

# A Scholarship of Open Teaching and Learning: new basis for quality in higher education

## La scholarship di una didattica aperta: nuove basi per la formazione universitaria di qualità

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### ABSTRACT

The recent research and policy context is drawing attention on the issue of openness in higher education. This emphasis is probably coming out from decades of debate on the power of open education to transform teaching and learning aligning the educational process with the needs of the knowledge society. However, the concept of openness has been probably endowed with a power that should be reconsidered on the light of real practices and institutional projects. This is particularly the case of quality teaching and learning in higher education, an issue that has been often connected with openness in a rather superficial way. This article draws on existing literature on the area of Open Education as well as on the area of educational quality, aiming at better understand how "opening up education" could generate quality for teaching and learning, and how quality teaching and learning could relate with openness in Higher Education.

In exploring these two conceptual universes, and building on Ghislandi and Raffaghelli (this Issue) the idea of SOTL is reconsidered, inviting the reader to think about a scholarship of open teaching and learning (SO2TL). In order to illustrate concepts, a case study is presented. It introduces a strategy to support an institutional process to opening up educational practices, which takes as key issue staff development to reflect on the idea of SO2TL. The conclusions aim at rethink future practice and research on the issue, in an attempt to give not only a concrete answer to the question "Is a scholarship of open teaching and learning connected to quality in higher education"?, but also, to put the basis for experiences that do support a positive answer.

Nel recente contesto politico e di ricerca sull'istruzione superiore c'è un'attenzione crescente sulla questione dell'openness (apertura di contenuti, pratiche, corsi, mediata dalle tecnologie). Quest'enfasi è probabilmente il risultato di un dibattito che esiste ormai da diverse decine di anni, sulle potenzialità dell'educazione aperta per trasformare la formazione, collocandola più in linea con le richieste della società della conoscenza. Tuttavia, il concetto di apertura è stato probabilmente investito di un potere che dovrebbe essere riconsiderato alla luce delle pratiche e progetti istituzionali concreti. Questo è probabilmente il caso della didattica di qualità nell'istruzione superiore, una tematica che è stata spesso collegata all'openness, ma in modo talvolta superficiale. Questo articolo si basa sulla letteratura esistente nell'area dell'Open Education, così come nell'area della Qualità della formazione, mirando a comprendere meglio come i processi di apertura educativa ("opening up education") potrebbero generare qualità formativa, e come la qualità formativa potrebbe essere collegata a sua volta con l'openness nell'istruzione superiore.

Nell'esplorare questi due universi concettuali, ed elaborando sul contributo di Ghislandi e Raffaghelli (questo volume), l'idea di Scholarship of Teaching and Learning (ricerca didattica) viene riconsiderata, invitando il lettore a pensare in una Scholarship of Open Teaching and Learning (ricerca per la didattica aperta) ovvero, SO2TL. Con lo scopo di illustrare meglio i concetti trattati nella prima parte, viene introdotto un caso di studio. Lo stesso presenta una strategia per supportare processi istituzionali di apertura formativa, cui elemento fondamentale sono i processi di sviluppo professionale del personale accademico per la riflessione sull'idea di SO2TL. Le conclusioni puntano a ripensare la pratica futura sulla tematica, in un tentativo di dare non solamente una risposta concreta alla questione "È la professionalità di ricerca per la didattica aperta connessa con la qualità nell'istruzione superiore?" ma anche, per porre le basi a nuove esperienze che ne diano una positiva risposta.

### KEYWORDS

Scholarship Teaching, Learning, Higher Education Openness.  
Ricerca didattica, Istruzione superiore, Apertura educativa.

## 1. Introduction: Opening up education, a challenge for XXI Century Universities

Nowadays, the governments show an increasing attention to the issue of openness in all sectors of lifelong learning, but higher education is the “eye of the storm”, due to the fact that the University is the first producer of high level knowledge, with a good (or even total) base on public funds. From the birth of the University of Bologna in 1088, the *alma mater studiorum* model has passed through several transformations, adjusting the role of the university at the crucial contribution the society and markets required (Ghislandi, 2005, p. 23). Today, however, it seems that this centrality is challenged, based on the evident impossibility of universities to tackle the fast economical and societal changes. There is agreement in recent studies in both North America (Brown, Calkins, & Siemens, 2012; Sheets, Crawford, & Soares, 2012) and Europe (European Commission, 2006, 2011, 2013b; EURYDICE, 2012) about the drivers of this critical situation: the contemporary institutional model of Higher Education (HE) must revisit its efficiency (organization and expenditures for the institutions and students), its effectiveness (employability of graduates), and its educational strategies (participation in lifelong learning internationalization, opening up education). Amongst the strategies for renewing Higher Education, there is a growing attention to what has been called “opening up” education (Barber, Donnelly, & Rizvi, 2013), i.e., a process of knowledge (produced by research and teaching at the university) sharing, based on the advances of educational technologies, that could encompass better use of resources, such as more inclusive educational models, a more direct connection with the labor market, and facilitating lifelong training.

A recent policy document of the European Commission (European Commission, 2013c), addressing a call for action on opening up education, underlines that «All educational institutions need to improve their capacity to adapt, promote innovation and exploit the potential of technologies and digital content» (European Commission, 2013c, p. 4). The study supporting the mentioned communication from the European Commission (European Commission, 2013a) stresses the need to promote “innovative teaching and learning through new technologies and Open Educational Resources” as strategy for lifelong learning, further embedded within the EU development goals and “flagship” initiatives for 2020 (EU2020). The actions deemed as crucial in this document are connected to the acquisition of digital skills, the availability of open educational resources, the connections between learning environments across physical barriers, and the engagement of all social stakeholders along the educational process to «change the role of digital technologies at educational institutions» (European Commission 2013b, p. 2). The concern for policy makers is the rather long way to go in a region where «while the three main MOOC (Massive Open Online Courses) providers in the USA offer around 400 courses with three million users worldwide, (...) one third of the 200 universities consulted were not even aware of what a MOOC is, and only one third were considering any MOOC-related initiative». European higher education institutions are a rather cautious or even reluctant approach to the adoption of technologies and pedagogies that lead to opening up education. In fact, in Europe, «institutional strategies tend to oppose openness to education that ICT provides. (...) In higher education (...) factors such as inflexible funding and governance structures, compounded by restrictions on budgetary resources, inhibit change» (European Commission 2013b, *ibidem*).

Yet the trend of political support to initiatives for openness is consolidated and will continue to grow. The emphasis is probably coming out from decades of

debate on the power of openness to transform teaching and learning aligning the educational process with the needs of the knowledge society (Banzato, 2012; Peter & Deimann, 2013).

Taking into account the international state of art, openness within HE models could be defined as the institutional promotion of OER-Open Educational Resources (UNESCO, 2002), OEP-Open Educational Practices (OPAL project/EF-QUEL,) and MOOC-Massive Open Online Courses (U. Ehlers, 2013). In January 2007, the OECD had found more than 3000 Open Courseware, offered by more than 300 universities around the world. This phenomenon was expanded by the Massive Open Online Courses, which exponentially grew from the initial experiences of Siemens in 2008 to the 2012 courses of the Stanford branch, with 160.000 participants. It is clear that open education will have an increasing incidence on curriculum, teaching and evaluation approaches in HE. The effectiveness and quality of an educational process can be easily recognized in an OER: it generates a process of research, management, generation and sharing of both disciplinary content (emerging from research) and pedagogical approaches (Gráinne Conole, 2012). In the case of MOOC, the debate (at the center of change in HE, according to Knox, Bayne, Ross, MacLeod, & Sinclair, 2012; Sheets et al., 2012), is taking research to analyze learning effectiveness as well as the feasible business models, since the big numbers characterizing these courses have completely changed the teacher/student relationship to focus other types of interaction (peer-to-peer, peer-content, etc.); generating spaces to think about quality and access to higher education.

