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The quality and reputation of open, distance and e-learning: what are the challenges?

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Distance education institutions, students and staff have often had to overcome negative perceptions about the overall quality of their programmes and qualifications. In this paper, we identify four of the major challenges cited as undermining the credibility and effectiveness of open, distance and e-learning (ODeL): the quality of teaching, learning and quality assurance processes; outcomes; access; and the perceptions of students, staff and employers. We conclude with reflections on current and future developments in ODeL, including the impact of massive open online courses (MOOCs): how far do they have the potential to address the challenges identified? We argue that some of these have been, or can be, resolved in many contexts, and are now the same as those faced by all teaching and learning programmes. We should shift the main focus of distance teaching and learning programmes from inputs such as media adopted, to outcomes, in terms of students successfully achieving their intended goals in education, employment and future livelihoods. This will impact on employers' and others' perceptions of ODeL. Examples are drawn from all sectors and are, therefore, necessarily selective, and, unless specified, are relevant to all modes of ODeL.

Keywords: open; distance and e-learning; quality assurance; learning and teaching; access; MOOCs; perceptions of distance learning

Introduction

Distance education students in all sectors have had a difficult time. Not only are they often studying part-time with all the pressures of additional family responsibilities or work, but also, for many years, their qualifications were not considered of any real value by their peers and potential employers. Results gained by distance education were considered secondrate; at University level, for example, learners might be thought to be inherently inferior because they were not 'good enough' to get into a 'proper' university, as evidenced by their lack of, or low, previous educational qualifications. The Open University UK (OU UK), for example, accepts undergraduate students with no qualifications at all; other Universities, such as the University of South Africa (Unisa) and Indira Gandhi National Open University accept students with lower entry qualifications than those required for conventional universities. In addition, results obtained were regarded as extremely dubious by many people who were suspicious about the quality of teaching and overall quality assurance processes (especially in assessment practices).

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Although not the first university to teach at scale at a distance (e.g. Tait, 2008), the OU UK's plans to teach at a distance in 1969 were met with incredulity and derision, particularly in the context of science subjects. When the first Dean of Science at the OU (Pentz, 1991) discussed his plans with scientist colleagues outside the OU, he was told 'it was clearly a preposterous idea, to try to teach university-level science *at a distance* to *part-time* students, many of whom would have had little or no secondary school qualifications …. *Perhaps*, one might be able to teach some arts subjects this way, but *science*?' (p. 1; and see Mills, (ed.), 2011). In the early years, it was commonly thought that OU students gained their degrees simply by watching television, and this, though completely incorrect, was not considered sufficiently rigorous a method of study. Concerns about the quality of distance education and the knowledge, abilities and skills of successful students have been expressed internationally: for example, in Turkey (Latchem, Ozkul, Aydin, & Mutlu, 2006) 'learners and faculty in conventional institutions regard distance education as a last-resort option' (p. 231). This is undoubtedly related to the local context and expectations of study at a campus-based university, but is relevant to the perceived quality of distance education and, hence, the possible outcomes and perceived employability of those who have studied through this mode. In a review of Asian open and distance learning, Jung and Latchem (2007) noted that

> Robust and strategically significant evidence is needed to assure policy-makers, funding agencies, faculty members, learners and the general public that quality in operations and outcomes is not being compromised by ODL and blended learning, but improved, and that the new institutions, forms of delivery, methodologies and uses of technology are both fully justified and beneficial. (p. 246)

More recently, Jung, Wong, and Belawati (2013) have analysed the challenges faced by providers in embedding quality systems, through 16 case studies from 12 Asian countries. Their discussion provides ample evidence of difficulties faced and some ways of addressing these.

