

**CONCORSO PUBBLICO, PER ESAMI, A N. 1 POSTI DI CATEGORIA D, POSIZIONE ECONOMICA D1, AREA TECNICA, TECNICO-SCIENTIFICA ED ELABORAZIONE DATI, PER LE ESIGENZE DEL CENTRO DI SERVIZIO DI ATENEO "FEDERICA WEBLEARNING – CENTRO DI ATENEO PER L'INNOVAZIONE, LA SPERIMENTAZIONE E LA DIFFUSIONE DELLA DIDATTICA MULTIMEDIALE" DELL'UNIVERSITÀ DEGLI STUDI DI NAPOLI FEDERICO II (COD. RIF. 2102), INDETTO CON DECRETO DEL DIRETTORE GENERALE N. 637 DEL 5.08.2021 E DI CUI E' STATO DATO AVVISO SULLA GAZZETTA UFFICIALE IV SERIE SPECIALE – CONCORSI ED ESAMI N. 67 DEL 24.08.2021**

**QUESITI ESTRATTI ALLA PROVA ORALE DEL 20.10.2021**

**PROVA ORALE N. 1 CONCORSO PUBBLICO COD. RIF. 2102**

1. La candidata/il candidato illustri quali dei recenti trend tecnologici nel campo dell'Education Technology possono essere applicati alla formazione in ambito Lifelong Learning;
2. Si illustrino le principali differenze che intercorrono tra la piattaforma Coursera e Udacity, descrivendo i modelli di business adottati;
3. La candidata/il candidato illustri le principali esperienze MOOC realizzate da istituzioni museali;
4. Si definiscano e descrivano quali funzioni di un software gestionale in cloud possono essere utilizzate per la gestione di azioni ridondanti.

## PROVA ORALE N. 1 CONCORSO PUBBLICO COD. RIF. 2102

5. Leggere e tradurre un estratto dell'articolo scientifico: "*The Future of MOOCs: Adaptive Learning or Business Model?*", Sir John Daniel, Esteban Vázquez Cano and Mercè Gisbert Cervera, RUSC Vol. 12 No. 1, Universitat Oberta de Catalunya and University of New England, Barcelona, January 2015, pag. 65.

### Introduction

Higher education regularly speculates about how to accommodate more learners at lower costs and facilitate the spread of knowledge. Many possible scenarios include an important role for technology and online learning. Massive open online courses (MOOCs) could be an interesting strategy towards these objectives, even if these are not the goals of most institutions offering MOOCs.

MOOCs now have more than 5 million students worldwide, of which most are aged between 26 and 45 and have university degrees or previous higher education studies. MOOCs provide these students flexibility and free courses on a variety of themes. However, they are not accredited and the level of abandonment (drop out) from the courses is between 60% and 90% of students enrolled.

In this article we review five dimensions that can promote the quality and effectiveness of MOOCs as a contribution to higher education.

### Trends and challenges to ensure MOOCs have a sustainable future

John Henry Newman, an English Roman Catholic cardinal, defined the post-Enlightenment university in *The Idea of a University* (1858) as "a place for the communication and circulation of thought, by means of personal intercourse, through a wide extent of country". But he warned that without the personal touch, higher education could become "an icebound, petrified, cast-iron university" (The Economist, 2014). That is a warning for MOOCs as well.

The MOOC world is evolving quickly with new pedagogical types and new users as the concept gradually matures. The MOOCs of the future will probably be different from what they are now as we see change on five dimensions: the teaching model, monetization, certification, adaptive learning and MOOCs for developing countries.

## **PROVA ORALE N. 2 CONCORSO PUBBLICO COD. RIF. 2102**

1. La candidata/il candidato illustri le possibili strategie di interazione tra stakeholder accademici nell'ambito della Digital Education;
2. Si illustrino le principali differenze che intercorrono tra la piattaforma Coursera e Udemy, descrivendo i modelli di business adottati;
3. La candidata/il candidato illustri un potenziale portfolio formativo da utilizzare per la produzione di corsi MOOC rivolti alle PMI italiane;
4. Si definiscano le principali differenze tra due tra i principali software di virtual classroom (ad esempio Google Meet e Zoom).

