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The complicity of digital technologies in the marketisation of UK higher education: exploring the implications of a critical discourse analysis of thirteen national digital teaching and learning strategies

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Abstract

National strategies play a crucial role in framing how digital technologies are enacted in Higher Education (HE). This paper draws on some of the findings of a Critical Discourse Analysis (CDA) of thirteen digital teaching and learning strategies issued by government departments and non-departmental public bodies in the UK between 2003 and 2013. It demonstrates that, across the strategies, digital technologies are depicted as tools for advancing the marketisation of UK HE. Rather ironically, the strategies are also fraught with contradictions and paradoxes with respect to the claimed relationships between digital technologies, learning, and markets. I argue that this problematic portrayal of digital technologies makes them complicit in the neoliberal erosion of UK HE.

Keywords: Digital technologies, Higher education policy and strategy, Marketisation of HE, Neoliberalism, Critical discourse analysis

Introduction

Digital technologies have become an accepted part of the contemporary Higher Education (HE) landscape. This ubiquity is precisely why their use in HE learning and teaching contexts should be subject to ongoing critique and problematisation. While there is a growing body of critical commentary around the use of digital technologies in HE (Bayne, 2015; Bulfin, Johnson, & Bigum, 2015; Kirkwood & Price, 2014; Selwyn, 2015), critical appraisal relating specifically to national digital learning and teaching strategies is more limited. Yet national strategies play a crucial role in framing how digital technologies are enacted in HE (De Freitas & Oliver, 2005). With this in mind, this article examines such strategies through a critical lens, in order to uncover and critique the motivations behind the drive to embed digital technologies into HE.

The Marketisation of UK HE

Neoliberalism, the prevailing philosophy guiding policy-making worldwide (Harvey, 2005), is predicated on three fundamental assumptions about the role and functioning



of markets. First, it is purported that the free market is the most appropriate mechanism for organising all aspects of human life. Second, markets are claimed to be self-regulating. Under this assumption, state intervention in the operation of markets should be minimised; instead, the government's role is to foster conditions that allow markets to operate at their optimum level. Third, individuals are assumed to be self-interested and rational economic actors. Overall, neoliberal ideology promises that open economies and global free trade simultaneously increase efficiency, improve quality, and widen consumer choice (Friedman 1962). The marketisation of HE is the application of the aforementioned principles to HE (Brown, 2011). Since the 1990s, the UK has established itself as the posterchild for the marketisation of HE. Public funding for HE has been slashed, with Higher Education Institutions (HEIs) more and more financed via student fees and private revenue streams (Brown, 2011; Williams, 2013). Competition, both within and between HEIs, is ever more fundamental to academia, and HEIs are increasingly managed according to corporate models (Olssen & Peters, 2005). A further manifestation of marketisation has been the growing privatisation of HE, evident in the emergence of private HE providers and the outsourcing of activities to the private sector (Brown & Carasso, 2013; McGettigan, 2013). This shift has been derived in part from the top-down influence of neoliberal government policies, and also from the bottom-up, as HEIs attempt to simultaneously accommodate increasing student numbers and cope with reductions in government funding (Brown, 2011; Molesworth, Nixon, & Scullion, 2011).

Proponents of marketisation assert that market-based competition drives HEIs to become more efficient, innovative, and entrepreneurial; leads to a higher quality of research activity and education provision; generates better diversity of provision (and hence more student choice); and results in a better alignment between HE's 'outputs' (research and graduates) and economic and societal needs (Brown, 2011; Massy, 2004; McGettigan, 2013). The research described herein is underpinned by an alternative perspective which refutes the aforesaid claims, and instead considers that the application of neoliberal market economics to HE is having a detrimental impact on HE's function as a public good, that is, the benefits of HE to individuals, to their families, and to society that "the market does not care about" (Massy, 2004, p. 13). In particular, the marketisation of HE is eroding the important societal, cultural, and - somewhat paradoxically – the potential economic benefits of those areas of scholarship that, according to the market-based model, are not considered to have an obvious economic impact, namely the arts and the humanities, as well as some of the social sciences. This blinkered instrumental focus is neglecting the cultivation of the skills essential to democracy (Nussbaum, 2010). The humanities, arts, and social sciences foster the dialogue, reflection, critical thought, imagination, and speculative testing of ideas that are critical to the discussion of social and political issues (Giroux, 2014; Nussbaum, 2010; Small, 2013). Rather ironically, these skills are also precisely those needed to cultivate a thriving economy (British Academy, 2004; McMahon, 2009; Small, 2013). Furthermore, and in direct conflict with claimed aspirations to make the system more inclusive, the marketisation of HE is likely to increase social inequalities. Rather than resulting in a free market, where choice and value for money are available to everyone, the application of market principles is resulting in an increasingly stratified system whereby it is mainly the already advantaged who can afford to attend the most prestigious institutions and pay for the training necessary to enter most economically lucrative professions; the less advantaged can only afford the lower cost, and lower status institutions and courses, or may not be in a position to participate at all (Brown & Carasso, 2013; McMahon, 2009).

