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Chapter 1 - The transformation of distance learning at Open University: the need for a new pedagogy for online learning?

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IS IT POSSIBLE TO START 'DIFFERENT' AND STAY DIFFERENT?

The Open University (OU) in the UK has been delivering distance higher education for almost fifty years. Initially conceived as the 'University of the Air', the OU first used broadcast technology to reach its remote students but, as digital techniques have developed, has moved much nearer to a fully digital provision. In so doing, it has become a leading innovator in pedagogies for technology-enhanced learning and ground-breaking in its support for distance learning, whilst maintaining its mission of being open to people, places, methods and ideas.

The benefits for learners of moving to online provision are ostensibly multiple. Learning can be engaged with both synchronously and asynchronously, offering flexibility for those who cannot attend a face to- face session due to work commitments, caring responsibilities or disability. However, delivering a fully online experience is not without challenges and this chapter will explore a range of issues which universities wishing to harness the power of digital technologies must at least be aware of.

'Putting it all online' does not necessarily make for a qualitative enhancement of the student experience. Rather the university must: place the learner front and centre of the learning experience; address the range of diverse contexts, situations and needs of all learners; recognize that studying remotely can be an isolating experience; appreciate the need for new ways of engaging learners; explore and engage with new forms of quality assurance and enhancement.

The OU's original pedagogy of supported open learning had as a central tenet the use of 'feed-forward' in which the learning takes place through assessment. The learner uses the materials provided to explore key themes and develop study skills but the feedback on assignments has a specific focus on the learner's future development. This principle is still central to the OU model but developments in digital technologies have enabled other ways to support learners and their learning. To illustrate some of these points, examples of two specific initiatives – learning analytics and Student Hub Live – will be presented and discussed.

BACKGROUND: THE OPEN UNIVERSITY UK

The OU in the UK is, at the time of writing, approaching its 50th anniversary but its mission – to be open to people, to places, to methods and ideas – and its values remain unchanged from those which informed its naissance in the late 1960s. Huge changes in technology since then have allowed the university to reach out to more people, to be even more independent of place, to use very different

methods and to constantly adopt new ideas. Over its lifespan, it has moved from books and broadcast (television and radio) to online delivery but always supported by a model which provides personalized support and feedback, a sense of belonging and the highest-quality teaching materials.

The origins of the OU, and indeed the international Open University movement, lie in the political context of the post-war boom in the United Kingdom, with the expansion of the welfare state and a growing sense of the criticality of education and the need for broader provision. The 'University of the Air' was the brainchild of the then prime minister, Harold Wilson, who saw it as a provider of opportunity to those people disenfranchised by an education system which, particularly within the post-compulsory sector, excluded those without the social, cultural and educational capital deemed essential for success.

Importantly, the founders were keen to ensure that this new form of provision was not 'offering to students a makeshift project inferior in quality to other universities' (MacArthur, 1974: 6). Rather the aim was to develop correspondence materials of the highest quality, supplemented with lectures on radio and television. In fact, the latter were much more than just lectures as the media enabled far more innovative and sophisticated approaches to teaching and learning. The success of the initiative can be seen in the sheer volume of people who have since benefitted from the life-changing experience of OU study (OU, 2017a).

COMPOUNDING PROBLEMS: CHALLENGES FOR THE OPEN UNIVERSITY

Despite over two million learners achieving their learning goals with the OU over the last 50 years, the key characteristics of the learning experience – it being open, distance and part-time – can have negative consequences. All three factors, individually and in combination, influence the learning experience and have important implications for pedagogy and the use of technology.

Distance education within the higher education sector is that which allows the participation of learners in a learning experience without them being physically present in a built environment, such as a campus or classroom. The terms distance learning and online learning are sometimes used interchangeably but whilst technology can facilitate learning at a distance it is not essential. Keegan (1980) for example analysed four definitions which variously address the presence of the teacher, the learner and the tools which are used to facilitate engagement with the learning itself.

The primary disadvantage of distance learning lies in the isolating nature of the experience. However good the teaching materials, the learner studies alone and only infrequently comes into contact with teachers and other learners. For some this is a preference but for others alienation can very easily set in and motivation fail, resulting in much higher dropout rates compared with those in traditional face-to-face environments. Furthermore, because students are at a distance it can be much harder to re-engage them in their studies.

The 'open-ness' of OU study can also be problematic. Being open in the context of open universities is generally taken to mean open access – that is anybody can study, regardless of prior educational qualifications or attainment. This fundamental principle of the OU is seen as sacrosanct but is also a major issue in relation to student success. Higher education courses require a level of prior skills development which is usually developed through post-compulsory study at level 3, both in academic and vocational programmes. For adults returning to learn, sometimes many years after the end of formal schooling, there is a need both to refresh such skills and to support confidence, legitimacy and agency in the learner (Marr et al., 2013).

