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## Sustainability and distance learning: a diverse European experience?

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### ABSTRACT

Higher Education (HE) is experiencing disruption from technologies, demographics, the globalising world and longer life expectancy. Historically Higher Education has had a legacy of being seen as the requirement for an educated ‘elite’, there has been a policy ambition set in various countries (including the UK) for it to become the expectation for much wider segments of the population as a whole. As students become ‘everyone’ and learning becomes ‘all the time’ Distance Teaching and Research Institutions have a tremendous opportunity but there are also many disruptions and barriers to overcome. Higher Education institutions have an important role within Education for Sustainable Development and sustainable lifestyles; one of the important goals and targets of the United Nations Sustainable Development goals for 2030. Higher Education can contribute to sustainability in many ways – social, technical and environmental; globally and locally. In particular distance-learning universities due to the flexibility in the learning process, use of technologies, and inter-disciplinary approach to teaching and learning, constitute key factors in education for sustainable development. But what will this contribution look like? In this paper, the responses from senior leaders in four major European distance-learning universities are presented, compared and discussed. The tentative conclusions draw out some strategic imperatives for sustainable higher education in the twenty first century.

### Introduction

Open Learning can be argued to be centrally concerned with two of the great issues of our time: sustainability and disruptive technologies.

Firstly, sustainability. As this encompasses a rather broad spectrum of ideas, we follow the Brundtland<sup>1</sup> Commission in understanding sustainability as to meet: ‘the needs of the present without compromising the ability of future generations to meet their own needs’ (Brundtland & Khalid, 1987).

In this definition sustainability necessarily includes the qualities and availability of higher education in a global setting of educational need, this setting includes the challenges of globalisation. The importance of informed sustainability in a global setting was made manifestly clear in the recent cut and thrust evident at the 21st Conference of the Parties to

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the United Nations Framework Convention on Climate Change (COP21) deliberations in Paris in December 2015.

Secondly, disruptive technologies are, on the one hand, providing the global learning community with the potential for more and more access to the wisdom of world scholarship and yet, on the other hand, are disrupting the very models which are attempting to deliver this learning. Massive Open Online Courses (MOOCs) are one surpassing example for opening up education that has received prominence beyond higher education. However, the added value of MOOCs to legacy educational systems has hitherto remained controversial.

Caught between the requirements of sustainability and the challenges of technological disruption we seem to be, as Manuel Castells puts it in his 2001 book, in a state of 'informed bewilderment' (Castells, 2001). Or, as John Naughton – Senior Research Fellow in the Centre for Research in the Arts, Social Sciences and Humanities (CRASSH) at the University of Cambridge and Emeritus Professor of the Public Understanding of Technology at the Open University puts it in his seminal book: 'From Gutenberg to Zuckerberg', concerning the impact of the internet:

“fears are so widespread and diverse that they almost defy summarising, but the main themes include: a conviction that the network is reshaping our intellectual, social, economic and political landscape in unpalatable ways, a belief that ubiquitous networking is changing our conceptions of art and entertainment – and blurring the distinction between news and entertainment; a perception that the Internet is fragmenting our culture into bite-sized chunks, overwhelming us with data, eroding personal privacy, polarising our politics. The network, we are told, is creating a world of atomized, isolated individuals who would sooner send an email to a colleague in the next-door cubicle than lean over to talk to her.”  
(Naughton, 2012, p. 31)

Distance learning Universities would appear to have a potential to address a large population of students but this potential is vulnerable to the radical changes and disruptions evident in the application of digital technologies (e.g. Massive Open Online Courses or MOOCs). Also, HE institutions face an unrelated but equally profound set of opportunities and disruptions related to innovations in the way we work, changes to the environment and the effects of globalisation.

The dynamics of technology and work-place innovation combine in what has been called the Knowledge Society or KS. If HE participates in the KS then it is important to be clear on the use of terms. What is the KS? There are lots of definitions. For example (Afgan & Carvalho, 2010) describe the KS:

“as a human structured organisation based on contemporary developed knowledge and representing new quality of life support systems. It (the KS) implies the need for a full understanding of distribution of knowledge, access to information and the capability to transfer information into a knowledge.”

