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How Have MOOCs Been Portrayed in the New Zealand Public Media?

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Abstract

Reports of massive open online courses (MOOCs) appeared in mainstream news in the early 2010s with messages of potential disruption to existing higher education systems. Several years on, the role of MOOCs is still evolving. The media has the power to influence acceptance of new ideas, therefore this research investigates New Zealand news media representations of MOOCs to the public. A document analysis of 27 newspaper articles published in New Zealand's mainstream media between January 2012 and December 2016 revealed similar results to those published in overseas research, in that MOOCs are predominantly reported to be a catalyst for necessary change in higher education, and discussions are consistent with the theme of commodification of higher education. Previously published overseas research focuses on the relationships between MOOCs and elite universities, whereas this research reveals that MOOCs are considered to be experimental in New Zealand's higher education system. Although the New Zealand media presents a more balanced perspective than that revealed in overseas research, dominant themes of MOOCs as revolutionising higher education are likely to boost the public's acceptance of radical changes to existing higher education structures.

Keywords: MOOCs; massive open online courses; New Zealand; media

Introduction

Massive open online courses (MOOCs) appeared in mainstream news in the early 2010s with much hype, especially with the publication of Pappano's (2012) article titled "The Year of the MOOC" in the *New York Times*. Because they enable massive enrolments while offering fee-free open entry to higher education courses, MOOCs were heralded as a new phenomenon that would follow Christensen's (2018) disruptive innovation business model (Jacoby, 2014), and disrupt existing higher education. Christensen's model suggests that a simple and affordable innovation established at the lower end of the market will drive upwards, dislodging existing competitors and becoming accessible to a wide range of consumers. The implication is that higher education institutions will be shaken by the technological innovation of MOOCs, which will broaden access to education and, potentially, revolutionise higher education structures and systems. Media attention on this particular educational technological innovation has been unprecedented, pointing to MOOCs having the potential to fundamentally affect higher education.

For many, the first exposure to the concept of MOOCs (Selwyn, Bulfin, & Pangrazio, 2015) is through the news media. The media affects people's beliefs and behaviour, regardless of whether news reports portray reality accurately (Devereux, 2014). Media publishers also hold an agenda-setting role, influencing the public's perception of which issues are important, and they have a role in deciding how news is framed, shaping the audience's understanding of the topic

(McCombs & Shaw, 1972). Within this context of high media influence, and because it moulds the public's understanding and affects their willingness to accept MOOCs and the education system changes that they might catalyse (Kovanović, Joksimović, Gašević, Siemens, & Hatala, 2015), researchers have become interested in how MOOCs are represented in the news. Representations of MOOCs in the media are therefore an area worthy of research and concern to those interested in the role of technology in education and society, the role of established higher education systems and institutions, and the challenges presented by MOOCs to existing higher education.

Research on MOOCs in the media has so far been limited to North American, U. K., and Australian news publications—until now, New Zealand media reports have not been analysed. The New Zealand context is one in which the *Tertiary Education Strategy 2014–2019* encourages consideration of "new delivery models . . . [based on] . . . technology-driven changes" (Ministry of Education, 2018, Introduction, para. 10), and where MOOCs have been identified as an example of "improved ways of delivering education" (New Zealand Productivity Commission, 2016, p. 72). This study, therefore, seeks to identify the messages about MOOCs received by the New Zealand public, and considers whether deeper meanings can be drawn from these messages. A document and thematic analysis approach has been taken to address the question: How have MOOCs been portrayed in the New Zealand public media?

Primary research on MOOCs

Because MOOCs are a relatively recent development in higher education, there is little primary research on MOOCs in the media. However, a search revealed primary research articles that used content, thematic, or critical discourse analyses, and six emergent themes: MOOCs as change agents, MOOC providers and elite universities, MOOCs and openness, MOOCs and commodification of higher education, pedagogical approaches of MOOCs, and the influence of MOOCs.

MOOCs as change agents

This theme relates to an expected outcome of MOOCs bringing change that will disrupt higher education systems. Bulfin, Pangrazio, and Selwyn (2014) and Selwyn et al. (2015) found MOOCs were reported as a revolutionary force. This finding points to disruption of higher education expressed as a desired outcome, exemplified by metaphors of natural disaster in which MOOCs are depicted as a "tidal wave" (Bulfin et al., 2014, p. 296) that will "shake up" (Selwyn et al., 2015, p. 182) the status quo. They are presented as a new phenomenon (Dumitrica, 2017; Deimann, 2015), devoid of their open education resource foundations (Bates, 2016), and in language associated with crisis. This crisis language implies deficiencies in current higher education systems and suggests that major change is needed, with the responsibility for enacting change resting on administrators and technology experts rather than educators (Dumitrica, 2017; Deimann, 2015). At the same time, MOOCs are presented as a natural technological evolution (Deimann, 2015).

Bulfin et al. (2014) believe that this portrayal of MOOCs is neither accidental nor neutral—aligning MOOCs with technology and presenting them as ahistorical, yet inevitable, serves to remove them from their role in debates about education (such as the role of private investors, the adequacy or inadequacy of funding, the challenges of competing in a global marketplace, and underlying ideological motivations for using MOOCs). Although MOOCs are presented as a technological revolutionary saviour to a problematised higher education system, their standing paradoxically rests on their association with elite universities that are founded on and operating within this higher education system (Bulfin et al., 2014). Nevertheless, these representations

prepare the public to accept MOOCs as the ideal revolutionary remedy for presumed faulty higher education structures.

MOOC providers and elite universities

MOOCs are presented as instigated by prestigious universities (Bulfin et al., 2014) with frequent reference to Berkley and Stanford (Kovanović et al., 2015), and are reported as having the potential to displace less elite institutions and educators (Selwyn et al., 2015). It is becoming commonplace for universities to offer MOOCs, with some partnering with the same MOOC provider as these elite universities. For example, the University of Melbourne and the University of Sydney both offer MOOCs through the Coursera platform, which was founded by Stanford.

