



Heriot-Watt University  
Research Gateway

# The use of MOOCs in transnational higher education for accreditation of prior learning, programme delivery, and professional development

## Citation for published version:

Annabi, CA & Wilkins, S 2016, 'The use of MOOCs in transnational higher education for accreditation of prior learning, programme delivery, and professional development', *International Journal of Educational Management*, vol. 30, no. 6, pp. 959-975. <https://doi.org/10.1108/IJEM-05-2015-0057>

## Digital Object Identifier (DOI):

[10.1108/IJEM-05-2015-0057](https://doi.org/10.1108/IJEM-05-2015-0057)

## Link:

[Link to publication record in Heriot-Watt Research Portal](#)

## Document Version:

Peer reviewed version

## Published In:

International Journal of Educational Management

## General rights

Copyright for the publications made accessible via Heriot-Watt Research Portal is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

## Take down policy

Heriot-Watt University has made every reasonable effort to ensure that the content in Heriot-Watt Research Portal complies with UK legislation. If you believe that the public display of this file breaches copyright please contact [open.access@hw.ac.uk](mailto:open.access@hw.ac.uk) providing details, and we will remove access to the work immediately and investigate your claim.

# The use of MOOCs in transnational higher education for accreditation of prior learning, programme delivery, and professional development

## Abstract

**Purpose** – The purpose of this research is to investigate how, and the extent to which, MOOCs might be used in the accreditation of students' prior learning, in degree programme delivery at international branch campuses, and for lecturers' professional development (PD) in transnational higher education.

**Design/methodology/approach** – The data were obtained from two international branch campuses in the United Arab Emirates (UAE). The research adopted a qualitative methodology that involved 20 lecturers participating in semi-structured interviews and 10 lecturers participating in a focus group. A rigorous process of content analysis was used to analyse and interpret the data.

**Findings** – Lecturers in transnational higher education perceived that MOOCs were not suitable for accredited prior learning (APL) but that they might be useful as a supplementary resource for student learning and for lecturers' PD. There was a strong belief that as international branch campuses offered a commodified product, MOOCs were unlikely to be adopted as a replacement for traditional programme delivery methods, as students strongly prefer face-to-face teaching and support.

**Practical implications** – The research has identified a number of recommendations for higher education institutions operating in transnational settings, which might improve both institutional and individual performance. Institutions that intend to use MOOCs in programme delivery should consider how their students and staff would react to such a move, and how this might impact upon institutional image and reputation.

**Originality/value** – Surprisingly, there has been little academic research published on the use of MOOCs in higher education, and to our knowledge, this is the first study conducted in a transnational education setting. The uniqueness of the environment in which international branch campuses operate, as well as their different objectives and student profiles, provide the rationale for this research.

**Keywords** Massive open online courses (MOOCs), Transnational higher education, International branch campuses, Accredited prior learning (APL), Professional development (PD), commodification of higher education, United Arab Emirates (UAE).

**Paper type** Research paper

## Introduction

Although the literature pertaining to massive open online courses (MOOCs) falls within a wide spectrum of views, two distinct camps have emerged: one suggests that MOOCs herald the demise of higher education as we know it (Shirky, 2012; Conole, 2013; Morgan, 2013), and the other which submits that MOOCs are merely a technological advancement that can augment learning without actually replacing traditional bricks and mortar institutions (Educause, 2012; Bates, 2013; Yuan *et al.*, 2014). Authors have recently become interested in the advent of the international branch campus, which is a higher education institution that operates from a country

that is not its own, and offers courses identical to and accredited by the home country campus (McBurnie and Ziguras, 2007; Altbach, 2010; Wilkins, 2010, 2013; Wilkins and Balakrishnan, 2013). Since about 2010, MOOCs have received a lot of media attention, but until now lecturers employed in a transnational education context have not been canvassed on their perspectives regarding whether MOOCs might be suitable for (1) accreditation of students' prior learning (APL); (2) integration into degree programme delivery; and (3) use in lecturers' own professional development (PD).

Transnational higher education provides a specific educational context, as very often public not-for-profit institutions venture abroad in pursuance of profit (Wilkins and Huisman, 2012). The establishment of international branch campuses may be considered an example of the commodification of higher education (Naidoo, 2003). We hypothesise that in an operating environment that typically emphasises cost minimisation, the managers and educators in international branch campuses might be more receptive to using MOOCs. Thus, the purpose of this research is to investigate how, and the extent to which MOOCs might be used in students' APL; in degree programme delivery at international branch campuses; and for lecturers' PD in transnational higher education. The results are based on the attitudes and opinions of faculty members working at international branch campuses in the United Arab Emirates (UAE). Lecturers were asked whether they perceived international branch campuses to be commodifying higher education, and, if so, whether or not commodification impacts upon the use of MOOCs in international branch campuses.

In summary, the central research questions of the study are:

- Might MOOCs be used in students' APL in transnational higher education?
- Might MOOCs be used effectively in programme delivery at international branch campuses?
- Might MOOCs be used effectively for lecturers' PD in transnational higher education?

## **Literature Review**

### *What is a MOOC?*

Having first appeared around 2007, MOOCs are a new learning phenomenon within higher education. MOOCs may be defined as online courses – predominantly university affiliated – that typically attract much larger numbers than standard university classes (massive), and which are open in that they provide open content and open access to educational material (Kennedy, 2014). Thus, having open access and unlimited numbers of participants appear to be two of the central features of a MOOC. Rodriguez (2012) defined the openness aspect as relating to the open-source, the lack of rigour in course registration, open information sources, open structure of the courses themselves, having open assessment criteria and also enticing learners who are open to the process of new ideology.

The original aim of MOOCs was to provide free access to university level education for as many students as possible (Yuan and Powell, 2013). As MOOCs have evolved, we have seen examples that are massive but not open, and others that are open but not massive. The earliest MOOCs had no prerequisites or admission requirements, no fees to students, minimal interaction with faculty, and they offered no academic credit. Although some universities offered MOOCs that were essentially the same or equivalent to their own degree programmes, these universities cited residency requirements to explain why the MOOCs provided no academic credit (Sandeen, 2013). Now, some MOOC providers are seeking to protect and license their content, and two of the three largest platforms for MOOCs – Coursera and Udacity – are profit-seeking organisations

(Yuan and Powell, 2013). Some providers have started to offer (for a fee) academic credit for successful completion of courses, realising that in future such fees might provide a rich source of revenue.

