

In and Out. Federica experience in the rugged terrain of MOOCs inclusion in institutional strategies of university education

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Abstract. MOOCs are increasing their role in vocational training in the American market, also as a result of the synergy between large universities and leading corporate players in the accreditation of online courses. In Europe, most universities seem to be caught in between two competing strategies. Either they produce a limited number of MOOCs, distributed through the big American providers and mainly aimed at the international market. Or they try to design MOOCs to be integrated into their own curricular courses, a complex administrative undertaking in light of internal resistance and loopholes. This paper describes the attempt at Federica.eu, the largest Italian MOOC provider and one of the largest single-university platforms in Europe, to combine both strategies in a sustainable educational model.

Keywords: Certification Markets, College Credentials, MOOCs, University Degrees, Federica Web Learning

1 Introduction. MOOCs on the ground

The MOOC movement exploded when concern about education costs, the sustainability of the traditional business model of universities, and the impact of technology on education was very high. MOOCs brought even more attention to lifelong learning and professional development and the role of educational credentials in the job market. As a result, MOOCs have also accelerated a relatively new discussion about the unbundling of the degree.

The debate on the value of higher education and educational qualifications re-emerged just after the global financial crisis of 2008, when college enrollment in United States registered a significant growth, despite the substantial increase in college tuition fees, following a countercyclical tendency: while the abundance of job opportunities discourages people from investing too many years in study, the scarceness of jobs encourages them to delay their entry into the job market and get higher qualifications instead.

In this context, the value of college credentials has been called into question more and more, as well as the validity of higher education and college business models as we know them. In 2010, Peter Thiel – PayPal cofounder – launched a grant initiative, called ‘*stopping out of school*’, to encourage talented students not to go to college and to start an entrepreneurial activity instead. In 2011, Christensen and Eyring (2011) applied the disruptive innovation theory to the higher education industry, where the

spread of the new Massive Open Online Courses was sufficient to pose a plausible threat for the future of universities. It was 2012, The Year of the MOOC according to the New York Times (Pappano 2012). Nevertheless, much of the dialogue about reforming higher education focused more on technology, online models, and the general idea of innovation within a centuries-old business model, than on the role of degrees as qualifications for the job market (Gallagher 2016).

Facing the global market, that increasingly required a more highly educated workforce to minimize in-house training, new technologies have been decisive in opening up new skills certification markets. The major American universities understood - relatively early - that, to retain their leadership role as higher education institutions, it was necessary to offer new - more agile and less costly - forms of skills certification. In 2015, many US Universities – even the most elite institutions - started experimenting new forms of credentials: Harvard Business School launched MOOC-inspired online programs, such as HBX CORE; other Universities, such as Georgia Tech, Northwestern, the University of Wisconsin, Washington and California have partnered to develop a joint project focused on new forms of online credentials and digital badges. But the extent of the ongoing change became evident when LinkedIn acquired Lynda – an online education company with more than ten years' history - for 1.5 billion dollars, in 2015 (Blumenstyk 2015), and, at the end of the following year, LinkedIn was acquired by Microsoft for more than 26 billion dollars. Within LinkedIn, Lynda allows for the integration of training ePortfolios within the professional profiles of social network members and, as a result, to create a self-sustaining system in which training credentials work as tags to make the mechanism of interrelation between users and companies more efficient.

On these grounds, the MOOCs play a dual role for Universities: they allow them to enter the game of noncredit certifications and open up new prospects for modernization of traditional degrees. In the next pages, we will present an analysis of the international scenario of MOOC providers as certification agencies and the main Federica policies in this field.

2 The American wave

2.1. MOOC certifications

MOOCs were born with the ambition to offer free university courses to a wide audience of potential students. This ambition corresponded to the policy of major US providers to offer a first level of free certification to anyone who demonstrates they have followed the course and participated in a certain number of required activities. In 2016 this policy was abandoned by the big providers, in favor of a 'freemium' formula, where the audit option is free while certified courses are always paid. Certification types do not differ radically among different providers such as edX, Coursera, FutureLearn. The certificate is printable and/or directly sharable through social networks, with a special attention to the LinkedIn network.

In addition, ever more significant investments are dedicated to the verified 'programs', clusters of MOOCs which, as a bundle, allow participants to gain a higher level of certification. This is the case of: XSeries and MicroMasters by edX, Specializations by Coursera, and Nanodegrees by Udacity. These are more

demanding and complete sets of courses, with more complex tests and examinations and, in many cases, laboratory sessions (apart from, but directly related to the programs) such as the Capstone Projects of Coursera. Although, there is conceptually no difference between these MOOC-based certificates and classic noncredit certificate programs offered by universities, they are distinguished by the fact that they are: awarded by the MOOC provider in affiliation with, rather than by the university; shorter and far less expensive than traditional certificate programs; and, many of them, designed in partnership with industry-leader firms and include work-related projects.

