the "Year of the MOOC" [3], 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' [4] 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 [5, 6], 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 [7–9], 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 [10, 11], 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 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 [12], 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, [13] ran a template analysis on a broader set of papers, identifying assessment and accreditation as key issues. BIS [14] 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 [1], 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 [15] and a grounded theory study of internal HE stakeholders involved in MOOC development [16] 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 Fig. 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.
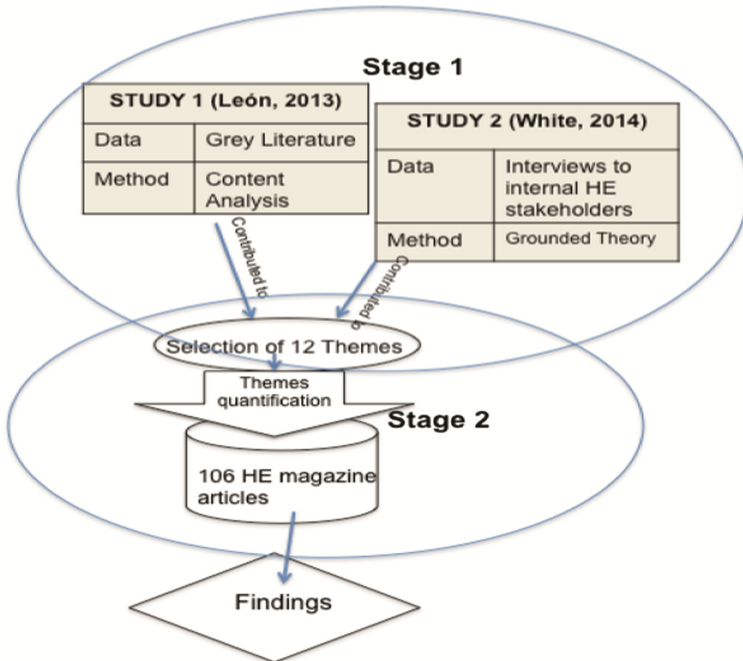

Fig. 1. Stages of the methodology.

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 [15]. 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 [14]. 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. This way, all sources had already passed at least one filter of relevance and rigour, and disregarded those identified as having been written with an intention of promoting MOOCs for profit seeking rather than offering objective accounts of their pedagogical potential, in line with [17].

Once the sources were gathered, they were analysed with a method inspired Content Analysis [18], and Herring's [19] 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 [16]. 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 [20], 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 [21] 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 [22], 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 various kinds of learner data produced 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' attempts 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 that 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" [1] 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 MOOCs in each of them. Only articles including 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 occurrences relate to how MOOCs are making an impact on teaching practice (this theme was 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 [23] 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 [24] also shares his experience of screen-casting 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.
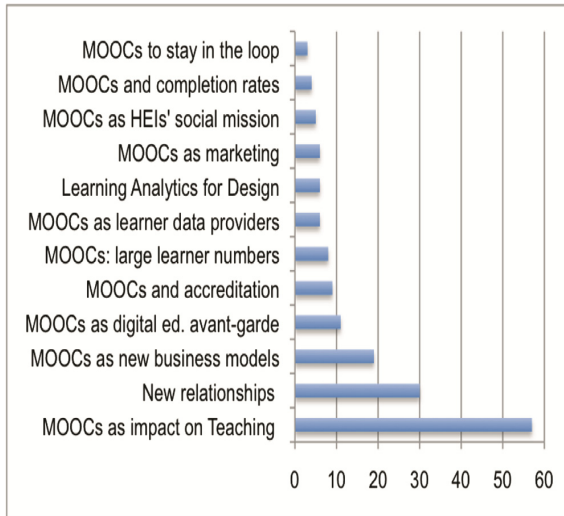

Fig. 2.   Theme frequencies in article corpus.