The advent of e-learning in the 1990s and increasing use of online resources in both conventional and distance education modes has also had an impact on perceptions of education at a distance. Flexible learning for all is now more common than in the 1970s, and most (if not all) higher education institution programmes, for example, contain elements of e-learning and support; while at the same time, many traditional institutions have been criticised for compromising the quality of learning through very large class numbers and a reliance on post-graduate teaching. Some early concerns about the quality of Open, Distance and e-Learning (ODeL) have been addressed, with good results. In 1999, Russell's *The No Significant Difference Phenomenon* provided an extensive comparative research bibliography on technology for distance education (including print) and concluded that there is 'substantial evidence that technology does not denigrate instruction … It allows us to employ cheaper and simpler technologies with assurance that outcomes will be comparable with the more sophisticated and expensive ones as well as conventional teaching/learning methods' (Russell, 2001 edition, p. xiii). Yet questions remain: even in 2013, Karl and Peluchette discuss: 'Management faculty perceptions of candidates with online doctorates: why the stigma?'.

What, then are the issues? Why are there still some reservations and scepticism about distance and e-learning students and their qualifications? Is this restricted to those who study solely at a distance or are there implications for those who study in

blended and flexible modes? Does it relate mainly to online learning? This article will consider some of the main challenges involved and reflect on the potential impact of open educational resources (OER) and Massive Open Online Courses (MOOCs) in this area.

Issues about quality in distance education

Supporters of ODeL have often adopted a rather cautious position, citing the equivalency of distance and online teaching to conventional education: 'If teachers, learners and the public in general identify learning at a distance as the equivalent of what they consider to be traditional learning, then distance learning will become mainstream, at least in America' (Simonson, Schlosser, & Hanson, 1999 p. 70). A more commercial argument from a similar date argues that 'students do generally experience enough learning when the underlying design of all compared treatments is adequate. So education must adopt the less expensive media – provided that learning outcomes are equivalent' (Clark, Foreword to Russell, 2001, p. x).

There would be many who would argue now that e-learning, in particular, is not necessarily 'less expensive'; but there are also many arguments from outside the US to support the view that conventional campus-based institutions simply cannot provide sufficient higher education for their growing populations and so distance, blended or e-learning is the only, and often the best, option. In Nigeria, for example, the need for teacher education and human capital development can only be met through ODeL in the context of the 'rising demand for admission places due to the exponential rise in the country's population and the corresponding rise in the population of school-age children and adults' (Olakulehin, 2008, p. 123). In this context, do ODeL supporters need to remain defensive or are the relative merits of distance and campus-based, and blended learning no longer an issue?

One of the difficulties about evaluating the effectiveness of ODeL is that many of the large-scale research studies come from the United States where there are high levels of internet and broadband access and few of the access issues experienced in some other areas of the world. Another issue is that there is relatively little research on some aspects of distance education and particular sectors and subject areas. For example, Xiao and Zhao (2011) argue that while there has been much research on Foreign Language teacher education, 'much of the research has centred on face-to-face classroom teachers, despite the fact that distance foreign language teaching is becoming increasingly popular in the 'connected' world of today' (p. 51). Mills (2011) notes the same problems with regard to science and health subjects, which he argues are 'under-reported and under-researched' aspects of distance education (p. 93). A further complication is that the blended nature of much teaching in all sectors in the twenty-first century makes generalisations about impact, effect and outcomes very complex in terms of particular modes of learning. As early as 1999, Mills noted in the seminal *The Convergence of Distance and Conventional Education* that 'it is more appropriate to think of open and distance learning and conventional learning as moving at the same pace and in the same direction … towards an increase in resource-based learning in both modes (the direct result of the development of the Internet)' (Mills, 1999, p. 78).

However there are some issues about Quality that are repeatedly discussed and for which research evidence is available; it is these that will structure the article.

- The Quality of distance and e-learning: do they provide a teaching and learning experience for students that is comparable with campus-based learning?
- Outcomes: Do distance learning students do better/the same as/worse than campus-based students?
- Access: How far do access issues, such as the availability of internet, postal services and broadband etc., impact on the effectiveness of ODeL?
- Perceptions: what are the perceptions of ODeL among students, staff and employers?
- Futures: what might be the impact of OERs and free online courses (MOOCs)?

It will review some recent literature and research on the subjects and consider the future.

The quality of distance and e-learning

'Quality' is a contested term but two important factors are

- The quality of the teaching and learning.
- The quality of the final qualification.

