THE MEDIUM IS THE MESSAGE

On the Emergence of Autonomous Learning, MOOCs, and Technology-Enabled Active Learning

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In a culture like ours, long accustomed to splitting and dividing all things as a means of control, it is sometimes a bit of a shock to be reminded that, in operational and practical fact, the medium is the message. This is merely to say that the personal and social consequences of any medium—that is, of any extension of ourselves—result from the new scale that is introduced into our affairs by each extension of ourselves, or by any new technology. (McLuhan, 1964: 7)

So begins one of the most influential commentaries on communication and media. The often-quoted phrase, “the medium is the message,” is commonly misunderstood (Federman, 2004; Gordon, 2003) to mean that the arrival of a new communications medium is more important than the content it conveys. In other words, the mass-media channel, such as TV, radio, the internet, or cinema, is more important than the content the channel transmits, or that the content conveyed through mass-media is unimportant. This was not McLuhan’s purpose. Instead, he emphasized that a message is “the change of scale or pace or pattern” that an innovation “introduces into human affairs” (McLuhan, 1964: 8).

McLuhan is interested in the bigger picture and what the innovations are telling us about changes in society. “It is only too typical that the ‘content’ of any medium blinds us to the character of the medium” (McLuhan, 1964: 9). Then, his concern was that the arrival of new “messages,” defined broadly, masks the underlying trend. And it is this underlying trend that is more important. In short, we tend to focus on the obvious, the thing in front of our face, rather than the societal or structural changes that happen more gradually and less ostentatiously.

Viewed in this way, autonomous learning, Massive Open Online Courses (MOOCs), and other forms of technology-enabled learning are less interesting
for their content or for their use of new forms of technology. These are the minutia that distract us from the bigger issue. Standing back from the excitement of these new approaches to teaching and training, we spy a more important trend: one that devolves the cost and responsibility of teaching and training to individuals and away from nation states, regional authorities, and organizations. Around the world, it is now common for university students to pay all or a proportion of their fees and living expenses where once they received a grant (Johnstone & Marcucci, 2010). Although organizations still bear the majority of costs for in-company training, evidence is emerging of a growing trend that sees employers transfer the costs of training to their workers (European Foundation for the Improvement of Living and Working Conditions, 2014), or asking them to engage in learning on their own time outside work. And the changing nature of employment from relational to transactional (Guest, 2016) requires that employees become responsible for their own improvement and progression.

This chapter will begin by exploring McLuhan’s (1964) ideas in more depth before examining trends in education of which autonomous learning, MOOCs, and other forms of technology-enabled active learning are contemporary manifestations. In particular, we document the increasing trend of governments around the world, with some notable exceptions, to transfer the cost of higher education (HE) to those undertaking it. We then explore the implications of this for individuals, universities, and organizations. Our primary emphasis will be on HE, with consideration given to organizations that deploy online tools for learning.

The Real Message

Workplace Training and Development

It almost goes without saying that training has benefits for individuals, organizations, and societies (Aguinis & Kraiger, 2009). As people learn and develop, they contribute “to the enhancement of human well-being and performance in organizational and work settings as well as in society in general” (Aguinis & Kraiger, 2009: 452). Greater skills and knowledge bring better performance, greater self-efficacy, and achievement (e.g., Hill & Lent, 2006; Kraiger, 2002; Satterfield & Hughes, 2007; Taylor, Rust-Eff, & Chan, 2005). However, “training for the sake of training, an approach that focuses on developmental ideals and supportive organizational environments, is not aligned with today’s business realities, including compressed career progression pathways, budgetary cuts and constraints, highly competitive environments, and market-driven economic philosophies” (Aguinis & Kraiger, 2009: 466).

Despite the many advantages attributed to training and development, several factors combine to provide reasons why organizations might be inclined to devolve responsibility for training and development to employees. Since the mid-1970s, the traditional relationship between worker and employer has changed
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with it being less relational and more transactional (Guest, 2016). Gone is the ‘job for life’ and instead it is increasingly being replaced with the short-term contract, aggressive performance management, and the non-organized labor force (Kruepe, Rogowski, & Schömann, 2013; O’Leary-Kelly, Henderson, Anand, & Ashforth, 2014). More specifically, in hard times, training budgets are often the first to be hit (Felstead, Green, & Jewson, 2012). And following the Global Financial Crisis of the late 2000s, many organizations experienced a financial squeeze with training budgets being a casualty, except where a “combination of market intervention and business requirements obliged most of them to sustain training despite the recession” (Felstead et al., 2012: 968).

The emergence of communication technologies that enable teleworking, outsourcing, and global workers, are the ones changing the way that training and development can be delivered. Indeed, Miller (2013) reports that in 2012 technology-based learning (e.g., e-learning, online learning, and mobile learning) was being employed in approximately 39 percent of organizations in the American Society of Training and Development (now Association of Talent Development (ATD)) benchmarking study. In 2014 and 2015 technology-based learning continued to increase to 25 percent and 41 percent, respectively (Miller, 2014, 2015). This gradual increase appears unabated and has been fueled recently on the supply side by increased opportunities for online learning such as MOOCs (Bilbberry, 2013).