Method

The current paper draws on some of the findings of a Critical Discourse Analysis (CDA) of 13 digital teaching and learning strategies issued by government departments and non-departmental public bodies (such as the HE funding councils² and Becta³) in England, Wales, and Scotland⁴ that were concerned partly, or entirely, with HE, spanning the time frame 2003–2013, and amounting to a corpus of approximately 138, 900 words (see Table 1).

CDA has its roots in the critical research paradigm (critical theory). A central tenet of CDA is thus an understanding that discourse can reinforce and perpetuate hegemonic structures of power (Foucault, 1980). CDA encompasses a diverse range of approaches, which differ in their theoretical frameworks and methods (Wodak & Meyer, 2009). The approach taken in this study is most closely allied to Fairclough's Dialectical-Relational approach, which is focused on the relationship between language, ideology, and power (Fairclough, 2010). Braun and Clarke's (2006) Phases of Thematic Analysis was employed in order to identify, categorise, and refine themes recurring across the corpus. The qualitative data analysis software Nvivo was used to code and organise instances of each theme. Themes were next clustered (Miles, Huberman, & Saldaña, 2014) around three overarching 'Master narratives' (Fairclough, 2006; Jessop, 2004): Instrumentality, Modernisation, and Marketisation. The themes were then subjected to an 'Ideology critique'. Ideology critique is the predominant form of critique associated with both critical theory (Held, 1980) and CDA (Fairclough, 2010). In this context, ideologies may be understood as sets of doctrines, beliefs, ideas, or values that are presented as implicit, natural, or self-evident, despite their being shaped by particular social, cultural, and political interests. Ideological beliefs and ideas may be employed

Table 1 Strategy texts analysed

England

- Department for Education and Skills (DfES): Towards a Unified e-learning Strategy (DfES, 2003)
- DfES: Harnessing Technology Transforming Learning and Children's Services (DfES, 2005)
- Becta: Harnessing Technology: Next Generation Learning (Becta, 2008)
- · Higher Education Funding Council for England (HEFCE): HEFCE strategy for e-learning (HEFCE, 2005)
- HEFCE Enhancing learning and teaching through the use of technology. A revised approach to HEFCE's strategy for e-learning (HEFCE, 2009)
- HEFCE: Report to HEFCE by the Online Learning Task Force Collaborate to compete. Seizing the opportunity of online learning for UK higher education (HEFCE, 2011)

Scotland

- Scottish Further Education Funding Council (SFEFC) and Scottish Higher Education Funding Council (SHEFC) Joint SFEFC/SHEFC E-Learning Group: Final Report (SFEFC/SHEFC, 2003)
- Scottish Funding Council (SFC): Review of e-learning policy (SFC, 2006)
- SFC: SFC Review of Council strategy on e-learning (SFC, 2007)

Wales

- National Council of Education and Training for Wales (National Council-ELWa): An e-learning Strategy for Wales (ELWa, 2003)
- Higher Education Funding Council for Wales (HEFCW): Statement of the position of e-learning in Higher Education in Wales (HEFCW, 2007)
- HEFCW: Enhancing Learning and Teaching through Technology: a Strategy for Higher Education in Wales (HEFCW, 2008)

in order to implicitly or explicitly justify ideas or actions, by presenting them as being inherently neutral, certain, natural, or commonsensical, and therefore exempt from criticism; by implication, other viewpoints or interpretations may be marginalised (Buchanan, 2010; Held, 1980). Ideology critique thus "assesses an object in terms of its own standards and ideals" (Held, 1980, p. 106). In doing so, it aims to highlight contradictions and inconsistencies, as well as to uncover the social, cultural, and political motivations underpinning ideological claims (Friesen, 2009; Held, 1980).

Findings and discussion

The 13 strategy texts analysed were found to be underpinned by a trilogy of neoliberal master narratives: Instrumentality - the idea that HE serves a mainly utilitarian purpose and is primarily concerned with advancing a country's economic growth and individuals' monetary wealth; Modernisation - the incessant pursuit of change and reform in HE, with technology often portrayed as both a driver and an enabler of this change; and Marketisation - the application of neoliberal market economic theory to HE. It is my ideology critique of this final master narrative that is the focus of the current paper. Recurring leitmotifs across the corpus that are derived from Marketisation are: the framing of students as 'consumers' of the HE 'product'; the emphasis on 'personalised learning'; the promotion of digital technologies as a means to facilitate global market-based provision of HE; the assumed potential for digital technologies to create cost savings; the emphasis on in the privatisation of HE; the purported role of digital technologies in increasing quality of provision; and the claim that the use of digital technologies can generate greater customer choice. As well as framing digital learning as a means to advance the marketisation of HE, as the discussion that follows will demonstrate, there are many contradictions and paradoxes evident across the corpus in relation to the portrayal of digital technologies, learning, and markets.