In sum, as Wiley & Hilton put, «An appropriate response to changes in higher education's supersystem should include increases in connectedness, personalization, participation, and openness. Of these four, a significant increase in openness is the most pressing priority for higher education because a culture of openness is a prerequisite to affordable, large-scale progress in the other three areas» (Wiley & Hilton, 2009, p. 8).

It is the time for introducing innovations in pedagogical and institutional approaches that lead universities, to open up the own educational model.

Nevertheless, the concept of openness has been probably endowed with a power that should be reconsidered on the light of real practices and institutional projects, as well as the gaps of skills amongst academics and other teaching staff (Hodgkinson-Williams & Gray, 2009). Indeed, «Openness is a controversial topic. Even people who agree on its desirability can disagree over what openness really means and how best to achieve it» ([Mackie, 2008], quoted by McNamara, 2012, p. 1). This is particularly the case when regarding to educational quality, an issue that has been often connected with openness in a rather superficial way (E. Osianilsson & Creelman, 2012).

I argue here that every university should find the “right way” to implement openness, connecting it to the own learning culture and mainly, to academics professional development to become fully fledged participants of a scholarship of *open* teaching and learning: aggressive, top-down reforms find always resistance and lack of cooperation [18](p. 502-562). In fact, according to Wiley & Hilton, every institution can analyze and find the own path to introduce open education principles and practices:

There are a number of ways institutions can be more open, including programs of open sharing of educational materials. Individual faculty can also choose to be more open without waiting for institutional programs. Increasing degrees of openness in society coupled with innovations in business strategy like dy-

namic specialization are enabling radical experiments in higher education and exerting increasing competitive pressure on conventional higher education institutions (Wiley & Hilton, 2009, pp. 13-14).

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In exploring these two conceptual universes, and building on Ghislandi and Raffaghelli (Introduction, this Issue) the idea of SOTL is reconsidered, inviting the reader to think about a scholarship of *open* teaching and learning (SO2TL). In order to illustrate concepts, a case study is presented. It introduces a strategy to support an institutional process to opening up educational practices, which takes as key issue staff development to reflect on the idea of SO2TL.

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## 2. What do we mean with openness: A term that continues to expand

Openness in Education has been defined as an *emerging paradigm of social production* (Peters, 2008). For Sir John Daniel (2012), President & Chief Executive Officer of the Commonwealth of *Learning* «Open education broke open the iron triangle of access, cost and quality that had constrained education throughout history and had created the insidious assumption, still prevalent today, that in education you cannot have quality without exclusivity».

In spite of these statements, it is worth to trace back the basis of a philosophy of openness in Education, to understand the strength of the concept.

As Materu puts, «If the nineties were called the e-decade, the current decade could be termed the o-decade (open source, open systems, open standards, open access, open archives, open everything). This trend, now unfolding with special force in higher education, reasserts an ideology that has tradition traceable all the way back to the beginning of networked computing» (Materu, 2004, p. 5)

However the principles of openness in education are not entirely new; it is worth to recall, the American movement of “open classroom” that flourished in the 60s and 70s, the idea of “deschooling society” by Ivan Illich (Illich, 1971), as well as adults education concepts by Freire (Freire, [1970] 2000), let alone the UNESCO campaign in the 70s “Education for all” as well as the United Nations’ Universal Declaration of Human Rights in 1948 expressing that “*Education shall be free, at least in the elementary and fundamental stages*” (United Nations, 1948, Art.26, para.1, quoted by (D’Antoni & Savage, 2009, p. 138). Even earlier thinkers have been considered. Peter & Deimann (op. cit.) made an historical reconstruction that traces back ideas on openness on embryonic forms of open adult education along modern Western history. They mention the late middle ages with public lectures and experts rented by independent learners as the basis of the Universities; the Renaissance with the emergence of the fabulous invention of Johannes Gutenberg and printing, allowing the creation of public libraries; and the industrial revolution with Enlightenment and self-education. Arriving to the XIX and XX<sup>th</sup> century, the public school, open and for all could be considered at the basis of the modern societies’ project of development. As just an example, it

is worth to remember Thomas Jefferson's famous principle that "*ideas should freely spread from one to another over the globe*" (Unsworth, 2004). Recently, the most quoted case is that of the British Open University, founded in 1960s, which removed every barrier of access to higher education admitting students without formal qualifications. Peter & Deinmann also quote the model of the public University of Buenos Aires, a case standing on a former national reform early in the XXth century (1918) and tightly connected to socio-political values. In the case of Italy, several educationists and educational philosophers have been appointed; in fact, Banzato (op. cit) traced back the open educational movement in Italy to the ideas of Antonio Gramsci (1947), to the movement of "Cooperazione Educativa" (1951), or the famous school of Barbiana (1967), among others.

Along this *ex-cursus* it becomes evident that values that were the kernel of the Enlightenment, that is, *liberté, égalité, fraternité* (freedom, equality, fraternity); the same that shaped socio-political movements of contemporary age, putting the basis for democracy; are embedded in all the discourses of openness (Peters, 2008). Moreover, making knowledge (as the highest human kind's achievement) accessible and shareable is at the bottom of educational philosophy, which aim is to make societies to progress (Wiley & Gurrell, 2009).

In the contemporary society, what have really changed is the pace and means by which the philosophy of openness is put into practice within the educational settings: this is in fact the result of the raise of ICTs and the connected digital culture. Therefore, while the pedagogical debate had already developed key ideas regarding openness, the technological *affordances*, as well as other socio-cultural representing the digital revolution, were the springboard for the current *me-me of opening up education*.

As a matter of fact, the age of Internet deeply changed the patterns of access to information; the more recent "Web 2.0", that is, the social web, has enabled a revolution with regard to the consumption and production of information and services through the web; Tapscott & Williams showed that in several fields a historic turning point has been reached. This applies to as different human activities as business, health care, the media, environmental issues, science and education, where the "wisdom of crowds", through collaborative processes is supporting innovation and deeply changing not only scientific discoveries or jobs, but also daily life (Tapscott & Williams, 2008, 2010). There were important milestones empowering openness in several fields. The first one was the Open Source led by Linus Torvald, who during the '90s and early 2000 launched the Unix open code, putting the basis for collaborative a world-wide community of programmers contributing to a common, universal good (code supporting free operational systems for personal and networked computing). The Open Source movement reinforced the Open Access (OA) movement, that meant, opening progressively scientific (and later on all sort of knowledge), universally (Suber, 2009). In fact, the debate moved around the unbearable situation of restricted access to scientific information generated with public funds. The increasing access and openness of contents during the decade of 2000, led to the concern on intellectual property, as one of the most important drawbacks of Open Access movement. As a result, another important milestone comes about: the Creative Commons Licenses, aiming to modify the concept of "all rights reserved", allowing combinations of four conditions (Attribution, Share Alike, Non Commercial, No derivatives). The mentioned combinations create new opportunities to make one's work available, facilitating open access to it.