Noe, Clarke, and Klein (2014) argue that with the increasingly global and localized workforce, traditional forms of training have become impractical for many organizations. Instead, they are taking advantage of online delivery and instructional methods.

Although e-learning has high development costs, organizations can potentially reduce their overall learning costs compared with face-to-face instruction through reduced travel and lodging costs, recurring instructional costs, and lost wages by learners. These cost savings come from learners’ ability to access e-learning anywhere and anytime from a personal computer, tablet, or smartphone, thus eliminating the need for an instructor.

(Noe et al., 2014: 250)

Moreover, once organizations have developed training products in this medium, they are “canned,” meaning they can be rolled out time and again with very low costs.

More pointedly, firms may use the ready availability of training to argue that it can and sometimes should be done outside of work hours. As Berry (2013) notes, “Many courses today use computers and Internet ... this allows the individual to work a normal week, making the [training] investment in the evenings and weekends.” The second author remembers a conversation with an automotive engineer who had completed an online course that had been repurposed from a
traditional, week-long residential course. The engineer found the online course suitable but felt it was an attempt by the company to make employees work all day and then learn at night on their own time. Direct evidence for the shift is not readily available. When and where employees complete training is, for example, not asked in ATD benchmarking studies, perhaps because it may signal violation of labor laws that demand firms pay for required training (for example, the US Fair Labor Standards Act). Companies may skirt this requirement by labeling the training as voluntary or tangential to current job duties.

Occurring simultaneously with the increase in online training materials, there is a trend towards the outsourcing of training and development (Chaudhuri & Bartlett, 2014). Some argue that this is counterproductive. For example, Aguinis and Kraiger (2009: 469) argue, “Training will have the greatest impact when it is bundled together with other human resource management practices and these practices are also implemented following sound principles and practices based on empirical research.” Such bundling is more difficult when organizations transfer responsibility for training and development to specialized firms who are less familiar with the company, its other HR practices, and its employees. In this environment, it will be primarily the employees’ responsibility to determine how to apply generic, canned materials to their work environment.

**Higher Education**

The transfer of HE costs to those who consume them is euphemistically called *cost-sharing* (Johnstone, 2004).

Cost-sharing refers both to the fact that HE costs are borne by governments, parents, students, and philanthropists, as well as to the political struggles among these alternative bearers of costs and, in many countries, to the apparent drift of this burden toward greater shares borne by students and their families. (Johnstone & Markari, 2010: ix)

Although there are exceptions (e.g., Scotland and most Scandinavian countries), the general trend since the 1970s across the globe has been to transfer the costs of HE to students and those supporting them. The United Kingdom is, perhaps, the classic example of this trend especially as it tended to lead the way in Europe in changing who pays for HE.

In 1962 the British Government offered maintenance grants to cover both tuition fees and living costs for university undergraduate students. This status quo was maintained until the end of 1989 when the Conservative Government froze grants and introduced student loans. In 1997 the incoming Labour Government introduced tuition fees to be paid by every student and the maintenance grant was abolished and replaced by a means-tested student loan. In 1998 Scotland
gained devolved powers over education and in 2000 all but scrapped tuition fees for people living in Scotland prior to going to university. These people had their tuition fees paid even if they went to university in England, Wales, or Northern Ireland. Although there were calls to eliminate what Iain Duncan Smith called “a tax on learning” (Blake, 2010), in 2005 the Conservative Government allowed universities to introduce fees of £3,000 (approx. US$4,500) per annum, which almost all universities adopted for almost all courses. By 2016, tuition fees had reached £9,000 (approx. US$13,000) per annum for almost all courses at almost all UK universities, while Scottish students had these fees covered by the Scottish Parliament. Most English, Welsh, and Northern Irish students are now emerging from their undergraduate degrees with significant levels of debt (Seligren, 2014).

In some parts of Western Europe, the gradual creep of cost-sharing has begun. In 2008 The Netherlands and many of the German Länder started charging tuition fees. Johnstone and Marcucci (2010: 6) report that “at least 18 European countries were charging at least some tuition fees by 2008, many of which are nominal and all of which are low in comparison to US public universities, but the trend is both politically and financially significant.” China began charging tuition fees and for board and lodging in 1997. Russia’s constitution says that education must be free to students and their families. Nevertheless, financial pressures have limited free education to the highest scorers on entrance examinations with other students having to pay (Johnstone & Marcucci, 2010). Kweik (2009: 149), writing with particular attention to Poland, says:

In European transition countries (including in new European Union member states), the solutions suggested for HE systems increasingly include references to such notions as academic entrepreneurialism in teaching, research, and third mission activities, the need for academic institutions to become financially self-reliant, and cost-sharing in the form or introducing or increasing tuition fees accompanied by more student loans but fewer student scholarships, etc.