In this way, the big MOOC American providers are working on:

- "Branding" of credentials, through building credibility as non-university training institutions that are recognized by the job market. Providers are starting to work more and more as connectors with companies, to facilitate the use of ePortfolios as a hiring qualification, still received with some resistance by the job market.
- User loyalty management. By following more courses on a single platform, it becomes possible to build a CV that summarizes in detail the features of the training paths and the results achieved, in an integrated way. In addition, programs are often paid annually, until the completion of the single courses. An investment of both time and money that requires a real as well as a symbolic value attribution by the user.

The success of this strategy will determine the effective placement of these certifications in the job market, where the distinction between certificates – micro credentials - perceived as skills qualifications, and certifications - degrees - perceived as job qualifications, is still significant.

2.2. A parallel track for universities

In this context, the universities involved help to contribute to the credibility of the providers through their content and their branding. The advantage for the universities in handing over the creation and management of the platform to an external provider is obvious in terms of organization. However, the decision to offer MOOCs through the big providers is also a strategic one, and is about diversification of their educational offer depending on the type of delivery.

For the most part, MOOCs are not the equivalent of curricular courses: not only they do not allow for credits, but they do not offer the same level of content either. The main reason is that they do not aim to reach the same audience. As some significant analyses show – such as the reports by Harvard-MITx (Chuang and Ho 2016) - the main audience of MOOCs is often composed of people with a degree.

In this way, universities achieve a three-pronged objective:

- Consolidating the role of the University in the noncredits market of credentials, and even managing to keep certificates separate from certifications;
- Disseminating the brand of the University, especially for the less authoritative institutions;
- Not interfering with the degree market, which is based on selectivity and exclusivity.

3 Federica policy for MOOC inclusion in university strategies

3.1. Federica in the Italian scenario

Born as an EU (FSE 2006-8; FESR 2007-2013/15) funded project, Federica Web Learning is today the first Italian University Center fully devoted to innovation, experimentation and dissemination of multimedia distance learning. The institutional consolidation has coincided with MOOCs becoming Federica's core activity. Since 2015, over 60 MOOCs have been published on the new platform Federica.eu, and more are in the pipeline.

- In terms of its configuration, Federica represents a unicum in the Italian MOOC scenario, which is characterised by a variety of models:
- Telematics universities. These are private universities, recently licenced by the Ministry of Education, with traditional e-learning platforms and few – or none - of the driving features of MOOCs: open access, international benchmarking, 2.0 dissemination.
- In-house experiments. Some Universities just activated occasional experiences in house – using platforms like Moodle or Blackboard, or by developing their own platforms.
- Big provider-oriented experiences. In a few cases, Universities have activated more structured collaborations with one of the main providers, as is the case for large universities such as Bocconi and Sapienza with courses available through Coursera. Due to costs and organizational constraints, the number of such courses is severely limited.
- National consortia. Eduopen is coordinating a number of smaller universities through a common platform.

Over its ten year lifespan, Federica has developed an original model, preserving strong internal links with the university it is part of, while occupying a strong position on the open Higher Education market.

3.2. Federica vision

The original objective of Federica was to deliver online courses which were the equivalent of the on-campus version in terms of quality and the commitment required, and whose content and structure would enable students to prepare for a traditional in-house exam. Federica combines quality content with experimentation into teaching and learning.

The Federica vision has four distinctive features:

- **High Quality Contents.** Course instructors are recruited from among the most authoritative Professors in their disciplines at a national and international level. All videos, texts and resources are produced by them, with the support of a specialized team. All courses comply with the requisite of high academic standards.
- **Interface design.** Since its beginning a key feature of Federica has been its innovative and user-friendly interface. An essential element of the MOOC revolution is represented by the dismantling of the traditional classroom habitat. In our vision, the future success of MOOCs will largely depend on

creating a new learning environment, which is as adaptive as possible to the navigation habits of the digital generation. Federica's interface allows for a seamless navigation between text and videos, with professional attention to functional as well as aesthetic details, in the best tradition of world renowned Italian design.