#### *Validating MOOCs as accredited prior learning (APL)*

Conrad and McGreal (2012) emphasised the difference between credit transfers and APL. Their study into the policy and practices of 31 universities assessing credit transfers and APL protocols highlighted the lack of consensus in perceptions of prior learning within higher education. They noted that the split was consistent with Selman *et al.*'s (1998) definition, which generally carved a demarcation between those who believe APL is earned through formal academic routes, via affiliated accredited educational providers, whilst others understand APL to be the culmination of experiential learning. Only a few institutions adopt both classifications as viable demonstration of APL.

Not long after MOOCs appeared, individual universities and colleges began to accept them for credit with faculty approval or the completion of an institution assessment (Sandeen, 2013). For example, the University of Helsinki started recognising MOOC credits in 2012. In 2013, the University of Central Lancashire announced that MOOCs would be considered as evidence of APL, with the caveat that the university would evaluate the efficacy of each MOOC's learning outcomes afresh (Parr, 2013). By 2013, several universities worldwide had decided to start recognising certificated MOOCs as valid course credits in their educational programmes (Young, 2013). Bayne and Ross (2014) reported that in the United States, some universities were beginning to accept MOOC accreditation as credit awards, especially where the cohort consisted of predominantly mature students or if the MOOC was aligned to the destination university. Students taking certain edX courses can pay a fee and take exams at a physical testing centre, which many universities will now recognise for APL.

Although many universities now recognise MOOCs for APL, most universities are still wary about crediting MOOCs, particularly in Europe (The Economist, 2014). In the European higher education area, regulations created to promulgate student mobility provide credits endorsement and course transfers within the 53 signatory countries of the Lisbon Recognition Convention. If these regulations were considered to be an endorsement of MOOC accreditation, the situation could become problematical for institutions. This is because an endorsement of MOOCs for APL by one signatory could lead to a legal challenge of all credit transfers since the regulations say transfers should be recognised "regardless of whether the knowledge, skills and competences were acquired through formal, non-formal or informal learning paths" (EU Commission, 2012, p. 9). Although many universities might resist accrediting MOOCs, it may be hard for them to hold out long-term against the large numbers of students who will likely demand credit transfers.

#### *MOOCs as professional development (PD)*

Jobe *et al.* (2014) advocated that MOOCs offer untold potential for academic PD, particularly if the courses provide academic recognition and PD validation. Mackness *et al.* (2013) conducted a small study that found MOOCs which are task-orientated supported PD within academic open-practice. Cooper and Sahami (2013) posed the question of whether MOOCs would provide employers with substantive certification of staff development. Yuan and Powell (2013) tracked employers' acceptance of certificates of participation and believed there was sufficient evidence of employers validating MOOC achievement as viable PD endeavours. Although MOOCs might provide a cost effective PD option, some individuals have argued that the most effective PD

scenarios involve team problem-solving on relevant issues (Schwartz, 2013). Interaction between individuals is difficult to replicate in MOOCs.

Although access to PD opportunities has grown (Fishman *et al.*, 2003), Ansell and Park (2003) opined that PD was still inadequate. Furthermore, participation in PD tends to be voluntary (Bobrowsky *et al.*, 2001). Lawless and Pellegrino (2007) reviewed empirical research on PD and the integration of technology in education and found both a paucity of research and a tendency towards small scale studies, examples being Hughes and Ooms (2004), where five teachers participated in a longitudinal study, and Orrill (2001) with only two teachers being observed and interviewed. While Lawless and Pellegrino (2007) mentioned other studies with larger numbers, they reported that the research methodology was often hazy and led to confusion on the technology or PD process under investigation and the criteria for assessing these.

### *The commodification of higher education at international branch campuses*

International branch campuses are the most visible and researched form of cross-border higher education. An international branch campus operates outside the country where the university is based, but it delivers the same courses and awards the same degrees as in the home country (Lane, 2010). The University Risk Management and Insurance Association reported that lecturers at international branch campuses are typically expected to focus on the short-term objectives of initiating and promoting their branch campus in lieu of their own career goals (URMIA, 2011). Altbach (2000) argued that the stagnation of employees' professional development (PD) could be to the long-term detriment of the employees.

At the start of 2015, there were 231 international branch campuses operating globally, and of these 33 were in the UAE, making it the largest single home of international branch campuses worldwide (C-BERT, 2015). Wilkins (2010) found that the competitiveness of the higher education marketplace in the UAE was particularly acute, and although regulations are robust, there is a growing trend towards encouraging technology within education.

Kline (2009) noted that commodification has been a trend in higher education, which has led to increased workloads, particularly in transnational settings. Gibbs (2010, p. 242) defines commodification as "the production and delivery of goods and services for monetized exchange by capitalist firms in pursuit of profit." Commodification is commonly associated with assigning a value to something that traditionally would not have been considered in economic terms. Wilkins (2013) stated that international branch campuses are generally profit-seeking, and as a result they adopt higher fee structures, which in turn attracts students from the more privileged socio-economic backgrounds, who can meet the financial demands. He suggested that that this might stifle the future growth of these campuses, as the current operating model excludes those who cannot afford the tuition fees. The author specifically wrote about MOOCs: he believed that despite their global prevalence, MOOCs would not lead to degrees. He opined that this was because universities believed that MOOCs were a threat to "the attractiveness and viability of the programmes delivered on campus" (Wilkins, 2013, p. 4). Nevertheless, in institutions that are required to minimise operating costs, MOOCs might be attractive as courses to run alongside traditional courses within degree programmes. Also, they might be a cost-efficient resource to use for academic staff's PD.

Wilkins and Balakrishnan (2013) observed that despite the growth of the transnational education sector, there was little research on student attitudes, beliefs and experiences therein. They conducted a study into student perceptions of international branch campuses within the UAE, which identified issues regarding service-quality and satisfaction levels. The authors found

that there was a positive satisfaction rate in excess of 70% within the seven areas of provision researched, one of which was the use of technology. This suggests that the Generation Y student cohort in the UAE – i.e. those students born in the 1980s and 1990s – has a proclivity towards such technology.

Gerson (2010) carried out a survey in the UAE and found that lecturers perceived that their students possessed an, at best, average ability in maths and written English, yet students often received inflated grades. McBurnie and Ziguras (2007) and Wilkins (2010) claim that lecturers in the UAE are under pressure to satisfy students' expectations by providing marking that exaggerates grades beyond truly reflective levels. Wilkins and Balakrishnan (2013, p. 8) stated that this was particularly evident among students who came from 'notable families', and they also found that Emirati students perceived Western higher education as making greater demands on them than they had expected.

