

MOOCS in Italy: An open and fragmented landscape

I MOOC in Italia: un panorama aperto e frammentato

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ABSTRACT If we look at the short but widely analyzed history of Massive Open Online Courses (MOOCs), it is evident that these courses, which were created and are still often acclaimed as ‘open’, have been progressively losing most of their openness. A substantial – and probably increasing – number of MOOCs are in fact not based on Open Educational Resources. Moreover, they are not continuously available for access. Recognizing that many openness declinations exist in the MOOC panorama, this article seeks to expand global knowledge about such variances by focusing on the characteristics of MOOCs in Italy. It claims that even if the Italian MOOC ecosystem has some similarities with those of other European countries, it is distinctive for two reasons: first, MOOCs produced by Italian universities seem to be more open than those in comparable countries in terms of both content licenses and accessibility; second, the Italian MOOC ecosystem seems to suffer from a rather high degree of fragmentation. By combining a literature review with a set of interviews with key stakeholders in the Italian MOOC panorama, the article provides insights on the factors and mechanisms that have generated such a particular configuration of the Italian MOOC landscape.

KEYWORDS Massive Open Online Courses (MOOC); Italian Universities; Open Education; Open Licenses.

SOMMARIO La breve ma ampiamente analizzata storia dei Massive Open Online Courses (MOOC) mostra con evidenza che questi corsi, creati e spesso ancora acclamati come ‘aperti’, hanno progressivamente perso la loro natura ‘aperta’. Infatti, un numero sostanziale - e in aumento - di MOOC in realtà non è basato su risorse educative aperte, e allo stesso tempo molti MOOC non consentono l’accesso in modo continuo. Partendo dalle molteplici declinazioni di apertura che sono presenti nel panorama dei MOOC, questo articolo cerca di contribuire con nuovo materiale empirico all’analisi delle variazioni nei gradi di apertura dei MOOC, concentrandosi sulle caratteristiche dei MOOC in Italia. Sebbene l’ecosistema dei MOOC italiani mostri alcuni punti di contatto con le esperienze di altri paesi europei, il contesto italiano si distingue per due ragioni: in primo luogo, i MOOC prodotti dalle università italiane sembrano essere più aperti di altri in Europa in termini sia di licenze di contenuto che di accessibilità; in secondo luogo, l’ecosistema dei

MOOC italiani sembra soffrire di un grado di frammentazione piuttosto elevato. Combinando una revisione della letteratura con una serie di interviste qualitative con i principali attori del panorama dei MOOC italiani, l'articolo fornisce approfondimenti sui fattori e sui meccanismi che hanno generato una configurazione così particolare dell'ecosistema MOOC italiano.

PAROLE CHIAVE Massive Open Online Courses (MOOC); Università Italiane; Formazione Aperta; Licenze Aperte.

1. INTRODUCTION

The COVID-19 health emergency and consequent lockdown policies have rapidly brought to the fore an unprecedented wave of distance education: millions of teachers and students have suddenly switched – willingly or not – to emergency remote teaching (Hodge, Moore, Lockee, Trust, & Bond, 2020), revamping both enthusiasm for and concerns about online learning. In this context, Massive Open Online Courses (MOOCs) have increased their popularity and numbers of users, as demonstrated by the fact that the three main MOOC providers globally (Coursera, edX and FutureLearn) registered as many new learners in April 2020 as in the whole of 2019 (Shah, 2020a). The pandemic seems to have revitalized interest (at least temporarily) in MOOCs, following the decrease of media attention that had followed their first hype in 2012. As happened in the past, during the pandemic MOOCs have often been presented as inclusive and accessible educational resources that can help in coping with the needs of distance teaching during the COVID19 crisis (Il Sole 24 ore, 2020; Reda & Kerr, 2020). But how accessible and inclusive are MOOCs? The first MOOCs, dating back to 2008, were based on principles of openness, inclusiveness and collaborative knowledge building, similarly to the Open Education Resources (OER) movement (Carfagna, 2018; Siemens, 2013), and since then MOOCs have been framed as means to increase access to education, together with other types of OER such as openly licensed textbooks (UNESCO, 2017). Nevertheless, in less than a decade MOOCs have changed greatly in their logic and business models, moving away from the initial open approach towards more market-prone and non-OER-based approaches.