In the United States, where free tertiary education has never been the norm, tuition fees are rising quickly (Johnstone & Marcucci, 2010). In Australia, students began paying a significant proportion of their tuition fees in 1989 through a process called the Higher Education Contribution Scheme (HECS), which is, to all intents and purposes, a system of student loans. In Japan, where parents have traditionally picked up the costs of HE, tuition fees are rising more steeply and quickly than ever before. Elsewhere in the Far East, Thailand and Vietnam introduced student loan programs during the 1990s. Ishengoma (2004: 101) reports that cost-sharing is now appearing in Tanzania. Woodhall (2004) reports a similar trend throughout Africa with Ghana, Kenya, Lesotho, Malawi, Nigeria, and Zimbabwe all operating student loan schemes.
The process of cost-sharing is ongoing, shows no sign of reversal, and is experienced across the globe except for a few bastions (e.g., in Scandinavia and Scotland) where populations believe that education should be free for all and is in the best interests of society. What is clear is that in most of the world, the costs of HE are being gradually transferred from the state to the individual. And the inevitable conclusion seems to be that one day universities will not be financed by governments and instead will stand alone and be financed by tuition fees and the other income streams they can generate.

That said, the first obstacles to this logical endpoint are emerging. A report by the Sutton Trust in the UK estimates "that 73% [of graduates] will have some debt written off [by the Government] at the end of the repayment period, compared with 32% under the old system" (Seligren, 2014), and in Australia the Budget Office reports that 21.8 percent of student debt is likely to be written off and "Australian taxpayers exposure to university students' loans will explode more than fivefold to AUS$185.2 billion (approx. US$142bn) in 2025–26, accounting for 46.3 per cent of the nation's public debt" (Owens, 2016). Such numbers will put student loan schemes in crisis and require a remedy. The second obstacle may be the impact of student debt on graduates. Already, the media contains many stories of graduates unable to get on the property ladder and debts taking decades to pay off (e.g., McGee, 2016; Phillips, Wilbanks, Salinas, & Doberneck, 2016; Xu, Johnson, Bartholomae, O’Neill, & Guter, 2015). The impact of these debts is only just being felt and this may become another factor limiting the ever-onward march of ‘cost-sharing.’

**Emergence of Free Training**

Elsewhere, scholars have documented the rapid emergence of technology and the opportunities it has opened up for instructors (e.g., Bennett, Bishop, Dalgarno, Waycott, & Kennedy, 2012; Davies, Dean, & Ball, 2013; Ellis & Goodyear, 2013; Kirkup & Kirkwood, 2005; Laurillard, 2013; Rollag & Billsherry, 2012). We have gone from the simple ‘chalk and talk’ technologies that dominated the educational landscape for centuries, through mechanical help such as overhead projectors, to a fully enabled multimedia environment where almost anything imaginable is possible. To reflect on this transformation and illustrate its connection to the societal trend of shifting the cost of training to the end user, we discuss the emergence of two forms of free training: 1) self-help style free videos, and 2) MOOCs.

**Internet self-help.** Given the high financial cost to individuals that HE brings, it is natural for potential consumers of universities to look for alternative sources for knowledge and skills. The obvious substitute is the internet and its vast and expanding reservoir of self-help material (e.g., professionally produced materials such as TED Talks and the Khan Academy through to amateur productions
in the form of self-help videos, recorded lectures, questionnaires, written material on websites, and chat and help rooms). The internet contains knowledge on just about everything, true and untrue, that you could imagine. On one level, internet content, such as the TED Talk and the self-help video, is a force that democratises HE, bringing knowledge and skills to those who previously only had limited access to such things. But on another level, these materials cannot challenge universities' place as the pre-eminent supply of respected HE qualifications.

Self-help videos have rapidly emerged as a powerful training device. We notice that despite their ubiquity and apparent helpfulness (Duggan, Heath, Lewis, & Baxter, 2012), they have their limitations. They are, to all intents and purposes, a broadcast medium with one-way transmission of ideas. Most sites allow comments and discussion of video, but these rarely offer insight or illumination (Hsueh, Yogeeswaran, & Malinen, 2015). Hammond, Rennie, Seekins, and O'Donnell (2015) analyzed online self-help videos that people suffering from Parkinson's disease could look at for ideas in coping with common functional problems associated with the illness. They noted that the "self-help videos ... varied significantly in quality, and few met accepted standards of instructional design" (Hammond et al., 2015: 594). They rated highest for content and technical production, and lowest for instructional design and framework. 'Talking heads' dominated, no supplementary material was offered, and rarely were video effects or "other video-specific techniques to show the learner relevant behaviors, places, techniques or procedures" (Hammond et al., 2015: 599). "However, the information presented in the videos was rated as being accurate, and many videos involved experts in the field. In addition, many of the available videos avoided jargon and provided appropriate descriptions at various levels of detail" (Hammond et al., 2015: 599). Lewis, Pearce, and Bisson (2012: 15) found that "Self-help interventions appear to be an effective way of treating individuals diagnosed with social phobia and panic disorder." Gainsbury and Blaszczynski (2011: 289) found that "online self-guided interventions are efficacious and represent an important treatment adjunct for individuals with gambling-related problems."