Altbach (2010) posited that many students in international branch campuses were unlikely to be accepted onto the same programmes at the universities' home campuses since the rationale was more financially than academically driven in transnational settings. Students who struggle to cope with the demands of Western higher education might benefit from taking MOOCs as a preparation for degree study at a traditional university, but if they were to do so, many students would undoubtedly expect to receive APL.

In earlier research, Mazzarol and Soutar (2002) reported that both 'push' and 'pull' factors attracted students to international branch campuses. However, they predicted that the pull factors – which included the reputation of the university, the prestige of faculty, alumni satisfaction rates, as well as the degree of innovation and use of technology – were more likely to surpass the push factors in students' decision making when selecting where to study.

## **Methodology**

An interpretive approach was believed to be the most suitable for this study. The research brought the researchers into direct contact with the interviewees, and therefore the resultant findings are qualitative. Burrell and Morgan (1979) described this as an elucidation of the researcher's subjective comprehension of the social participants' viewpoint as opposed to that of an objective observer. It was recognised that conducting research in countries with different cultures and languages produces special methodological challenges, which, in turn, necessitates additional consideration of cultural, linguistic and nationality traits within the participant group (Spector, 2001; Brooks and Gaetene, 2015).

Hsiu-Fang and Shannon (2005) encouraged the use content analysis, which was employed for this interpretative research. This involved reading transcripts to ensure accuracy and then disassembling the data and reassembling it to logical themes. This followed the four stages recommended by Jonker and Botma (2012):

1. Disassembling content by defining and categorising data into initial themes, e.g., by agreement or non-agreement.
2. Analysing the themes by using notes, (including the postscript notes), then to reassemble them in an overview, taking account of the themes and subthemes (e.g. seeing MOOCs as viable for APL or not).
3. Discarding data which was in excess of the themes and sub thematic construct (such as general niceties and non-relevant chat).

4. Converting the language into codes but retaining germane participant extracts that validate narrative (which allows for some direct quotes to enter the analysis, to both emphasise and validate findings).

Coffey *et al.* (1996) noted that coding is often required in qualitative research. Atherton and Elsmore (2007 p. 68) recommended that codifying should be done in person and not by computer-aided-tools as they have a tendency to de-contextualise and distort the situated meaning and significance. They advised that a thematic key was established by hand, where, for example, various modes of saying 'yes' or 'no' to the questions were widely offered yet accurately reflected as either agreement or disagreement.

Codifying takes on a different approach when it is applied to focus groups, as was the case for the validation by triangulation phase. Onwuegbuzie and Leech (2007) observed that within focus groups, comparison of words/utterances could indicate consensus. They advised that researchers should monitor the quantity and quality of words coming from each subgroup on themes and that this interest level could be used during codifying to gauge the importance of the topic under consideration by the whole group. This is important since Sim (1998) professed that merely counting articulated agreement, and reiterating this as consensus can be misleading particularly where a focus group is dominated by only one or two focus group members and others acquiesce for ease. Certainly within the focus group meeting there were members who were more expressive, yet verbal cues of enthusiastic support also denoted wider agreement within the group.

The study relied on self-selecting convenience samples for both the individual interviews and the focus group. Participants were drawn from two international branch campuses in the UAE. The samples were broadly representative of the faculty profiles at these two institutions in terms of sex (53% male; 47% female), nationality (the main ones being 24% British, 26% other European, 10% Indian, and 8% Australian), and rank (90% instructor/assistant professor, 10% associate professor/professor). Interpretive research is viewed as having higher risk potential owing to concerns regarding small(er) sample sizes (Chen *et al.*, 2011). Charmaz (2005 p.528) asked the question: "What stands as adequate research?" Cooper and Schindler (2003) stated that for the sample to hold validity, it should be an accurate representation of the population. Guest *et al.* (2006) found that during an analysis of 60 qualitative interviews, saturation was achieved within 12 interviews, while initial meta-themes were found within just 6 interviews. Twenty semi-structured interviews took place in this study, which provided a sufficiency of views and data for analysis.

Examples of questions asked in the interviews include: What is your opinion of accepting MOOCs as proof for accredited prior learning for students entering your university?; What is your opinion on using pre-recorded lectures so that students can watch these in their own time, with lectures then being used more as interactive sessions?; What kind of professional development have you undertaken in recent years?; and Do you think that MOOCs could be useful to you in your own personal development?

To validate participants' input, the interview findings were triangulated via a focus group. This established wider consensus for the opinions expressed in relation to the earlier part of the research. Krueger and Casey (2008) stated that the ideal focus group size should be between 8 to 10 participants, as anything larger would curtail responses because the participants may encounter a social pressure to share airtime or alternatively they could feel ill at ease having to discuss issues in front of a large group. Ten participants attended the focus group.

Parahoo (2006) recognised that reflexivity has bias potential in itself so there are safeguards which need to be incorporated into the research design. He advised that the researcher should note their own feelings after the interview, within a postscript document, a tool also recommended by Helfferich (2009). This establishes a record of preconceptions, conflicts and assumptions which then facilitates self-monitoring, to prevent researcher bias. Parahoo (2006) referred to this as ‘self-injunction’, which helps create more authentic interpretations and findings. Following this procedure, the researchers are confident that the research design, data collection, data analysis, and data interpretation are free of researcher biases.

Purposive sampling was used because the information sought could not be gathered as effectively from other sources (Maxwell, 2005). Purposive sampling retains validity when the sample is representative, (and since the participants are all lecturers at an international branch campus, this is arguably the case), is measured correctly, (hence the validation through focus group meetings) and the methodology is reported accurately. Indeed, Maxwell (2005) suggested that the strength of purposive sampling lies in intentional bias. The data collection, handling, and analysis complied with the ethical guidelines of the British Educational Research Association (BERA, 2011).

### **Findings and Analysis**

This section summarises the key findings resulting from the semi-structured interviews with 20 interviewees and the focus group with 10 participants. To evaluate the outlook of the interviewees, they were asked, “What is your opinion on accepting MOOCs as proof of APL for students entering your university?” All 20 interviewees stated that they were against this, and the following quote captures the main essence of that opposition, “*I am concerned about how academic standards can be maintained in terms of assessment on such a massive scale and online... clearly the nature of assessments are either unmarked/peer marked or utilise MCQ methods,*” (Interviewee 6). This seems to validate The Economist’s (2014) assertion that most universities are still wary about crediting MOOCs. However one interviewee said that while they were currently against APL for MOOCs, they were open to reviewing matters as technology developed and more robust methods supported bona fide learning outcomes and proof of participation. That interviewee proposed that accepting MOOCs for APL “*is something to explore*” (Interviewee 8).