This article aims to expand knowledge of these significant changes by providing a current analysis of the field of MOOCs in Italy. By combining literature and web reviews with a set of interviews with representatives of the main Italian MOOC providers, the article gathers evidence on the level of openness of the Italian MOOC ecosystem. The aim of the research is to explore whether, somehow contrary to the global marketisation trend of MOOCs, Italian higher education institutions are preserving the original open and collaborative spirit of MOOCs, despite — or perhaps because of — the fragmentation of Italy's national MOOC ecosystem.

2. CONTEXT

MOOCs are often and were originally defined through the letters forming their acronym (Cinque, 2015; Stracke, Downes, Conole, Burgos, & Nascimbeni, 2019): Massive (potentially accessible to huge numbers of people, as long as they have an internet connection), Open (participation is free-of-charge and without prior educational qualification), Online (delivered through the internet), Courses (focused on a specific subject, structured into several modules, planned to last for a specific length of time, encompassing lectures, assignments and grades).

The earliest versions of MOOCs, which were introduced in 2008 in Canada, took a collaborative and generative pedagogical approach that emphasized learners autonomy (Siemens, 2013). Following these first

cMOOCs (where the ‘c’ stands for connectivist), less interactive and more instructive versions of MOOCs started to appear under the acronym of xMOOC, adopting a more traditional pedagogy and ultimately replicating transmissive in-presence education (Siemens, 2013). This model, launched in 2011 with a course on Artificial Intelligence and Machine Learning by a group of Stanford University lecturers who would subsequently become the founders of the first MOOC commercial startups, was rapidly adopted by elite US universities including MIT and Harvard, and is now the mostly used approach by universities globally (Nascimbeni, 2020).

In terms of popularity, the MOOCs hype started with the New York Times designating 2012 as The year of the MOOCs (Pappano, 2012): in the following months MOOCs gained massive coverage by mainstream media, so that their presence in the public discourse outweighed their actual use (Bulfin, Pangrazio, & Selwyn, 2014; Deimann, 2015; Kent & Bennett, 2017; Kovanović, Joksimović, Gašević, Siemens, & Hatala, 2015). This expansion was accompanied by a ‘secular evangelism’ (Losh, 2017) about the democratizing capacity of MOOCs to empower people around the world through education, coupled with an unquestioned faith in techno-solutionism and disruptive innovation (Head, 2017; Weller, 2015). Neglecting the historical past of MOOCs rooted in thirty years of distance and online education, the mainstream MOOC narrative emphasized the unique potential of MOOCs to disrupt the status quo of higher education (Bulfin et al., 2014; Deimann, 2015). After the hype reached its climax in 2013, the promises of MOOCs started to be questioned by empirical research, which began to identify their shortcomings (Emanuel, 2013; Hansen & Reich, 2015), and the tone of newspaper articles became less enthusiastic (Bulfin et al., 2014; Deimann, 2015). Nonetheless, the number of MOOCs continued to rise: whilst in 2013 the total number of MOOC learners was 10 million for an overall 1200 courses, in 2020 the registered users amounted to 180 million (excluding China) for a total of over 16,000 courses available from more than 900 higher education institutions (Shah, 2013; 2020b). More recently, MOOCs have earned a reputation as tools for continuing professional development (Brown, 2018), and the rise of microcredentials is transforming them into off-the-shelf skills development courses with clear employability targets. Even if the value and role of such credentials in the labour market remain unclear (Pickard, Shah, & De Simone, 2018), these new developments demonstrate that MOOCs are evolving as far as their aim and breadth are concerned (Shah, 2019).

The most striking fact about the evolution of MOOCs is the inexorable loss of meaning of the first O of their acronym, the one that stands for ‘Open’. A first problem in this sense is accessibility: MOOCs content is often available only when the course is actually running. The first MOOC platform to introduce this approach was Coursera in 2015, which was then joined by FutureLearn in 2017, which allows free access to course materials for 14 days after the end of the course, and by edX, whose course materials have no longer been accessible after the end of its courses since early 2019 (Shah, 2018). Moreover, even if users can register in MOOCs for free, most courses require them to provide valuable personal data (Cronin, 2017) which can be used for wealth generation in the “age of surveillance capitalism” (Zuboff, 2019), and the certificates of completion require the payment of a fee.