Duggan et al. (2012: 56) looked at online self-help for non-suicidal self-injury (NSSI) in children and noted that "peer driven, informal websites have a variety of triggering content and are accessed more often than professionally driven websites." They noted concern that while the peer-driven websites were more appealing to their audience and drew more visits, they:

[b]oasted a myriad of formal and informal educational and informational resources, anecdotal self-help tips, and insight from past and current self-injurers, as well as actual photos and artistic imagery related to NSSI, all of which were easily accessible by a general audience.

(Duggan et al., 2012: 64)
Professionally driven websites tended to avoid these. Hence, this medium is attractive to the amateur. But without some baseline of knowledge, amateurs may also be overwhelmed or mislead with myth. In contrast, these sources can be useful as entertainment or as a source of information for those who are already expert and have the baseline knowledge to determine veracity. In short, online self-help communities can be a valuable source of knowledge, but they are largely unpolicd and inconsistent, and thus better suited to experts seeking additional knowledge rather than novices looking for a reliable path to the knowledge and skill that would mark them as competent in a particular domain.

**MOOCs.** Simultaneously noting the popularity of online delivery for self-help videos and their variable quality, universities have stepped into the void by developing free high-quality online courses. The most high-profile format is the MOOC and they are delivered through platforms such as edX or Udacity, although universities are increasingly developing their own delivery systems. The ‘classic’ MOOC is a multipart course delivered online as a series of weekly multimedia lectures variously supplemented with assignments, online tutorials, online discussions and networking opportunities, and self-tests. Typically, each week, students study material delivered to them online and may engage in discussion with other students, may complete an assignment, and may attempt automated online assessments of progress which, if successfully completed, opens up the next study module. Enrolment is free, but where offered, those wishing marked assignments or an End of Course completion certificate may have to pay a modest fee. Most MOOCs do not carry credit and are designed to showcase and educate.

There is a lot of hype surrounding MOOCs because the headline numbers are breathtaking. Hyman (2012), for example, quotes examples of MOOCs drawing in 300,000 students on three computer courses. MOOCs are increasing in popularity and being developed by a variety of suppliers. On one level, they provide a billboard for universities to promote their best research and teaching. On another, they present a shop-front to entice students. And most universities can find some digitally-literate professors to put up a suitable course. As such, it is perhaps surprising that even more MOOCs have not been developed.

But the ‘MOOC revolution,’ as some have termed it (e.g., Aguadé-Gómez, 2013; Kim, 2014; Kolowich, 2013), is not all roses. Most MOOCs are reporting very low completion rates. It is rare for a MOOC to have more than 10 percent of its registered students complete (Kizilcec, Pich, & Schneider, 2013; Marcus, 2013). These statistics are quite revealing. Billsbery (2013) argues that their free nature fails to provide an incentive for students to complete the course and that for the learning to have value, it must be respected both by its consumers and the consumers of the consumers.

As MOOCs mature, universities are finding ways to monetize them. The most obvious solution is to keep the teaching free, but charge for assessment (Billsbery, 2013). This way, all the advantages of free education are realized, but the university can assess students and thereby offer qualifications, solving another
of MOOCs’ weaknesses. The new conundrum for universities and students alike is whether degrees obtained via MOOCs, and the first ones are just appearing (e.g., the Master of Computer Science in Data Science at the University of Illinois), will be seen as sufficiently high-quality and accepted by employers (Billberry, 2013; Tickle, 2014). Ultimately, it is universities’ ability to award degrees that people value which separates them from the competition.

In summary, as countries around the world and the organizations within them increasingly shift the cost and responsibility of learning to those undertaking study, free online alternatives to HE have emerged. But these are generally failing to replicate the experience or quality inherent in a university degree or completing a structured development program. Importantly, in most cases, they are not perceived by the job market to be equivalent to HE qualifications and training. As a result, there is tension between the desire of countries and organizations to divest themselves of cost and responsibility, the ability of students to take on these costs, and the haphazard supply of free material that does not have the economic value associated with qualifications from traditional institutions.

Implications of the Message

We now move into the applied arena and look at how the trend of shifting cost and responsibility for learning to individuals may affect individual learners, faculty, universities, and organizations.

Implications for Students

‘Back in the day,’ students were students. University was an extension of school and society designed courses based on what society needed and valued and then paid for them (Guttmann & Ben-Porath, 1987; Laurillard, 2002). Students went to university to receive the wisdom of the day and did not question the institutions or the people teaching them (Blasi, 2006). They thought themselves privileged to be there and to be in receipt of the money to pay for it. But society has changed and so have the people comprising it.