The key themes of the definition are that the KS is based on contemporary knowledge and comes with *new quality life support systems*. Therefore, the KS is not just society

fundamentally based on knowledge. It implies a support system of knowledge, *knowledge supporting human life*. We will return to this idea towards the end of this paper.

If the KS is unfolding, then who is participating? If knowledge is a good thing, then clearly we should all be participants. But, recalling the totemic work of Arendt on Totalitarianism (Arendt, 1950), slower and more deliberate rationalism may not lead to glorious participation. If the KS is like one of its famous predecessors, Industrial Society, then it may well encompass all and take no prisoners. But there are grades of participation and engagement. This can be thought of from a number of ideological positions. For example:

- (1) Those who own the means of Knowledge production and those who own nothing other than a potential to buy (possibly a Marxist interpretation).
- (2) Or, the trade of knowledge in a benign and free market (more of a Classical Economics interpretation).
- (3) Or, knowledge as a common right and a resource open to all according to need (a socialist interpretation?).
- (4) Or, knowledge as a technical product available by diverse means- which we don't know or care about so long as we have them – and at diverse costs -which we also don't know about and only care if we cannot afford them – (a technical/mechanistic interpretation).

But which, if any of these positions will come to dominate the knowledge landscape? Our hope was that the interviews we were to conduct would give us some indication of the strategic mind-set.

Distance Teaching (DT) could be argued to be particularly relevant and responsive to the specific challenges of KS. First, Distance Teaching can apply technologies to allow human interactions through the web and promote a self-regulated learning process (Narciss, Proske, & Koerndle, 2007). Second, Distance Teaching is crossing boundaries of space and time for Life Long Learning. Third, Distance Teaching enables flexible/customised ways of education and graduation for everyone despite constraints. Due to these characteristics, Distance Teaching can also allow an inter-disciplinary approach to teaching and learning, which constitute key factors in education for sustainable development (ESD) (Lozano, Lukman, Lozano, & Huisingh, 2013).

With these thoughts in mind we have undertaken interviews at four major European DT universities: the Open University in the UK, UAb, Universidade Aberta in Portugal, UNED, Universidad Nacional de Educacion a Distancia (the National Distance Education University) of Spain, and FernU, FernUniversität in Hagen in Germany. The universities stand for a plethora of innovation in Distance Teaching over the last decades. With regard to their past achievements these universities represent a key contact point to forecast the further development in Distance Teaching. The aim of our interviews was to discuss and reflect what role and strategies these European Distance Learning (DL) universities have to respond to the challenges of sustainable development in the next two decades.<sup>2</sup>

### Questions and method

Our interviews involved asking the Vice Chancellors or Rectors of the four selected universities (OU, UAb, UNED, FernU) several questions relating to the sustainability of the DL model and the likely impact of current disruptions in the future. Through an email

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process over several weeks, the authors arrived at six questions which, we agreed, provided the strategic leaders in each institution with a way of setting out their thinking on: the key areas of long term vision, perspective on change, the link between HE and sustainable development, the impact of MOOCs in particular on the learning process, the place of the University in the provision of HE and the importance of a sense of place in the delivery of HE. Specifically, our six questions are as follows:

- (1) What is the current strategic vision of the University to meet the challenges of the next 20 years?
- (2) Is it 'business as usual' for HE or can we expect to see dramatic change?
- (3) How does the University's strategy contribute to the specific international challenge of sustainable development in its many guises?
- (4) What are the likely futures for MOOCs?
- (5) Is distance learning going to remain the preserve of a few specialised agencies or do you think it will become more widely provided by other agencies?
- (6) As country and language boundaries change – how important is a sense of place to the University?

As background, we should note that the four universities in this study represent over 600,000 students across Europe.

The interviews were transcribed and a qualitative content analysis conducted. Most important ideas/quotes are summarised in the results.

### [An overview of the responses](#)

What follows are a selected overview of some of the key responses to our questions.

Question 1: What is the current strategic vision of the University to meet the challenges of the next 20 years?