The customer is always right? Meeting the demands of the student consumer

A key manifestation of the marketisation of HE is the growing tendency to frame students as 'consumers' of the HE 'product' (Brown & Carasso, 2013; Giroux, 2014; Molesworth et al., 2011). Across the corpus, students are frequently presented as consumers with their needs and expectations repeatedly referenced. For example:

[I]t is very important to place learning and learners (or, in other terms, markets and customers) at the heart of our thinking. (SFEFC/SHEFC, 2003, p. 11)

[T]he education and training system [needs] to become more demand-led, client focused and personalised. (Becta, 2008, p. 28)

Technology needs to enhance student choice and meet or exceed learners' expectations. (HEFCE, 2011, p. 12)

Although the increasing perception of the student as consumer can be partly attributed to rising tuition fees, as Williams (2013) reasons, the construction of the student-consumer is perhaps a more complex and multifaceted outcome of wider social, cultural, and political changes; indeed, the student as consumer is an enduring theme across the strategies, despite regional variances in strategies on fees. The emergence of

the student-consumer tends to be presented in the media, and in government policy, as a positive and inevitable development that casts students as empowered to influence their university experience (Williams, 2011). Yet, the portrayal of students as consumers is contributing to the erosion of HE as a public good. Instead of presenting participation in HE as having both public and personal benefits, neoliberalism places most emphasis on the latter: rather than a primary benefit of an educated society being society itself, the emphasis is on the individual, with HE conceived of as a financial investment in oneself, for which students are entitled to value for money (Holmwood, 2011; Williams, 2013). Moreover, although students may think they know what they want from their participation in HE, their perceived needs may not actually be in their own best interests, or the wider interests of society (Brown & Carasso, 2013; McGettigan, 2013; Williams, 2013). Additionally, a higher education differs from a normal consumer good since it hinges on the complex interaction between the student and his or her engagement with educational processes: it is thus highly problematic to frame it as a tangible commodity that can be bought and sold (Barnett, 2013; Brown, 2011; Collini, 2012). The drive to produce satisfied consumers may also be a contributing factor in reducing quality, by encouraging teaching staff to lower their intellectual demands on their students, and to instead focus on 'entertainment education' (Morley, 2003; Williams, 2011).

It's my learning for me: Personalisation as the epitome of neoliberal individualism

Allied to the framing of students as consumers is the focus across the strategies on digital learning as a means to enable 'personalised learning'. Although popularly considered to be a positive aspiration (Bowles, 2004; O'Neill & McMahon, 2005), the notions of personalisation, choice, and responsiveness often associated with student-centeredness, and that are promoted across the strategies, both align with and reinforce the neoliberal conception of the self-interested individual. This emphasis on the individual is derived from the assumption that humans are self-interested utility maximising individuals, and that their uncoordinated self-interest – the so called 'invisible hand' – correlates with the best interests of society (Smith, 1776). But the privileging of individual wants and needs is incredibly damaging from a societal perspective. As Giroux (2014) contends, neoliberalism "fosters a mode of public pedagogy that privileges the entrepreneurial subject while encouraging a value system that promotes self-interest, if not unchecked selfishness" (p. 1), and whereby "notions of citizenship are replaced by the overburdened demands of individual responsibility" (p. 55).

Technology is intimately intertwined with neoliberal individualism. As Selwyn (2011) puts it: "[digital technologies are] introducing a distinctly 'individualized' way of doing things" (p. 21), while for Watters (2014) "There's a very powerful strain of American individualism that permeates technology: personal responsibility, self-management, autonomy" (p. 60). Across the strategies, this "ideology of individualism" (Peters, 2011, p. 31) is evident in the multiplicity of references to personalisation:

[W]e want courses and services to become more personalised. (DfES, 2005, p. 8)

e-learning can also advance the flexibility and personalisation of learning. (HEFCE, 2005, p. 4)

A shift towards more personalised learning is fundamental to the Government's approach. (Becta, 2008, p. 26)

For Hartley (2008) personalisation is the "organising concept" (p. 365) of the marketisation of education, while for Bragg (2014) personalisation "speaks to the student as consumer of education" (p. 310). Personalisation fundamentally changes the relationship between students and teachers. In the personalisation model "professionals become advisers and brokers of services, not providing the services themselves so much as helping clients generate pathways through the available range of provision that meet their particular needs" (Campbell, Robinson, Neelands, Hewston, & Mazzoli, 2007, p. 137). However, rather than being a passive consumer of education who "selects from what is on offer", in this model the student becomes "an 'active' user who 'shapes' service provision from below" (Hartley, 2008, p. 366). But once again, this is problematic: an individual's perceived needs may not actually in their own best interests overall, and may neglect broader societal requirements. Furthermore, an entirely personalised and student-driven curriculum raises significant questions about both the credibility and integrity of such a HE experience, and the role of academic expertise within it.

Competitive provision of HE to a global market: Rhetoric versus reality

The marketisation of HE has intensified pressure on HEIs to compete, not only locally, but also on a global scale. The neoliberal conception of HE as key "traded service" (Cable, 2012, p. 13) is reflected across the strategies, with digital technologies presented as playing an essential role in opening up the provision of UK HE to new markets:

The UK's wider role in global education will mature as we realise that e-learning acknowledges no national boundaries. (DfES, 2003, p. 12)

[Digital technologies can provide] learning products and services which are global in their scale and reach but relevant and appropriate to the needs and preferences of the individual learner. (ELWa, 2003, pp. 1–2),

The strategies emphasise that the HE market will not be confined to traditional education providers. Transnational competition is also presented as a threat to UK HEIs, and is framed as an impetus for them to step up their game and become more competitive:

Global players (which may be universities, colleges, or commercial enterprises) will be an increasing fact of life. (ELWa, 2003, p. 6)

E-learning increases the potential for competition from on-line providers, nationally and internationally. (HEFCW, 2007, p. 8)

Providers around the world ... may well attract students away from UK institutions. (HEFCE, 2011, p. 6)

The free market thesis purports that competition can simultaneously increase efficiency and drive up quality. Yet when imposed on HEIs it may have the opposite effect. Competition may generate new inefficiencies or create possible reductions in quality, as institutions divert resources away from academic endeavours towards activities such as administration, marketing, recruitment, and customer service (McGettigan, 2013; Williams, 2013). Competition has also extended to the internal functioning and culture of universities, and is further contributing to the erosion of HE as a public good, as workloads increase, collegiality is damaged, and subjects and activities are prioritised according to their market value (Brown & Carasso, 2013; Giroux, 2014; Williams, 2013).

Notwithstanding the role of digital technologies in compounding the detrimental impacts of marketisation on HE, there are – somewhat paradoxically – many practical, cultural, and pedagogical issues that may make entry into, and participation in the global HE market less straightforward, and likely less successful, than is claimed in the strategies. For example, there may be issues relating to recognition, accreditation, and transferability of UK qualifications further afield, limiting the actual potential for successful global provision. (Paulsen, 2009). Moreover, many global HE ventures have failed due to overestimation of demand (Bacsich, 2010; Jokivirta, 2006; Keegan, Lõssenko, Mázár, Michels, Paulsen, et al., 2007).

Practical preconditions for participation in HE via digital technologies include access to the appropriate technologies, as well as a reliable power source and internet connectivity. Yet these prerequisites may not be met in many parts of the world (ITU, 2015; World Bank, 2013), further limiting the actual potential for global course delivery. In addition, cultural differences may have significant implications for the delivery of learning to a global audience. Technologies are not neutral, and instead embody particular values and ideologies (Feenberg, 1991). Digital technologies and resources - like all teaching approaches and instructional materials - are therefore embedded with cultural biases that may disadvantage learners from outside the predominant culture (Aljabre, 2012; Goodfellow & Hewling, 2005; Thompson & Ku, 2005). Furthermore, variations in cultural communication patterns can result in miscommunications or misunderstandings (Reeder, Macfadyen, Chase, & Roche, 2004) and can contribute to feelings of isolation or marginalisation (Mavor & Traynor, 2003; Shattuck, 2005). Language barriers for non-native speakers may be exacerbated when communicating online, and have been demonstrated to inhibit equal participation (Liu, Liu, Lee, & Magjuka, 2010; Zhao & McDougall, 2008). Moreover, differences in time zones may adversely impact on the quality and continuity of dialogue (Ke & Kwak, 2013; Liu et al., 2010).

Privatisation

Privatisation is "the penetration of private capital, ownership and/or influence into what were previously publically funded and owned entities" (Brown & Carasso, 2013, p. 24). In HE privatisation is manifest via the entrance of private providers into the HE market; the outsourcing of activities to the private sector; and the entry of private capital into HE via donations, commissioned projects, or public–private partnerships (Brown & Carasso, 2013; McGettigan, 2013). Digital technologies are highly implicated in all three of the aforesaid aspects of privatisation. First, due to the perceived ease with which forprofit providers can apparently successfully enter and prosper in the online learning global market, and second, via the increasing emphasis on partnerships between HE and commercial organisations.

Although there are still restrictions on the ability of new providers to enter the UK HE market, successive UK governments have facilitated an expansion in the number of private and for-profit providers (Brown & Carasso, 2013). Private provision of online learning is a recurring theme across many of the strategies, where competition from non-traditional HE providers, and providers outside the UK, is presented as a threat:

Organisations, which may be colleges, universities, commercial enterprises or multinational corporations, are investing in the design and delivery of learning which can be accessed from beyond the borders of a single country. (ELWa, 2003, p. 1)

Providers around the world ... may well attract students away from UK institutions. (HEFCE, 2011, p. 6)

Privatisation carries many threats to the role and scope of HE. The three pillars of the academy have traditionally been teaching, research, and service (Bourner, 2008). Private providers do not tend to be engaged in research; indeed, 'freedom' from the apparent burden of research is identified as a positive in one of the strategies:

Some successful for-profit models of online provision have benefited from using a different staff structure to that of UK HE institutions, with freelance tutors focusing on facilitation, teaching and assessment, with no expectation of engaging in research activity. (HEFCE, 2011, p. 19)

Yet this severing of the link between teaching and research neglects the symbiotic relationship between the two activities, and fundamentally changes the nature of both the academic profession, and HE itself (Boyer, 1990; Jenkins, Healey, & Zetter, 2007). Private providers are also unlikely to be interested in engaging in the 'unprofitable' civic and social activities traditionally associated with HE's service mission (McGettigan, 2013). New providers may even be prepared to initially operate at a loss in order to seize markets from established HEIs; this is likely to be to the detriment of local communities who will no longer avail of the benefits associated with a local institution (University of Cambridge, 2011). The drive to privatise may also be a contributing factor in the overall narrowing of subject provision in HE. UK HEIs have historically tended to offer a broad range of disciplinary and subject provision. Privately funded providers, on the other hand, tend towards more vocational and specialised provision (BIS, 2013; McMahon, 2009), a trend that, as will be discussed later on, may be exacerbated by digital technologies (Carr-Chellman, 2005; Guri-Rosenblit, 2009; Selwyn, 2011).