As noted above, societies are increasingly questioning who benefits most from HE and coming to the conclusion that it is the students who benefit most. As a result, students are being asked to pay a higher and higher proportion of the costs. During the same period, people are changing. The growth of the consumer society (Baudrillard, 1998; Glickman, 1999), the growth of instrumental attitudes (Lusszcz & Fitzgerald, 1986; Miller, DeBacker, & Greene, 1999), the emergence of a sense of (false or misaligned) entitlement (Campbell, Bonacci, Shelton, Exline, & Bushman, 2004; O’Leary-Kelly, Rosen, & Hochwarter, in press), and the commoditization of HE (Gibbs, 2001), all alter the changing relationship between students and their teachers. Franz (1998: 63) summarizes this changed role
succinctly, “Around campus, I frequently hear how ‘students are our customers,’ and that we should treat our students like customers.”

The metaphor of the ‘student as customer’ is now so commonly heard that it has become part of the lexicon of learning. Not only do faculty think of students as customers, so do the students themselves. And it is the impact on the students that we explore here. As every existentialist knows, with choice comes responsibility (Caruth, 2015; Singer, 2006; Thompson, Locander, & Pollio, 1990). This is one of the trade-offs from which many contemporary students suffer. They have more opportunity than ever before to enter HE, and they have more freedom to choose the course and units that they think best suits them, but they now have to pay a significant contribution of the costs.

Another trade-off is that because countries and universities are no longer responsible for prospective students’ choices, the supply side of the equation feels less duty bound to provide help with the choice. And within this choice, the prospective students are “condemned to freedom” (Sartre, 1973). They are poorly informed about their future needs, the nature of the choices, and the nature of the differing experiences, by definition. They are students; people who want to learn. But, for the most part, they are naïve consumers buying in a world of experts. How can they make good choices about things they know little? Prospective students need to become more critical and more questioning, something likely to happen as they realize their power as customers.

Once these customer–students embark on their studies, their reference points for good education are skewed by their past learning experiences, which are often very different to learning experiences in HE, their liking of their instructors, and their comfort with the material. As Billsberry (2014: 152) says:

The problem is that although most would agree that learning should be fun, often it is also painful, especially in managerial disciplines where students may need to confront and change deep-seated values, beliefs, opinions, and behavior. Hence, the need to delight often coexists with the need to challenge, and a lot of students (and instructors) have difficulty with this apparent contradiction.

When teaching moves into these challenging areas, students may shy away from what they really need in the interest of short-term comfort, such as the customer’s prerogative. The instructors, wary of negative student satisfaction ratings, may resort to ‘edutainment’ and dumbing down their courses to make them easier and less confrontational for their customers (Biehl-Missal, 2015; Billsberry, 2014; Garrett & Ezso, 1996; Okan, 2003). The underlying dangers in this scenario are lowered standards, less personal development, and once time has passed and given the graduate an opportunity to reflect on their studies, greater criticism of the value of HE.

Such criticism is increasingly being heard as students realize the financial and social impacts of paying the majority of the costs for their HE. Above, we discussed
The increasing realization that these costs were unsustainable for governments. Increasingly, the evidence suggests that they are unsustainable for students as well (Elliott & Lewis, 2015). While studies show that many students poorly understand debt and its implications (Agniew & Harrison, 2015; Cho, Xu, & Kiss, 2015), there is slightly more equivocal data looking at the impact of student debt on house-buying (Phillips et al., 2016; Xu et al., 2015; cf. Houle & Berger, 2015), although the majority seems to support the view in the press (e.g., McGee, 2016) that student debt burdens are causing graduates to delay buying homes. Some research is emerging that suggests going to university may not be in people’s best interests: “Indebted college graduates have lower net worth, less home equity, and compromised ability to accumulate assets, as compared to their peers with the same level of education but no student debt” (Elliott & Lewis, 2015: 614).

**Implications for Faculty**

As mentioned earlier, faculty are caught in the middle of an ever-tightening bind. Their students are customers and evermore demanding and critical (Chory & Offstein, 2016; Ferguson & Phau, 2012; Grebennikov & Shah, 2013). Research publications are counted and assessed for quality. The unrelenting expectations for high-quality research and teaching constitute the performance culture in which faculty now work (Natale & Doran, 2012).

There has always been a tension between the skill sets required to conduct world-class research and perform in a classroom. One is very much the solitary realm of the introvert, the other much more the public realm of the extrovert. Technological changes are driving faculty towards increasingly extroverted teaching techniques. The ‘sage on the stage’ must also be the ‘star in the studio’; someone who can hold the attention in audiovisual media and stand in comparison to the professionally produced programming to which student consumers are accustomed (Barry & Melisiek, 2015). Such skills can be developed, but the time and costs for this to be done properly are prohibitive for many universities. At the same time that universities are keen to utilize more distance and online instructional methods because they mean that more students can be taught more cheaply, a significant pedagogical change has been running for several decades and is now running in parallel. Namely, a move away from traditional didactic approaches towards facilitation; the so-called ‘guide on the side.’ Interestingly, a facilitative approach that is grounded in peer-to-peer interaction and is often aligned with active forms of learning requiring a less stentent and less extroverted approach.