As we can see, more and more, the digital revolution has pushed the bounda-



ries of users' expectations with regard to the accessibility: having free access to a wealth of information leads users to get engaged were they can participate, not by achieving content, but mainly by communicating with others and creating the own content. This puts strong basis for openness: from one side, there is an utopia of participation and equity through access; from the other hand, new business model that are based on restricting participation and top-down control of knowledge and services could not survive. In fact, within the educational field new ways of communicating through the web resulted in new ways of learning, beyond institutional spaces and reinforcing both collaborative (peer-to-peer) and independent learning (Seely Brown & Adler, 2008). The formal educational institutions, from school to higher education, were stroke by the dynamics of the networked, social media: the educational debate along the last decade has been just responsive to the need of integrating and acknowledging informal and non-formal learning processes, being the risk not only drop-out but also the poor alignment with the socio-economical requirements for development. Open education in fact provided a strong conceptual base for educational researchers, practitioners and policy makers to figure out the landscape of educational shift; the blurring boarders of formal education, and the educational practice itself as "cross boundary" or "runaway object" (Engestrom, 2009) could be framed.

As the latest cases of *openness* in education we should consider the MIT's Open Course Ware (OCW); the Open Educational Resources concept (UNESCO, 2002) later followed by Open Educational Practices (Ehlers & Conole, 2010); and the recent "hype" of Massive Open Online Courses (MOOCs). In a more or less evident manner, these concepts are challenging formal education and particularly Higher Education, while at the same time are putting the basis for a new educational landscape. The Figure 1 introduces a representation of the history of openness in Education as depicted by Peter & Deinmann (op. cit., p. 11), that allows us to understand the phenomenon's depth and length.

The most enthusiastic declaration on open education was made at Cape Town in 2007; as the web document stands, "we are on the cusp of a global revolution in teaching and learning. Educators worldwide are developing a vast pool of educational resources on the Internet, open and free for all to use. These educators are creating a world where each and every person on earth can access and contribute to the sum of all human knowledge. They are also planting the seeds of a new pedagogy where educators and learners create, shape and evolve knowledge together, deepening their skills and understanding as they go". This was preceded and followed by scholarly research literature that by means of empirical and theoretical research gave support to the following statement: openness could be the via maestra to make quality education finally accessible for all. What was once restricted to an élite could be now given for free to the masses, that could respond in time by enhancing open knowledge for a personalized pathway of lifelong learning.

It goes without saying, within this landscape quality is the kernel of the debate (Ehlers, 2013). In spite of the enthusiastic statements coming out from the Open Education movement, openness cannot be equated to better educational quality. Quality is a complex issue, and where an educational resource is deemed as of quality, more refined issues like cultural contextualization, or more basic problems as internet connection, can prevent the learner to experience full quality learning. From the other hand, openness has the potential to enact teachers' and learners' new forms of engagement in the educational process, generating what has been called "quality learning cultures".

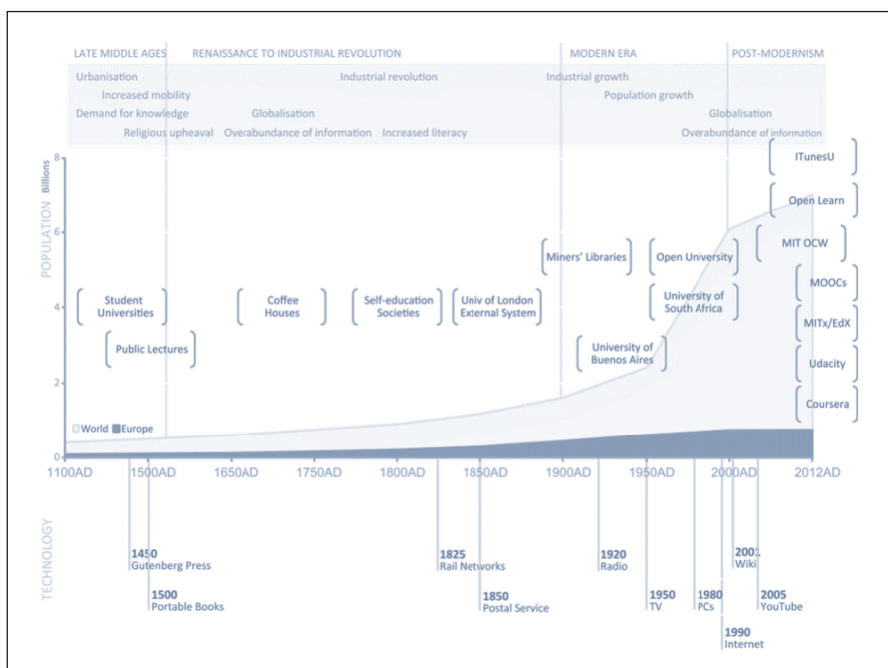


Fig. 1. A timeline for the idea of openness. From: Peter&Deinmann, p. 11

In the next section we will introduce the debate on Educational quality, as a mean to understand the opportunities and pitfalls generated by open education.

### 3. Educational Quality and Openness: opportunities and pitfalls

The promise of Open Education faces tensions and contradictions within Higher Education Institutions, depending on the stakeholders' values (educational, deontological) and interests (Bates & Sangra, 2011). Indeed, one of the main hazards for the implementation of openness is the quality of networked learning experiences: considering the base of educational resources available, the way they are made accessible, the existence of local support and cultural contextualization, the recognition of learning from open educational resources outside an institution are but a few of the topics regarding the problem of quality in open education.

But there is another, deeper problem in understanding educational quality within open education, that is, how quality is defined by the several stakeholders participating in an educational process.

Indeed, quality is not an intrinsic, universal value, but it has to do with the methodology of evaluation and the substantial epistemological principles and values underlying the process of evaluation (Ghislandi, Raffaghelli, & Yang, 2013). As the 2005 UN *"Education for All" Global Monitoring* report indicates, «...Notwithstanding the growing consensus about the need to provide access to education of "good quality", there is much less agreement about the term actually means in practice.» (UNESCO, 2005, p. 29).

In the general field of education, authors exploring the concept have used a myriad of definitions (Adams, 1993) or at least different values as drivers of quali-

ty conceptions and practices (Harvey & Green, 1993; Shelton, 2011). The recent advances in the study of educational quality have in any case emphasized the need of a multidimensional approach where elements like learners' characteristics, the teaching and learning processes, the learning outcomes as well as the socio-cultural and institutional context supporting education intervention are to be taken into account (UNESCO, *op. cit.*). In the specific case of Higher Education and particularly of eLearning (a key component of Open Education), the debate about quality considers in fact several levels and areas of the educational process, like is the case of the Sloan-C framework from U.S, which defines quality as a synergy of five elements or "pillars", i.e., *learning effectiveness, cost effectiveness, access, faculty satisfaction and student satisfaction* (Bourne & Moore, 2003). Consistently, in the European approach, quality is considered through the different values and perspectives (producers/deliverers/users of education), and the different levels of the educational process (Ehlers & Joosten, 2009). Furthermore, the trends of research in Europe emphasize the notion of quality as a participatory process where the learners/users vision is fundamental. The perspective of the user generated content quality framework stresses the idea of quality as part of dialogue and participation within an organizational learning process (EFQUEL European Foundation for the Quality of eLearning, 2006; Ehlers, Helmstedt, & Bijmens, 2011) that supports the generation of a "quality culture" and of "peer reviewed" quality (Auvinen & Ehlers, 2007). What it is clear according to this panorama, is that quality cannot be considered as universal fact, but a multiperspective, multilevel and contextualized process (Ghislandi, Pedroni, Pellegrini, & Franceschini, 2013). In spite of European efforts to constitute a framework for reflection and practice in the field of eLearning quality and later on Open Education, consistent transferring of concepts into practices is still difficult (Ehlers & Hilera, 2012).