## PROVA ORALE N. 2 CONCORSO PUBBLICO COD. RIF. 2102

5. Leggere e tradurre un estratto dell'articolo scientifico: "*The Future of MOOCs: Adaptive Learning or Business Model?*", Sir John Daniel, Esteban Vázquez Cano and Mercè Gisbert Cervera, RUSC Vol. 12 No. 1, Universitat Oberta de Catalunya and University of New England, Barcelona, January 2015, pag. 66.

### **The business model from "freemium" to "premium"**

The financial framework of MOOCs is another major issue. Various approaches all have business models that are still under development. These models depend on how institutions are funded. For example, European universities are largely publicly funded and the question is whether they have the right to produce MOOCs and if the opportunity cost can be justified in the current funding squeeze (Gaebel, 2014). The costs of developing MOOCs can be high and the process demands commitment of personnel time and effort. Course design and delivery has shifted from a solo endeavour to team efforts including administrators in offices of digital technology, instructional designers, instructional technologists, videographers, and project managers (Hollands & Tirthali, 2014). In the United States, Coursera offers universities 6 to 15 per cent of the gross revenue generated by each of their MOOCs on its platform, as well as 20 per cent of the profits generated by the "aggregate set of courses" provided by the university (Kolowich, 2013a).

Another unresolved issue, at least in European universities, is how to remunerate teachers, tutors and professors or how to integrate their participation in MOOCs into their workload. The largest ever survey of professors who have taught MOOCs, conducted by The Chronicle (2013), shows that many of those surveyed felt that these free online courses should be integrated into the traditional system of credit and degrees and two-thirds believed MOOCs would drive down the cost of earning a degree from their home institutions. An overwhelming majority believed that the free online courses would make college less expensive in general (Kolowich, 2013b).

To make MOOC courses financially viable, different monetization approaches have been implemented. Testing and certification of MOOC participants, who for individual courses remain low in number and disseminated widely around the globe, is also a growing domain for specialist companies, such as ProctorU and Pearson. An edX representative recently announced the "post-MOOC" era as its members start experimenting with SPOCs – small private online courses with fixed enrolments (Fox, 2013).

### **PROVA ORALE N. 3 CONCORSO PUBBLICO COD. RIF. 2102**

1. La candidata/il candidato illustri i possibili modelli organizzativi e le principali aree funzionali presenti in un'organizzazione che si occupa di produzione e distribuzione di corsi MOOC;
2. Si descrivano le principali differenze che intercorrono tra la piattaforma Coursera e edX, sottolineando i modelli di business adottati;
3. Il La candidata/il candidato illustri, con esempi concreti, i possibili modelli di partnership utilizzati nel mondo MOOC e della digital education;
4. La candidata/il candidato illustri le principali funzionalità di condivisione presenti nei principali strumenti di storage in cloud (ad esempio Google Drive).

## PROVA ORALE N. 3 CONCORSO PUBBLICO COD. RIF. 2102

5. Leggere e tradurre un estratto dell'articolo scientifico: "*The Future of MOOCs: Adaptive Learning or Business Model?*", Sir John Daniel, Esteban Vázquez Cano and Mercè Gisbert Cervera, RUSC Vol. 12 No. 1, Universitat Oberta de Catalunya and University of New England, Barcelona, January 2015, pag. 67.

### **Certification or/and accreditation**

Certification is, after monetization, the most contentious issue with regard to MOOCs. Accreditation has two aspects for MOOCs. The first is that it opens the door to revenue from course fees. Second (and less discussed for the moment) is the issue of how learning is assessed, authenticated and valued by employers (BIS, 2013). There has been speculation whether higher education institutions will lose the monopoly on degree and credit validation, as other education providers start to issue badges and certificates, which are accepted by employers (Gaebel, 2014, Fain, 2014). In Europe, surprisingly, there has been no real discussion on whether MOOCs should earn credits, and whether they could be related to the instruments of the European Higher Education Area (ECTS, recognition of prior learning).