The relationships between MOOC providers and prestigious universities are mainly evident in articles found in financial newspapers. These links are notable in the groundswell of articles in 2013 (Kovanović et al., 2015) which illuminate the large venture capital investment for start-up MOOC provider companies (Kovanović et al., 2015; Selwyn et al., 2015). This evidence points to private investment and interest in publicly funded education, which raises ethical and business questions beyond the scope of this study, although these relationships offer opportunities for future research.

MOOCs and openness

The broad accessibility and, at times, fee-free nature of MOOCs is reported as democratising. This global accessibility could account for Kovanović et al.'s (2015) finding of significant discussion about the adoption of MOOCs beyond westernised countries. Although news articles may encourage the public to accept MOOCs as supporting tenets of democracy and equity, the perpetuation of social inequalities and the privileged position of the powerful are largely ignored, with critical comment predominantly made by researchers rather than journalists. Bulfin et al. (2014) provide a counter-narrative to mainstream news articles by pointing out that MOOC learners are typically privileged and already hold qualifications; Selwyn et al. (2015) point to media focus on availability of courses framed as democratising which favours the concept of equity of opportunity over the democratic principle of equity of outcomes; and Dumitrica (2017) found that concerns such as socio-economic barriers associated with MOOCS were raised only in professional magazines.

Dumitrica (2017) also questioned why news media present fee-free education as visionary, yet omit to question why it is not currently fee-free; a policy that may foster emancipation of the less privileged. Dumitrica states that this stance reflects neoliberal framing of higher education, disengaging the public and learner from civic goals of higher education, while perpetuating the neoliberalist value of self-responsibility. Self-responsibility demands learners define their own knowledge gaps and seek out education that will build their knowledge profile (Dumitrica, 2017). This approach may favour those who are already privileged, and presumes to ignore the individual and social preconditions that might enable self-responsibility, such as digital capability (Deimann, 2015). Dumitrica adds that, as self-education becomes accessible (although not equitably), the public could more willingly accept the state's disengagement from funding higher education, and might even see the withdrawal of funding as a natural development.

Finally, critical examination of the openness of MOOCs highlights concerns of intellectual colonisation as a result of widespread dissemination of westernised education (Daniel, 2012; Dumitrica, 2017). Dumitrica (2017) describes this as a "cultural imperialistic framing of knowledge" (p. 460) which may conflate knowledge and information, foster the view that higher education is mainly about disseminating information, and ignore the roles of universities in creating and garnering knowledge or being an environment that challenges the social status quo (Dumitrica, 2017). Deimann (2015) describes this trend as supplanting humanistic goals of

higher education with economic goals, and seeing MOOCs as having the potential to disestablish costly campus-based institutions (Deimann, 2015).

MOOCs and commodification of higher education

An economic emphasis in the news reports on MOOCs was seen to consolidate the notion that higher education is a product rather than a process (Selwyn et al., 2015), and that it should operate naturally and competitively in an open market (Deimann, 2015). Additionally, the ahistorical representations of MOOCs serve to promote the thinking that MOOCs are decontextualised from any ideological context (Bulfin et al., 2014; Dumitrica, 2017). Deimann (2015) states that if the commodification of education is accepted as natural, this thinking will become the benchmark for discussion about future educational technological developments.

Although a positive perspective of MOOCs dominates in media (Brown, Costello, Donlon, & Giolla-Mhichil, 2016), critical researchers believe that the public should be presented with the non-economic goals of higher education, otherwise the implication that higher education is inefficient or in crisis will be considered and acted on (Brown et al., 2016). The notion that MOOCs are revolutionary, technologically evolutionary, and neutral, should be challenged because MOOCs bring private investment and control into public education. This action is both ideological and political and therefore not at all natural or neutral (Selwyn et al., 2015). Indeed, private profiteering from higher education (Bulfin et al., 2014), educators' concerns of casualisation and deprofessionalisation (Bulfin et al., 2014), and questions as to how commodification and private financial interests in higher education might affect teaching and learning (Selwyn et al., 2015) point to MOOCs being integral to wider political motivations in higher education reforms (Selwyn et al., 2015). Yet these debates are largely unaddressed in the news media.

Pedagogical approaches of MOOCs

Although news reports mention pedagogy, it is usually in terms of the capacity of MOOCs to disseminate knowledge to vast numbers (Bulfin et al., 2014). However, media descriptions of how information is delivered and shared (such as videos, and online quizzes and discussions, with self-paced engagement in the course), are presented as a new pedagogy (Selwyn et al., 2015) as is the concept of the flipped classroom, where learners view lectures and other material before entering discussions online (Deimann, 2015). Claims that this pedagogy is new support the notion of MOOCs as ahistorical and revolutionary, yet news articles from professional magazines have criticised descriptions of MOOC pedagogy as innovative, instead describing it as conservative and replicating existing university pedagogical models (Selwyn et al., 2015). However, contextual differences mean that quality classroom delivery does not necessarily equate to sound online pedagogy (Bates & Sangra, 2011). In addition, Bates (2012) describes the top-down dissemination of knowledge, commonly found in xMOOCs (eXtended MOOCs), as being based on behaviourist pedagogy with limitations in teaching higher-order thinking skills. A critical stance maintains that this xMOOC pedagogy serves to reframe education as transmission of information (Dumitrica, 2017), with news media rarely mentioning the limitations of this style of online teaching and learning (Bulfin et al., 2014; Daniel, 2012). This lack of critique in the media raises concerns about the quality and definition of higher education.

The actual influence of MOOCs

Despite forecasts of MOOCs being a disruptive innovation that was expected to revolutionise existing higher education systems and structures, this outcome has not been reported as being actualised. Brown et al. (2016) conclude that despite media representations, the fact that policymakers and the public have remained disengaged with MOOCs has been demonstrated by low completion rates (Daniel, 2012). These researchers point to lack of empirical research into

the benefits of MOOCs, stating this lack of evidence may hold back government investment. Disengagement could account somewhat for the fall in MOOC-related news articles over time, with the focus on MOOC providers giving way to topics such as data analytics, the relevance of MOOCs to employment, and the failure of MOOCs to dominate higher education as promised (Kovanović et al. 2015).