The initial assumption in Open Education was that just "access" to "high quality resources" could encompass a radical change in the quality of education. This idea has probably emerged along with the concept of OER (open educational resources) coined by UNESCO (2002), yielded by the MIT Open Courseware initiative and impacts. Nevertheless, lying behind the utopia of high quality education, we find a conception that could neglect a more participatory idea of quality, for the "high quality resources" would be produced by powerful and rich Western institutions, mostly English speakers, while the "access" would be possible for those in the underdeveloped world. As Atkins et al put "(OER) *catalyze universal access to and use of high-quality academic content on a global scale*" (Atkins, Seely Brown, & Hammond, 2007, p. 1); also (Keller & Mossink, 2008, p. 13) emphasized that OER could promote "*high-quality educational material freely available world-wide in many languages*".

In spite of the positive data showing the beneficial results of openness in education, several drawbacks were also highlighted (Bates, 2011). Firstly, the evidence showed that most open educational resources are produced and adopted in rich, English speaking, countries. The first analysis on the participation at Massive Open Online Course are indicating a striking participation of those that are already employed, with high levels of education, and coming mainly from the US (Christensen et al., 2013; Ho et al., 2014). An infographic by "Top ten Colleges" clearly illustrates this situation.<sup>1</sup> Moreover, Kanwar, Kodhandaraman, & Umar (2010)

1 <http://www.top10onlinecolleges.org/mooc/>



have pointed out the importance of practice and cultural aspects of OER, where different stakeholders, not only OER producers, contribute to the quality of education; and Liyanagunawardena, Williams, & Adams, 2013 have highlighted the type of barriers that can be met in developing countries when adopting OER: physical (access to internet) lack of digital literacy to participate in online courses, institutional and cultural (from language to the culture of learning).

Secondly, the idea of quality in eLearning does not only regard the delivery of content, but has to do with the way the learner is engaged with the content through opportunities for significant activity both regarding interactions with experts, tutors, peers; and the own practice for learning (Swan, 2003). Conole (2012), has mentioned a set of criteria elaborated by the Spaces for the Knowledge Generation project, that should be taken into account when designing for (open) learning: comfort (a sense of well-being), aesthetic (recognition of symmetry, harmony, simplicity and fitness for purpose), flow (the state of mind felt by a learner when totally involved in the learning experience), equity (consideration of cultural and physical differences), blending (a mixture of technological and face-to-face pedagogical resources), affordances (action possibilities) and repurposing (potentials for multiple uses). More recently, when referring to MOOCs, Conole (2013) pointed out that there are a number of characteristics that should be taken into account when thinking about learning effectiveness and quality, namely: the degree of openness, the scale of participation, the degree of their use of multimedia, the amount of communication, the extent to which collaboration is included, the type of learner pathway (from learner-centred to teacher-centred and highly structured), the level of quality assurance, the extent to which reflection is encouraged, the level of assessment, how informal or formal it is, the degree of autonomy possible, and the diversity of the learner population.

Thirdly, there is the problem of recognition of open learning experiences for lifelong learning as well as for career opportunities. As (Ossiannilsson & Creelman, op. cit., p. 19) pointed out there is still a long way to go to move from “proprietary” to “personalized” higher education, where any students come from any learning experiences to one University and their learning can be recognized; and where the certification/credits obtained for several types of learning can be also deemed for career and personal development. Wiley (2011) suggests that Open Accreditation Resources (OAR) could be a strategy through which the learners having access, using, and remixing OERs can create forms of evidence that support certification of learning. Moreover, the OERTest project (EU-LLP-ERASMUS)<sup>2</sup> has analyzed several scenarios for the accreditation of learning outcomes acquired through OER; within this project, a clear principle was that quality (open) learning cannot be achieved if the final step, accreditation has not place (Camilleri et al., 2012).

Therefore, open education quality emphasizes even more the need of reflection, participation and recognition of values as well as the need of standards and frameworks of reference, shared at interinstitutional and even transnational level, in a combination of individual, intersubjective, community, institution and regional/transnational layers of experience (Ossiannilsson & Creelman, 2012a). In fact, the movement of open education has moved in the last decade from the production/consumption model, to understand the networks of “prosumers”,

2 <http://www.oer-europe.net/>

promoting the cycle of use, share, remix and get credit (reelaborating on Beaven, 2013). In line with this idea of vivid communities and networks, Ossialnisson and Creelman (2012) structure open education projects as based on a first level of resources (OER), as springboard for practices (OEP), that generate an “open educational culture” (OEC). Within this culture, flexibility, accessibility, interactivity and personalization, well known quality indicators in open learning, have to be put in relation to management, content and support to students and staff, to participate in a culture of openness.

Building on the revised literature above, we could conclude that there are three key issues regarding the problem of quality in open education:

- The first one regards the process of generation of “quality” resources, from content coming out from scientific research, to teaching documents and media, to learners’ generated content. Much research on the quality of Open Education focused frameworks of quality to classify existing OER. Moreover, most MOOCs require a complex process of elaboration, from the selection of academics engaged, to editing resources, mainly videos (Seaton et al., 2014; Zahn, Krauskopf, Kiener, & Hesse, 2014)
- The second one regards the process of fruition and engagement from learners as well as the opportunities for obtaining recognition of the own learning experiences across open education.
- The third one regards the strategies that an institution or better a network of institutions puts into practice to assess, accredit and certificate learning outcomes from own activities or external activities.

The above three items draw attention to a key requirement to yield quality open education, that is, the need of academic staff development through a scholarship of teaching and learning. Indeed, the principles of open education and SOTL coalesce. As Gale puts:

The heart of open education is the sharing of accumulated knowledge and developed resources that improve teaching, student learning, and research. The scholarship of teaching and learning thus is naturally committed to open education, for it has always supported and been sustained by open understanding of principles and practices, examples and exemplars, made available and usable to the broadest of publics (Gale, 2008, p. 289)

The same author, gathering the experiences of the *Carnegie Academy for the Scholarship of Teaching and Learning (CASTL) Higher Education Program*, pointed out that openness is based on a culture of sharing, peer-analyzing and constructing teaching resources (Gale, op. cit., p. 290)

However, as Ghislandi & Raffaghelli (this volume) emphasized, a prior requirement of SOTL is staff development to understand the connections between doing research and teaching in an open, hyper connected world: a *scholarship reconsidered*, to paraphrase the pioneer work of Ernest Boyer (1990).

At this point, we can elaborate Ehlers’ conceptualization on “Quality Culture” (Ehlers, 2007; Ehlers, 2009), which brings good instruments to develop a quality model that overcome evident quality procedures or frameworks to validate open educational resources, practices, and massive courses (first level); moving ahead, instead, to achieve academics awareness on openness as part of a broader concept of educational quality.

Ehlers introduces 4 elements of the organizational culture, namely:

- A structural element (the visible quality system of an organization);
- Enabling factors (the tools/engines that allow the implementation of quality systems);
- The quality culture (the values, symbols, heroes and rituals linked to the idea of quality) and
- Transversal elements (the forms of participation, communication and trust that maintain a certain quality approach).