A second problem is the actual openness of MOOC content. Simply put, the majority of xMOOCs do not apply open licenses to their resources, thereby preventing their adaptation, re-distribution or re-use. This is a major problem from the perspective of the Open Education Movement (Zawacki-Richter, Bozkurt, Alturki, & Aldraiweesh, 2018). These characteristics of MOOCs depict something very different from the initial connectivist and open courses (cMOOCs) and quite distant from the narrative of free knowledge able to democratize the world of education. As noted by Reich and Ruipérez-Valiente, MOOCs clearly pivoted to a commercial business model based on continuing professional development, becoming a complementary asset for learners many of whom are already highly educated (Reich & Ruipérez-Valiente, 2019). In this regard, some advocates of Open Education claim that MOOCs did more harm than anything else to the cause,

by “promoting and popularizing an abjectly impoverished understanding of the word ‘open’” (Wiley, 2015, p. 3). This impoverished understanding refers to the fact that MOOCs apply to online courses the model of ‘open entry’ that has characterized Open Universities since the 1970s, disregarding other levels of openness that are possible thanks to global ICT. Answering the question of whether MOOCs can be considered a form of OER, Stracke et al. (2019) underline that the answer is not univocal and depends on the perspective taken and on the kind of stakeholder (educator, learner, policy maker) who is posing the question. As noted by Havemann (2020), rather than asking whether MOOCs are or are not ‘open’, we should overcome the dichotomous approach between open and digital vs. closed and analogic: openness should be disconnected from the pervasiveness of digital technologies, which are based on an interplay between open and closed elements, and should be regarded as a set of possibilities that are connected to certain kinds of contents and practices.

3. METHODOLOGY

At the core of this article is the hypothesis that, despite the fragmentation of the Italian MOOC landscape and the absence of a comprehensive national policy in the field of Open Education, the actual practices of MOOC delivery in Italy display strong features of accessibility, reusability and sharing, somehow against the MOOC marketisation wave that we presented earlier. The article addresses three research questions:

- 1) How do Italian universities approach MOOCs, and why?
- 2) How open are the MOOCs provided by Italian universities, in terms of resources accessibility and reusability?
- 3) What are the main challenges of the Italian MOOCs ecosystem and how could they be overcome?

The empirical material used in this study consisted of reviews of the websites of Italian universities and MOOCs platforms, integrated by 8 semi-structured interviews with representatives of the major MOOC initiatives in Italy. The key informants were a purposeful sample of either staff members responsible for MOOCs developments within e-learning offices, or lecturers with responsibilities for MOOCs at the following universities: Bocconi University, Polytechnic of Milan, Telematic University UniNettuno, University of Naples Federico II, University of Rome La Sapienza, University of Turin, University of Venice Cà Foscari and EduOpen platform. The sample is certainly not representative of all national experiences, although the major players on the Italian scene are included, and the data collected proved useful to investigate the mechanisms, motivations and degrees of variation within each MOOC experience, employing a qualitative method to explore the evolution of each case in detail. All interviewees received information about the interview procedure and treatment of their data before participating, and they provided their explicit consent to recording and transcription. The interviews were conducted remotely by the authors. Interviews were recorded and then transcribed. The transcriptions were read by both authors and coded manually using a Grounded Theory approach (Glaser, 1978) to isolate the main themes emerging in each section of the interview outline. The material was coded using an emergent list of basic codes (coding families) for the main topics. Moreover, for each interview the authors drew up a synopsis highlighting the most relevant findings and quotations for each theme. As a final step, interviewees provided feedback on the representation of their own case in a preliminary draft of the article, following a backtalk process (Cardano, 2003).

4. RESULTS

The spread of MOOC development and delivery in Europe started with some delay and with much less media attention compared to the hype that characterized the North-American experience (De Rosa & Reda, 2013). The ‘year of the MOOCs’ in Europe was 2013, and the process was initiated by the ‘Opening Up