Previous research, predominantly North American and European, does not encompass a New Zealand perspective. This study explores New Zealand news media representations of MOOCs to determine if the themes extracted from overseas research are reflected, or if other themes are evident. It therefore extends the existing knowledge base, adding a New Zealand perspective by answering the research question: How have MOOCs been portrayed in the New Zealand public media?

Methodology

Ethics

Because the research is based on analysis of publicly available documents, the ethical considerations were not complex. There were no participants, and no harm could be afforded to any individual. An ethics application was submitted and approval obtained before the research started.

Document analysis methodology

The research takes an interpretive paradigm approach (Bowen, 2009) by way of document analysis of publicly available New Zealand news media articles related to MOOCs. Because document analysis is suitable for case studies (Bowen, 2009) it's appropriate for this research, which is a case study of New Zealand media representations. The systematic analysis of documents allows both content and thematic analysis to ascribe meaning, identify trends, and further establish empirical knowledge (Bowen, 2009).

In this study, only mainstream news media articles were explored—it is acknowledged that further meaning may be drawn from other types of media. It is also acknowledged that multiple interpretations are possible and that this research depends on the researchers' interpretation, although transparency about the development of codes improves reliability (Ryan & Bernard, 2003). Therefore, a list of the criteria for pre-defined codes is appended (see Appendix).

Data collection

The Newztext, Library Press Display, and National Library of New Zealand Catalogue/Index New Zealand databases were searched. Search terms were *MOOC* and *Massive Open Online Course,* although the latter did not return additional articles. The date range parameters were 01 Jan 1960 to 28 June 2018, or *Anytime*, depending on the search parameters available. Where applicable, the search parameter *New Zealand* was also included. Obvious duplicates, irrelevant articles such as recipes and travel reports, and articles published in documents other than newspapers, were omitted.

To ensure completeness, online websites of New Zealand mainstream newspapers were also identified and searched. Websites were identified using the World-newspapers.com (2015) website. Popular New Zealand magazines, specialist media on non-related topics, and community newspapers were excluded. The websites were searched using key terms *MOOC* and *Massive Open Online Course*. The key term *Massive Open Online Course* was not always effective because the search functions were not Boolean search capable. On some websites the term *MOOC* returned many non-related articles indexed on words starting with the letters

"MOO". Nevertheless, six previously unidentified articles were found and it was then considered that saturation had been achieved.

The total yield was 63 news items with unique headings that did not immediately appear to be irrelevant or duplicates. On the first reading, it was found that 12 articles contained text that was identical to that in other articles. Because analysis of the articles' headings is not part of this research, these articles were removed from the dataset. Twenty-four articles focused on other topics and mentioned MOOCs briefly, so these were also excluded. This left 27 unique articles that had informative or evaluative comments for the New Zealand public about MOOCs.

Data analysis

Data analysis was performed by first coding the articles. This entailed deductive coding according to pre-defined codes (i.e., change, MOOC providers and elite universities, openness, commodification, pedagogy, and the actuality of MOOCs) and inductive coding to capture emerging codes (see Appendix). Coding allows for quantitative content analysis and subsequent qualitative thematic analysis. The themes were developed by establishing patterns within the data (Bowen, 2009), which was achieved by grouping codes around a phenomenon (Flick, 2006) while looking for connections that might occur between and within them. This approach gives an abstraction of the original data (Flick, 2006) and allows a re-presentation of the data to provide new meaning (Olsen, 2014).

The data analysis, therefore, used a three-step process: deductive and inductive coding of articles according to pre-determined and emerging codes; quantitative content analysis of the codes; and qualitative thematic analysis.

Coding

Articles were coded manually. The first step was to become familiar with the data by reading the reports and noting impressions. On this first reading, it was evident that some articles portrayed MOOCs positively, others gave a balanced argument or neutral portrayal, and some gave a negative perspective of MOOCs. An initial round of coding was therefore performed according to positive, negative, or neutral categories, akin to the study by Brown et al. (2016).

This initial coding was followed by simultaneous deductive and inductive coding of the articles' contents according to pre-defined codes (change, MOOC providers and elite universities, openness, commodification, pedagogy, and the actuality of MOOCs), which were established according to the six themes in the literature review, plus one emerging code (MOOCs as experimental, see Appendix). Many articles had content that was applicable to multiple codes. The articles were re-read later to review the accuracy of the initial coding, and notes were made relating to each code.

Analysis

The codes were analysed quantitatively according to:

- number of articles presenting a positive, negative, or neutral perspective
- number of articles published in each quarter of each year (January–March, April–June, July–September, October–December)
- number of articles presenting a positive, negative, or neutral perspective per quarter
- number of representations according to the six pre-defined and the one emerging code.

Analysis of trends in the content over the period of the data, showing frequency over time, has high reliability (Olsen, 2014). However, because the data set was small, it was decided to not

analyse the distribution of the number of articles according to the seven codes across the quarters of each year.

A thematic analysis was undertaken. For that purpose, notes were extracted from the articles for each code and they were read to establish initial themes. Many articles discussed a variety of perspectives and their content therefore related to multiple themes. These were re-read to determine whether the initial identified themes held, or different themes emerged. It is acknowledged that this process is interpretive, and therefore influenced by the researchers' knowledge (Olsen, 2014).

Results

Number and tone of MOOC articles

Although most articles largely presented MOOCs positively, many took a neutral stance. To provide a balanced portrayal, the neutral articles included those that presented both positive and negative aspects. A minority were negative, questioning the value of MOOCs in higher education. Table 1 shows the dominance of positive and neutral portrayals, with 48% and 41% respectively.