Within the focus group, there was debate on whether international branch campuses were more or less likely to lead the call for MOOCs to be used for APL. There was general agreement that MOOCs could provide a way of extending awareness of a university’s brand and, through the provision of a distance credit route, a way of attracting more international students. ‘Brand extension’ may be defined as the products linked to an organisational name that add value and guide future strategies and decisions (Aaker, 1990). However, there was fear expressed that this marketing style was akin to franchising, with one focus group member referring to it as the “*McDonaldisation of higher education*”.

The interviewees were asked their opinion on whether MOOCs would provide them with a platform for their own PD. Of the 20 interviewees, 13 said that it would, 3 thought it would not, while the remaining 4 stated that they were not sure. Most interviewees voiced concern over the fact that there were no formal PD routes in transnational education currently and one commented: “*The universities I have been in so far in the UAE have not been proactive with regards to PD ...so anything I have done is self-driven,*” (Interviewee 3).



When asked specifically whether MOOCs would impact upon their future PD most interviewees indicated that they were prepared to consider using MOOCs for PD. As Interviewee 4 noted, *“I will start using MOOCs since PD is not offered here anyway.”* This is consistent with the prediction by Jobe *et al.* (2014) that MOOCs offer untold potential for academic PD. There was some interest among the interviewees about creating their own MOOC, (after receiving instructional guidance on how to create a MOOC), with 5 of the 20 interviewees stating that such activity might lead to career progression, ironically perhaps, even outside traditional teaching roles.

Not all interviewees liked the idea of using MOOCs. Interviewee 13 commented, *“There are other tools which would provide me with better PD value.”* However, the interviewee did not enlarge on what these other tools actually were. The lack of subscription to MOOCs providing PD options is also consistent with Bobrowsky *et al.*, (2001) who noted that PD requires voluntary participation. Interestingly, 9 interviewees had enrolled in a MOOC of their own volition prior to this research. Their rationale for doing so broadly fitted within a PD perspective in that they were motivated to augment resources for their own lectures, and also because MOOCs allowed them to calibrate themselves against professors from universities such as Harvard, Stanford, and Yale.

In the focus group, 7 of the 10 participants believed that MOOCs offered them access to knowledge that might loosely be termed PD. All indicated that PD options were in short supply in their current roles. There was agreement that any online-learning option would be equally as appropriate as a MOOC, as it was the ease of access that was appealing. Thus, no particular MOOCs were endorsed. The participants agreed that MOOCs had PD potential, but what appeared to galvanize discussions was the process of learning how to create MOOCs themselves, which is consistent with the results from the interviews.

Several of the focus group participants expressed an interest in exploring ways to self-promote through MOOCs, as a means of career progression. It would appear from their discussion that although lecturers broadly perceive that MOOCs will have an impact on PD, what that impact will be is highly individualized. Some participants believe that international branch campuses will continue with a business-as-usual approach, while others predicted that MOOCs will become an innovative marketing tool that will augment student numbers rather than detract from applications. Proactive lecturers see MOOCs as a way to commercialize their own external activities, while others still look at MOOCs as a best-practice evaluation tool.

The interviewees were then asked if they perceived international branch campuses to be offering a commodified product. Universally, the interviewees thought there were differences between the ethos and financial priorities of the home campus to those of the international branch. Interviewees likened themselves to *“a second class citizen”* (Interviewee 3) and discussed their role as *“deskilling”* (Interviewee 2), while believing that *“We are not equal partners”* (Interviewee 14). Interviewee 9 thought that one weakness of international branch campuses was the typically high teaching load, which restricted participation in research activities, while Interviewee 12 added, *“There is very little scope to be innovative in transnational education teaching.”*

McBurnie and Ziguras (2007) and Wilkins (2010) researched the pressure that lecturers in the UAE were under to satisfy students’ expectations and had chronicled reports from lecturers of being asked to provide inflated marks. This point was articulated by several of the interviewees. The implicit aspect of ‘wasta’ (a term used in the Arabic world that refers to nepotism and the exploiting of personal positions and connections), highlighted by Wilkins and Balakrishnan

(2013, p. 8) was echoed by Interviewee 8, “...learners in the UAE tend to be strategic and always have a sense of entitlement to high grades, for example they expect to get 70%, 80% and are not really able to accept criticism and don't prepare themselves in the same way as students would at the home campus. They quite often apply the *wasta* principle to try and get higher grades or exoneration from some aspects of course compliance.” There were also stories shared during this research of senior management getting involved to ‘gently persuade’ lecturers into rethinking grades, either to maintain the bell curve pass rate or after specific student intervention.

Interviewee 10 stated, “Students’ are less academically demanding but want more contact time and need me to cover the basics for longer before I explain the additional idea, and then they complain to me when they receive their marks and feedback.” Many interviewees talked about the amount of non-class support time that they had to offer to students and believed that this was significantly higher in international branch campuses than would be seen in the home campus. There was a feeling among the focus group participants that although MOOCs could contribute to preparing students for a Western-style higher education, and could offer on-going support for students alongside their traditional college courses, MOOCs should not be used for students’ APL.

The focus group participants were asked whether the commodification of higher education in transnational settings would impact on whether MOOCs would be considered as a teaching medium in international branch campuses. There was a strong belief among the participants that any online learning component was not a substitute for face-to-face education and therefore MOOCs were not viewed as a threat to the lecturers’ current role. Wilkins (2010, 2013), reported that competitiveness within the UAE higher education market was leading institutions to seek new ways of reducing their costs. Interviewee 10 showed an awareness of the cost factor when they said, “The home campus might see MOOC teaching as a way to reduce costs and expand access.” This indicates that whereas Wilkins (2013) stated that MOOCs would not lead to degrees because international branch campuses are profit-driven, there is a contrasting belief that MOOCs may be incorporated into a delivery model that promotes expanding operations at minimal additional cost. This alternative view reflects the Educause (2012, p. 12) statement that MOOCs provide education access, experimentation, and brand extension for universities.

Interviewee 13 thought that international branch campuses were unlikely to be the first port of call for MOOC provision, but attributed this to the fact that implementation would be top down, and not bottom up, so would start in the home campus first. The perception that the implementation of MOOCs requires a top-down approach was not a consistent view. Some interviewees saw value in MOOCs because they incorporate leverage that digital resources provide. For example, several interviewees perceived MOOCs as a way of calibrating their own material and teaching style with that of leading universities, which is indicative that MOOCs are also subject to bottom up interest. This is exemplified by: “It is interesting to see how courses manage with big student numbers... The lectures are very much Ivy League products.” This endorses the implicit PD role that MOOCs can provide.