- **Electronic Alexandria.** A plus of Federica courses is that they offer guided access to the extraordinary wealth and variety of – possibly open – sources, which are now available on the Web. Drawing on long-term experience as the editors of IPSAPortal, the International Political Science Association's electronic journal offering a selection of PS most authoritative electronic sources, at Federica we have always placed special emphasis on *weblinks*, which offer the student the possibility of directly accessing a book, a review article, a data set, a lab-experiment, a video-reference. Web-links are all clearly embedded in the text slides, and are a distinctive feature of Federica's augmented content.
- **Openness.** Access to all Federica courses is free. Given the public nature of the Italian University system, this offers Federica a potentially unlimited student audience, as well as an expanding target in the life-long-learning segment.

In its first stage, Federica, through the platform *Federica.unina.it*, managed the production of over 300 courses from teachers at the University of Naples, Federico II, in all the main subject areas. The courses were open to anyone for consultation and were, therefore, mainly targeted at an internal university audience, provided as support to the traditional on-campus course. In the second and current phase of development, with the *Federica.eu* platform, we are opening up to a wider public, enriching the courses with more textual content and adding high-quality video contributions from the professors, to make them into stand-alone products in the MOOC format.

In this way, Federica has consolidated its national target over the years, consisting mainly of registered students, and has increased the numbers of graduate participants on board.

3.3. A new frontier: multimedia certification

The main limit of the Federica model, as of today, regards certification. The Federica offer is mainly positioned in the for-credits area of certification which, on the American and International market, is still separate from that of the non-credits area which MOOCs is developing in. As all Federica courses are created as a fully-fledged equivalent – and a potential substitute – of curricular on-campus courses, their immediate and most frequent use is from enrolled students at Federico II to prepare for their for-credits exams. This can be done either by using Federica courses as an online companion to class attendance. Or as an alternative to attending classes, also in consideration of the fact that, in the Italian university system, attending classes is not a mandatory requirement, and a large number of students, mostly for economic reasons and especially in the humanities and social sciences degrees, sit their final exams after preparing them at home, with little or no ties to campus life.

Therefore, the most natural expansion of the Federica model consists in providing complete university degrees in the MOOC format. This may considerably expand the

current number of students. Once the whole degree is available online, students from all over the country could access it, while still benefiting from the extraordinary content and multimedia quality developed in all Federica courses. In this respect, Italy represents a particularly interesting opportunity, in light of its underdeveloped university degree offer.

In fact, Italy currently stands in penultimate position in Europe as regards numbers of university graduates, according to recent Eurostat¹ figures, with 26% of 30-34 year-olds holding a degree compared to a European average of 39%. Recent cuts in investment in HE have done nothing to reverse this trend. In this context, developing a top quality online offer is a fundamental strategic asset to encourage young people to get a university education. Achieving such an ambitious goal, however, can only be possible through a stepwise strategy which maximizes the know-how in MOOC production and dissemination that Federica has gained within – and thanks to – the mainstream international MOOC environment. The main difference between the online degrees presently offered – in Italy as in other countries – by online private universities and the ones that the Federica model is aiming at, is one of quality and branding, the key asset of the MOOC revolution. Federica MOOC degrees aim at bringing together the outstanding multimedia content features and authorship qualification nurtured through the MOOC movement worldwide with the open access and public mission at the core of the European university system.

Federica intends to carry this vision forward, maximizing the use of existing tools and working to find new routes through an integrated strategy. Federica courses will thus remain open, but they will also be offering more opportunities to certify the academic results obtained through various procedures:

- The opportunity, for all students, to take a final exam because the online version of the course mirrors that of the on-campus one;
- Certification through third parties, already experimented with IPSAmooc and about to be launched with edX;
- A successive upgrade of this model by offering XSeries and Micromaster programmes with edX, as well as directly on the Federica platform;
- The launch, scheduled for 2018, of full MOOC degree courses, which will allow students to graduate with a degree certificate from the oldest – and one of the most prestigious – European universities.

4 A look to the future

Access to higher education as an enabler of economic and working opportunities is a critical social issue for a market that continues to be empowered by prestige and tradition. Little or no evidence exists that MOOCs will wash away universities and their credential systems. Traditional credentials continue to hold a special place in the job market, but they must evolve. The golden age for noncredit courses and continuing education brings intense competition between universities and non-institutional providers.

¹ The Eurostat Report, Europe 2020 education indicators in 2016, is available at <http://ec.europa.eu/eurostat/documents/2995521/8001730/3-26042017-BP-EN.pdf/c22de270-ea00-4581-89bc-501056f9cae2>

A more standardized taxonomy and a common language for naming, describing and communicating new forms of credentials would be helpful in accelerating market adoption and ensuring value for both students and employers. In one word: institutionalization is needed. Universities' internal governance must evolve to support this development.

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