Table 1 Number of articles presenting MOOCs positively, negatively, or neutrally

Tone of article	Number of articles	Percentage
Negative	3	11%
Neutral	11	41%
Positive	13	48%
Total	27	100%

The articles were published over 4 years; the first in the third quarter of 2012, and the most recent in the third quarter of 2016. Figure 1 shows a spike in the number of articles in the third quarter of 2013, when 11 of the 27 articles were published.
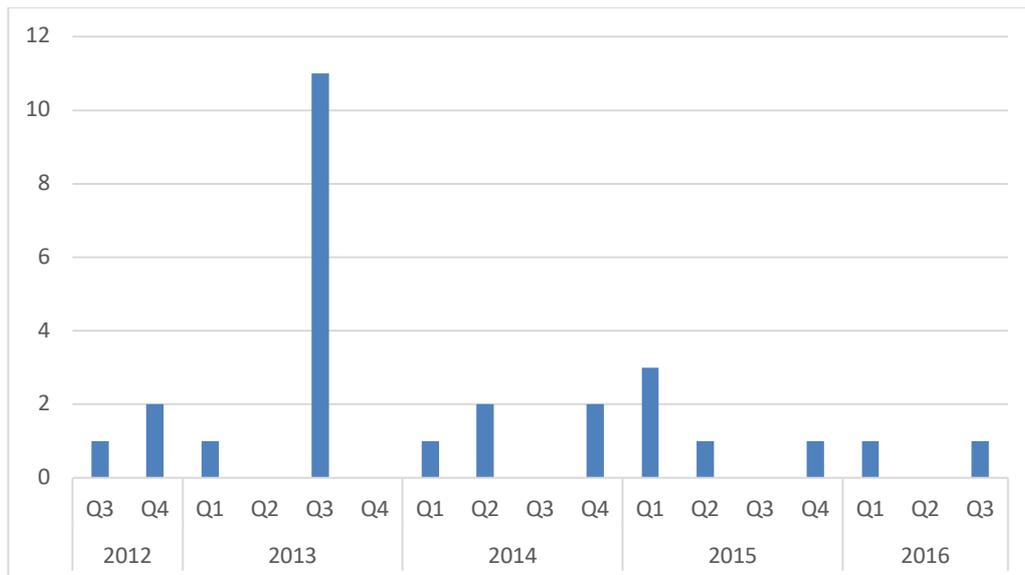

Figure 1 Number of articles published per quarter

Figure 2 shows an initial dominance of positive articles until the third quarter of 2013. This quarter shows a spike in articles: two positive, two negative, and seven neutral. From then until the last article in the third quarter of 2016, there is a range of positive, neutral, and negative articles, although a positive perspective dominates.
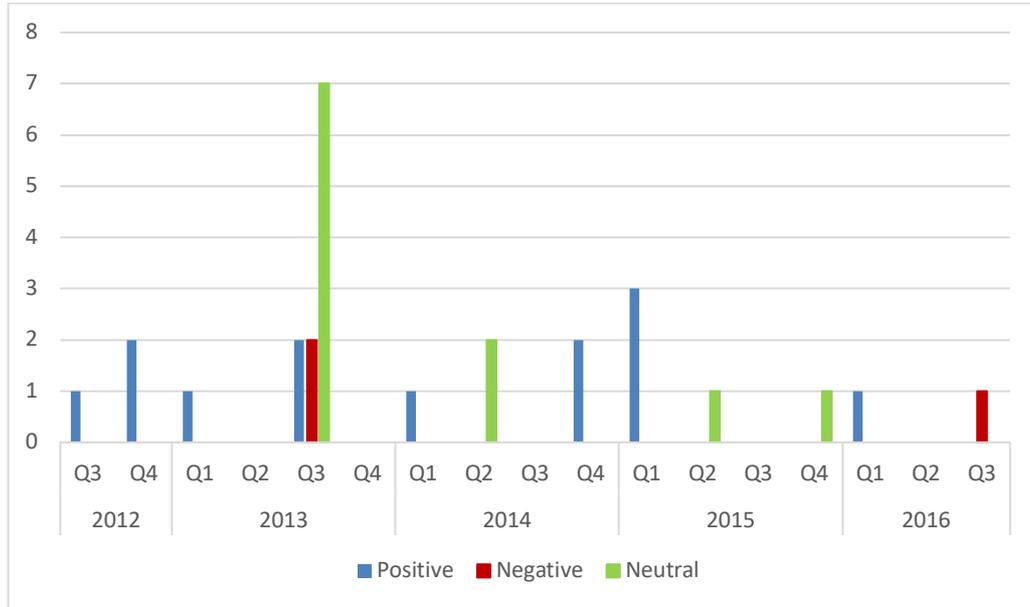

Figure 2 Number of positive, negative, and neutral articles per quarter

The dominant codes were *Change* (*n*=17) and *Openness* (*n*=17). This was followed by *MOOC providers and elite universities* (*n*=14) and *Commodification* (*n*=14), *Pedagogy* (*n*=12), and the emerging code of *MOOCs as experimental* (*n*=12). The *actuality of MOOCs* (*n*=7) was rarely mentioned. Figure 3 shows how often the content of the articles was identified as relevant to each code.
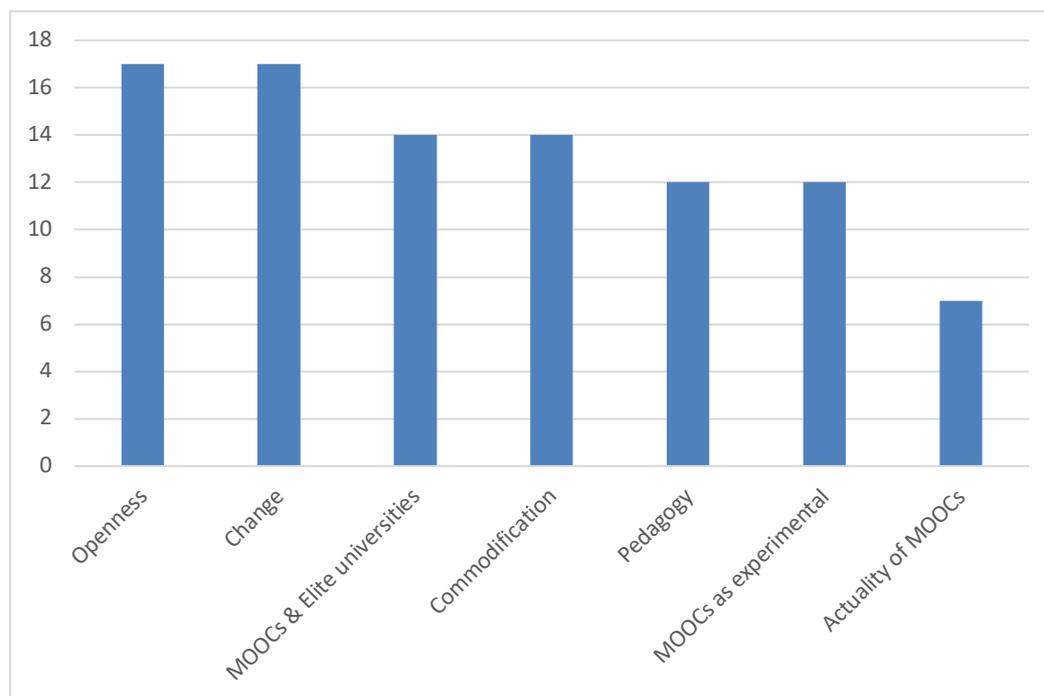
Figure 3 Number of articles in each coded category