A more fundamental change concerns the way in which the notion of ‘classroom’ is transforming to include off-campus and online students, which is sometimes called ‘converged learning’ (Taylor & Newton, 2013). Technology is facilitating this approach and the inclusion of online campus students into classes is an important revenue driver in many universities. In many cases, this is putting
distance between teachers and students, even between teachers and their on-campus students as the converged learning space encourages more didactic approaches as instructors look for the higher common denominator. Many of the activities commonly used in the classroom do not work well when there is a cohort of students attending the ‘classroom’ remotely. In addition to the need to learn a new set of teaching skills to cope with this new environment, faculty may have to change their shepherding style. In converged learning, teachers may not meet or encounter some or all of their students face-to-face. Not only does this require faculty to learn new skill sets, as mentioned above, it may alter the closeness of the bond. We know from psychological research that people who meet face-to-face tend to like each other and those at a distance become more suspicious of each other (e.g., Berger & Calabrese, 1975; Olson & Olson, 2000; Schiffenbauer & Schiavo, 1976; Williams & Bargh 2008) and it makes perfect sense. Humans have social conventions around contact, engagement, and interaction. When they meet, they can talk about and around topics and gain a better understanding of each other’s motives and interests.

A common complaint about contemporary students is that new technologies have reduced their attention span and that long-form reading and writing is an increasing challenge (Paul, Baker, & Cochran, 2012). The response of many universities is to modularize learning content to short, sharp nuggets. To be fair, this is also a consequence of digital media and the nature of interaction with computers for everyone, not just contemporary students. But the trend is to modularize courses and to put teaching into smaller and smaller chunks for easier digestion (Smoluk, 2015), and, to be honest, such brevity suits the online medium. A challenge with such teaching design is to integrate across the many nuggets, to bring it altogether, and to help students see the bigger picture. Some (e.g., Hessey & Smith, 2012) are concerned that this trend will produce teaching within which it is not possible for students to develop sophisticated, critical, and deep thinking.

The assessment of teaching is also changing with the emergence of online technologies. In a world where the student is a customer, student satisfaction scores rather than student performance dominate. Strangely, student satisfaction is often incentivized, whereas higher student performance is questioned (Billsberry, 2014). In much of the English-speaking world, ‘Rate My Professor’ scores are a safe place where the very happy and the very angry record very public opinions about their instructors without any responsibility for their comments. The public and somewhat subjective nature of teaching and learning assessment is happening at a time when there is a prevailing understanding that research determines the quality of an academic (Adler & Harzing, 2009; Özbilgin, 2009). The pressure to publish is getting greater and greater (L'Huillier, 2012; Özbilgin, 2009; Van Dalen & Henkens, 2012; Wright, 2016) and the mantra of “publish or perish” resonates down the corridors of every university. It is common knowledge that academic applicants are mostly sorted by their research outputs and research income.
In such an environment, why would faculty give one moment more to teaching than they have to? Great people who have a vocation still teach and they put a lot of energy and passion into it. They see their role as helping the managers and leaders of tomorrow grow and excel. But in many schools, putting such commitment into teaching seems counterproductive from a personal career perspective. It reduces time for research, the outputs of which are the main currency for promotion and advancement. Ironically, at a time when students are becoming customers and more focused on the value of their learning as they acquire large amounts of debt, their teachers in many parts of the world (e.g., UK, France, Singapore, Australia, and New Zealand, but not the US) where research-focused tenure-track roles often co-exist with teaching-focused non-tenure-track roles) are being incentivized to focus on research outcomes and treat teaching as 'a necessary evil.' In these places, the non-research-active teacher is likely to be a thing of the past and faculty will have to ensure that they have a stream of research outputs to survive.

**Implications for Universities**

While the technological changes make so much more possible on a micro-level, they bring with them much greater competition (Pucciarelli & Kaplan, 2016). MOOCs allow students the opportunity to "try before they buy," to sample the teaching before committing to a university for a qualification (Young, 2015). This means that every university is competing for students with every other university. If universities allow students to make their own homes their learning space, students can choose from around the globe, assuming of course, they do not want the 'on-campus experience.'

With this "try before you buy" opportunity, universities are putting a lot of resources into their MOOCs as they represent a prestigious shop window that shows off the best aspects of the university. However, at the present time, MOOCs tend to be non-award-bearing or one-off units rather than whole courses; their purpose is to draw students to the university. This approach creates interesting comparison issues. The MOOC tends to be a different style of teaching to the units that students will take when they arrive at the university. Moreover, the heavy financial and professional investment in MOOCs is unlikely to be matched by the 'run of the mill' units delivered by most faculty on most courses. Comparison effects are likely to create student dissatisfaction. There is an ethical issue here. Selling one's services with a high-quality product that does not represent the experience that buyers' will receive is questionable practice at best. There is likely to be a lot of pressure for universities to bring the quality of their units up to the standards of the high-profile shop-front MOOCs.