According to Ehlers, the model of Quality Culture cannot be changed/improved if stakeholders are not aware of these four elements at least partially. He further emphasizes that quality systems implemented as *exogenous* (mostly based on structural elements) tend to conflict with the organizational culture and hence to be applied superficially; whereas *endogenous* quality systems take into consideration actors participation and awareness of the quality system, governing processes and production. The stakeholders information, skills, and ability to transfer into practice the quality values, is called by the author “*quality literacy*”. He further operationalizes the construct through four important dimensions:

- Quality knowledge (to know what about quality),
- Quality experience (to have the necessary instruments to implement quality);
- Quality analysis (to evaluate –and understand the evaluation- of quality);
- Quality innovation (to modify actively what is necessary to promote better quality).

To expand Ehlers’ developmental idea, in our research (Ghislandi & Raffaghelli, 2012, Ghislandi, Raffaghelli, & Yang, 2013, Raffaghelli & Ghislandi, 2014) we took into consideration the socio-constructivist definition of the term *mediation* (Wertsch, 2007) as approach that implies offering tools that would support the processes of negotiating the many values lying behind a *quality culture*. According to this theoretical reference, *mediation* could encompass a learning process where stakeholders can enter a process of change, being guided *across the zone of proximal development*, from an initial position (i.e. *outsiders* of quality) to a new position (as *insiders* of quality or active agents of change). In fact, this approach is not *prescriptive*, that is, based on a number of instructions to operate. Instead, it is contextual and based on reflective and collaborative professional/institutional practices within the learning culture. For openness should not be deemed as an absolute; instead, we should think on *degrees of openness* (Hodgkinson-Williams & Gray, 2009), as progressive process of implementation along different (EU/national/institutional) systems, that must overcome cultural, organizational and personal tensions and contradictions.

I will say more: in the light of this conceptualization *opening up educational practices* is the *mediational mean* to develop awareness, reflection and collaboration for a *quality open learning culture*.

Our next step will be to better understand the Open Education movement in its different facets (OER, OEP, MOOC), in order to understand how it emerged and developed; and to make the connections with quality teaching and learning.

### 3.1 Open Educational Resources: a springboard to rethink educational practices

The concept of OER was coined during the UNESCO’s 2002 Forum (UNESCO, 2002) on the Impact of Open Courseware for Higher Education in Developing Countries,

as concept to make sense of the impressive amount of educational content being offered freely and openly for anyone to use through the Internet. The potential of the concept was mainly connected to access and quality education for all, a well-known concern for UNESCO. From then on, the use of OER has been considered a valid strategy in order to renew educational practices (OECD, 2007), (Conole, 2012), on the basis of the previous discussion about learner centered approaches supported by access to free knowledge, beyond the curriculum (Lemke, 1994) (Seely Brown & Adler, 2008). In fact, after the conceptualization proposed by UNESCO, several experiences and systematic approaches emerged about the use and sharing of OER (Andrade et al., 2011; Van Assche et al., 2009).

According to the extensive review on OER in Conole (op. cit., p. 225-243), there is a rapid expansion in the number of OER projects, as well as the number of people involved and the number of resources available. By January 2007 the OECD identified over 3.000 open courseware available from over 300 universities worldwide; latest estimations count 20.000 courses and 500 million OER (Pantò & Comas-Quinn, 2013). In repositories such as MERLOT<sup>3</sup>, Connexions<sup>4</sup>, OpenLearn<sup>5</sup> and others, there are hundreds of thousands of pieces of content or materials representing thousands of freely available learning hours (Hénard & Roseveare, 2012; OECD, 2007, p. 10). A recently created area for retrieving and sharing open educational resources (from specific resources to MOOCs) is the European Portal “Open Education Europe”, a portal that should mainstream sparse practices and ideas according to the EU policy priorities (European Commission, 2013c).

Independently of whether institutions are engaged in OER projects or not, OER can be expected to affect curriculum, pedagogy and assessment, since OER movement is likely to accelerate changes in the traditional teaching role and the evolution of more independent learners (OECD, op. cit.). However, in the recent years the concern about the quality of OER raised, taking into consideration the fact that the quality models are fragmentary or not applicable to OER (Andrade et al., 2011). The same authors addressed the idea that quality has to be built through *open practices*. Since OER can be used and reused by teachers and learners in a range of contexts (formal, non-formal and informal learning); in the form of self-guided individual learning or collaborative, problem-driven learning, the concept of OEP (Open Educational Practices) emerged after 2010 as extension of the discussion about the quality of Open Educational Resources (U. Ehlers, 2011). Open Educational Practices are based on access to the extensive available resources, but attempt to move beyond, as we will see in the following paragraph.

- 3 <http://www.merlot.org/>, Multimedia Educational Resource for Learning and Online Teaching. The project is supported by individual and institutional contributors from US. MERLOT is a free and open online community of resources designed primarily for faculty, staff and students of higher education from around the world to share their learning materials and pedagogy.
- 4 <http://cnx.org/> Connections Project, sharing resources and knowledge building - Connexions® is supported by the William and Flora Hewlett Foundation, the Maxfield Foundation, and the Connexions Consortium. The context is international but almost all supporters are from US.
- 5 <http://www.open.edu/openlearn/>. The project is supported by the Open University of UK.

### 3.2 Moving from the Open Educational Resources to the Open Educational Practices concept

According to the OPAL final report<sup>6</sup> «although open educational resources (OER) are high on the agenda of social and inclusion policies and supported by many stakeholders of the educational sphere, their use in HE and adult education (AE) has not yet reached the critical threshold which is posing an obstacle to a seamless provision of high quality learning resources and practices for citizens' lifelong learning efforts. This has to do with the fact that the current focus in OER is mainly put on building more access to digital content. There is little consideration of whether this will support educational practices and/or promote quality and innovation in teaching and learning». As the OPAL coordinator put (Elhers, 2011) «In an analysis of publicly-funded and foundation-funded OER initiatives worldwide, Stacey (2010) shows that the focus of current, well-known OER initiatives is on the creation and publication of OERs. Use and reuse are still somewhat underrepresented; strategic aspects like business models or incentive strategies for creation use and reuse are not broadly touched upon». Elhers continue to argue that «in this situation, a model of factors that outlines the surrounding and influencing elements for the creation, use, sharing and reuse of OER for individuals, organisations and policy is indispensable. Such a model has to suggest the shift from a phase in which the preliminary focus is on opening access to resources, to a phase in which the primary aim is to embed OER into learning and teaching practices. The project OPAL therefore extends the focus beyond 'access' to 'innovative open educational practices' (OEP). OEPs are defined as practices which support the (re)use and production of high quality OER through institutional policies, promote innovative pedagogical models, and respect and empower learners as co-producers on their lifelong learning path. OEPs address the whole OER governance community: policy makers, managers/administrators of organizations, educational professionals and learners».

The OPAL project in fact developed a set of tools for the diagnosis of levels of implementation of OEP in the policymaking, institutional and individual activity.

In line with OPAL concern, the OLNET<sup>7</sup> case, presented by Conole (2012, op. cit.), is an international research hub for aggregating, sharing, debating and improving Open Educational Resources (OER). The aim of OLnet is to gather evidence and methods about how we can research and understand ways to learn in a more open world, particularly linked to OER, but also looking at other influences. The project has tried to develop tools, like the "Evidence Hub" and the Seminars and Visiting Fellowships to provide an environment to systematically interrogate the Open Education movement, as well as represent and map the collective knowledge and memory of the Open Education community. The case of OpenLearn (see footnote) is also interesting for it has not only created an extensive database of resources for open education, but also tried to analyze the im-

6 OPAL Project final report – Public part – KA3-ICT project funded within the context of EU LLP (2010-2012) [http://eacea.ec.europa.eu/llp/projects/public\\_parts/documents/ict/2011/ict\\_mp\\_504893\\_opal\\_final.pdf](http://eacea.ec.europa.eu/llp/projects/public_parts/documents/ict/2011/ict_mp_504893_opal_final.pdf).