MOOC themes

Codes were grouped according to interconnections. Quotes from the articles exemplify the ideas in each theme. Three themes were identified.

1. MOOCS as a catalyst for a revolutionised higher education system. This theme incorporates aspects from the Change, MOOC providers and elite universities, and Openness codes.
2. The business aspects of higher education. This includes aspects from the Change, Openness and Commodification codes.
3. MOOCs as experimental in New Zealand. This includes aspects from the Pedagogy, the Actuality of MOOCs, and MOOCs as experimental codes.

MOOCs were presented as *revolutionising to higher education*, claiming technology as the driver to make existing higher education systems obsolete, and forcing an "international revolution" ("Massey to Offer," 2013, para. 17). This change is described as being as significant as the "invention of the printing press" (Jones, 2014, para. 6), and expected to have the same disruptive effect on higher education as the internet has had to the "music and newspaper industries" ("Internet Challenges Universities," 2013, para. 1). MOOCs have "potential to transform traditional, campus-based learning and globalise higher education" (Pearl, 2013, para. 3.)

This globalising aspect is seen in references to open and widespread availability of higher education due to MOOCs being "mostly free and aimed at mass audiences" (Pearl, 2013, para. 3). Large enrolment numbers are also mentioned, although low completion rates balance this point (Elder, 2013a). The openness of MOOCs has also been discussed in relation to humanitarian goals; for example, helping to educate people in Liberia about ebola ("Internet v Ebola," 2014). However, although MOOCs have the potential to democratise education ("Learn to Love the MOOC," 2013), this argument is countered with reminders that not everyone has internet access or capability ("My First MOOC," 2013).

The technological innovation of MOOCs is reported to rescue higher education from its burden on the taxpayer. The *Press* refers to an Ernst and Young report, stating that reduced government funding "would force universities to 'fundamentally reinvent themselves'" (Pullar-Strecker, 2012, para. 7). The presumption is that higher education needs operational change to become financially leaner. MOOCs are described as the "saving grace" (Walters, 2015, para. 20) due to "flat lining government funding" ("Internet Challenges Universities," 2013, para. 8), bringing cost-cutting potential, especially by reducing staff numbers and replacing educators with course facilitators: "For many academics this is code for lower pay and lost jobs" (Laxon, 2013, para. 36).

These changes are presented with a sense of urgency, with statements indicating "time was running out" ("Internet Challenges Universities," 2013, para. 6), and that universities are under pressure to adopt MOOCs to avoid being "guillotined" ("Universities Face Online Assault," 2013, para. 5) by the MOOC movement. However, the expectation of disruption is not shared—MOOCs are also reported as being complementary to existing higher education. As stated in *Stuff*, they are "not a replacement for a traditional university education but . . . a step in the right direction" (Walters, 2015, p. 11).

This step in the right direction, however, sees the involvement of MOOC providers as a normalised characteristic of higher education. This characteristic is founded on partnerships between elite universities and private MOOC providers. New Zealand universities use this relationship, in a similar fashion to Coursera's partnership with "many of America's top tier universities" ("Universities Face Online Assault," 2013, para. 5), to give credence to their practice of enlisting MOOC provider companies. For example, comments such as "following in the footsteps of Ivy League giants" ("Massey to Offer," 2013, para. 4) foster an impression of credibility and promote the public's acceptance of MOOCs and MOOC providers' involvement in higher education. In reality, the few New Zealand universities that have partnered with MOOC platform providers have chosen FutureLearn, owned by the U.K.'s Open University and the SEEK group; edX, a non-profit organisation established by the Massachusetts Institute of Technology and Harvard University; and Open2Study, previously offered through Open Universities Australia. New Zealand Institutes of Technology and Polytechnics have partnered with OERu, a non-profit platform, or TANZ eCampus, a partnership of several New Zealand tertiary education providers.

Business functions in relation to MOOCs in higher education are evident, signifying an expectation that higher education should operate as a commodity in a competitive marketplace. Firstly, MOOCs are presented as a marketing opportunity for universities to increase their global brand: "The global education market is a very, very big market that is growing . . . we want to get some experience and some publicity" (Pearl, 2013, para. 11), and institutions are "offering courses free online to grow their 'global brand'" (Pullar-Strecker, 2012, para. 3). Although humanitarian benefits are touted, the marketing motivation which sees higher education as a product in a global market place is revealed: "At work here is a blend of philanthropy, turning education into a global public good; of self-interest, for there may be ways of making money from this and for now it achieves brand recognition" ("Universities Bend to Change," 2012, para. 11).

In addition, there is frequent discussion about the role of higher education in fulfilling the needs of industry; for example, the function of higher education "to deliver recruits who have skills the firms actually need" ("World," 2015, para. 3). However, the role of MOOCs is seen as one of disseminating information in service to industry. This raises concerns about the role of MOOC providers. They are described as venture capitalists with "no serious commitment to public education . . . [they] give the public greater access to information, but not necessarily greater access to learning or knowledge" ("Massey to Offer," 2013, para. 14).