The fact that high levels of student debt now pay for much of HE is likely to put another pressure on universities. When governments and similar agencies paid students' fees and grants, universities were duty bound to respond
to national priorities. Nowadays, the choice of what courses should be taught is more likely to be driven by the market, or rather, student demand. Brutal financial decisions will kill courses and disciplines if they are not popular with students. In addition, the weight of personal financial debt and hardship that will finance universities is likely to exert a growing moral pressure on universities to produce courses that are relevant to students’ personal interests and futures. Taking on the debt must be worth it, which challenges universities to make their teaching more practical and instrumental than ever before.

There is an obvious end game of this trend that makes individuals responsible for their own development. Eventually, it seems inevitable that in many countries, universities and other HE providers will be fully privatized. There are parts of the world where this has already happened; in the US, for example, where many universities and most liberal arts colleges are private. There are independent universities in many countries. In our eyes, the underlying direction that universities are headed is toward independence; with universities that are free from government control and funding, and free to pursue whatever policies they deem fit. In short, a world of customers and suppliers where the free market reigns supreme. All of the manifestations of the larger trend that we have discussed in this chapter point towards and support this conclusion.

Within such independent universities, the customer will become more and more powerful. Teaching will, even more, be tailored to their wishes. The popularity of TED Talks, the modularization of teaching into smaller and smaller chunks, and the nugget-sized visually appealing approach to online material all point to a world of more easily digestible content and ideas. Who will regulate such pressures when universities are independent? Who will ensure that universities do not dumb down to entice the masses? Or ensure that they do not become overly focused on preparing students for jobs at the largest firms (i.e., the most powerful customer of customers) at the expense of preparing them to be good citizens and neighbors?

Direct Implications for Organizations

There are several direct implications for organizations from these trends in the HE sector, some positive, others less so. On the positive side, the increasing use of technology in HE should mean that graduates are better aligned with the type of training methodologies that have become commonplace in organizations. Also, customer–students are increasingly likely to be thinking about the practical benefits of their studies and increasingly likely to assert their influence to shape their degrees to make themselves more employable and thereby better prepared for jobs. And universities themselves are likely to become even more focused on the employability of their graduates, as this will be an increasingly important market differentiator. On the surface, the cost-sharing trend seems likely to move towards Kraiger’s (2008) third-generation instructional model in which social negotiation helps align the various constituents more closely.
However, as responsibility for training and development is increasingly being transferred to individuals, organizations find themselves facing a new challenge. Whereas training and development has been aligned to organizational needs, organizations now have to balance these with an empowered and emboldened worker who will judge the suitability of training interventions to their own interests (O’Leary-Kelly et al., 2014). Much of the time, of course, these two sets of interests are broadly aligned, but as society increasingly creates a climate in which individuals are responsible for themselves, this alignment is likely to decrease. Maintaining the strategic and business focus of training and development initiatives will become harder and harder as the individual worker increasingly sees themselves as a separate entity to the organization that just happens to be employing them at that moment.

Another implication for the future of learning is the prospect of crowding out deep, meaningful learning in favor of superficial, quick fixes. With responsibility for learning pushed to individuals and with organizations standing by looking for immediate return, learning becomes rushed and superficial. Spending five minutes learning a new technique via an online video may squeeze out potential for richer, deeper learning that comes from taking time to study unrelated and not obviously applicable ideas, and reduces opportunities for creative insight. So, fast learning may be efficient in the short run, but it may hinder subsequent learning and innovation. A more positive gloss is that with technologies that facilitate use, people simply do not need to learn as much or in as much depth, especially in regard to technical skills. Quick and easy might be a good thing that encourages more people to invest in learning that they know will be relevant.

Social connections are another area of possible loss in a world of autonomous learning by autonomous employees. As noted by Brown and Van Buren (2007), trust between individuals carries many benefits for both the individuals involved and their organizations. Individuals whose relationships are marked by trust are more likely to exchange information and collaborate towards mutual goals. Organizations with employees who have these relationships are believed to have access to more and better information and have the capacity to influence and make progress towards goals (Alder & Kwon, 2002). Face-to-face training, especially new employee orientation and milestone training such as “new manager” training, are one means by which organizations help forge relationships among employees (Brown & Van Buren, 2007). To the extent that shifts to autonomous and online learning interfere with the development of trust-based relationships, employees and organizations will fail to obtain those benefits.