One way of ensuring the quality of teaching and learning for students at any institution is comparable is for distance teaching and campus-based teaching and institutions to have the same quality assurance frameworks and processes. This is the case now for higher education in many countries such as the UK, Hong Kong, Malaysia and Singapore. However, in 1998, this was not always so: for example, the UK Quality Assurance Agency (UK QAA) produced draft guidelines specifically for distance education, the aim of which were 'to provide advice, mainly to campus-based institutions, about what needs to be considered when assuring the quality and academic standards of programmes provided through distance learning'. The draft guidelines note that 'the physical separation of programme design, delivery, learner support and assessment raises particular questions for institutions about the ways in which they 'manage' teaching and learning to ensure quality of provision and security of standards' (Mills, 1999, p. 83).

It is interesting to note that the UK QAA now includes distance teaching within all Universities' higher education quality assessment which refers to how and how well the higher education provider supports students to enable them to achieve their award. It covers learning, teaching and assessment, and all the different resources and processes a provider puts in place to help students progress and fulfil their potential (see UK QAA, 2014).

In contrast, some countries, for example, India, South Africa and China, regard distance education as separate in terms of quality assurance and requiring different processes. This may have made comparability/equivalence studies more complex, and for the future, Jung, Wong, Li, Baigultugs, and Belawati (2011) argue that in the context of the convergence of distance and conventional education, 'there should be no distinctions between QA in DE and conventional higher education or between e-learning and face-to-face teaching' (p. 80).

The quality of the teaching and learning process in ODeL can be measured using a range of inputs including:

- The involvement of several staff in the production of materials where academics and instructional designers work together.
- External assessment of teaching materials and the use of external examiners.
- Periodic reviews by peers.
- Student feedback – although some of the standard student satisfaction surveys may not be entirely appropriate for distance education students. (Ashby, Richardson, & Woodley, 2011)
- Feedback from staff including adjunct faculty/part-time tutors.
- Monitoring systems in place for staff, which should be supportive.

For some ODeL Institutions such as the OU UK, importance is placed on the quality of the distance teaching resources. This can be measured by similar criteria to the processes listed above; for example, the involvement of external staff in production, student and staff feedback and periodic review by external assessors. Distance teaching materials can benefit all teaching institutions; for example, in the early years of the OU UK, the published course materials were regarded as of such high quality that colleagues from other Universities borrowed ideas from them to support their own teaching. The OU UK had made university teaching public for the first time.

The quality of teaching resources, whether in print or online, takes on additional significance in the context of the ways in which students experience different ways of receiving teaching at a distance. A meta-analysis by Bernard et al. (2009), based on Moore's (1989) three typologies of interaction in distance education: *student-content*; *student-student*; and *student teacher*, analysed student performance in terms of which type of interaction made the most difference when it was increased. The authors' conclusions are significant for the quality of distance teaching resources. Increasing *student-content* interaction had the greatest effect, followed by *student-student* interaction, with *student-teacher* interaction coming last. This has significant implications for the development of OER (Kanwar, Kodhandaraman, & Umar, 2010) and for the development of ODeL resources more generally. These results highlight the importance of appropriate pedagogical models for the delivery of high-quality ODeL, and are being challenged through the development of MOOCs.

The quality of the final qualification is assured if both distance and campus-based students take the same exam, such as in London University's International and Internal programmes. However, this is more difficult to assess if different quality standards or different assessment procedures are in place. One of the major issues is security: how does an institution assure that a distance or online student is really doing the continuing and final assessment submitted? Could someone else be helping them? Some universities such as the OU UK require students to attend final examinations in person at study centres and provide evidence of their identity which is checked on site. In addition, technologies are now available which can, for example, identify the typing 'fingerprint' of a person using a keyboard and this may help in detection of fraud, while programmes such as 'Copycat' and 'Turnitin' can be used for identifying similarities or extensive quotes in scripts used for continuous assessment for both distance and campus-based students. Concerns have also been raised about the sole use of multiple choice questions in examinations, such as

practised at Anadolu University (Latchem et al., 2006, p. 31). The development of peer assessment in some MOOCs (e.g. the Coursera portfolio of courses) also raises questions about quality standards and moderation processes.