Education Initiative’ of the European Commission, which clearly referred to the potential of MOOCs to widen access to education by reaching non-traditional students. The seminal phase of European MOOCs was characterized by an active role of governmental bodies, which acted as key enablers for the growth of MOOCs (Castaño Muñoz et al., 2016; Kerr & Eradze, 2016). De Rosa and Reda (2013) acknowledged the cultural and language heterogeneity among European initiatives, but at the same time they underlined the homogeneity of the European MOOCs paradigm as far as openness and accessibility are concerned. Our research has shown that this openness spirit, which was already noted in an earlier analysis of MOOC experiences in Italy (Pozzi & Conole, 2014), is still a characteristic of the Italian MOOCs landscape. The Italian MOOCs ecosystem is rather dynamic both in terms of scientific debate and actual offering, as demonstrated by the fact that two of the main global MOOC conferences held in 2019 took place in Italy: the eMOOC19 Conference hosted by the University Federico II of Naples, and the OEGlobal Conference 2019 by Polytechnic of Milan. The Italian MOOCs landscape consists of one initiative aggregating MOOCs from several universities (EduOpen) and of a series of initiatives run by individual universities. In terms of numbers, the MOOC offer has been growing substantially: in 2014 the Conference of Italian University Rectors (CRUI) mapped a total of 39 MOOCs produced by 10 universities (CRUI, 2015), while a census based on institutional websites made by the authors at the time of writing this article counts up to a total of about 983 MOOCs provided by 28 Italian universities¹ (Table 1).

UNIVERSITY/PLATFORM	MOOCS NR.	PLATFORM
Bocconi University	12	Coursera
UNINETTUNO	115	OpenupEd
Polytechnic University of Milan	80	own platform and Coursera
University of Turin	69	own platform
University of Bari	2	EduOpen
Free University of Bozen	3	EduOpen
University of Catania	2	EduOpen
University of Ferrara	12	EduOpen
University of Foggia	34	EduOpen
University of Genova	15	EduOpen
University of Rome LUMSA	1	EduOpen
Polytechnic University of Marche	11	EduOpen
University Milano-Bicocca	36	EduOpen, Federica
University of Modena and Reggio Emilia	77	EduOpen
University of Parma	23	EduOpen
University of Perugia	7	EduOpen
University of Salento	2	EduOpen
University of Venice	97	EduOpen
University of Naples “L’Orientale”	2	Federica

¹ The calculation has been done manually based on the information received through the interviews, complemented with web search, therefore some initiatives may have been overlooked. Also, it must be noted that some online openly accessible courses are not necessarily labeled as MOOCs.

University of Florence	4	Federica
University of Naples Federico II	300	Federica Web Learning, edX
University of Bologna	12	own platform
University of Rome Sapienza	6	Coursera
University for Foreigners of Siena	9	FutureLearn, Federica
University of Padua	30	FutureLearn, EduOpen
Catholic University of the Sacred Heart	4	own platform
University of Pavia	9	iVersity, Federica
University of Urbino	9	own platform

Table 1. Number of MOOCs provided by Italian universities and platforms.

4.1. What are the approaches of Italian universities for MOOC development, and why?

Within Europe, nation-wide MOOC platforms have emerged since 2015. Even if their origins and characteristics are different (Nascimbeni 2020), initiatives such as FutureLearn in the UK, FUN in France or MiriadaX in Spain have been the preferred — and often the only — way for universities from these countries to enter the MOOC arena. In the absence of such a top-down national initiative, Italian universities have developed different strategies to offer MOOCs. A first approach is to offer MOOCs through a self-developed online platform. A precursor of the MOOCs' advent, the University of Naples Federico II developed its own online open course platform *Federica* already in 2007 (obviously without labeling its courses 'MOOCs' because the term would be coined five years later), and now hosts a total of 300 courses, from other universities as well². More recently, in 2016 Polytechnic of Milan has developed its own platform (Polimi Open Knowledge - POK) by building on the OpenedX software, which has served as the basis for a very similar development at the University of Bologna. Other universities which have developed their own MOOC platform are the University of Urbino and the Catholic University of Milan. Instead of developing a MOOC-labeled platform, other universities have developed online platforms linked to their institutional website to deliver open online courses, such as the University of Turin with the *start@unito* and *Orient@mente* projects. Another strategy used by Italian universities is to rely on international MOOC platforms: Bocconi and La Sapienza decided to have their MOOCs hosted on Coursera, University of Pavia is using iVersity, University for Foreigners of Siena is on Futurelearn, while UNINETTUNO is releasing its MOOCs through the OpenupEd platform. Finally, 20 mid-size universities³ have decided to deliver their MOOCs through EduOpen, the Italian multi-universities MOOCs platform that was launched in 2016 and counts almost 300 courses and around 50,000 registered users (Fontanin & Pantò, 2019). Some universities use more than one strategy, choosing different ways to reach different target users: Polytechnic of Milan, for example, offers its MOOCs both through its own platform and through Coursera; the University of Padua is using Futurelearn; Federica.eu and EduOpen; Pavia and Milano Bicocca are present on both Federica.eu and EduOpen, and the University of Naples Federico II is using both its own platform and edX, and will soon be joining Coursera too.