There was discussion on the differing student profiles which made MOOCs less likely to receive popularity in international branch campuses, with the following comment illustrating the unanimous belief that there were differences in the student requirements: “International branch campuses typically charge relatively high tuition fees. In international markets, it would be hard to justify these fees if considerable amounts of learning were done online. Also, students in transnational education need more support than the traditional students in America or Europe, and they would be less likely to achieve success if they worked independently using MOOCs.

*Students at international branch campuses expect to be able to engage with faculty and ask lots of questions and receive face-to-face support. Even if MOOCs were used to deliver the main lectures, the students here would still need to be tied to a supervisor or tutor in order to work through the course,” (Interviewee 6).*

This epitomised the general belief that students in transnational education require interaction with lecturers as well as validating the earlier reports on the UAE student profile (McBurnie and Ziguras, 2007; Altbach, 2010; Gerson 2010, Wilkins, 2010, 2013; Wilkins and Balakrishnan, 2013). Several interviewees and focus group participants explicitly stated that their students were unlikely to meet the rigour of entry to their university’s home campus. In summary, it was believed that these students might make effective use of MOOCs as a preparation or supplement to their traditional degree programmes, but that MOOCs could not replace traditional lectures, seminars, and tutorials or be used effectively for students’ APL.

Ethnicity may highlight differences in values and cultural practices when applied to specific groups (Markus and Kitayama, 2003), but the ethnicity of the lecturers did not provide evidence of a particular divergence in opinions. This emphasises the study by Cole and Barber (2003) which noted that faculty integration was a stronger tie than lecturer ethnicity. Also, there were no perceptible differences in answers between sexes or lecturers of different rank. Bamshad and Olson (2003, p. 80) explained that often individuals from different populations are, on average, just slightly more different from one another than are individuals from the same population. Tarhini et al., (2015) reported that technology acceptance models may not be applicable across all countries. As a result this study is considered a useful guide for other researchers to understand whether the acceptance of MOOCs is affected by the individuals’ cultural background or whether the acceptance is mainly based on the key determinants of technology itself (behavioural beliefs).

## **Discussion**

Accepting MOOCs for APL was not endorsed by the participants in this study due to the under-developed verification routes and the inability to gauge learning outcomes. Most MOOCs do not currently offer credit award or validation. This may, in part, be attributed to the difficulty in establishing verifiable participation and achieving validated online assessment. There was moderate agreement that MOOCs might be useful to students as a supplementary resource to help them prepare for the demands of Western higher education before they start their degree programmes, or to use MOOCs alongside traditional delivery methods, such as lectures and seminars. Nonetheless, the argument regarding cultural effects on technology adoption has been polarised within previous literature (Tarhini et al., 2015; Sharma et al., 2014).

It was interesting that while MOOCs were not seen as practical for students’ APL, they were perceived as viable for lecturers’ PD; 13 of the 20 interviewees and 7 of the 10 focus group participants stated that MOOCs offered PD potential, particularly in the absence of current formal routes. MOOCs offer unexploited potential for lecturers PD, particularly if the specific MOOC is structured to demonstrate excellence in teaching and/or provide guidance on making MOOCs. Strategically targeting MOOCs towards lecturers’ PD may be a way to develop more linkages with mainstream face-to-face education. Lecturers’ own online professional following could be grown through MOOCs which may benefit university brand extension via the new global student that could be attracted. The ambiguous classification of APLs (Selman *et al.*, 1998; Conrad and McGreal, 2012) was not explicitly discussed. Nonetheless, it was implicit

from the views expressed by the lecturers in this study that while they had concerns about verifying the credence of APL for students, they were much happier to accept the viability of APL as evidence of their own experiential learning for PD purposes.

There is also potential mileage to create access to a peer-group or expert interface that might benefit learning-effects by creating a platform for enhanced contribution. Using MOOCs for PD provides learning development opportunities. The development lies in seeing other teaching styles, evaluating material that might be useful to draw upon or present to students, and also the chance to learn how to create a MOOC. There was recognition that MOOCs could impact on an individual lecturers' career if they become a first-mover within MOOC provision. The international branch campus lecturers believed that their UK counterparts' networking prospects are greatly enhanced through conference attendance and research opportunities. Therefore, MOOC creation had the potential to forge international networked relationships.

The commodification of higher education in transnational settings was perceived to be a negative attribute. The student profile was believed to be markedly different in the UAE to that which was perceived to exist in the UK; there was no emergent conversation on how to align these differences. International branch campuses are structured for a specific type of fee-paying learner and although students' technological dependence has evolved, the lecturers who participated in this research perceived that their students want more interface and support via traditional face-to-face teaching, and they unanimously concluded that MOOCs could not provide the required interaction. This presents a bifurcated view in that whilst the lecturers interviewed accepted that students were more technologically driven (Wilkins and Balakrishnan, 2013), they also held a resistance to the idea that these same students would embrace innovation within teaching delivery. Thus, these lecturers did not support the view of Mazzarol and Soutar (2002), who claimed that innovation and technology would be pull factors for students seeking an international education. Furthermore it does not negate the efficacy of using broader technology applications as resource platforms; indeed Sharma et al., (2016) looked at the causal relationship of social influence, perceived usefulness and resource sharing for students in higher education in Oman and discovered that the most influencing factor was the students' prevalence towards resource sharing via Facebook.

## **Conclusion**

One of the main reasons why higher education institutions have been reluctant to give academic credit for achievement in MOOCs is that admissions tutors cannot usually be sure that the person who completed the course and passed the assessments is the same person who enrolled. The MOOC providers have recognized this problem and have recently introduced new strategies to tackle this issue. For example, Coursera has piloted the use of keystroke biometrics, which involves analysis of each user's pattern and rhythm of typing, while other MOOC providers, such as edX, have required students to take assessments at physical testing centres, and to show ID when enrolling and taking assessments (Young, 2013).

If students that use MOOCs are taking courses that are comparable with university degree programmes, then denying these students APL might be causing them to unnecessarily repeat courses and to enrol on degree programmes for longer periods than is really justified. Higher education institutions should stay abreast of developments in the content and assessment of MOOC courses, and in student identity confirmation, so that applicants can be treated fairly and the institutions themselves can increase their student numbers. Even if institutions are not yet

prepared to recognize MOOCs for APL, rather than ignoring them completely, it would be sensible to consider them as a piece of additional information that can be used in the admissions process. Irrespective, a common agreement of what constitutes APL needs to be explored by higher education institutions given that there seems to be a dichotomy between whether APL is academically or experientially evidenced or the result of an either/or approach.