The increasing number of private for-profit organisations offering online-only learning internationally raises more serious considerations about Quality; while MIT and the OU UK may be among those with reputable online delivery, there are many organisations offering 'cheap' degrees with no apparent quality assurance processes. This internationalisation of distance education together with a transformation of higher education through technological developments has also led to a tension emerging

> between increasing professionalism over delivery and concern for quality assurance on the one hand and, on the other, a movement towards greater flexibility and freedom from constraint in the delivery of higher education. The two trends might usefully be thought of as a diametrically opposed movement on a continuum from private entrepreneurship to public control. Concern for quality is represented as a progression towards control; teaching and learning arrangements are moving in the opposite direction towards individual freedom of action. (King, 2011, pp. 101–102)

How will this be resolved? King argues that 'Quality improvements in the past have often been about improving processes (e.g. delivery of resources to students in a timely manner) or fostering teacher ability (e.g. professional development directed towards cross-cultural understanding). These measures are directed towards improving *inputs* to the student experience. Improving learning standards means changing *outputs* – measurable learning outcomes' (King, 2011, p. 106).

Outcomes

What evidence do we have of outcomes from ODeL? There is a good deal of research which indicates that the outcomes from distance learning can be very effective and even excellent, both in terms of learning achieved and in terms of formal results. Some studies are relatively small scale, but one of the larger scale studies is by Roberts and Vänskä (2011) from Unisa who used the mobile technology MXit to support mathematics learning of about 3200 teenagers at 30 public secondary schools in South Africa. Their conclusions were that it is possible to use mobiles to support maths learning, but students need to have the same model of phone; there needs to be collaboration between the school and surrounding areas and general radio package service network coverage. Unsurprisingly, perhaps learners used the technology more than teachers did.

Some large-scale meta-analyses also provide support for effective outcomes from ODeL. A study of research literature from 1996 to 2008 related to K12 learners (up to the end of secondary school) sponsored by the US Department of Education found that 'students in online learning conditions performed modestly better than those receiving face-to-face instruction' (US Department of Education, 2010, p. ix). This is an important finding in that it was restricted to studies of web-based instruction alone, rather than blended learning, includes studies with controlled designs and examines effects only for 'objective measures of student learning' (ibid. p. xii). Similarly, Bernard et al. (2004) undertook a meta-analysis of 232 studies between 1985 and 2002. Even at this date, they found that the mean overall effect for synchronous applications favoured face-to-face, while overall distance education was favoured for asynchronous communication and learning. They also noted that

learning may be more constructive and efficient with ODeL: 'media may transform the learning experience in ways that are unanticipated and not regularly available in face-to-face instructional situations' (Bernard et al., 2004, p. 379). And, sometimes students learning at a distance may outperform their contemporaries from conventional schools; this was true, for example, for BRAC (formerly the Bangladesh Rural Advancement Committee) students in Bangladesh, as evidenced by comparative tests and completion rates (Morpeth & Creed, 2012, p. 207). These results form part of a large-scale UNICEF research project which argues that open and flexible frameworks and non-formal provision are the only way through which marginalised children and the diversity of their needs can be met in many high-population, low-income countries. It is noticeable that many of these large-scale research studies which show positive outcomes relate to school-age children or young people, who may find online and/or distance learning more accessible than some of their more senior counterparts.

Completion rates in higher education, however, remain an issue in many cases; overall ODeL often has lower levels of retention than does campus-based education. In the UK, for example, the Higher Education Statistics Agency figures in 2013 indicate a drop-out rate after the first year of study by full time students of 7.4%, part-time of 35.1% and OU UK student by 44.7% (Tait, 2013). In terms of graduation rates, Simpson (2013) argues, for example, that even when HE ODeL students take the same exam (London University's International Programme) or a different exam (The OU UK), the graduation rate is only about one-quarter of that for students in campus-based UK higher education (p. 106). However, Tait (2013) argues this is not a failure of particular educational institutions or distance learning in general, but because ODeL is meeting the needs of different students – some of whom are mature students, or ethnically diverse, those with lower or no previous educational qualifications, with no family tradition of higher education or who live in rural and remote areas.