An overall finding emerging from the interviews concerns a non-dichotomous inward vs. outward strate-

² University of Florence, University of Milan "Bicocca", University of Naples "Orientale", University of Padua, University of Pavia and University for Foreigners of Siena.

³ University of Bari, Polytechnic of Bari, Free University of Bozen, University of Camerino, University of Catania, University of Ferrara, University of Foggia, University of Genova, University of Rome LUMSA, Polytechnic University of Marche, University Milano-Bicocca, University of Modena and Reggio Emilia, University of Padova, University of Parma, University of Napoli Parthenope, University of Pavia, University of Perugia, University of Salento, University of Salerno, University of Venice.

gy of the MOOC offerings. This distributes the institutions along a continuum, rather than dividing them between institutions oriented mainly towards an internal audience vs. institutions mainly oriented towards an external audience. Indeed, Italian universities seem to use MOOCs both to address their internal users, namely students and faculty, and to reach global learner communities, although to different degrees. An emerging trend is the use of MOOCs to address students' critical transitions, for example through first-year remedial courses and soft-skills courses for the transition to the labour market. This direction is particularly visible in the cases of University of Turin and Polytechnic of Milan, which have pioneered this approach since the early days of their experience with MOOCs:

"There are many reasons why we did it: to guide secondary school students in choosing their university program, to gain an overview of our educational offer as a large university, and to facilitate the transition from school to university" [University of Turin].

"The idea was to look inside, to support our students in the various stages of transition. The logic was 'to bridge the gap', that is to help students to cope with the transition from school to university, to the master's degree and then to the world of work" [Polytechnic of Milan].

Whilst the former is closest to the end of the continuum associated with an internal audience and remains mainly focused on students' needs, the latter has progressively added other types of recipients and also provides its courses on Coursera:

"We started with 'MOOCs to bridge the gap', but the current development involves also courses designed for researchers and lecturers, to innovate their teaching methods. And then there is a whole series devoted to citizens, which is very important for us because it fulfills our third mission" [Polytechnic of Milan].

Federica.eu is another example of hybrid use of MOOCs, with pathways dedicated to high school students planning to join the university, including a MOOC on mathematics in collaboration with the CISIA consortium (De Notaris, Melchionna, & Reda, 2020).

Another focus of MOOCs concerns the training of faculty members - using MOOCs to build training pathways for incoming or existing faculty members is emerging transversally, both targeting the national context (Bocconi, University of Venice, University of Turin) and the international one (Polytechnic of Milan). Three institutions can be considered as the closest to the end of the continuum linked to external audience, though for different reasons. Bocconi rode the MOOCs hype since its beginning in 2012 by joining Coursera, targeting mainly international students and professionals in an attempt to keep pace with competitors worldwide. The decision to join the MOOCs club, however, was also aimed at developing e-teaching competences internally.

"Bocconi entered Coursera [...] with two objectives: [...] to increase the university's abilities to create online courses on a massive scale; and to maintain an international positioning [...]. Precisely because the positioning of the university is in any case international, a partner was chosen that would enable us to be global and at the same time flexible when we needed to experiment" [Bocconi University].

Similarly, La Sapienza joined Coursera in 2014 to promote their brand internationally, to attract students and to position themselves as a gateway of the Italian culture worldwide, filling in the particular niche of archeology and cultural heritage (Cesareni, Micale, Cosmelli, Fiore, & Nicolò, 2014).

"For Sapienza, the goal is to promote its brand [...], attract students from outside Italy, and promote Italian culture abroad. Since archeology and cultural heritage are Italy's greatest assets, we have focused on these [...] and this choice has proved to be a winner" [University of Rome La Sapienza].

On the other hand, UNINETTUNO has since its beginning focused on an external audience as a part of

its commitment to distance learning, which started in the 1990s with a particular focus on disadvantaged students.

“We have always maintained a distinction, rightly or wrongly I don’t know, between business models linked to open education and open education itself. [Open Education] is part of our social mission and we as a distance university have always felt it to be our duty.” [Telematic University UNINETTUNO].