The rapid and catastrophic fall in part-time student numbers in England between 2012 and 2017 has largely been attributed to the introduction of higher fees and loans in 2012. As Butcher has identified (2015), however, studying part time is not a choice for some students but their only option. Whilst the OU in the UK has experienced some decline, this has not been as great as in the sector as a whole, due to the geographic flexibility which distance learning offers. Nonetheless, many writers have recognized the additional challenges part-time students face, particularly in respect of community and engagement (Marr et al., 2013).

Part-time study at higher education level in the UK is often delivered as in-fill to full-time provision – that is, students study at a lower intensity over a longer period but attend classes with their full-time peers, supplemented in some cases by evening or weekend classes or block provision. With distance providers full-time study is possible but uncommon. Students can take up to seven years to achieve a level 6 (European Qualification Framework – EQF) qualification, although many initially believe that it is possible to do it more quickly. Indeed, a common cause of attrition is the student’s belief that they must register for 120 (UK) credits in an academic year (60 European Credit and Transfer System – ECTS) but then fail to cope with the workload, alongside work and caring responsibilities.

Thomas (2015) has explored the notion of ‘belonging’ for part-time students in face-to-face higher education and has noted their sense of being treated as outsiders, attending evening classes when the library and cafeteria are closed, never feeling part of a cohort or community with their full-time peers and not seeing themselves as ‘real’ students. There has been very little work to date on community and engagement for distance learning students, for whom the part time-ness of their experience manifests differently. There are no set study times, other than for (optional) tutorials and engagement with their fellow students and tutors is rarely face-to-face.

In its earliest incarnation, the OU in the UK provided distance learning through the provision of printed texts, tape recordings or long playing records, supplemented by television and radio broadcasts, local tutorials and summer schools. Students were allocated a tutor who they could meet regularly, if they wished to, and who provided feedback on their assessed work. At that time the use of broadcast media was a significant development in engaging learners but the fundamental correspondence course which underpinned the model did not necessarily require technical solutions – rather they provided enhancement. The development of information and communication technologies over the years has made possible far more sophisticated techniques for students to engage with their learning, their tutors and their peers and at the time of writing the OU is embarking on a new strategic direction to move from the University of the Air to the University of the Cloud (Weale, 2017). Our challenge is to ensure that innovation in pedagogy keeps pace with innovation in technology.

THE CHANGING ROLE OF TECHNOLOGY AND LEARNING DESIGN

Innovation in technology for teaching and learning is not necessarily the introduction of new tools. More often, the innovation relates to the ways in which technologies might be used or combined. Early OU provision was predicated on a correspondence model – the student received materials, submitted assignments and was given detailed feedback by post. The learning experience was supplemented by regular face-to-face tutorials and a summer school providing a week-long immersion in a study experience. Whilst the tutorial model and the provision of books has persisted, summer schools have decreased and often been replaced by day schools or by online forums where learners and teachers can interact asynchronously. Modules, the building blocks of qualifications, all have online options – some no longer providing printed material – and may offer online tutorials in addition

to face-to-face. Students have access to a Virtual Learning Environment but there is still a tendency to design for print and then convert this to an online experience.

However, as Sir John Daniel has pointed out, Open Universities may be struggling to know how to dress now that traditional universities have stolen their clothes (Daniel, 2017). Digital technologies are increasingly being mainstreamed in all university provision and there has been considerable growth in dedicated online institutions around the world. At the same time in England at least there has been a dramatic decline in the numbers of part-time learners – 56 per cent between 2010 and 2015 (Horrocks, 2017a) – which has impacted heavily on Open University student numbers. Primarily this is a result of changes to fees and funding which saw the cost of OU study trebling in 2012 and students required to draw down loans to fund their studies. Employer sponsorship has also declined markedly with the realization that employees could self-fund through the loan system. Financial drivers have, consequently, driven thinking about what the University of the Cloud might look like.

The growth of MOOCs was heralded as a major disruptor in the higher education sector but that promise has so far been slow in materializing. The democratizing potential of free, open online learning is necessarily limited by access to technology, adequate network connectivity and prior learning experience, such that the post-graduate market is benefitting more from the opportunities which MOOCs offer. Nevertheless, the influence these developments have had on learning design and approaches to delivery have been far-reaching, particularly at the OU. Involvement in FutureLearn as a wholly-owned commercial subsidiary of the University has provided multiple opportunities to consider how our online learning might develop in the future.