These factors contribute to higher attrition rates for ODeL than for campus-based learning; moreover, ODeL students often have additional external pressures – often studying part-time, with other commitments, work or crises occurring while studying; and academic reasons such as transferring to another HE provider, or completing just part of a programme, because this covers what they wanted to learn. Many students may be enrolling for individual courses to meet their specific needs whether these be in relation to professional updating or general interest; the achievement of the final composite qualification of a degree or diploma may not be as important today as in previous generations. 'We need to remember that what we call "drop-out" is for some students to study as much or little as they want and to study at their own pace and wherever they wish' (Gibbs, 2004, p. 3). Thus the debate about outcomes might more usefully focus on performance on individual courses rather than whole degrees – and this would apply to both distance and campus-based study.

Access

It is, perhaps, anomalous that access to ODeL is often cited as an issue in its effectiveness, when many distance learning programmes have been developed precisely, because conventional (particularly higher) education was not available for so many people. Campus-based universities in many countries cannot cope with the numbers hoping to attend to gain qualifications for their employment or are needed for the

economic development of the country; and many potential students in all sectors are not able to attend a campus/school regularly, because they are employed, carers, girls or women (in some cultures), have difficulties with access (e.g. some disabled students) or are otherwise unavailable for conventional term times (e.g. soldiers, prisoners).

However, there are good reasons for access to be a major issue for distance education, and particularly e-learning, in many countries. Poor infrastructure in terms of internet access and postal services creates many difficulties, for example, in Uganda (Basaza, Milman, & Wright, 2010) and Kenya (Nyerere, Gravenir, & Mse, 2012). The lack of available teachers is also a problem and attempts to remedy this can be hindered by language issues; for example, more than a third of students in a BEd honours course at the University of KwaZulu-Natal were reading a core academic text at frustration level, because they were reading in their third or fourth language. There was also a strong correlation between these levels of reading competence and academic achievement (Bertram, 2006), which militates against the students' success from the outset, and does not help contribute to meeting the Millennium Development Goals http://www.un.org/millenniumgoals/. Willems and Bossu (2012) point to another language-related problem: the majority of OERs are still in English – for example, in 2012, Wikipedia had nearly 4 million entries in English, but only 164,000 in Arabic. Only 22,000 entries were in Swahili and many African languages were grossly underrepresented.

Access difficulties in the context of distance learning have sometimes been attributed to a major digital divide, with access to technology the main problem. However, there are also cultural and political factors. Warschauer (2003) argued that it is not just a question of a digital divide: we need to reorient discussion to 'one that focusses on gaps to be overcome by provision of equipment to one that focusses on social development issues to be addressed through the effective integration of ICT into communities, institutions and societies' (p. 9). Wright, Dhanarajan, and Reju (2009) sum up the problems faced by developing nations: educators

> must determine a sound rationale for employing online learning, recognize that technology is only part of the educational transformation process, address the lack of infrastructure and the cost of Internet bandwidth and equipment, counter the cultural imperialism of courseware from Western nations, deal with limited educational resources, place a greater emphasis on quality assurance systems and change negative perceptions of distance education, respond to the needs and concerns of both students and faculty, access or develop up-to-date educational resources, and consider the implementation of mobile learning. (p. 1)

Research on mobile learning in six mLearning projects in Asia has certainly provided evidence of a significant increase in access (Valk, Rashid, & Elder, 2010) though there was little evidence of new forms of learning, such as those promoted by Kukulska-Hulme in the UK: mobile learning 'challenges us to create new learning, in the form of new content, interactivity, means of support and knowledge sharing' (2010, p. 185).