Several complementary ideas were raised by the respondents about this question. The responses indicated that the leaders of the four institutions appeared comfortable with global and transboundary future challenges. Key responses included: Open University UK: '... a community that is available to learners throughout their lifetimes and to try to do that globally'; UNED Spain: 'initiatives should move beyond institutional or even national boundaries'; The view from the Universidade Aberta Portugal is that the entire higher education system needs to be reorganised as a dynamic knowledge network in which all institutional and social actors operate interdependently and openly share their resources; Fern Universität Germany: 'Starting to think from the learner's perspective'. The complementarity of focus in the responses indicated optimism regarding the potential for global, boundary-free institutions, providing learning relevant to and primarily orientated from the perspective of the learner (a rhetoric captured in the term 'Student centred learning').

Question 2: Is it 'business as usual' for HE or can we expect to see dramatic change?

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Distance-Learning HE institutions, with their focus on technology-based learning would appear to be in a continuous process of changing and innovation. This overview is highlighted by the Universidade Aberta Rector when he underlines the need to 'embed the use of technological innovation', a view amplified by the UNED Rector: 'universities will undergo significant transformations'.

Further changes and challenges can be expected. FernUniversität noted that the university will need to be open to disruptive change: 'we will have different roles' and the Vice Chancellor of the Open University noted that: 'support could be delivered to more people at lower cost'. This reference to the cost of HE needs to be seen in dynamic relationship to the cost-cutting which is possible with the adoption of mass technologies.

Question 3: How does the University's strategy contribute to the specific international challenge of sustainable development in its many guises?

The use of online technology can have an important role within education for sustainable development, namely for sustainability knowledge, assessment practices competences and outcomes assessment (Azeiteiro, Bacelar-Nicolau, Caetano, & Caeiro, 2015). All the respondents seemed to agree with this sentiment and gave suggestions of how DL universities can embrace Sustainability in its different ways and domains:

FernUniversität Germany noted that: 'everyone that graduates from a university has been confronted with ways to make our world more sustainable.' The Vice Chancellor of the Open University UK suggested that Distance Learning outcomes: 'contribute to human capital which will be one of the most important ways of ... tackling issues of sustainability'. The Rector of UNED Spain emphasised the need for a translation of rhetoric into realities: 'we should do more to translate these kinds of declarations into real actions' and the Rector of Universidade Aberta Portugal underlined the need to be: 'ground-breaking in reducing the carbon footprint in the higher education sector'.

Question 4: What are the likely futures for MOOCs?

MOOCs are a recent phenomenon, although given their impact, their usefulness and role within the education process is controversial. Questioning their future was considered important in these interviews. Different opinions were highlighted, the most important were:

The Universidade Aberta Portugal suggested that MOOCs could encourage wider adoption of education in that they were: 'a "trigger" and a way for the wide dissemination and adoption of educational innovation.' Open University UK focused on the catalytic potential of MOOCs: 'I don't mean ... free degrees or anything like that at this stage, but you can see where learning that is free at the point of use starts to become a component of more substantial qualifications'. UNED Spain suggested that MOOCs have a transitional importance in that: 'MOOCs will not be the future, but the future will not be understood without them'. Finally, FernUniversität Germany suggested that one size does not fit all. MOOCs have a place but this place needs to be considered and planned: 'MOOCs need to be embedded in a learning environment where individuals can benefit from them'.

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Question 5: Is distance learning going to remain the preserve of a few specialised agencies or do you think it will become more widely provided by other agencies?

With the advent of the internet, worldwide traditional universities are trying to add distance learning in their educational systems, justifying the importance of this question. The senior leaders engaged in our interviews generally agree on the convergence between distance learning and face to face teaching.

Most strikingly, the Rector of the Universidade Aberta Portugal identified the: ‘convergence taking place in the higher education sector between traditional teaching and distance learning universities’ and the Vice Chancellor of the UK Open University noted with regard to Distance Learning: ‘it’s got to become more widely provided.’ Emphasising the point, the Rector of UNED Spain argued that: ‘the days are numbered for the rigid division between campus-based universities and distance and on-line universities.’, and FernUniversität Germany suggested: ‘The golden mean of blended learning combines the benefits of distance teaching and face to face teaching in higher education’. It would appear that models of educational delivery need to be mixed and integrated.

Question 6: As country and language boundaries change – how important is a sense of place to the University?