A further manifestation of privatisation is the increasing emphasis on partnerships between HE and commercial organisations. Across the strategies, commercial organisations are repeatedly framed as having a role to play in the establishment of markets for digital tools and resources:

[W]e need to improve education-industry partnerships to achieve innovative, effective and sustainable e-learning resources. (DfES, 2003, p. 13)

There are also significant opportunities for partnership with private organisations to produce content. (HEFCE, 2011, p. 7)

Indeed, the development of digital technologies for learning and teaching is frequently "predicated upon the involvement of commercial IT firms" (Selwyn, 2007a, p. 86). While not attended to in any of the strategies, the possible impact of such commercial interests needs to be considered: the software industry is driven by commercial imperatives for profit and efficiency, thus digital technologies tools and resources are not neutral, value free artefacts. Instead, a precarious balance of "public, private and political interests are embedded in every stage of the development of digital learning resources, from the designer's drawing board to the learner's desktop" (Selwyn, 2007b, p. 225). Furthermore, left unfettered, commercial developers may be inclined to prioritise the most 'profitable' subject areas and forms of knowledge (Clegg, Hudson, & Steel, 2003).

Efficiency and cost savings

The neoliberal thesis purports that free markets simultaneously increase efficiency and reduce costs. Digital technologies are linked to this claim in two ways. First, as has been discussed, they are directly implicated in the marketisation of HE, due to the claimed potential of online learning for opening up market-based provision of UK HE. Second, across the strategies, it is repeatedly claimed that digital technologies can "achieve economies of scale and increase value for money" (DfES, 2003, p. 19). Such assertions need to be scrutinised. Leaving digital technologies aside for a moment, it is difficult to empirically prove or disprove whether marketisation can improve efficiency in HE. Massy (2004) defines efficiency as "producing the right bundle of outputs given the needs and wants of stakeholders, and then minimising production cost for the given bundle" (p. 13). But it is not possible to quantify the return on investment from HE, since it impossible to establish a direct correlation between the outcomes of students' learning and the investment made (Brown, 2011; Collini, 2012; McGettigan, 2013). Furthermore, the aforementioned "right bundle of outputs" includes "goods that are valued by society but not captured by individuals' demand functions" (Massy, 2004, p. 13). Thus, although it could certainly be argued that marketisation has made UK HE more efficient and entrepreneurial, and has facilitated massive expansion in student numbers despite reductions in government funding, any apparent efficiency gains must be offset by the reductions in quality, equity, and diversity of the UK HE system (Brown, 2011; McMahon, 2009), as well as the detrimental impacts on HE's societal role (Giroux, 2014; Nussbaum, 2010).

Further to the aforementioned general difficulties in relation to defining and measuring efficiency in the context of HE, bold pronouncements such as the following merit particular attention:

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e-Learning also offers scope to achieve more efficient business processes. (SFC, 2006, p. 7)
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[W]here economies of scale can be achieved [Blended and online provision can] deliver capacity to meet greater demand. (Becta, 2008, p. 16)

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Online learning [...] if offered at scale, can deliver quality and cost-effectiveness. (HEFCE, 2011, p. 2)
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Fisher (2006) outlines five ways in which digital technologies are generally claimed to generate efficiencies: *Development*: once built, digital technologies tools and materials can serve as building blocks for further development; *Delivery*: enrolments can be increased at little or no cost; *Labor [sic] savings*: teaching costs can be reduced, or eliminated, by reducing contact time, 'downsizing' to adjunct instructors, and by automating grading and other administrative tasks; *Renewable use*: content can be reused in different contexts, and thus reduce development costs; and *Low operating costs*: once up and running, digital technologies resources are cheap to maintain compared to physical resources. These five claims are evident across the strategies. For example:

Once created, materials can be made available at all times, in many places, with very small marginal costs for each additional user. (SFEFC/SHEFC, 2003, p. 13)

E-learning programmes and materials are expensive to develop, but once they are available they can be accessed by large numbers of students with no additional cost ... Much online material is available free of charge ... thus improving the quality of the learning experience at no additional development cost ... Communication is easily achieved electronically, with a saving of time and cost on traditional methods. (HEFCW, 2007, p. 8)

Effective use of e-assessment technologies can provide efficiency and effectiveness improvements. (HEFCE, 2009, p. 9)

[F]or-profit models of online provision have benefited from using a different staff structure to that of UK HE institutions, with freelance tutors focusing on facilitation, teaching and assessment. (HEFCE, 2011, p. 19)

The argument for achieving economies of scale thus assumes that, once the preliminary fixed costs are out of the way, digital technologies make it cheaper to deliver learning over time. There are many problems with this idealised story, however, not least, since – further to the more general complications already highlighted in relation to measuring costs and efficiencies in HE – generating an accurate picture of the actual costs involved in developing, delivering, and maintaining digital technologies is difficult. Digital technologies in the UK tend to be employed in blended, rather than fully online contexts (Browne, Hewlett, Jenkins, Voce, Walker, et al., 2010; Jenkins, Walker, & Voce, 2014). Thus it is often difficult to precisely determine the extent to which they are utilised across a particular course or programme (Garrett & MacLean, 2004). Furthermore, costing studies on digital technologies tend to employ different methods, making it difficult to compare the outcomes of studies or to make generalisations (Bacsich, 2008; Laurillard, 2007).