Perceptions of students, staff and employers

There may be excellent quality assurance processes and results from distance learning institutions and programmes, but these may not translate into the perceptions of students, staff and employers. What do they think of ODeL? There is some positive

feedback; as an example, the OU UK, has always been rated by students as among the top five UK HEIs for student satisfaction since the first UK student satisfaction survey in 2005 and in 2013 was rated equal to the University of Cambridge (The HEPI-HEA Student Academic Experience Survey, 2014). This remains a significant result even when many current student surveys are not always appropriate for distance learning students (Ashby et al., 2011).

From the US, a small-scale study of 217 students in 2006 also supports student satisfaction with distance learning in an online format: 'the data indicate that students strongly prefer distance education largely because it allows them to balance their other commitments more easily. Respondents also perceive that they achieve higher quality education outcomes in the distance learning environment. They do not believe that they sacrifice a quality education for the convenience of utilising distance learning' (Hannay & Newvine, 2006, p. 1). Indeed, a meta-analysis of student satisfaction by Allen, Bourhis, Burrell, and Mabry (2002) indicated that while there was 'a slight student preference for a traditional education format over a distance education format', there was 'little difference in satisfaction levels' (p. 83).

The key factor is a robust quality assurance process for ODeL. Zhang and Cheng (2012) constructed an evaluation model which includes four phases: planning, development, process and product evaluation. A small-scale e-Learning survey used this model in China, Hong Kong and Macau and demonstrated that the majority of students thought the e-Learning experience better than face-to-face learning, because of cross-border, collaborative, student-centred learning, together with flexibility and learner support.

Students may be satisfied but there can still be suspicion from Faculty members: ODeL can be seen as a threat, particularly when social media and e-Learning are so readily adopted by students in advance of Faculty's full understanding of the media. Even in the United States in 2007, Ulmer, Ward, Watson, and Derby (2007) conclude that Faculty do not regard distance education seriously (while noting that, at the time, distance education may include only 'some technological components'); and that 'Faculty members and administrators of some institutions of higher education argue that the problem appears to lie in the misconception that distance education sacrifices quality' (p. 59). Hannay and Newvine (2006), on the other hand, found that 'those [online] instructors who favoured distance learning were those that were more familiar with the educational technology' (p. 3, citing Clark, 1993). Perhaps, familiarity breeds greater satisfaction in this case, but it is sometimes difficult to disentangle what Faculty understand by distance education if online and distance education are treated as identical, and the blend of learning modes may vary so significantly.

There are undoubtedly disreputable distance education organisations that offer degree certificates for cash whose business model is based on up-front payments and high drop-out rates. This has made employers believe that distance education qualifications are suspect and students not worth employing. For example, Columbaro and Monaghan (2009) undertook a literature review of US research about the perceptions of potential employers (or 'gatekeepers') about mainly online degrees in comparison with conventional degrees. Overall, the results are not encouraging for ODeL. The authors cite a study which concluded that within the healthcare professions, 'most gatekeepers (95%) would prefer the applicant with a traditional degree to one who completed an online degree' (n.p.). They conclude that 'all scholarly research to date has concluded that the "gatekeepers" have an overall negative

perception about online degrees' (n.p.). It is not clear from this evidence whether the same would be argued about blended learning.

However, there is plenty of evidence of a positive response from employers when the awarding institution is of good standing and well recognised. ODeL provides students with a wide range of skills and abilities which might not be so highly developed among campus-based students. For example, OU UK employers have commented that they particularly value OU students because of their motivation, ability to juggle commitments, persistence and focus; a spokesperson from KPMG said of OU graduates: 'what we see is some additional skills in an individual …. And an absolute motivation to succeed'. A multinational IT and management consultancy particularly valued the ability of OU students to work at a distance: 'So having the ability to think about planning things remotely, working with people who are not perhaps based in the same office, that can be a really useful skill to have … people who have genuinely thought about their career … and look for a career change, that really shows good focus, good motivation and they're the kind of people that we're looking for' (Intranet page on the OU UK's Careers Website http://www2.open.ac.uk/students/careers/about).