It is likely that in the next few years we will see new forms of MOOCs appearing, including hybrid versions that are used by and integrated into traditional higher education institutions. Several universities have announced agreements to licence MOOC content for inclusion in campus-based courses, which will provide credit to students. This could provide a win-win scenario in which the MOOC creators achieve revenue and the receiving institutions receive a high-quality learning resource at a relatively low cost. International branch campuses that are required to minimize costs so that they can produce profit, or at least break-even, might be well-suited to incorporating *some* MOOC content into traditional programmes. However, there was a strong belief that the working environment is different within international branch campuses to that of home campuses, due to commodification influences and different student profiles, with the two aspects being inexorably linked. This led to an assumption that the student cohort attending international branch campuses predominantly require and desire traditional face-to-face teaching and support.

International branch campuses that intend to use MOOCs in programme delivery will need to consider how their students and staff would react to such a move, and how this might impact upon institutional image and reputation. Students taking full-time programmes on campus might expect and insist upon face-to-face contact with lecturers, while the lecturers might fear that the institution is trying to replace faculty with lower cost online resources. It is clear that any wide scale licencing model would result in a two-tier hierarchy of educational institutions: the prestigious and wealthy creators of MOOCs and the lower-ranked and less wealthy buyers of MOOC content. Nevertheless, by associating themselves with the world's most prestigious universities, some international branch campuses might actually enhance their reputations by gaining networking benefits and better engaging part-time and distance students, alumni, and local employers.

It appears that the most revolutionary aspect of MOOCs was not in creating an alternative demand pattern for education, but in providing lecturers with PD options. It was perceived that MOOC development, alongside MOOC participation, were potential PD activities that could lead to more effective pedagogy, resource sharing, and career progression, especially for those who could stimulate support for their teaching activities within a wider market. MOOC creation may, for example, stimulate effective links to international networked relationships especially when lecturers at international branch campuses perceive that they lack such networking opportunities, in contrast to the prospects of their home campus counterparts. Given that lecturers in transnational education settings typically perceive that they are deprived of PD opportunities, institutions might promote and encourage staff to engage with MOOCs, both as users and creators. MOOCs that facilitate peer engagement might be viewed particularly favourably.

To our knowledge, this is the first study that has been conducted in a transnational education setting, which has explored three possible uses of MOOCs by higher education institutions. The uniqueness of the environment in which international branch campuses operate, as well as their different objectives and student profiles, provide the rationale for this research. The research has

identified a number of recommendations for higher education institutions operating in transnational settings, which might improve both institutional and individual performance.

The research is not without limitations. Our research relied on cross-sectional data obtained at only two university campuses in one country. While the interview and focus group samples provided an abundance of data, it is recognized that they are not sufficient in size or range to allow for generalization. Lecturers in international branch campuses do not necessarily represent the diversity that is found within the lecturer population as a whole, nor do they represent the experiences of other lecturers in transnational education, or even in the UAE.

The research sought to obtain the views and attitudes of academic staff but these could change over time and vary according to how much experience individuals had of interacting with MOOCs. Future research could compare the performance of students who had received APL for completing a MOOC against those students who did not receive such credit. It would also be interesting to investigate the outcomes in institutions that incorporate MOOCs into programme delivery, and the work performance and career progression of academic staff who complete MOOCs in their PD.

## References

- Aaker, D.A. (1990), "Brand extensions: the good, the bad, and the ugly", *Sloan Management Review*, Vol. 31 No. 4, pp. 47-56.
- Altbach, P.G. (2000), "The changing academic workplace: comparative perspectives", available at: <http://www.rdisa.org.mx/documentos/Libros/academicworkplace%202000.pdf> (accessed 28 February 2015).
- Altbach, P.G. (2010), "Why branch campuses may be unsustainable", *International Higher Education*, No. 58, available at: [https://htmlbprod.bc.edu/pls/htmlb/CIHE.cihe\\_public\\_rpt2.download\\_issue?p\\_issue\\_id=110100](https://htmlbprod.bc.edu/pls/htmlb/CIHE.cihe_public_rpt2.download_issue?p_issue_id=110100) (accessed 10 March 2015).
- Ansell, S.E. and Park, J. (2003), "Tracking tech trends", *Education Week*, Vol. 22 No. 35, pp. 43-44.
- Atherton, A., and Elsmore, P. (2007), "Structuring qualitative enquiry in management and organization research: a dialogue on the merits of using software for qualitative data analysis", *Qualitative Research in Organizations and Management: An International Journal*, Vol. 2 No. 1, pp. 62-77.
- Bamshad, M.J. and Olson S.E. (2003), "Does Race Exist?" *Scientific American*, Vol. 289 No. 6, pp. 78-85.
- Bates, T. (2013), "Harvard's current thinking on MOOCs", available at: <http://tinyurl.com/a2uh86z> (accessed 5 August 2014).
- Bayne, S. and Ross J. (2014), "The pedagogy of the massive open online course: the UK view", *Higher Education Academy*, available at: [https://www.heacademy.ac.uk/sites/default/files/HEA\\_Edinburgh\\_MOOC\\_WEB\\_240314\\_1.pdf](https://www.heacademy.ac.uk/sites/default/files/HEA_Edinburgh_MOOC_WEB_240314_1.pdf) (accessed 28 February 2015).
- BERA. (2011), *Ethical Guidelines for Ethical Research*, British Educational Research Association, London.
- Bobrowsky, W., Marx, R. and Fishman. B. (2001), "The empirical base for professional development in science education: moving beyond volunteers", Annual Meeting of the National Association of Research in Science Teaching (NARST), St. Louis, MO.