Notwithstanding the aforesaid issues, the limited number of studies which have attempted to cost digital learning tend to indicate that high-quality provision may cost as much as, or even more than conventional approaches (See, for example CFHE, 2013; Delgaty, 2013; Laurillard, 2007; Stotzer, Fujikawa, Sur, & Arnsberger, 2013). Furthermore, the assertion that development costs will be eliminated over time does not tend to be borne out in practice: development technologies, aesthetic designs, and pedagogical approaches tend to have a relatively short 'shelf life', therefore there are costs

incurred in sustaining and renewing them (Jones, Maramba, Boulos, & Alexander, 2009; Nicholson & Nicholson, 2010).

In relation to efficiency in delivery, while it may be theoretically possible to significantly increase student numbers for a given course when it is delivered online (Massive Open Online Courses (MOOCs) being a case in point) these efficiency 'gains' may be offset by compromises in relation to quality (Brown & Carasso, 2013; Fisher, 2006). Indeed, many MOOCs have been characterised by a lack of student engagement and low retention rates (Conole, 2013; Hayes, 2015; Koller, Ng, Do, & Chen, 2013).

It is also unlikely that digital technologies can achieve significant savings in relation to human resources, as Fisher (2006) puts it:

When one adds up the number of persons needed to design, develop, deliver, support and sustain instructional technologies ... the comparable cost of the all-in-one faculty member found in traditional teaching environments begins to look far more attractive. (pp. 129–130)

The notion of renewable use is particularly promoted across the strategies, yet there is little evidence that significant efficiency gains can be achieved via reuse. The core idea is that digital resources can be designed for use in multiple contexts, including across subject boundaries and education sectors, thus reducing duplication of efforts. Charles Clarke, the UK's Education Secretary at the outset of the analysis timeframe, romantically envisions the apparent potential for reuse as follows:

[T]he same piece of information can be easily adapted to a number of uses. For example, a 3-D online model of a trench could be used by a PhD student studying war poetry, by an A-Level psychology student studying the effects of shell shock and by a primary school teacher preparing for a trip to the Imperial War Museum. (Clarke, 2003, p. 16)

Accordingly, the importance of reusability is foregrounded across the texts:

[I]t may be useful to commission content once, which can then be deployed across a very wide range of academic programmes or institutions. (SFEFC/ SHEFC, 2003, p. 23)

There is no point duplicating effort to create content that is already available. (HEFCE, 2011, p. 7)

There is also an emphasis on the need for cross-sectoral recycling of digital resources:

We now have a range of digital resources for education, but their usage is typically confined to the one curriculum area or age group for which they were designed. (DfES, 2005, p. 27)

[W]e will promote national arrangements for the collaborative development of content and services, to enhance front-line value for money and reduce duplicated efforts. (Becta, 2008, p. 32)

Two factors are fundamental to achieving economies of scale in relation to reuse of digital resources. First resources need to be findable by educators, and second, reuse needs to be practicable. There may be technical, cultural, and pedagogical obstacles to the successful design, retrieval, and reuse of digital learning resources, however. Initiatives such as the UK's Jorum repository have encountered technical difficulties in relation to resource storage and retrieval. Further challenges have been derived from copyright and digital rights management concerns, as well as a lack of interest in, and an absence of motivation for sharing materials (Halliday, 2008; Littlejohn & Margaryan, 2006). Indeed, Jisc, the agency responsible for the Jorum service, elected to 'retire' Jorum in 2016, in part at least, due to some of the aforementioned issues (Jisc, 2016).

Good practice in pedagogical design emphasises the need to design learning activities and resources with the target audience or context in mind (Nurmi & Jaakkola, 2006). Thus pedagogical effectiveness and potential for reuse may be in conflict. Furthermore, the 'design for reusability' philosophy may promote decontextualized and content-focused conceptions of learning (Friesen, 2004; Kirkwood, 2011; Nurmi & Jaakkola, 2006).

The actual potential for reuse across disciplines may be complicated by differences in disciplinary preferences in relation to preferred types and formats of resources (Littlejohn & Margaryan, 2006) and variances in pedagogic approaches (HEA & Jisc, 2009; Russell, 2005). Aspirations for sharing across sectors may also be unrealistic, due to variations in cultural preferences for, and traditions of, sharing and collaboration. (Littlejohn, Jung, & Broumley, 2003).

Overall then despite the sweeping claims made in the strategies regarding the potential efficiency affordances offered by digital technologies, it is unclear whether the anticipated cost savings have been, or can be, achieved.