4.2. How open are the MOOCs provided by Italian universities, in terms of accessibility and reusability of contents?

Another emerging feature of the Italian MOOC landscape is the fact that, despite the different strategies adopted, the great majority of MOOCs offered by Italian universities are more open than the typical MOOCs, both in terms of resources and accessibility. Table 2 summarizes the openness characteristics of the major providers of Italian MOOCs.

As far as licenses are concerned, all the universities interviewed release their course content with Creative Commons (CC) licenses, with notable exceptions. Indeed, University of Turin and all universities which offer MOOCs through the EduOpen platform explicitly display the CC license icon on their homepages; Polytechnic of Milan shows the CC icon on each course description webpage (thus CC licenses may vary from course to course) and UNINETTUNO uses an extremely open license (CC-BY) in line with the terms of use of the platform hosting their courses, OpenupEd. Bocconi and La Sapienza, which are bound by the more restrictive terms of use of Coursera, nonetheless have selected the most open option, giving the right to learners to download course materials for “a limited, personal, non-commercial, non-exclusive, non-transferable, and revocable” use, and La Sapienza is also considering whether to make its videos available on its institutional YouTube channel, as Polytechnic of Milan is doing. At the opposite extreme, we find the Federica.eu platform, which uses an ‘all rights reserved’ license whereby reproduction and distribution of its contents is not permitted without authorization.

With respect to the important concept of time-related accessibility, the institutions using their own platform generally make their MOOCs available in a self-paced way with no time restrictions for enrollment, and only in a few cases are there recurrent editions for those who want to obtain a certificate. Those universities delivering their courses through international platforms also commit to continuous enrollment policies but with some limitations due to the platform policies. For example, Coursera allows for self-paced courses but if learners want to obtain a final certificate, they must perform the activities within a certain timeframe. University of Venice, as an example of an institution that works through EduOpen, opts for a hybrid approach: in order to foster interaction between learners and instructors, it grants access to past editions of courses only to registered users of those courses, while new users have to register when the new editions of courses are launched.

“Our MOOCs end today and restart tomorrow –when there are editions, and the majority of them have been transformed in self-paced courses, precisely to give anyone the possibility to constantly access them. Free and continuous access are two fixed points for us.” [Polytechnic of Milan].

“We call them open online courses (OOC), because they are 100% open, twenty-four hours a day, three hundred and sixty-five days a year, that is, there are not the windows typical of MOOCs, [...] and access is via social media ... so more open than that ... and the license we’ve used is Creative Commons ...” [University of Turin].

As regards commitment to accessibility by learners with disabilities, most of the institutions considered had adopted specific policies to guarantee the accessibility of web content to all. As an example, Federica.

eu offers MOOCs on different subjects fully using sign language, with three courses at the moment and more under development. However, information about these policies was not always clearly stated on the homepage or in other sections of the platform.

Institution	MOOC platform	ACCESS			CONTENT		
		Language of the courses	Registration	Time accessibility	Disability	Licence	Download
Bocconi University	Coursera	English, Spanish, Arabic	Login requested: Coursera account or social networks account	Self-paced but with windows for enrolment	Follows Coursera policy: Web Content Accessibility Guidelines (WCAG) 2.1 Level AA	Download permitted but limited, personal, non-commercial, non-exclusive, non-transferable, and revocable	Possible but not for reuse
Polytechnic of Milan	PoliMi Open Knowledge (POK) and Coursera	Italian and English	Login requested: university or platform account	Self-paced, continuous enrolment, teaching materials are always available	No explicit policy on web content accessibility on the website	Creative Commons licences are included in the course description and vary from course to course, from CC-BY to CC-BY-NC-SA	Possible
International Telematic University Nettuno	OpenupEd	Italian, French, English, Arabic	Login requested, linked to university registration	Self-paced, no time limitations	All MOOCs on OpenupEd platform have to comply with accessibility requirements	Creative Commons licences (CC-BY), visible in the section "Terms of use of OpenupEd website"	Possible
University of Bologna	UniBo Open Knowledge (BOOK)	Italian and English	Login requested: university or platform account	Self-paced, continuous enrolment, teaching materials are always available	No explicit policy on web content accessibility on the website	Creative Commons licences are included in the course description and vary from course to course, from CC-BY to CC-BY-NC-SA	Possible
University of Naples Federico II	Federica Weblearning	Italian and English	Login requested: Federica account or social networks account	Self-paced but with windows for enrolment	No explicit policy on web content accessibility on the website	All rights reserved	Not possible
University of Rome La Sapienza	Coursera	Italian and English	Login requested: Coursera account or social networks account	Self-paced, with soft deadlines for those who want to obtain the certificate	Follows Coursera policy: Web Content Accessibility Guidelines (WCAG) 2.1 Level AA. Future plans for adding sign language	Download permitted but limited, personal, non-commercial, non-exclusive, non-transferable, and revocable. Plans to share course videos on institutional Youtube channel	Possible
University of Turin	self-developed online platform (start@unito, Orient@mente)	Italian and English	Login requested: university account or social networks account	Self-paced, no time limitations	No explicit policy on the website, but the website and courses use a font for dyslexia or dyscalculia, subtitles and transcripts	Creative Commons licences (CC-BY-NC-ND), visible on the website homepage	Possible
Members of the EduOpen consortium	Eduopen	Italian and English	Login requested. University or platform account	Courses are available session-based. Past courses are archived, teaching materials are available for already registered learners	Follows EduOpen policy about Web Content Accessibility	Creative Commons licences visible on EduOpen homepage (CC-BY-NC-SA)	Not possible