7 OLNET - <http://www.olnet.org/> Open Learning Network. Supported by The William and Flora Hewlett Foundation, OLnet is a partnership project between The Open University, UK and Carnegie Mellon University, USA.



part of “openness” at institutional level; formulating a set of recommendations that go from generating the platform for OER to designing for OER (McAndrew et al., 2009). It is important to note that probably many of these achievements have been transferred to the OPAL initiative since OU-UK, leader of OpenLearn was partner in this last pan-EU project.

Another three cases worth to mention are the OERTest project<sup>8</sup>, the LUOERL project and the POERUP<sup>9</sup> project.

The first one is a recently concluded LLP Erasmus Partnership that aims to support the mainstreaming of OERs within Higher Education and to test the feasibility of assessing learning exclusively achieved through the use of Open Educational Resources. In a project final publication (Camilleri et al., 2012), the consortium attempts to take the movement of OER “a step further”, with regard to the processes of recognition of learning on the basis of adoption of OER, according to several scenarios of learning recognition that go from self-guided learners within HE as integration of formal learning, to the recognition of non-formal and informal learning based on OERs for professional crediting.

The second one is a JISC research project<sup>10</sup> where an expert consultant was asked to undertake a literature review to provide a greater understanding of the ways in which learners, whether or not in formal education, use online resources to aid their learning experiences and the factors that influence the selection of resources.

The last is an ongoing LLP project KA3-ICT that will conclude in 2014, which aim is to study the end-user-producer communities behind OER initiatives. By comparing in-depth European case studies to selected non-European ones, the aim of POERUP is to refine and elaborate recommendations to formulate a set of action points that can be applied to ensuring the realization of successful, lively and sustainable OER communities.

As we can see from the cases cited above, the community of researchers and practitioners are moving clearly from the idea of *producing and consuming* OER, to understand the ways in which OER are (if) used. In many of the concluded studies and projects, like the case of OERtest and the LUOERL project, the evidence shows a) still weak culture of adoption towards innovative/quality open practices; b) little analysis of how learners adopt OER and which kind of impacts have them in their personal/professional careers, with most of the evidence collected in studies with undergraduate students and in Higher Education OER platforms.

All the above reported information seems to be coherent with the EACEA's concern about moving educational practices to the digital age: «Substantial progress has been achieved in all Member States in the field of ICT for education since the launch of the Lisbon strategy. Almost all education and training institutions are equipped with and networked through ICT. However, more needs to be done to realise the full potential of ICT for supporting innovative pedagogical

8 <http://www.oer-europe.net/>

9 <http://www.poerup.info/index.html>. “Policies for OER uptake”.

10 “Learners Use of Online Educational Resources for Learning”. See Bacsich,P.; Phillips, B. and Frank Bristow,S., *Learners Use of Online Educational Resources for Learning, Final Report*, retrieved from <https://oerknowledgecloud.org/?q=content/learner-use-online-educational-resources-learning-luoerl-%E2%80%93-final-report>, JISC, Joint Information Systems Committee, UK, January 2013.

developments, generalised access to lifelong learning, and the acquisition of key competences. This will maximise the return on current investments in ICT supported learning. Despite the progress made in the field of ICT and education, there is a serious lack of systematic and practical uptake of new technologies and creative pedagogies in formal education. Educational institutions are not reaping the benefits of ICT as an enabler to modernise learning and teaching practices»<sup>11</sup>

So OER can be a channel for pedagogical innovations based on the full enhancement of ICTs through OEP, but its potential is still to be exploited in the light of educational quality.

### 3.3 *The case of MOOCs*

As we mentioned at the beginning of this article the model of the academic institutions as “ivory towers”, where pure knowledge is guarded and accessed only by privileged (academics and young students), is to be overcome. In this context, MOOCs (Massive Open Online Courses) have been given an impressive attention since late 2011 (Sheets, Crawford, Soares, 2012; Daniels, 2012). From the Siemens’ early experiences in 2008, several proposals have been launched from US and Canada; during 2013 Europe officially joined the movement with the project “Openup Ed”, and the European portal “Open Education Europe” (both aggregators of some hundreds of MOOCs produced in EU, no technical or pedagogical support; it is to be noted that many of the MOOCs there appeared are originally delivered through the main American platforms like Coursera). The model has seen a very fast expansion and has been considered as a springboard for Higher Education change due to the revolution it encompasses regarding key issues as accessibility, openness, excellence of teaching staff tightly connected to very successful research and business activities (Brown et al., 2012; Knox et al., 2012). It is to be considered that the concept of MOOC is based on the original experience by Siemens, but the initiatives by Coursera and other American platforms yield a classification of MOOC initiatives in late 2012, as xMOOCs (based on the excellence of the lecturers with a rather traditional delivery method) and cMOOCs (the original proposal by Siemens, based on the principles of Connectivism are adopted in the pedagogy of the MOOC) (Yuan & Powell, 2013). Later on, Clark discussed the former classification proposing as much as 8 types of MOOCs (Clark, 2013). In any case, the high quality of contents, produced by prestigious academics, as well as the open access to them, put the basis for “quality for all” (Barber et al., 2013; Daniels, 2012). Beyond the enthusiastic response of thousands of students and teachers, and the presence of prestigious universities behind the initiatives, the criticism is also raising, while the first designers think about the pedagogical drawbacks (Guàrdia, Maina, & Sangrà, 2013), and the first learners go through their MOOC experiences (Ho et al., 2014).

Along the evolution of both scholar and policy making discussion on the issue it is possible to see how the attention is moving from the organizational innovation to the participants’ perspective. Amongst the initial criticisms raised against the value claimed by the first MOOC implementers for the sustainability

11 LLP Call for Proposals 2013 – Policy Priorities: [http://ec.europa.eu/education/llp/doc/call13/prior\\_en.pdf](http://ec.europa.eu/education/llp/doc/call13/prior_en.pdf), p. 43.

and quality of the approach, the issue of drop-out became crucial. As Hill declares it should be necessary to provide... *an experience and perceived value that enables higher course completion rates (most today have less than 10% of registered students actually completing the course)* (Hill, 2013). Another important concern was the pedagogical design of MOOCs; for example, the “Higher Education Chronicle Survey”<sup>12</sup>, which analyzed the point of view of 174 scholars engaged in MOOCs, established the interest of them in keep contributing to the experience, but the high overload in doing so. The trend of scholarly publications grew exponentially from the beginning of 2013 till today. A year after the raise of the phenomenon, the contributions of scholarly literature have focused the need to pass from the analysis of MOOCs as model to the impact it can have on learners and institutions, across diverse learning cultures (Liyaganawardena, Adams, & Williams, 2013; Mor & Koskinen, 2013; Siemens, Irvine, & Code, 2013).

The issue of quality in MOOCs is evidently controversial: while institutions are concerned about business models and the role of MOOCs as “marketing” or as part of educational research activity (Raffaghelli, 2014b); scholars have raised a number of issues that affect the quality as perceived by learners. A model for the quality of MOOCs is extremely necessary: to this regard, the EFQUEL initiative “MOOC quality project” pioneered a number of debates drawing attention on the issue, worth to mention separately in the following paragraph.