In their *Innovating Pedagogies* annual reports (see for example, Sharples et al., 2016) the OU has been sharing learning and thinking around pedagogies since 2011, with particular reference to innovation in education. Not all pedagogies are reliant on, or determined by, digital technologies but many are facilitated or enhanced by enabling technologies. The 2016 edition, for instance, includes learning through social media, learning through video games and formative analytics as examples of using existing technologies in new settings. Sharples et al. make the point that: ‘With so many new and emerging pedagogies, the obvious question for teachers and policy makers is “which ones should we adopt?”’ (Sharples et al., 2016: 7). In response to the changing world and economic and policy context in which the OU exists, a dramatic redesign was launched in early 2017. Its intention is to deliver world-leading part-time distance learning and teaching with digital innovation at its heart, where students will have greater choice over start times and study intensity, be able to work flexibly on any device and receive personalized support for their learning. The Vice Chancellor, Peter Horrocks, commented that, ‘We were disruptive and revolutionary in our use of technology in 1969 and as we approach our 50th year we intend to be disruptive and revolutionary again...’ (Horrocks, 2017b).

The concept of personalized open learning is central to this vision in which the student will be able to choose, with guidance, when they start, how fast or slowly they will work their way through a programme, what support they will need and how they will access this. At the same time a shift away from designing for print and towards a fully digital experience is essential to support an ‘any time, any place’ model. That is not to say that print will be unavailable – many students with disabilities and those in secure institutions may still require the option to print. Rather, the emphasis will be on ensuring a high quality, interactive digital experience to enhance learning. After all, there are very few young people now – our future students – who are not avid consumers of digital media in all its forms.

To prepare for its future, the OU is adopting a test and learn approach to pedagogical change to establish what will work best. There are, of course, many examples which can be used to illustrate the range of pedagogical choices available but this chapter focuses on just two examples of the way we

are currently using technology to support learners and to overcome the barriers which distance and part-time students face. The first of these, learning analytics, is not new in the sense that it has always been possible to identify variables which may impact on learning but digital engagement enables a much more detailed and real-time view which facilitates intervention at the point of need. The second example, Student Hub Live(OU, 2017b), concerns the use of existing technologies combined in new ways to enhance the sense of community for the learner and thus foster engagement and persistence.

THE USE OF ANALYTICS IN SUPPORTING LEARNING

According to Sclater et al. (2016), 'Learning analytics refers to the measurement, collection, analysis and reporting of data about the progress of learners and the context in which the learning takes place.' Student engagement with their studies has long been measurable in terms of attendance, submission of coursework, performance in assessment and use of the library, for example. With the gradual introduction of Management Information Systems for student registration and records, the potential to link these has enabled profiling which has the capacity to predict success. However, we know that attendance, for example, is not a measure of engagement with learning or success, although it is usually a good indicator. In combination with other indicators, however, the information is likely to be much more helpful.

The use of digital technologies in learning creates potential for much bigger datasets but, as HEC (2016) point out, our digital footprints provide more unstructured data. Data analytics, as they say, is the process where data is collected and analysed in order to identify patterns, make predictions and inform business decisions (HEC, 2016: 11). Within face-to-face HE, fluid data, which marks out the digital footprint, can be acquired from swipe card access to buildings or services. Logging into the institution's Virtual Learning Environment (VLE) also creates records which show what a learner has looked at, how long they spent listening to or watching a file and what links they click through to.

The benefits of using learning analytics are substantial, particularly when they are used in predictive modelling. The OU has been working towards some predictive modelling which draws in prior educational experience, individual characteristics (such as age, employment status, study intensity) and performance on assessed coursework. Using this information and building on accumulated data the University is able to predict the likelihood of success and determine the appropriate intervention for the individual.

Concerns have been raised about the ethics associated with the use of analytics as a pedagogical tool. For instance, when data shows that learners with specific characteristics are less likely to succeed, institutions may decide not to accept applicants sharing those characteristics, particularly if funding and reputation are tied to completion and achievement rates. Such an approach would, however, be fundamentally at odds with the Open University's vision. The use of analytics is focussed on what the institution needs to do to better support a student or a cohort, whether that be at pre-entry stage or mid-programme. The following examples illustrate this point.

BOX 1.1 PRE-ENTRY ANALYTICS

Esme is a 34-year-old full-time carer from a BAME background. She wants to study to enhance her employability options when she no longer has caring responsibilities. She left school at 16 with no qualifications but worked in administration for several years before becoming a carer for her disabled parents. Analysis of trend data for those with similar characteristics suggests that Esme might benefit

from some pre-entry preparation for study and she is therefore advised to complete some diagnostic tests which help her to understand her literacy and numeracy skills and her digital literacy. The outcome of the tests may include guidance to some free courses on OpenLearn or FutureLearn or suggest that Esme begins her study with an Access course.

BOX 1.2 ON-COURSE ANALYTICS

James is a 45-year-old mechanic studying Environmental Management. He is part of the way through his first module but data has shown that although he started well and got a good mark for his first assignment, his VLE use has declined, he is spending only short periods of time looking at course materials, his second assignment was submitted late and received a bare pass mark. Support messages triggered by these occurrences have not been opened. On the basis of this profile, James is considered to be at risk of non-completion. The student support team contacts James to discuss what support might be needed and find that he has recently had to take on extra hours at work and is caring for a sick relative. As this is a temporary situation but likely to endure for at least the next six months, James is advised that he can 'bank' his assessment and re-join the course in its next presentation.