Table 2. Openness of access and content within the Italian MOOCs providers.

4.3. What are the main challenges of the Italian MOOCs ecosystem and how could they be overcome?

Despite the different strategies adopted by Italian universities, a critical feature on which all interviewees agreed was the lack of policy coordination at national level in the field of MOOCs and in the broader area of Open Education. Interviewees noted that the many initiatives in the sector often remain isolated and context-specific, being often dependent on the motivation of individual lecturers:

“What is lacking is a national and/or European strategy [...] without some strategic policy decision [...] we will continue to have many fine practices and virtuous teachers, and only few virtuous universities with a clear strategy” [Bocconi University].

“The phase now would probably be that of advocating at the Ministry so that [...] something more structured can be produced. In short, a somewhat more structured reflection at the national level is required” [University of Venice].

A shared vision with clear goals and detailed directions to achieve them, together with a governmental endorsement of Open Education, including MOOCs, is a perceived key element that is lacking at national level. Informants agreed that the present moment, characterized by renewed attention to distance education due to the COVID-19 pandemic, would be an important window of opportunity for raising awareness among policymakers about the need for policies aimed at spreading openness values within education that can be supported by MOOCs as well. Moreover, such a national approach to MOOCs would help to systematize existing practices within a coherent approach.

About half of the interviewees admitted that their universities are currently re-evaluating their MOOCs strategy (Bocconi, University of Venice, UNINETTUNO). For different reasons, these universities have decided to slow down the time-consuming effort of developing new courses and updating old ones; some have decided to keep active what they already had while evaluating whether to embark on a broader MOOCs strategy. Recent developments such as microcredentials and MOOC-related specializations are viewed with some skepticism: interviewees feared the risk of riding the hype associated with educational technology with no attention paid to the actual quality of teaching and course content.

“The difficulty of devising models suited to the Italian context induced us to stop for a moment [...] We continue because we want to remain in that scenario for the time being. [...] Now we are in a phase of research, study” [Bocconi University].

“We are in a phase of reflection, in the sense that [...] much of our online work now focuses on training lecturers in online teaching and we have slowed down in the MOOC sector” [University of Venice].

A different trend was reported by Federica.eu: also thanks to the input of the COVID-19 crisis, the development of MOOCs is being seen as a key strategy of the university, and new projects are being launched, in particular to support teachers to create MOOCs that they can use immediately in their online or blended courses (Reda & Kerr, 2020).

Some other providers, such as the universities of Turin and La Sapienza, have plans to enlarge the audience of their MOOCs by adding new courses and systematizing existing ones, ultimately investing in MOOCs as a component of their lifelong learning, guidance and third mission, with a particular care to preserve the openness of the courses:

“If you ask me about the future of MOOCs, I don’t know what to say because the word MOOC is a bit restrictive. [...] If we consider digital education, this is surely the future [...] linked to this are the MOOCs, the Open Online Courses, the microcredentials” [University of Turin].