Overall perceptions among key stakeholders vary: students value the flexibility and access available; staff familiar with educational technology are more welcoming; and employers may be concerned about subjects traditionally involving hands-on experience such as healthcare (despite much evidence that these can be taught at a distance), but they welcome ODeL students in other disciplines where generic core skills and motivation are highly valued.

OER, MOOCs and the future

The advent of OER and MOOCs raises further thoughts about the acceptance and quality of distance education teaching and learning methods as well as access issues. Does the ready availability of open resources and free not-for-credit on-line courses give further credence to the value of ODeL or do OER and MOOCs raise major questions about quality and validity?

Baggaley (2014) argues that 'the widespread acceptance of MOOCs has been more myth than reality' (p. 126) and that 'solid educational principles have been replaced by a mass communication model with very few principles' (2013, p. 370). Even Harvard, 'one of the most auspicious champions of MOOCs appeared to reject its two major precepts, massiveness and openness …. henceforth offering small, private on-line courses (SPOCs) limited to tens or hundreds of students via a closed application process' (Baggaley, 2014, p. 127). A recent distinction has been drawn between xMOOCs, based on knowledge transmission (such as Baggaley cites above), and cMOOCs, based on constructivist or connectivist principles, which aim to develop a community. xMOOCs have been criticised for replicating conventional lectures by experts and involve little interaction – a model which has long been recognised as not necessarily the best way of communicating knowledge or promoting deep learning. As early as 1973, Bligh asked *What's the Use of Lectures?* (5th edition 1998) and concluded that while the lecture is as effective as other methods for transmitting information, it was not as effective as discussion for promoting thought; and was relatively ineffective for teaching subject values, inspiring interest in a subject and developing personal, social and behavioural skills (1973, p. 3).

Perceptions of the value of lectures may vary according to context – in a study from the University of Karachi, for example, students rated the lecture as the best teaching method, because 'the teacher provides all the information and knowledge related to the topic, it is a time-saving method, students can listen attentively, choose to make notes if they wish and students can ask if they need any clarification' (Sajjad, n.d). However, a recent study by the UK's Higher Education Policy Unit and the Higher Education Academy (2014) reveals that students at campus-based UK universities are missing almost 10% of teaching time because lecture notes are available online (p. 27).

If cMOOCs might seem to provide a more appropriate learning experience, there is still need for caution: a recent study of a cMOOC found the students completely overwhelmed by the huge amount of material generated by fellow students; and feeling a loss of identity and individuality among such large numbers – in addition to the Coursera platform and Facebook entries, there were over 700 tweets about the course in one day. The students asked for a more structured linear programme (Knox, 2014, pp. 167–169).

However, most of the criticisms and suspicion of MOOCs come from academics and 'educational technology veterans', while support, and indeed 'hype' has come from providers and institutions. Relatively little has been heard from students or from other stakeholders, such as employers. Indeed, very little has been heard about what learning has actually taken place (e.g. Bates, 2014, p. 147). Learners also might justifiably view MOOCs with some suspicion: what measures have the providers put in place to ensure intellectual and pedagogical integrity; to avoid neocolonialism; to support vulnerable students; to avoid commercial and academic exploitation of students? These and other ethical issues discussed by Marshall (2014) need addressing in the future.

How might the development of OER and MOOCs impact on our four challenges to the quality and reputation of ODeL? It has been argued that OER have a huge potential to improve the quality of education, particularly in developing countries (Kanwar et al., 2010, p. 65), but that this has not yet translated into tangible results. In addition, online resources and courses such as MOOCs do not currently fall within the scope of many quality assurance processes; in the UK, for example, the QAA states that 'Since MOOCs are typically non-credit bearing and have no particular entry requirements, they are not formally scrutinised during QAA review' http://www.qaa.ac.uk/Newsroom/news/Documents/QAA-position-statement-MOOCs.pdf. It has also been argued by Daniel that University brand is used as a surrogate for teaching quality: 'the so-called elite universities that are rushing into xMOOCs gained their reputations in research' (Daniel, 2012).