A role that may be heavily impacted by these changes is the role of the manager. Traditionally, the manager has been at the heart of training. They determined what was needed, by whom, and often played a major role in delivering the training. But managers may now find themselves in a more persuasive role, where they have to convince people to undertake training. Moreover, rather
than deliver training themselves, the increasing use of computer technologies to deliver training means they may assume a commissioning role calling in experts to design the training interventions. While some managers may welcome the expert assistance, it may create more problems than it solves. For example, outsourced training may employ different language and concepts than the manager, and mis-communications can arise. The second author has heard more than one story of an immediate manager holding a meeting post-training to say, “Now please forget everything you learned.” While this problem is not unique to online, autonomous learning, the possibility for it to occur is increased when training is something designed and delivered outside of organization, as is the case with free online videos and courses.

Conclusion

In this chapter, we have heeded the words of McLuhan (1964) and focused on the broader trend of which educational technological innovations are one manifestation. This trend is the euphemistically termed ‘cost-sharing’ that is progressively shifting both the costs and responsibility for education and training to individuals. Viewed within this context, the technological advances provide ways for suppliers to extend their reach and alternative means by which students get their learning. By shifting the costs and responsibility of education to individuals, the nature of students’ relationship with their teachers, universities, and employers may change. The worst case scenario might be that students become more critical and more confrontational, which may reduce the enthusiasm of faculty. In this worst case scenario, universities will seek to minimize their investment in teaching to what the market will stand, and employers reduce training and development opportunities.

Our analysis is based on the logical extension of the present trends. Pushed to their natural conclusions, the future seems dire. However, we want to end on a more upbeat note, and it seems more likely to us that these trends will not play out to their extreme endings. At some point, societies will realize the important role that universities play and the long-term negative, economic effect of massive student loan debt; universities will realize that teaching is their most important income generator and reward those faculty who do it well; and customer-students will realize that the quality of their degrees and the reputation of their universities are paramount. These are just some of the reactions we hope will rebalance the cost-sharing transformation of online and autonomous learning. Once this greater trend is slowed, perhaps halted, and maybe even reversed, the technological innovations currently masking the message can find their rightful place. MOOCs, for example, will not be high-profile marketing shop fronts for universities or taster courses designed to attract students, but instead a delivery method that will give the impoverished, the remote, and the immobile the opportunity to access high-quality HE experiences and obtain its many benefits.
Looking more specifically at the research implications in the business and management space, several questions assert themselves. Perhaps the most important question will concern the suitability of graduates for employers. Although a hotly debated topic with various scholars arguing for (e.g., Bridgstock, 2009; Rae, 2007) and against (e.g., Andrews & Higson 2008; Boden & Nedeva, 2010; Ng & Feldman 2009) the notion that universities’ role is developing people for the workplace, employers and employees certainly see that universities have some form of role in shaping the employability of graduates (Holmes, 2013). Tymon (2013) argues that there is only weak alignment between undergraduates and employers in what constitutes employability. Students most commonly cite communication, teamwork, information technology, and planning and organizing skills and the personal attributes of flexibility, adaptability, hardworking, commitment, and dedication as key components of employability. As students increasingly assert their role as customers, they are likely to ask for more development in these areas. These are interpersonal skills most usually delivered face-to-face and with small student/tutor ratios (Burnard, 2013). As mentioned above, given their desire to move towards more online provision and larger class sizes, universities may find such requests difficult to accommodate. Research is needed to understand students’ employability expectations and how these reflect and align with employers’ expectations. With the ever-changing nature of work, the rapidly changing nature of teaching that is incorporating technology, and the changing relationship between students and universities, this is likely to remain a fertile and important stream of research.

Another important area for future research will be examining the changing nature of the relationship between students and instructors. Traditional approaches to the student–teacher relationship typically conceptualize it as a dyadic one. Contesting questions this assumption and would seem to place the instructor in a more precarious position as an intermediary between the student–customer and the university retailer. The person in the middle of this relationship has an unclear identity and one that challenges traditional notions of the teacher as a shepherd who has the best interests of the students at heart. Studies that capture the nature of instructors’ perceptions towards their students, their employers, and their disciplines will help us chart changes in the role and see the ramifications for students’ learning and employability; teachers’ motivation, satisfaction, and performance; universities’ profitability and reputation; and satisfaction of employers’ needs.

In this chapter we have been focusing on the message hiding behind the rise of autonomous, online learning. When we were asked to consider writing a chapter for this book on technology-enabled active learning, MOOCs, and associated online training and development, our initial interest was, naturally, on the technological innovation engulfing us. Only as we explored themes did we begin to think about the bigger picture of which these innovations seem to be part. Here, we have provided broad sketches about the trend and explored a few of the more obvious implications. We hope this is enough to entice readers to research
further into this largely hidden trend of student responsibility for choosing and paying for HE. While appreciating that exciting technological advances need to be examined as they emerge, we would encourage scholars to focus on the bigger issue transforming our universities, our students, our employers, and our jobs.

References


responsibility for choosing and ological advances need to slurs to focus on the bigger employers, and our jobs.