Both these examples show that learning analytics can be embedded into pedagogical strategies to enhance student experience and support completion and achievement. Data can also be used to enhance teaching, for instance if a whole cohort performs badly on an assessment, this might indicate a need for better preparation or revision of the assessment instrument.

THE ROLE OF STUDENT HUB LIVE IN CREATING COMMUNITY

A more recent pedagogical innovation focuses on the creative use of digital technologies to create community and a sense of engagement. OU students can meet physically in tutorials, at day schools or through OU Student Association (OUSA) events and meet virtually through forums which may be synchronous or asynchronous. There are both official and unofficial Facebook groups established but no equivalent of a face-to-face campus experience. The idea of a sense of belonging as a factor in persistence and achievement (Thomas, 2012) has been a driver for the development of Student Hub Live (OU, 2017b) – a livestreamed interactive online event where students interact with studio hosts through social media. Originally launched as a 'Freshers' event to welcome new students to the university, Student Hub Live (SHL) uses an informal, 'breakfast television' format with a mix of informative and fun sessions. Academic staff are invited to conduct debates, run skill sessions and answer questions from students.

The format has been expanded to include Faculty or discipline specific events, topical debates and study skill boot camps. Students are encouraged to submit their own videos, blogs, selfies, questions and responses to activities which are highlighted during live sessions. All the recorded assets are available for re-use and many are shared more widely via YouTube. Student reaction is extremely positive with over 6000 views of the 2016 induction event on an intake of 8000 new students. Study skill boot camps routinely attract thousands of views and the following are indicative of the kind of feedback received:

Being an OU student can be a particularly lonely experience. Having events like student hub live is so important in enabling students to connect not only with other students but with a faculty. The events have given me the impetus and drive to complete one module and start my

second. Without these events I don't think I would have been able to complete my studies. Before signing onto it I imagined I would only stay a short while and then log off, though it kept me entertained all day whilst reading much of my course material. I think it really was fantastic.

There is potentially also a role for SHL in attracting new students:

I've been thinking about starting one of the courses at The Open University. I watched the first Student Hub Live session (Boot Camp One) and I am just amazed. You are doing such a great job informing people and giving all kinds of support and explanations! That makes them certainly feel much more comfortable and safe about their studies. The way you seem to be so organized and lovely to deal with the student's issues really made me more confident to take my decision on starting at the OU.

SHL is, however, expensive to run in that it requires film crews, equipment and studio set up. The SHL team have therefore experimented with the use of Online Rooms from Adobe Connect to deliver study skill workshops. These are very well attended – up to 500 attendees a session – and well liked by students. Feedback also suggests that this kind of communal event is more attractive than tutorial sessions, which are generally very poorly attended:

What a fantastic way to swap ideas and also find out that tutors love chocolate. I just wanted to say how much I enjoyed last night's session on Essay Writing. It was quite fun – so much more than the dry on-line tutorials. Nice to hear your voices those who organised, and if you could just be available every evening that would be great!

SHL is now embedded in the business of the University, delivered with Faculties from the Learning and Teaching Innovation portfolio. Its popularity with students and staff and the ease with which it has been implemented shows that it is not necessary to develop new technologies to enhance the student experience but to think about different and creative ways of using existing techniques.

CONCLUSION

There are now many Open Universities around the world, some constrained in their open-ness by local regulation but all with similar missions – to provide opportunities for those who might not be able to access traditional higher education institutions. Developments in technology are encouraging all universities to consider how they can enhance the student experience – learning analytics are becoming increasingly ubiquitous, for example, but for the most part blended delivery (a mix of face-to-face and online) is becoming the norm. Open and distance institutions must still, however, make provision for those who can only study remotely and future generations of learners will be much more digitally literate than current cohorts. Technological innovation is not, however, a panacea. Rather it is the innovative ways in which technology is used in a teaching and learning context, aligned with appropriate pedagogic choices that will enable learners to engage and succeed.

As long ago as 1971, Ivan Illich argued that an educational system should:

[P]rovide all who want to learn with access to available resources at any time in their lives; empower all who want to share what they know to find those who want to learn it from them; and finally furnish all who want to present an issue to the public with the opportunity to make their challenge known. (Illich, 1971: 75)

As Sharples et al. point out, though, this ‘presents technical, educational, and social challenges to modern providers of online learning’ (Sharples et al., 2015: 1). All online providers face these challenges, open and distance universities more so. The need to put pedagogy at the heart of course design is critical for effective learning, whatever technologies are used.

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