Improving quality

A defining tenet of the neoliberal free market thesis is the claim that market-based provision of HE can drive up quality. Yet it is difficult to specify what quality means in HE (Gibbs, 2010). The quality of a given HE experience depends on the outcome of the complex interactions between the student, his or her teachers and peers, and his or her learning experiences, and will thus differ for each individual (Barnett, 2013; Williams, 2013). While it is impossible to directly and objectively measure quality in HE, some measure of quality, however imperfect, is necessary. Previously it was the academic community who adjudicated over quality in UK HEIs (Brown & Carasso, 2013). Quality judgements were made in relation to the extent to which students, programmes, and awards fulfilled specified requirements, and quality "was ultimately seen in terms of an academic view of what is meant to be an educated person, usually in a particular discipline" (Scott, 1999, p. 198). In the ever more marketised HE system, however, institutions have increasingly been required to provide indirect or symbolic quality indicators (Brown & Carasso, 2013). But the resulting proliferation of quality indicators and league tables have been criticised for providing scant information on "what actually happens to students between matriculation and graduation" (Massy, 2004, p. 29). The nature of what is meant by quality is also changing, with quality increasingly determined by the perceived requirements and expectations of employers and students (Brown & Carasso, 2013; Molesworth et al., 2011; Williams, 2013). Yet the priorities of employers and individual students may not correlate with the wider interests of society. Furthermore, "students by definition having not yet completed their education are not in a strong position to determine what this education should be" (Williams, 2013, p. 53). The concept of quality is thus becoming less about "academic quality" and more about the "general student experience" (McGettigan, 2013, p. 4). In this context, although marketisation may improve the perceived "quality of service" (Brown & Carasso, 2013, p. 125), there are many indicators that marketisation, coupled with increasing emphasis on privatisation and reductions in public funding is actually detrimentally affecting the quality of UK HE. The pressure on institutions to aggressively compete is diverting resources away from learning and teaching towards marketing activities and the development of non-academic amenities (Brown & Carasso, 2013; McGettigan, 2013). The time spent by both academic staff and their students on teaching and learning related activities is decreasing, due to reductions in contact hours, heavier staff workloads, and higher student-staff ratios. Students are increasingly engaged in part-or full-time work - which is often essential to funding their studies - but this has been demonstrated to negatively impact on academic performance (Brennan, Duaso, Little, Callender, & Van Dyke, 2005; Callender, 2008). Marketisation is also claimed to have contributed to reductions in academic standards, manifest via grade inflation (Bachan, 2017; Yorke, 2009); increases in plagiarism (Brown & Carasso, 2013; Pulfrey & Butera, 2013); pressure on academic staff to lower academic demands (Brown & Carasso, 2013; Furedi, 2011; Soin, Huber, & Wheatley, 2014); and students' increasingly instrumental approaches to their studies (Shephard, 2008).

As I have already argued, digital technologies are framed in the strategies as a way to push HE further into the realm of the market, and are thus implicated in contributing to the negative impacts of marketisation on the quality of HE. It is ironic, then, that across the strategies, digital technologies are presented as a means to increase quality:

Essentially, e-learning is about improving the quality of learning. (DfES, 2003, p. 7)

Innovation in learning approaches may increase quality and standards. (HEFCE, 2003, p. 4)

[T]he main driver for e-learning should be to enhance the quality of learning and teaching. (SFC, 2006, p. 7)

Notwithstanding the aforementioned difficulties in describing what is meant by quality in HE, there is little substantive evidence to support assertions such as the above (Guri-Rosenblit, 2009; Trucano, 2005). Furthermore, there are instances where digital technologies have been shown to have a detrimental impact on the quality of the learning experience. Particular concerns have been raised about quality and standards in relation to for-profit online provision of HE. Several high profile online providers have been subject to controversy, including claims of unethical and fraudulent practices; reliance on transient, part-time, and adjunct – and in some cases underqualified and/or underpaid – teaching staff; poor academic standards; low rates of retention and dismal graduation rates; and ultimately for putting profit before educational concerns (Hillman, 2011; Keegan, 2011; Mufson & Yang, 2011).

Broadening choice

Fundamental to neoliberalism is the claim that markets generate a greater diversity of offerings, and hence widen consumer choice. Across the strategies, digital technologies are presented as a further way in which to increase consumer choice:

Through e-learning a wider range of course options can be generated. (DfES, 2003, p. 23)

[A strategic priority for HEFCE is] Enhancing flexibility and choice for learners. (HEFCE, 2009, p. 12)

It is ironic then that the marketisation of HE is instead actually narrowing the scope of provision, by causing 'market-orientated' types of knowledge to be prioritised (Belfiore & Upchurch, 2013; Brown & Carasso, 2013; Small, 2013). Students are increasingly favouring what are perceived to be more 'vocational' and 'lucrative' courses such as Business, Engineering, and IT, over the Arts, Humanities, and Social Sciences (McGettigan, 2013; Reay, David, & Ball, 2005; UCU, 2012). In addition, the value of academic departments has become determined by their ability to generate income, privileging some disciplines but marginalising or even eliminating others (Bivens, 2014; Giroux, 2014). Digital technologies may be compounding this problem. Selwyn (2011) contends that while digital technologies may support "a greater volume of learning opportunities ... these are often homogeneous and interchangeable" while provision tends to be dominated by "popular and profitable areas of study" (pp. 100-101). Guri-Rosenblit (2009) points out that most applications of digital technologies to date "have taken place in postgraduate courses of business administration, informatics and computer science, engineering, introductory mathematics, statistics, language instruction" (p. 96). Indeed, as Carr-Chellman (2005) observes "[I]t is rare to see any courses on Shakespeare, Kant or impressionist painters offered online" (p. 5).