Another emerging common trend concerns the creation of MOOCs as a product of European research and

innovation projects, often as a way to off-set declining internal funding for the creation of new online courses. Interviewees agreed that the creation, regular updating and maintenance of MOOCs is rather expensive and that European funds can help because MOOCs can provide a showcase for the research and innovation activities of the university and be a way to reach wider audiences as requested by most EU-funded projects. *Finally, the interviews* depict a positive context of cooperation among Italian universities, though often based on personal ties rather than on structured institutional agreements. This collaborative approach can be spot in the existence of multi-institutional platforms such as Federica.eu and EduOpen and by the fact that some universities, such as the University of Padova and Pavia, have selected more than one platform to host their MOOCs, showing a non-rival approach that is typical of mature and trust-based communities (Loeffler, 2021).

5. CONCLUSIONS

This article has presented the Italian MOOC panorama as it emerged from examination of key web sites and a number of interviews with stakeholders. It has highlighted that, despite a certain degree of fragmentation due to the lack of a national policy, or probably because of the absence of such a policy that has allowed bottom-up experimentation, the Italian MOOC ecosystem is rather dynamic and seems oriented to preserving a certain commitment to openness. The empirical data collected depict a situation in which the lack of coordination at central level has not prevented universities from finding their own strategy to enter the MOOC world, and from conducting constant reflection on why to continue to invest in these courses. Within a global context where mainstream MOOC platforms have largely abandoned the “O” of openness, this study provides new evidence about the commitment of Italian higher education institutions to the original intent of accessibility and openness of MOOCs. In an international context where the major MOOC providers do not release their content with open licenses and where access to such content is increasingly limited to defined time windows, Italy seems to be largely a positive exception. As noted, most Italian MOOCs providers are in fact releasing their course content with open licenses and do not impose time constraints on their registered users, thus enabling them to download, retain, and reuse the educational content of each MOOC. Another relevant finding is the perceived lack of top-down policy coordination. Agreement emerged among the interviewees on the fact that the Ministry of University and Research should endeavour to ensure the medium and long-term sustainability of existing initiatives in the field both in financial terms and by supporting successful collaboration schemes. Moreover, this top-down support should explicitly endorse the commitment to openness and accessibility that the Italian initiatives have been able to preserve: this would be a strategic asset of the Italian university system, in line with the recent UNESCO Recommendation on OER (UNESCO, 2019). Interviewees agreed that policy makers should continue along the lines of the CRUI’s ‘Progetto MOOCs Italia’, which in 2016 launched a set of quality guidelines together with an institutional framework for the mutual recognition of credits acquired through MOOCs (CRUI, 2017). This initiative, which was criticized for its overly regulatory approach given the start-up phase of the Italian MOOC community at the time (Tammaro, Ciancio, De Rosa, Pantò, & Nascimbeni, 2017), has in fact not been followed up and has somewhat lost its momentum, as demonstrated by the fact that the CRUI observatory on MOOCs has not yet been activated (Fontanin & Pantò, 2019). The renewed attention to online learning imposed by the COVID-19 pandemic may be a unique opportunity to counterbalance the international MOOCs commercial attitude and ultimately to take advantage of the characteristics of the Italian MOOC ecosystem within the international scene. Well-defined measures by the Ministry able to capitalize on the openness of the Italian MOOCs landscape would be particularly timely and welcome in re-activating energies and resources already invested by Italian universities.

Furthermore, this study has highlighted that for most Italian universities the recent years have represented a period of reflection about their future MOOCs strategy. Faced with the increasingly commercial strategies of major international MOOCs platforms and the shifting of attention and resources to specializations and microcredentials, some of the players involved have decided to take some time to plan their strategy for the coming years.

Finally, this study has confirmed the need to conduct further research on Open Education dynamics within Italian universities, of which MOOCs often represent only the tip of the iceberg. A number of interesting and important aspects of MOOCs warrant attention. They include the business models adopted by different institutions; the multi-stakeholder collaborations that are starting to appear, as in the cases of Federica and EduOpen, which are gathering also non-academic institutions; the characteristics of MOOCs produced by Italian universities in terms of duration, language, field; and the impact of MOOCs on the different user groups targeted. Properly addressing these issues would contribute to increase the shared knowledge within the Italian Higher Education community about how MOOCs are approached and strategically planned, favoring both the strengthening of existing partnerships and the capacity of the Italian MOOCs ecosystem to self-promote within international settings.

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