This theme refers to an *uncertainty of the application of MOOCs*, their future in higher education, and their business viability. Uncertainty is represented by expressions such as, "I don't think we can be left out of the experiment" (Elder, 2013b, para. 6), "the sector had yet to establish what MOOCs would mean for New Zealand universities" ("Massey to Offer," 2013, para. 13), and the business model for MOOCs "hangs by a thread" (Elder, 2013b, para. 9). Only one article countered this theme, stating that MOOCs were "not unchartered territory" ("Massey to Offer," 2013, para. 3).

The role of MOOCs in higher education is therefore presented as evolving. MOOCs have not been as disruptive as initially expected, but have "an uncertain future" (Elder, 2013a, para. 14). They are reported as being suitable programme tasters and useful for those wanting to study for professional development or personal interest: "The biggest winner is the average person with a curiosity for knowledge" (Slabbert, 2015, para. 22). Although universities are adopting MOOCs (Jackman, 2016), MOOCs are not necessarily totally replacing traditional education: "Technology supports but does not replace the teacher in the education process" (Torr, 2014, para. 10). MOOCs have been more recently viewed as a disruptive innovation that has "fallen flat" (Russell, 2016, Myth No. 4, para. 3). Nevertheless, new MOOC offerings, such as nanodegrees, are becoming available. They fill a different need than the traditional university qualification ("World," 2015, para. 3).

The experimental nature of MOOCs is also evident in references to pedagogy. Although the pedagogy is often described in terms of the delivery and interaction modes (Walters, 2015), with opportunities to interact world-wide and gain ideas, knowledge, and information (Torr, 2014), there are concerns about the lack of social aspects of university life and support networks that might not be replicated online (Walters, 2015). It was also considered that online education could not adequately replicate laboratory and field-work teaching and learning: "Hands-on experience . . . was essential" (Laxon, 2013, p. 16).

Experimentation with MOOCs calls the definition of higher education into question. It is pointed out that education is not just "knowledge transfer" (Elder, 2013a, para. 12) although the effectiveness of the lecture-theatre experience is questioned (Laxon, 2013). Other concerns are expressed about the concept of peer marking (Laxon, 2013) and the lack of teaching input in MOOC development, with MOOCs criticised as at risk of being "edutainment . . . advanced by people who have great skills in social media but not necessarily teaching" (Pearl, 2013, para. 9).

Discussion

The findings have revealed an alternative perspective, unique to New Zealand, regarding MOOCs in higher education. Overt admissions that the place of MOOCs in higher education is experimental suggest a more critical representation in public news media than that found in overseas research. Nevertheless, there are similarities with previous research (Bulfin et al., 2014; Deimann, 2015; Dumitrica 2017; Selwyn et al., 2015) in that it is a perspective dominated by the revolutionising potential of MOOCs and the representation of higher education as a commodity in a global marketplace.

Although the New Zealand articles were largely positive (48%), closely followed by articles with a neutral tone (41%), these results contrast with findings from Brown et al. (2016) who reported 77% positive, 19% neutral, and 4% negative. These differences may be because previous research included specialist magazine media such as *Times Higher Education* (Bulfin et al., 2014; Kovanović et al., 2015; Selwyn et al., 2015)*,* whereas the current research was restricted to public newspaper articles. However, it may also point to the New Zealand media taking a more critical approach to MOOCs in higher education.

The surge of media interest in the third quarter of 2013 is also consistent with overseas findings (Bulfin et al., 2014; Kovanović et al., 2015). In New Zealand, this period uncovered a balanced debate, moving the representations away from the previous positive perspective towards one reflecting both positive and negative aspects of MOOCs in higher education. This could indicate a trend towards increased criticality and alignment with the Gartner hype cycle, which sees a new technological innovation following a cycle of "enthusiasm, disillusionment, and sensible adoption" (Daniel, 2016, p. 4).

Reporting by the New Zealand media is consistent with overseas reporting in presuming that adoption is inevitable. This notion of inevitability is fostered by representing MOOCs as a natural, unavoidable technological development. This point remains unquestioned. Although both New Zealand and international media adopt the approach of MOOCs as a natural yet ahistorical development to disrupt existing higher education, New Zealand reports show that they are not supplanting, but are complementing, existing higher education.

Likewise, international and New Zealand media describe MOOC pedagogy by outlining aspects of online course delivery, although debate in New Zealand media questions their adequacy in experiential learning and student support. This argument reflects an assimilative approach to adopting MOOCs, whereby questions of educational effectiveness are framed in terms of existing pedagogy. However, like those in overseas media, New Zealand reports have not discussed the quality of MOOC pedagogy, leaving the reader unaware that, with open educational resource development, sound MOOC pedagogy is possible (Bates, 2012). Rather, soundness of the MOOC pedagogy is implied by referring to MOOC provision at elite universities, thereby perpetuating the ahistorical perspective.

New Zealand reporting also points to media focus being not on educational quality, but on non-educational aspects. As in previous research (Deimann, 2015), the argument for MOOCs in New Zealand is powered by the narrative of higher education being broken and needing to be rescued by the MOOC movement, presented with the persuasive narrative of MOOCs' democratising potential. However, there is little questioning of the truth of this narrative, or of the motivation behind it. There is no evidence that existing higher education is inefficient and broken. As stated by Weller (2015), the "broken" narrative is "often stated as an irrefutable fact" (p. 2). This narrative tends to focus on the funding of higher education but does not ask whether the brokenness is caused by inadequate funding, instead blaming institutional inefficiency. This emphasis obscures debate about private investment in higher education and the underpinning neoliberalist ideology that might enable it (Dumitrica, 2017).