Much criticism has also focussed on the outcomes from MOOCs: typically only about seven percent complete any of the courses – however, this is usually from a very large intake. Initial analyses of available data by Jordan suggest that 'the average MOOC course is found to enrol around 43,000 students, 6.5% of whom complete the course' (Jordan, 2014, p. 160) – this is still a very large number of people! – and formal completion may not be the main aim of the students, who may just want to learn a new subject. Such people can be those who have never studied anything since leaving school, school and higher education students who want to do some extra work or who are recommended to look at a MOOC and professionals who want updating in a particular area. Yet other MOOCs are aimed at higher education students, for example, *Enhance your Career and Employability Skills,* which

is produced by the London University Careers Service and has had over 100,000 registrations in its first presentation. See https://www.coursera.org/courses or https://www.futurelearn.com/.

The principle behind MOOCs seems to us to be very much focussed on access, enabling a huge range of people to choose from a wide range of offerings and to decide whether they wish to take 'signature' tracks to obtain some formal accreditation or whether they want to study something purely for pleasure. They can provide greater public access to education than anything before them (bandwidth permitted). However, the evidence so far suggests that MOOCs may favour those who are already educationally privileged; Jordan (2014) cites data from Coursera that indicate that the majority of their students are already educated to at least undergraduate level, with 'a further 36.7 and 5.4% holding master's and doctoral degrees' (p. 134). However, Coursera's data do not necessarily include all those who engage with the course through social media sites (Knox, 2014, p. 167).

It has been argued that MOOCs are a 'disturbing invention' rather than a 'disruptive innovation' (de Langen & van den Bosch, 2013), but that they also promote fundamental questions about the nature of learning in digital environments, particularly the extent to which learners need guidance and support (Bates, 2014, p. 146). If the general public and employers find them useful, then they will enhance the reputation of distance education; if the MOOCs are poorly presented then, as with all poorly presented courses, they will reflect badly on the institution.

The jury is out; let us see what impact MOOCs have had in five years' time.

Conclusions

In our introduction, we identified four major issues which have been used to challenge the acceptability of ODeL: quality and quality assurance processes; outcomes; access; and the perceptions of stakeholders. We then review how far new developments in OERs and MOOCs have the potential to address these challenges. A review of recent research in these areas suggests that, while there are some conflicting conclusions, particularly in different contexts, many of the issues are in the process of being resolved, are capable of resolution, or are the same as those faced by all teaching and learning programmes. As more and more campus-based institutions offer part-time and online courses alongside or as part of their degree programmes, with common examinations for those participating, the issue of quality will ultimately depend, not on the mode of teaching and learning, but on the value placed by students on their learning experience and the measureable learning outcomes from particular programmes and institutions.

For a long time, 'inputs' to education, such as entry qualifications, have guided public perceptions of quality. Students across the world who pass particular exams can often attend highly regarded institutions; the universities of Cambridge and Oxford, for example, are able to demand very high entry qualifications. It is, therefore, not surprising that a large percentage of these students achieve a qualification or degree, whereas other schools and universities, which accept lower entry qualifications, may have lower success rates. This does not mean that the quality of the education offered, and more particularly the eventual learning outcomes are lower; indeed, those who succeed at a distance are often more able to demonstrate additional skills such as time management and commitment.

Perhaps, the best way to demonstrate the quality of distance learning to governments, employers and the public is to ensure that the outcomes, in terms of assessment processes, are measured in the same manner as those for school-based or on-campus students. This suggests that there should be common standards and quality assurance processes at appropriate levels for all forms of education by whatever media. This is relatively easily attained in those universities which offer both modes of learning, for example, the University of London. It is less easy to see how free-standing open and distance teaching universities can easily convince the general public, governments and employers that their qualifications are as good as on-campus institutions.

In the end, it is how students value their experience of education and how they make use of this learning in all aspects of their future lives. This will impact on governments, employers, communities and families, and will challenge any distinctions between different modes of education. In this respect, distance education and more traditional forms of education face exactly the same issues. Ultimately, the mode of teaching and learning is irrelevant; what matters is the outcome of such education.

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