- Brooks, M.C. and Gaetane, J.M. (2015), “The challenges to and the need for international research in educational leadership”, *International Journal of Educational Management*, Vol. 29 No.7, pp. 874-887.
- Burrell, G. and Morgan, G. (1979), *Sociological Paradigms and Organizational Analysis: Elements of the Sociology of Corporate Life*, Ashgate, Aldershot.
- C-BERT. (2015), “Research and news about educational institutions moving across border: quick facts”, available at: <http://www.globalhighered.org/> (accessed 6 May 2015).
- Charmaz, K. (2005), “Grounded theory for the 21st century: applications for advancing social justice studies”, in Denzin, N.K. and Lincoln, Y.S. (Eds), *The Sage Handbook of Qualitative Research*, 3<sup>rd</sup> edition, Sage, Thousand Oaks, CA, pp. 507-535.
- Chen, Y.Y., Shek, D.T. and Bu, F.F. (2011), “Applications of interpretive and constructionist research methods in adolescent research: Philosophy, principles and examples”, *International Journal of Adolescent Medicine and Health*, Vol. 23 No.2, pp.129–139.
- Coffey, A., Holbrook, B and Atkinson, P. (1996), “Qualitative data analysis: technologies and representation”, *Sociological Research On-Line*, available at: <http://www.socresonline.org.uk/1/1/4.html> (accessed 10 March 2015).
- Cole, S. and Barber, E. (2003), *Increasing Faculty Diversity: The Occupational Choices of High-Achieving Minority Students*, Harvard University Press, Cambridge, MA.
- Conole, G. (2013), “MOOCs as disruptive technologies: strategies for enhancing the learner experience and quality of MOOCs”, *RED, Revista de Educación a Distancia*, Número 39, 15 de diciembre de 2013, available at: <http://www.um.es/ead/red/39/> (accessed 11 February 2015).
- Conrad, D., and McGreal, R. (2012), “Flexible paths to assessment for OER learners: a comparative study”, *Journal of Interactive Media in Education*, available at: <http://www-jime.open.ac.uk/jime/article/view/2012-12> (accessed 30 August 2015)..
- Cooper, D.R. and Schindler, P.S. (2003), *Business Research Methods*, 8<sup>th</sup> edition, McGraw-Hill Irwin, Boston.
- Cooper, S. and Sahami, M. (2013), “Reflections on Stanford’s MOOCs”, *Communications of the ACM*, Vol. 56 No. 2, pp. 28-30.
- Educause. (2012), “What campus leaders need to know about MOOCs”, available at: <https://net.educause.edu/ir/library/pdf/PUB4005.pdf> (accessed 10 March 2015).
- EU Commission. (2012), “Recognition of prior non-formal and informal learning in higher education”, available at: <http://eacea.ec.europa.eu/education/eurydice/documents/focus-on/152.pdf> (accessed 18 February 2015).
- Fishman, B., Marx, R., Best, S. and Tal. R. (2003), “Linking teacher and student learning to improve professional development in systemic reform”. *Teaching and Teacher Education*, Vol. 19 No. 6, pp. 643-658.
- Gerson, J. (2010), “Inflation of grades is widespread”, *The National*, available at: <http://www.thenational.ae/apps/pbcs.d11/article?AID=/20100124/NATIONAL/701239914&SearchID=73381447367283> (accessed 18 February 2015).
- Gibbs, P. (2010), “The commoditization and standardization of higher education”, in Maringe, F. and Foskett, N. (Eds), *Globalization and Internationalization in Higher Education*, Continuum, London, pp. 241-253.
- Guest, G., Bunce, A. and Johnson, L. (2006), “How many interviews are enough? An experiment with data saturation and variability”, *Field Methods*, Vol 18 No. 1, pp. 59-82.

- Helfferrich, C. (2009), *Die Qualität Qualitativer Daten: Manual für die Durchführung Qualitativer Interviews*, 3<sup>rd</sup> edition, VS Verlag für Sozialwissenschaften, Wiesbaden (translated).
- Hsiu-Fang H. and Shannon, S.E. (2005), “Three approaches to qualitative content analysis”, *Qualitative Health Research*, available at: <http://qhr.sagepub.com/content/15/9/1277> (accessed 12 March 2015).
- Hughes, J.E. and Ooms, A. (2004), “Content-focused technology inquiry groups: preparing urban teachers to integrate technology to transform student learning”, *Journal of Research on Technology in Education*, Vol. 36 No. 4, pp. 397-411.
- Jobe, W., Östlund, C. and Svensson, L. (2104), “MOOCs for professional teacher development, available at: [https://oerknowledgecloud.org/sites/oerknowledgecloud.org/files/proceeding\\_130997%20\(3\).pdf](https://oerknowledgecloud.org/sites/oerknowledgecloud.org/files/proceeding_130997%20(3).pdf) (accessed 28 February 2015).
- Jonker, C. and Botma N. (2012), “The emotion experiences of employees in a work setting”, in Ashkanasy, N.M, Härtel, C.E.J. and Zerbe, W.J. (Eds), *Experiencing and managing emotions in the workplace*, Research on Emotion in Organizations, Volume 8, Emerald, Bingley, pp. 13-49.
- Kennedy, J. (2014), “Characteristics of massive open online courses (MOOCs): a research review, 2009-2012”, *Journal of Interactive Online Learning*, Vol 13 No. 1, pp. 1-16.
- Kline, R. (2009), *The Impact of Marketisation on Industrial Relations in Higher Education*, British Universities Industrial Relations Association, Salford.
- Krueger, R.A. and Casey, M.A. (2008), *Focus Groups: A Practical Guide for Applied Research*, 4<sup>th</sup> edition, Sage, Thousand Oaks, CA.
- Lane, J.E. (2010), “International branch campuses, free zones, and quality assurance: policy issues for Dubai and the UAE”, Dubai School of Government Policy Briefing, available at: <http://www.dsg.ae/portals/3/DSG%20Policy%20Brief%2020%20English.pdf> (accessed 12 March 2015).
- Lawless, K.A. and Pellegrino, J.W. (2007), “Professional development in integrating technology into teaching and learning: knowns, unknowns, and ways to pursue better questions and answers”, *Review of Educational Research*, Vol. 77 No. 4, pp. 575-614.
- Mackness, J., Waite, M., Roberts, G. and Lovegrove, E. (2013), “Learning in a small, task-oriented, connectivist MOOC: pedagogical issues and implications for higher education”, *The International Review of Research in Open and Distance Learning*, Vol. 14 No. 4, pp. 1-20.
- Markus, H.R., and Kitayama, S. (2003), “Culture, self, and the reality of the social”, *Psychological Inquiry*, Vol. 14 No. 3/4, pp. 277-283.
- Maxwell, J.A. (2005), *Qualitative Research Design: An Interactive Approach*, Sage, Thousand Oaks, CA.
- Mazzarol, T. and Soutar, G.N. (2002), “Push-pull factors influencing international student destination choice”, *International Journal of Educational Management*, Vol. 16 No. 2, pp. 82-90.
- McBurnie, G. and Ziguras, C. (2007), *Transnational Education: Issues and Trends in Offshore Higher Education*, Routledge, Abingdon.
- Morgan, J. (2013), “Leading voices pooh-pooh Moocs and echo Thatcher’s famous line”, *Times Higher Education*, available at: <http://www.timeshighereducation.co.uk/principal-poll-v-cs-dont-rate-mooc-threat/2004981.article> (accessed 28 February 2015).