A neoliberalist approach to higher education is consistent with the media's emphasis on MOOCs as a marketing tool and of higher education being a service to industry, thereby pointing to education as a commodity in a globalised marketplace. The New Zealand media has not questioned why higher education institutions should focus on marketing, but instead delivers the international message that MOOCs are a much needed catalyst to overhaul existing higher education systems and traditions. Rowe-Williams (2018) points out that New Zealand learners and higher education institutions have been encouraged to consider higher education in financial terms, and that this has resulted in more value being assigned to some areas of study than others—based on the financial benefit to the institutions. Within this context, New Zealand higher education institutions, creators of knowledge founded on sound rationale and experimentation, forge ahead with the MOOC experiment without sound evidence of their economic or pedagogical outcomes or benefits. This fosters the notion of higher education institutions being a utility for disseminating knowledge rather than being institutions for knowledge creation.

Finally, in the context of a commodified higher education competing for market share armed with the MOOC product, student consumers may be under-represented. Rather, New Zealand media more dominantly reflects the interests of institutions to experimentally market themselves in the face of a perceived threat to their existing structures, with only minimal reference to their educational soundness. Ultimately, this raises the question: Whose interests are really being served in this experiment?

Conclusion

The New Zealand public receives powerful messages from mainstream news media. Although analysis of the New Zealand news articles related to MOOCs has revealed similar themes to overseas research (namely; MOOCs are disruptive to higher education systems, which are regarded as inefficient and in need of revolution), the New Zealand media more overtly portrays the reality of the adoption of MOOCs, representing them as assimilated into existing higher education structures rather than supplanting them. Nevertheless, MOOCs are presented as a natural solution to inefficiency; they are expected to reduce education costs and democratise access to higher education.

Although globalisation of education might be supported by new technologies such as MOOCs, the rhetoric in the New Zealand public news media reveals them to be experimental. This experimentation is not validated in terms of sound rationale or educational or pedagogical benefits, although credibility is implied with references to New Zealand universities' MOOC offerings being consistent with the actions of elite overseas universities. Although these offerings are coupled with the claim of experimentation, they are more commonly viewed as a marketing tool.

New Zealand media reports appear to take a more neutral stance than overseas findings, but MOOCs are still predominantly presented in a positive light. Although there has been a shift towards negative as well as positive perspectives of MOOCs, not all stakeholders' voices appear to be well represented. Concern for student learning is dominated by themes of higher education as a commodity, with MOOCs presented as the saviour of a broken higher education system, fostering the mindset of financialisation of higher education. The power of the agenda-setting role of media means that these dominant themes, which incorporate a role for private MOOC provider companies and potentially radical changes to existing higher education structures, are likely to be accepted by the New Zealand public as both natural and necessary.

As with all research, this study has limitations. The documents in the dataset are limited to New Zealand public newspaper articles. In terms of future research, analysis of the strength of voice given to different stakeholders in higher education could further highlight underpinning motivations behind media representations for this and other technological innovations. Examination of the actualisation of MOOCs compared with the reported expected outcomes may also be of interest. In addition, research examining trends of the themes across time would expand the state of knowledge regarding changes in the messages to the public about MOOCs and technological innovation in education more generally. Finally, the extent to which technological innovation drives the delivery of higher education, and shapes the definition of higher education, would further highlight political, social, and ideological changes over time.

References

Bates, T. (2012, August 5). What's right and what's wrong about Coursera-style MOOCs [Blog post]. Retrieved from https://www.tonybates.ca/2012/08/05/whats-right-and-whats-wrong-about-coursera-style-moocs/

Bates, T. (2016, July 20). Online learning for beginners: 3. Aren't MOOCs online learning? [Blog post]. Retrieved from https://www.tonybates.ca/2016/07/20/online-learning-for-beginners-3-arent-moocs-online-learning/

Bates, T., & Sangra, A. (2011). *Managing technology in higher education: Strategies for transforming teaching and learning.* San Francisco, CA: Jossey-Bass.

Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal, 9*(2), 27–40. https://doi.org/10.3316/QRJ0902027

Brown, M., Costello, E., Donlon, E., & Giolla-Mhichil, M. (2016). MOOCs in the news: The 'real' story behind the Irish story. In *Proceedings of Global Learn–Global Conference on Learning and Technology* (pp. 337–345). Limerick, Ireland: Association for the Advancement of Computing in Education (AACE). Retrieved from https://www.learntechlib.org/p/172743/

Bulfin, S., Pangrazio, L., & Selwyn, N. (2014). Making 'MOOCs': The construction of a new digital higher education within news media discourse. *International Review of Research in Open and Distributed Learning, 15*(5), 290–305. https://doi.org/10.19173/irrodl.v15i5.1856

Christensen, C. (2018). *Disruptive innovation* [video]. Retrieved from http://www.claytonchristensen.com/key-concepts/

Daniel, J. (2012). Making sense of MOOCs: Musings in a maze of myth, paradox and possibility. *Journal of Interactive Media in Education, 2012*(3), Art, 18. http://dx.doi.org/10.5334/2012-18

Daniel, J. (2016). Massive open online courses: What will be their legacy? *Fems Microbiology Letters, 363*(8). https://academic.oup.com/femsle/article/363/8/fnw055/2570130

Deimann, M. (2015). The dark side of the MOOC: A critical inquiry on their claims and realities. *Current Issues in Emerging eLearning, 2*(1), Article 3. Retrieved from https://scholarworks.umb.edu/ciee/vol2/iss1/3

Devereux, E. (2014). *Understanding the media*. London, England: Sage.

Dumitrica, D. (2017). Fixing higher education through technology: Canadian media coverage of massive open online courses. *Learning, Media and Technology, 42(*4), 454–467. https://doi.org/10.1080/17439884.2017.1278021

Elder, V. (2013a, July 7). Online courses no threat to Uni: Hayne. *Otago Daily Times*. Retrieved from https://www.odt.co.nz/news/dunedin/online-courses-no-threat-uni-hayne

Elder, V. (2013b, July 29). Otago online stand queried. *Otago Daily Times.* Retrieved from https://www.odt.co.nz/news/campus/university-of-otago/otago-online-stand-queried

Flick, U. (2006). *An introduction to qualitative research* (3rd ed.). London, England: Sage.

Internet challenges universities. (2013, January 15). *Taranaki Daily Times.* Retrieved from Newztext database.

Internet v ebola. (2014, October 12). *Sunday Star-Times.* Retrieved from Newztext database.