### 3.4 Where is Quality in MOOCs? Defining Quality from the several perspectives

There are already consolidated systems to analyze and award eLearning quality both in North America (see for example the case of SLOAN Consortium<sup>13</sup>) as well as in Europe (the European Framework for Quality in eLearning<sup>14</sup>). It is interesting to consider that the multilevel approach to the analysis of quality is consistent with Conole and Oliver levels’ of analysis for the eLearning practice (Gràinne Conole & Oliver, 2006):

1. Macro-level or system factors such as cultural norms, social context, educational policy, curriculum standards, organizational factors.
2. Micro-level or individual factors such as, from the teachers’ side, pedagogical practice, educational background, experience with technology, etc; and for pupils, experience with technology, social and cultural background, learning processes, etc.

According to the above mentioned frameworks, it is not enough to refer to effective issues registered at macro-levels in MOOCs (business model, organizational innovation, the quality of design and resources to cover big numbers of students). Instead, an integral approach to quality requires effective practices and impacts also at micro-level, as it is the case of learners’ perspective.

However, the frameworks adopted to analyze eLearning experiences could not properly address the MOOCs,

12 <https://chronicle.com/article/The-Professors-Behind-the-MOOC/137905/#id=overview>

13 <http://sloanconsortium.org/>

14 <http://efquel.org/>

When it comes to quality there are some crucial questions. What are MOOCs actually aiming at? Can the quality of MOOCs be assessed in the same way as any defined university course with traditional degree awarding processes? Or do we have to take into account a different type of objective with MOOC learners? Are the learners mostly interested in only small sequences of learning, tailored to their own individual purpose, and then sign off and move to other MOOCs because their own learning objective was fulfilled? – (U. D. Ehlers, Ossiannilsson, & Creelman, 2013)

To this regard, the MOOC Quality Project launched a debate about quality in MOOCs, bringing together a global group of experts and first movers in the field of MOOCs, along 12 weeks. The experts were: Stephen Downes, Dave Cormier, Asha Kanwar, Grainne Conole, Claudia Bremer, Martin Weller, Julius Kvissberg, Paul Stacey, Wayne Macintosh, Gilly Salmon, Yves Epelboin. Summarizing the points raised regarding quality in MOOCs, almost all experts (and particularly Stephen Downes) highlighted the need to reconsider dropouts as a sign of poor quality. Most of them pointed out that the quality measures adopted for analyzing educational quality and elearning quality are not applicable to the MOOCs, which nature should be understood better, case by case; the idea most experts embraced is that understanding the aims a specific MOOC promotes (or why and how the MOOC was designed), leads to implement tools to explore to which extent there is “fit for purpose”. Moreover, these factors should be transparent to the learners, in order to avoid their disappointment with the MOOC they decided to attend. In Ehlers, Ossiannilsson & Creelman terms (2013), *The key issue is perhaps to ensure that promises are kept and that MOOC providers provide clear information about what the course can and cannot offer.*

In any case it seems appropriate to have some parameters against which a MOOC can be analyzed, and through which different MOOCs could be compared both by learners and by institutions. To this regard, an interesting proposal was made by Conole, presented within the “MOOC Quality Project” and further deepened in a scholarly article (2013). She goes on saying that the quality needs to be considered in relation to both the design and delivery of MOOCs. To that regard, she created a classification of 12 dimensions to analyze MOOCs, introduced at table 1.

Dimension	Description
Open	Use of open source tools. Use of open educational resources. Encouraging students to share their learning outputs (learners generated content) using the creative commons license.
Massive	Design, content and activities that can be perceived as significant for participants at global level. No prior training/skills is required to participate. If so, the offering is significant for a wide professional community.
Use of multimedia	Use of multimedia and interactive media, along with an extensive range of OER.
Degree of communication	Possibilities to contribute to key debates on discussion fora, as well as keeping reflective blogs; or adopting other social networks for communication.
Degree of collaboration	Presence of activities that promote collaborative learning.
Learning pathway	Presence of structured or personalized routes through the course, allowing the learner to self-regulate the own learning pathway.
Quality Assurance	Deployment of strategies (with strong emphasis on self and peer reviewing) aimed to analyze, discuss and evaluate the quality of contents, learning environment, learning activities, assessment and learning outputs.
Amount of reflection	Learning activities encompassing reflection along the course, such as writing on personal blogs, or learners-log.
Certification	Strategies for collecting evidence on learning achievements, aimed at supporting forms of institutional recognition (certification). These can include: certificates of attendance, badges, accreditation (recognition of university or other institutional credits), verified certificates of course completion, certification of professional competences.
Formal learning	Forms of integration of the course with regard to a formal learning pathway, from very informal and isolated course, to formal course that can be recognized in subsequent studies.
Autonomy	Independence of learners in taking control of the own learning, combined with low tutor support.
Diversity	Openness to learners from different cultural, professional and linguistic backgrounds, with the possibility of creating local communities, meet-ups, groups; as well as cultural contextualization of contents and activities.

**Table 1. 12 criteria to analyze MOOCs (slightly modified from Conole, 2013, p. 12)**

Her proposal is to adopt the above criteria, blended with a Learning Design framework (the 7Cs framework, Conole, 2013<sup>15</sup>) can be used both to design and

- 15 The 7Cs of Learning Design framework aims to provide teachers with the guidance and support they need to make more pedagogically informed design decisions that make effective use of new technologies. It consists of the following elements: Conceptualise (what is the vision for the course?), Capture (a resource audit) Communicate (mechanisms to foster communication), Collaborate (mechanisms to foster collaboration), Consider (assessment strategies), Combine (overarching views of the design), and Consolidate (implementing and evaluating the design in a real learning context) (Conole, 2013).



evaluate MOOCs, allowing not only to make more accurate decisions during the design phase; but also ensuring the design fits for purpose, *hence ensuring the quality of the MOOCs and the ultimate learner experience* (Conole, op. cit., p. 13)

While Conole gave instruments (the 12 criteria) to think about designing for learning in MOOCs, along the 12 weeks of the MOOCs Quality Project, none of the experts expressed the need of understanding how academics could be engaged in MOOCs, and which are the skills that are necessary for their professional development to participate in a MOOC, as part of the open education movement. In our approach of *Mediated Quality*, professional development in line with a scholarship of teaching and learning is the key for quality open education.

#### 4. Scaffolding a Scholarship of Teaching and Learning for Openness: the way to achieve educational quality

It takes a **leap of faith** for the teachers to understand that sharing their educational content benefits the entire education system: appropriate training on legal and technical-operational issues is still necessary. Institutions should encourage and reward those who share their own materials and those who reuse other people's content, and also support publishers that produce quality learning content and promote widespread sharing and dissemination (Pantò & Comas-Quinn, op. cit., p. 18, my emphasis).

My emphasis in this quotation regards the idea that academics (and other educators) require allegedly a *leap of faith* to integrate open practices as part of the own repertoire. My point here is that the context of discussion of Open Educational Resources (OER) and the later evolution toward Open Educational Practices (Elhers, op. cit.); as well as the hype of MOOC as part of the open education movement, create the context to move on the issue of academics' professional development. In fact, if these professionals are the catalysts for pedagogical quality and innovation, it should be considered how they learn to participate in the OER production cycle (use, remix, create and share) and how they are (and could) taking part of the open education movement. It is on these bases that we could think how quality is addressed by openness. In fact, to promote openness in Higher education, the abilities that the academics are expected to have (for dealing with OER) are, to some extent, the same ones now expected of students; however, in reality there is little support for them to develop these digital skills and much less support in developing open literacies. Engaging with open practices requires expertise, support, time and commitment and universities need to provide both the support for developing the expertise and the time for academics to explore this new world as in general academics are positive and committed to embracing new practices, but they are also scared and worried, as new technologies are not their natural environment (Atenas, Havemann, & Priego, 2014).