It is difficult to understand how MOOCs can change higher education if they do not award credits, whether in blended or in distance-learning mode – unless they involve new ways of validation which either complement or compete with existing credit systems (Gaebel, 2014). A report from credit rating agency Moody's on the income prospects of US higher education institutions points to MOOCs as an additional income source – provided they award credits (Moody's Investor Service, 2013).

In this context, the Massachusetts Institute of Technology (MIT) announced recently that it would offer certificates to students who passed a sequence of seven courses in computer science. EdX, the non-profit MOOC provider founded by MIT and Harvard University, calls such certificate programmes "XSeries", with the expectation that other institutions among its university partners will create certificate-bearing sequences of their own (Kolowich, 2014). Along these lines, the American Council on Education (ACE) endorsed five MOOCs for credit: "Bioelectricity: A Quantitative Approach," from Duke University; "Pre-Calculus" and "Algebra" from the University of California at Irvine, and "Calculus: Single-Variable" from the University of Pennsylvania. All five are offered through Coursera. The council

## **PROVA ORALE N. 4 CONCORSO PUBBLICO COD. RIF. 2102**

1. La candidata/il candidato descriva due modelli di business adottati dalle principali piattaforme MOOC;
2. Si descrivano tre dei principali recenti trend tecnologici dell'Education Technology;
3. La candidata/il candidato illustri le principali differenze che intercorrono tra un OPM (online program manager) e una piattaforma MOOC;
4. Si illustrino le principali tipologie di visualizzazione dei dati presenti nei software di Data visualization più diffusi (ad esempio Tableau).

## PROVA ORALE N. 4 CONCORSO PUBBLICO COD. RIF. 2102

5. Leggere e tradurre un estratto dell'articolo scientifico: “*The Future of MOOCs: Adaptive Learning or Business Model?*”, Sir John Daniel, Esteban Vázquez Cano and Mercè Gisbert Cervera, RUSC Vol. 12 No. 1, Universitat Oberta de Catalunya and University of New England, Barcelona, January 2015, pag. 67.

### **MOOCs for developing countries and in fragile contexts**

MOOCs are not yet a hot issue for educational policymakers in most middle and low-income countries. To date, the MOOC movement has paid insufficient attention to the real needs in the developing world. There are many issues and challenges that MOOC providers and policymakers have to overcome in fragile contexts. In many developing countries, computer literacy is still underdeveloped; for example Sri Lanka has an adult literacy rate of 91% (UNICEF, 2013) but a digital literacy rate of only 20.3% (Department of Census and Statistics Sri Lanka, 2009) and in most developing countries there is simply inadequate technology infrastructure to support the systematic use of MOOCs in any substantial way. While MOOC providers produce high definition videos to satisfy developed countries' participants, due to poor connections these videos take a long time to download or fail to do so. These countries need more suitable engagement tools such as: lower resolution videos, offline “burst connectivity” tools, and offline reading and composition of replies (Liyaganawardena, Williams, & Adams, 2013).

Even where the technology infrastructure is in place and affordable, to date most of the courses have been offered in English or Spanish. While this is now changing, it still represents a significant barrier to participation in MOOCs by the majority of learners. Most developing countries have local languages and people in these countries are rarely competent in an international language. This language challenge has been addressed by some companies, such as Coursera with its Global Translator Community (GTC) initiative, a programme designed to greatly expand the number of courses offering high-quality subtitle translations, but more efforts are needed in order to guarantee that language is not a barrier.

Furthermore, courses need a cultural adaptation to ensure the inclusion of all participants both in intellectual debates and in forums avoiding unacceptable cultural posts (Mak, Williams & Mackness, 2010). MOOCs offered in developing countries should adapt to the local setting and contextualize courses for the competencies and skills required in these countries. In this regard, some initiatives are emerging, such as the new pilot initiative in Tanzania with support from the World Bank, that seek to incorporate Coursera offerings as part of a broader initiative to help equip students with market-relevant IT skills. Employers in Tanzania complain that there is a mismatch of skills in the local labour market. There is a growing need for IT and ICT knowledge and skills necessary meet growing demand for technically skilled workers across Tanzanian corporations (Trucano, 2013ab).

PER ORDINE DEL PRESIDENTE  
IL SEGRETARIO DELLA COMMISSIONE  
F.to dott. Pasquale PIROLI