Research implications

My analysis has demonstrated that, across the strategies considered, digital technologies are depicted as tools for advancing the marketisation of UK HE. Furthermore, and rather ironically, many of the specific assertions made in relation to digital technologies, learning, and markets are flawed. Digital technologies are portrayed as a means to open up UK HE to a global market, and as a way to accede to the needs and expectations of student-consumers; yet there are many practical and cultural issues that make it incredibly difficult to successfully provide online courses to global cohorts. A central element of the argument for market-based provision of HE is that it can drive up quality; yet there are indications that marketisation is having the opposite effect on HE. In another paradox, while it is asserted that digital technologies can increase quality, I have demonstrated that this is a dubious claim. Notwithstanding the difficulties in defining and measuring quality in HE, there does not appear to be any empirical evidence that supports the assertion that the use of digital technologies improves quality; indeed there are indications that if poorly implemented, they may instead have a detrimental impact on students' learning. Another defining pillar of neoliberalism is the claim that market-based competition makes processes more efficient, and can thus reduce costs. Across the corpus, digital technologies are portrayed as a source of efficiency and cost savings; once again, there is little substantive evidence to support these assertions. A related alleged advantage of marketisation is that it will widen consumer choice. But the increasingly market-based provision of HE in the UK is paradoxically narrowing the range of options available to students, and online courses could be contributing to this due to their homogeneity, as well as their tendency to focus on vocational provision.

There are limitations to the research. Many factors shape how digital technologies are manifest in HE, of which government strategy is just one. A further limitation is that my interpretation of the strategies cannot be untangled from my own values as a researcher. What is certain, however, is that the strategies send out a clear message about the UK governments' and HE funding councils' perceptions of both the purpose and functioning of HE, and the role that digital technologies should play in relation to the same. Moreover, the strategies analysed framed many of the available funding opportunities for the exploration of the use of technology in HE, with such programmes claimed to have had lasting impacts (Jisc and Million+, 2009). It is also clear that, despite the enthusiastic rhetoric surrounding the claimed transformative potential of digital technologies, their deployment in UK HE has been rather more banal. Digital technologies have mainly been used to support rather than to transform practice, often replicating face-to-face teaching strategies, automating administrative tasks, or promoting behaviourist, content-driven pedagogical models (M. Jenkins et al., 2014; Kirkwood, 2011; Kirkwood & Price, 2014; Selwyn, 2011; Walker, Voce, Swift, Ahmed, Jenkins, et al., 2016).

While the discussion herein has been on the UK, the findings are also relevant to other contexts. The marketisation of HE is not unique to the UK (Giroux, 2014; Teixeira et al., 2004), neither is the deployment of digital technologies as a means to advance this project (Ball, 2012; Selwyn, 2014; Shore, 2015).

Neoliberalism's ongoing threat to the purpose and functioning of HE takes many forms, of which the market-orientated framing of digital technologies in government strategy is just one. Notwithstanding this, if digital technologies continue to be proposed as a means to advance the marketisation of HE, then it is likely that pedestrian, potentially inequitable, and even pedagogically harmful, implementations of digital technologies in HE will persist. Furthermore, any capacity that digital technologies *might have* if their application was focused on issues that they might actually be able to address are unlikely to be realised.

Endnotes

¹Notable exceptions include Selwyn and Gorard's challenges to policy constructions of technology in relation to lifelong learning and widening participation (Gorard, Selwyn, & Madden, 2003; Selwyn, Gorard, & Williams, 2001; Selwyn & Gorard, 2003; Selwyn, Gorard, & Furlong, 2006); Clegg et al.'s (2003) exposé of the flawed "meta-narrative linking of ICTs, globalization and supply side economics" (p. 51) in HE policy; and Plenderleith and Adamson's (2009) analysis of New Labour's 'transformation agenda' as a policy driver imbedding digital technologies.

²The Higher Education Funding Council for England (HEFCE), the Higher Education Funding Council for Wales (HEFCW), and the Scottish Funding Council for FE and

HE (SFC) (formerly the Scottish Higher Education Funding Council (SHEFC) and Scottish Further Education Funding Council (SFEFC)).

³The British Educational Communications and Technology Agency (BECTA), latterly known simply as 'Becta', was a UK non-departmental public body responsible for the promotion and integration of digital technologies in education between 1998 and 2011.

⁴The United Kingdom of Great Britain and Northern Ireland (UK) comprises, England, Scotland, Wales, and Northern Ireland. No relevant policy was issued in the Northern Ireland during the analysis timeframe.

Abbreviations

CDA: Critical Discourse Analysis; DfES: Department for Education and Skills; HE: Higher Education; HEFCE: Higher Education Funding Council for England; HEFCW: Higher Education Funding Council for Wales; HEIs: Higher Education Institutions; National Council-ELWa: National Council of Education and Training for Wales; SFC: Scottish Funding Council; SFEFC: Scottish Further Education Funding Council; SHEFC: Scottish Higher Education Funding Council

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