- Naidoo, R. (2003), "Repositioning higher education as a global commodity: opportunities and challenges for future sociology of education work", *British Journal of Sociology of Education*, Vol. 24 No. 2, pp. 248-258.
- Onwuegbuzie, A.J. and Leech, N.L. (2007), "A call for qualitative power analyses", *Quality and Quantity: International Journal of Methodology*, Vol. 41 No. 1, pp. 105-121.
- Orrill, C.H. (2001), "Building technology-based, learner-centered classrooms: the evolution of a professional development framework", *Educational Technology Research and Development*, Vol. 49 No. 1, pp. 15-34.
- Parahoo, K. (2006), *Nursing Research: Principles, Process and Issues*, 2<sup>nd</sup> edition, Palgrave Macmillan, Basingstoke.
- Parr, C. (2013), "Futurelearn plans Moocs for mobiles", *Times Higher Education*, available at: <http://www.timeshighereducation.co.uk/news/futurelearn-plans-moocs-for-mobiles/2004010.article> (accessed 17 April 2014).
- Rodriguez, C.O. (2012), "MOOCs and the AI-Stanford like courses: two successful and distinct course formats for massive open online courses", *European Journal of Open, Distance and E-Learning*, available at: <http://www.eurodl.org/?p=current&article&article=516> (accessed 11 November 2014).
- Sandeen, C. (2013), "Integrating MOOCs into transnational higher education: the emerging "MOOC 3.0" era", *Change: The Magazine of Higher Learning*, Vol. 45 No. 6, pp. 34-39.
- Schwartz, K. (2013), "MOOCs for teachers: Coursera offers online teacher training program", *Mindshift*, available at: <http://blogs.kqed.org/mindshift/2013/04/new-online-teacher-training-program-joins-mooc-madness/> (accessed 11 November 2014).
- Selman, G., Selman, M., Dampier, P. and Cooke, M. (1998), *The foundations of adult education in Canada*, 2nd ed. Thompson, Toronto.
- Sharma, S.K., Chandel, J.K., and Govindaluri, S.M. (2014), "Students' acceptance and satisfaction of learning through course websites", *Education, Business and Society: Contemporary Middle Eastern Issues*, Vol. 7 No 2/3, pp.152-166.
- Sharma, S. K., Joshi, A., and Sharma, H. (2016), "A multi-analytical approach to predict the Facebook usage in higher education", *Computers in Human Behavior*, Vol. 55, pp. 340-353.
- Shirky, C. (2012), "Napster, Udacity and the Academy", available at: <http://www.shirky.com/weblog/2012/11/napster-udacity-and-the-academy/> (accessed 11 November 2014).
- Sim, J. (1998), "Collecting and analyzing qualitative data: issues raised by the focus group", *Journal of Advanced Nursing*, Vol. 28 No. 2, pp. 345-352.
- Sin, N.L. and Lyubomirsky, S. (2009), "Enhancing well-being and alleviating depressive symptoms with positive psychology interventions: a practice friendly meta-analysis", *Journal of Clinical Psychology*, Vol. 65 No. 5, pp. 467-487.
- Spector, P.E. (2001), "Research methods in industrial and organizational psychology: data collection and data analysis with special consideration to international issues", in Anderson, N., Ones, D.S., Sinangil, H.K. and Viswesvaran, C. (Eds), *Handbook of Industrial, Work and Organizational Psychology, Vol. 1: Personnel Psychology*, Sage, London, pp. 10-26.
- Tarhini A., Scott M., Sharma S.K., and Abbasi M. (2015), "Differences in Intention to Use Educational RSS Feeds Between Lebanese and British Students: A Multi-Group Analysis Based on the Technology Acceptance Model", *The Electronic Journal of e-Learning* Vol. 13 No 1, pp. 14-29, available at [www.ejel.org](http://www.ejel.org) (accessed 8 October 2015).

- The Economist. (2014), "The future of universities: the digital degree", available at: <http://www.economist.com/news/briefing/21605899-staid-higher-education-business-about-experience-welcome-earthquake-digital> (accessed 10 March 2015).
- URMIA. (2011), *International Branch Campuses and Unique Risk Considerations*, available at: [http://irc.nacubo.org/Documents/URMIA\\_InternationalBranchCampuses\\_FINAL\\_20110718.pdf](http://irc.nacubo.org/Documents/URMIA_InternationalBranchCampuses_FINAL_20110718.pdf) (accessed 16 September 2014).
- Wilkins, S. (2010), "Higher education in the United Arab Emirates: an analysis of the outcomes of significant increases in supply and competition", *Journal of Higher Education Policy and Management*, Vol. 32 No. 4, pp. 389-400.
- Wilkins, S. (2013), "The future of transnational higher education: what role for international branch campuses?" in de Wit, H., Hunter, F., Johnson, L. and van Liempd, H. (Eds), *Possible Futures: The Next 25 Years of the Internationalisation of Higher Education*, European Association for International Education, Amsterdam, pp. 182-186.
- Wilkins, S. and Balakrishnan, M.S. (2013), "Assessing student satisfaction in transnational higher education", *International Journal of Educational Management*, Vol. 27 No. 2, pp. 143-156.
- Wilkins, S. and Huisman, J. (2012), "The international branch campus as transnational strategy in higher education", *Higher Education*, Vol. 64 No. 5, pp. 627-645.
- Young, J.R. (2013), "Coursera announces details for selling certificates and verifying identities", *Chronicle of Higher Education*, January 9, available at: [http://chronicle.com/blogs/wiredcampus/coursera-announces-details-for-sellingcertificates-and-verifying-identities/41519?cid=at&utm\\_source=at&utm\\_medium](http://chronicle.com/blogs/wiredcampus/coursera-announces-details-for-sellingcertificates-and-verifying-identities/41519?cid=at&utm_source=at&utm_medium) (accessed 28 February 2015).
- Yuan, L. and Powell, S. (2013), *MOOCs and Open Education: Implications for Higher Education: A White Paper*, University of Bolton, available at: <http://publications.cetis.ac.uk/wp-content/uploads/2013/03/MOOCs-and-Open-Education.pdf> (accessed 28 February 2015).
- Yuan, L., Powell, S. and Oliver, B. (2014), *Beyond MOOCs: Sustainable Online Learning in Institutions*, CETIS Publications, available at: <http://publications.cetis.ac.uk/2014/898> (accessed 28 February 2015).