Jackman, A. (2016, February 24). Uni students face lecture-free future. *Dominion Post.* Retrieved from Newztext database.

Jacoby, J. (2014). The disruptive potential of the massive open online course: A literature review. *Journal of Open, Flexible and Distance Learning, 18*(1), 73–85. Retrieved from http://www.jofdl.nz/index.php/JOFDL/article/view/214

Jones, N. (2014, May 28). Online and free: Lessons for the future. *New Zealand Herald.* Retrieved from https://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=11262869

Kovanović, V., Joksimović, S., GaŠević, D., Siemens G., & Hatala, M. (2015). What public media reveals about MOOCs: A systematic analysis of news reports. *British Journal of Educational Technology, 46*(3), 510–527. http://dx.doi.org/10.1111/bjet.12277

Laxon, A. (2013, September 14). Wide open university. *New Zealand Herald.* Retrieved from Newztext database.

Learn to love the MOOC. (2013, July 24). *Manawatu Standard.* Retrieved from Newztext database.

Massey to offer open classes online. (2013, July 7). *Southland Times.* Retrieved from Newztext database**.**

McCombs, M., & Shaw, D. L. (1972). The agenda-setting function of mass media. *Public Opinion Quarterly, 1972*(2), 176–187. https://doi.org/10.1086/267990

Ministry of Education. (2018). *Tertiary education strategy 2014–2019.* Retrieved from https://www.education.govt.nz/further-education/policies-and-strategies/tertiary-education-strategy/

My first MOOC: A student guide. (2013, September 14). *New Zealand Herald.* Retrieved from Newztext database.

New Zealand Productivity Commission. (2016). *New models of tertiary education.* Retrieved from https://www.productivity.govt.nz/inquiries/new-models-of-tertiary-education/

Olsen, W. (2014). *Data collection: Key debates and methods in social research.* London, UK: Sage.

Pappano, L. (2012, November 4). The year of the MOOC. *New York Times*, p. 26(L). Retrieved from https://www.nytimes.com/2012/11/04/education/edlife/massive-open-online-courses-are-multiplying-at-a-rapid-pace.html

Pearl, H. (2013, July 20). Online courses a 'game-changer'. *Stuff.* Retrieved from http://www.stuff.co.nz/waikato-times/news/8942061/Online-courses-a-game-changer

Pullar-Strecker, T. (2012, November 28). Free online courses pose huge challenge for NZ universities. *Press.* Retrieved from Newztext database.

Rowe-Williams, J. (2018). The financialisation of tertiary education in Aotearoa/New Zealand. *New Zealand Sociology, 33*(2), 41–68. Retrieved from https://search.informit.com.au/documentSummary;dn=952584780174018;res=IELNZC.

Russell, A. L. (2016, August 22). Five myths about the web. *Stuff.* Retrieved from Newztext database.

Ryan, G. W., & Bernard, H. R. (2003). Techniques to identify themes. *Field Methods, 15*(1), 85–109. http://dx.doi.org/10.1177/1525822X02239569

Selwyn, N., Bulfin, S., & Pangrazio, L. (2015). Massive open online change? Exploring the discursive construction of the 'MOOC' in newspapers. *Higher Education Quarterly, 69(*2), 175–192. http://dx.doi.org/10.1111/hequ.12061

Slabbert, B. (2015, February 04). Getting a taste of uni from your living room. *Dominion Post.* Retrieved from https://www.stuff.co.nz/technology/digital-living/65743427/getting-a-taste-of-uni-from-your-living-room

Torr, A. (2014, March 19). Revolution connects 'classrooms' across world: Comment. *Daily Post.* Retrieved from Newztext database.

Universities bend to change. (2012, September 22). Retrieved from Newztext database.

Universities face online assault. (2013, July 26). *New Zealand Herald.* Retrieved from Newztext database.

Walters, L. (2015, November 3). University of Auckland launches first online course. *Stuff.* Retrieved from https://www.stuff.co.nz/national/education/73639819/university-of-auckland-launches-first-online-course

Weller, M. (2015). MOOCs and the Silicon Valley narrative. *Journal of Interactive Media in Education, 1*(5), 1–7. http://dx.doi.org/10.5334/jime.am

World. (2015, February 08). *Sunday Star-Times.* Retrieved from Newztext database.

World-newspapers.com (2015). Retrieved from http://www.world-newspapers.com/new-zealand.html

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Appendix

Pre-defined codes for deductive analysis (based on themes established in the literature review)

1. Change. This code is based on the idea that MOOCs are a disruptive innovation, set to revolutionise existing higher education systems. Included is the presentation of MOOCs as ahistorical and as a new phenomenon which is also an evolutionary technological development. It incorporates the sense that MOOCs are both a radical yet inevitable solution to an implied inefficient and problematic higher education system.

2. MOOC providers and elite universities, and the association of the two. This code incorporates reporting of MOOCs as driven by elite universities, the mention of the MOOC provider companies and their venture capital funding, and the massiveness of MOOCs in terms of large investment into the provider companies.

3. Openness. The third code includes reporting of MOOCs as free. This typically involves the interpretation of free in terms of fee free, and references to MOOCs as democratising as they make education widely available. It is based on the concept of openness, and accessibility to higher education.

4. Commodification. This code includes presentations of higher education as a commodity rather than a process, which places higher education as a player in a globalised, or even a national, free market. It includes the MOOC provider's position in the delivery of higher education, reference to unbundling of education and changes to credentialling as the marketisation of higher education is fostered and enabled through the adoption of MOOCs.

5. Pedagogy. This code refers to mentions of teaching and learning, and the pedagogy of MOOCs. It includes assumptions and interpretations of what teaching and learning entails and the construction and/or dissemination of knowledge. Related to this are assumptions or discussion regarding the role of educators.

6. The actuality of MOOCs. This code includes reports of the extent of the adoption of MOOCs and whether the forecasts of a disrupted higher education system and global impact have or have not occurred.

Emerging code

MOOCs as experimental. This code includes references to uncertainty of the application of MOOCs, their future in higher education, or their business viability.