For DL institutions geography and culture may not be seen as a barrier or border. Senior Leaders had a range of observations:

For the Universidade Aberta Portugal the issue of place is key and is centred around the importance of language: ‘For UAb, that place is not a specific city or country, but the Portuguese-speaking community, with its current 260 million «inhabitants»’. At the Open University in the UK the focus was more on place as in a building in which to deliver education. As the Vice Chancellor notes, a university: ‘may not necessarily be a building in the centre of town’. This suggests that location is less important and, indeed in the UK the Open University has recently begun to close regional centres. For the UNED in Spain this sense of the lack of importance in a given place is shared. How important is a sense of place? The Rector responds that he is: ‘not among the believers in a virtual world with only virtual relationships.’ Finally at FernUniversität in Germany the Rector again points to the question- able value of a sense of place: ‘But I am not convinced that an actual geographical point of reference is necessary to achieve this feeling’.

### Discussion and conclusions

The pressure to be sustainable and to act responsibly in a global context set against the powers of disruptive technologies can combine to provide a complex system much in need of coherence. Distance teaching and Distance Learning via internet technologies are a complex system and their contribution to what some call the Knowledge Society is at once both obvious and unclear.

In our interviews with the strategic heads of four of Europe’s leading DT universities, we gained wide ranging and occasionally contradictory insights. For the long version of the four interviews contained in this paper please refer to the Editorials of *Open Distance and E*

Learning, Editions: Volume 31, issues 1, 2 and 3 and Volume 32 issue 1. In this paper, we look only at what we consider to be our key findings.

Whilst it is true that there was much agreement among the leaders on the essential need for change and transition there did not seem to be an understanding that there was a strong role to be played in policies around concepts of sustainability. Concerns relating to the student learning experience and the importance of institutional resilience seemed more evident than any vision of a key role in sustainable development or deeper visions of global existential issues. DT and DL did not seem to be seen as key players in sustainable development. Maybe this was born out in that geography seemed to be less important. The physical place was diminished but language and communities of practice seem to rise in strategic importance as the HE DL institutions figure out how they will mark the boundaries of their actual and potential student communities. But the future of the HE institution itself is seen to be subject to questions with leaders reflecting on the convergence of agencies delivering the teaching and, in passing, noting that this may well end up as a blend of private and public providers. Indeed, blended education might be a phrase which we will see repeated again and again as the HE providers of DL blend face to face with virtual teaching, blend various forms of internet technologies and blend delivery mechanisms with private agencies for optimum economic performance and logistic efficiencies. If these optimum and logistic improvements are real or rank as illusions is yet to be seen. Our four leaders agreed that educational delivery is in transition and that there is no clear view as yet as to what the final model will look like (if there is to be a final model or if DL is rather – to follow the metaphor of the airport – constantly under renewal) but it does seem that, important as they are, MOOCs are a stepping stone to the future but not the future.

Across Europe, these four institutions, delivering HE to over 600,000 students struggle with disruptions which were not included in the initial vision of their foundation. The sustainability of HE distance delivery is now in question as disruption to workforce and wider political changes call into question the globalisation which lies at the core of true distance education. Education sans frontières? All four institutions show remarkable similarities but also some major variations in response to the six questions and the realisation of the Knowledge Society which lies at their core. We might summarise with the observation that sustainability is, by and large, yet to be seen as much more than the narrow sustainability of the individual institution's life cycle of educational delivery. HE DL is not seen in this survey as a profound leading agency in delivering a sustainable world. However, the struggle to master the challenges of technology and the need to meet the aspirations of the student body in a rapidly changing world will surely mean that issues of global sustainability will move up in the distance learning agenda.

#### Notes

1. The Brudtland Commission was set up in December 1983 and chaired by Gro Harlem Brundtland. Formally known as the World Commission on Environment and Development (WCED), its mission was to encourage countries to pursue sustainable development together. The background was that the concern which the UN General Assembly had at the perceived deterioration of the human environment and natural resources. To bring



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countries together in collaboration for sustainable development, the UN established the Brundtland Commission.

2. The long versions of the interviews contained in this paper are to be found in the Editorials of *Open Learning*: Volume 31, issues 1, 2 and 3 and Volume 32 issue 1.

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#### Disclosure statement

No potential conflict of interest was reported by the authors.

#### Notes on contributors

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Daniel Otto received his PhD from the Goethe University in Frankfurt. He is a research assistant at the Chair of International Politics and Lecturer for the further studies program Interdisciplinary Distance Studies of Environmental Sciences at the FernUniversität in Hagen.

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