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 [25], for example, highlights the need for 'team-based course design'. Academic staff cannot develop a MOOC on their own. Instead, they need to liaise with learning designers, media teams, legal services, and librarians. These are no longer ancillary services, but essential parts of the machinery to craft these new

educational products. This collaborative task tends to happen within the university. Institutional consortia created around platforms privilege internal capacity building over outsourcing options, which involves collaborative work within different roles at the universities. There are others who suggest new relationships even beyond the walls of the universities. Straumsheim [26] reports on work to involve local community stakeholders in some aspects of course design at the University of Wisconsin, in a strategic attempt to attract local students.

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. Straumshem [27], described how private companies are taking up the role of drivers of change and innovation in education technology, and warned about the risks of an unregulated growth of ed-tech private companies seeking benefit rather than quality in education. Another article suggests advertising as a source of income to MOOC producers [28]. The article warns against the trend of placing bad quality advertisements in the content streamed over the web. There is a great opportunity for online education to leverage some profit from advertisements, as long as these are relevant and non intrusive.

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 [30] for example describes efforts by the Open University to focus on social elements of MOOC course development, and also to explore the possibility for creating "nanodegrees" involving very short courses on specific subjects. These courses addressed at smaller learning communities could be the new formal educational offerings at universities. Another article explains how MOOCs have become "fertile testing grounds" for later on developing SPOCs (small paid/private online courses) in an iterative process in which the learning experience can be refined, especially in terms of study groups formation [31].

The theme of MOOCs and accreditation was mentioned in 9 articles, and was addressed in a number of ways. Straumsheim [32] discussed the potential flexibility in course offerings and accreditation which MOOCs may afford, while Kim [33] 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, [34, 35]. Eshleman [34] 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 [28] 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 [29], 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 [36] notes the possibility of raising the profile of Rice University among pre-college students, while Tyson [37] speculates about the relationship between international student recruitment for US institutions and MOOCs.

5   Discussion

MOOCs as impact on teaching is by far the most frequent theme in the analysed sample. Findings in similar studies place the pedagogical dimension of MOOCs in a lower position. For example, the ranking of MOOC issues in media by Bulfin et al. [1] places pedagogy in the sixth position, behind other issues such as the Higher Education marketplace and the free and open nature of MOOCs. That 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   Conclusion

MOOC related discourses are quickly echoed in Higher Education magazines. This study has taken advantage of this feature to interpret the conversations around MOOCs within staff at universities in year 2014. The study suggests that the most frequent conversation topic has been that of MOOCs as laboratories of new pedagogical approaches. This focus may have shifted from a debate around the disruptive potential of MOOCs in the Higher Education scene. Speculation on whether or not MOOCs will shake up Higher Education seems to have subsided, giving way to discussions on how to best implement them.

MOOCs may not be a change of paradigm, but new relationships are being built as a result of them. Different communication means are being use between learners and

educators, and different interactions occur between them. This is also the case in the universities internally, where new work dynamics are happening. Making a MOOC and delivering it requires liaison of staff with different roles, many of which may have never worked together before. Higher Education specialist media has reported that the duties and responsibilities of some established roles may have been altered, and new roles such as that of the learning designer are becoming more prominent.

The present study has drawn on a previous one in which internal stakeholders at universities at different levels in the organizational hierarchy were interviewed. The portrait that Higher Education magazines make of Higher Education Institutions coincides in great measure with the results in the interviews of such study. The accounts of both the interviewees and the content in the magazine articles examined seem to coincide in terms of the main motivations for developing MOOCs. These seem to have become an experimental tool for educational innovation, and the main goal of staff at universities is experimenting new pedagogical approaches through MOOCs. The study suggests that marketing, democratization, social mission, and new business models are still important, although secondary reasons for dedicating resources in open online education.

This study has analysed MOOC related magazine articles in 2014. As future work, it is intended to study the discursive evolution around MOOCs in Higher Education specialist magazines over a longer period, since their inception to the present time. 2012 was described as the year of the MOOC [3]. Other ed-tech commentators have described 2013 as the year of the anti-MOOC [38, 39]. From what has been found in this study, 2014 could be described as the year of MOOC pedagogy. A more detailed and extensive study will attempt to determine to what extent this is true.

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