The issue of educators (in a general way, professionals whose work is related to teaching in some way) and professional development has been particularly analyzed in the area of school teaching. Teachers professional development has been defined as a body of systematic activities designed to prepare educators to do their job at several stages of their professional life (Twining, Raffaghelli, Albion, & Knezek, 2013); it has become a major issue within educational research, particularly in the case of compulsory education (Darling-Hammond, Holtzman, Gatlin, & Heilig, 2005) in other LLL areas like Adults (Buiskool, Broek, van Laker-

veld, Zarifis, & Osborne, 2010) and Higher Education (Hénard & Roseveare, 2012); according to these studies, the preparation of quality teachers is considered one of the most important factor affecting learners performance; it has been emphasized that it could be the most important factor in formal education (Rivkin, Hanushek, & Kain, 2005). Teachers Professional Development is hence rooted in a performance-oriented perspective on the literature that emphasizes professional development for quality of education (Scheerens, 2010). While there are many key concepts from TPD that can converge in the specific case of University teaching, this last is newer in the scholarly research literature, with most research done in the last '20 years. Moreover, in the academic profession one of the main problems is the tension between teaching and doing research; in spite of the growing concern about the importance of quality teaching for quality higher education (McAleese et al., 2013), the academics' professional development is still based on research (Rué, 2013, Ghislandi & Raffaghelli, this issue). There are few emerging cases of excellence where the academics' engagement in pedagogical innovations is rewarded (Creten & Huyghe, 2013; de Jong, Mulder, Deneer, & Van Keulen, 2013).

The technological shift made the problem of lack of innovation in pedagogical practices on higher education more evident, due to the pushing effect of technologies in the learners, and the fact that academics lost "power" as beholders of knowledge. However, the counterpart of this problem is the hint technologies represented to rethink academics professional development: self-learning strategies, collaboration among peers and reflection on own practices, key dimensions already explored in TPD, could be successfully supported by openness, based on the use of Web resources for doing open research as well as for open teaching, not in tension anymore, but in a dialogic situation (Weller, 2011).

#### *4.1 Digital Scholarship: a new frontier of open academic practice*

We will ask at this point: Why should be academics interested in generating open educational resources, practices and courses, if research is their prior objective?

When Boyer, in 1990, established the need of revisiting the priorities of the professoriate, the current scenario of technologies was maybe unthinkable. Nowadays the scholarship has been pushed to change by the growing phenomenon of Open Access and social web, into what has been called the "Digital Scholarship".

Open access has transformed the world of scholarship and since the early 2000s with major OA statements starting with Budapest in 2002 movement has picked up momentum and developed a clear political **ethos** (Peters, 2008, my emphasis)

Peter Suber's Timeline to Open Access Movement, as the basis for access to scientific and scholarly research literature (Suber, 2009) shows clearly the early roots of the mentioned movement. While it is true that the uptake of technologies and the idea of openness is being slower in scholars than in any other sector of business and socio-cultural activity, it is also true that the resistances are being overcome, for the same scholars find the results of a "networked" professional life (Weller, *op. cit.*).

(...) most studies indicate that researchers tend to use a variety of tools, some of which are provided by their institution and others they have selected themselves (Kroll and Forsman 2010). In terms of Web 2.0 technologies, there is tentative take-up; for example, Proctor, Williams

and Stewart (2010) in the United Kingdom found that a majority of researchers are making at least occasional use of one or more web 2.0 tools or services for purposes related to their research: for communicating their work; for developing and sustaining networks and collaborations; or for finding out about what others are doing. But frequent or intensive use is rare, and some researchers regard blogs, wikis and other novel forms of communication as a waste of time or even dangerous (Weller, 2011, ch. 5).

Weller studied carefully several cases of scholarship, attempting to understand how open access was understood and practiced by scholars (mostly in UK). In his rich contribution to this emerging situation of the academic profession, one of his most insightful conclusions was that

When we consider the changes in scholarly practice, it is perhaps in teaching that we see the greatest potential for a radically different approach to emerge. The three key elements of digital, networked and open converge most significantly around the production, pedagogy and delivery of education (Weller, op. cit., ch. 8).

Weller's remarks show that the idea of participating into what he called "*a pedagogy of abundance*" is in deep connection with a "networked" research: that is, adopting several open access spaces to share the own research (processes and products), that can be hence adopted as a base for open teaching. He goes on suggesting the characteristics of the "open scholar" that combines open research and teaching. I will summarily introduce them here:

- Cultivate an online identity, that is both distributed and connected to a central place to express it – using digital tools to communicate the own activity (like social networks), but also building a space to gather the results of the distributed activity.
- Networking with peers – engaging in a preferred social network and contributing regularly, engaging in informal, but still professional "conversations" with other scholars.
- Develop a personal learning environment from a range of tools – by trial and error, not institutional imposition, building the own space for professional learning.
- Engage with open publishing, both formal and informal – disseminating the own scholarly research through open access journals and publishers; but also by producing nontraditional outputs to disseminate such as video, *podcast*, *slidecast* and so on.
- In doing all of the above, experiment new technologies, and build on the new open technological tools for doing research, sharing data, sharing immature ideas that can be enriched by asking to the community, etc.

In sum, according to this emerging idea the priorities of the professoriate established by Boyer could be now reconsidered in the light of the technological "affordances", for the quality of teaching and learning are nowadays connected with this changing panorama.

However, addressing new practices and identities within a new quality culture, as expressed above, is not something that will occur only by informing or explaining the changing situation with regard to the academic profession. Instead, professional development strategies should be implemented to support academics in passing from a situation as *outsiders* of open (quality) educational practices, to become *insiders*. A hint comes to the fact that an open and digital scholar-

ship aligns perfectly with the principles of SOTL: it requires careful reflection on the “content” produced taking into consideration a learner-centered perspective; and it frequently requires forms of collaboration within the own institution and beyond while designing OERs that can be fruitfully adopted by life-long learners.

Indeed, the strategies to support academics’ learning and engagement into open education, should build on the power of informal professional learning in collaborative networks, enhancing open content. Seely Brown & Adler (op. cit.), consider the importance of an “*Open Knowledge Exchange Zone*”, where venues for teachers to share pedagogical knowledge to improve practice is to be linked to the use of peers represented knowledge, re-mix, integrating others’ knowledge into their own, and create new representations of pedagogical knowledge through activities and resources. An interesting example engaging eTutors and teaching staff in higher education is the project *Learning Design Initiative*, from the Open University<sup>16</sup>; this project (already concluded) attempted to develop and implement a methodology for learning design, that is, to discuss and represent educators’ knowledge and plans about their own pedagogical practices supported by educational technologies. This was interwoven with workshops and events exploring mechanisms for enabling teachers/designers to develop and co-create learning design (Conole, 2010). Educators’ collaboration processes within specific learning environments were called “Cloudworks”, an *ad hoc* created social network for educators take advantage of the interesting metaphor of *clouds*<sup>17</sup>, an excellent example of representation of collaborative processes on the Web. Recently, Laurillard launched the miniMOOC “International Learning Design Challenge”<sup>18</sup>, inviting openly to create at least 100 Learning Designs adopting the tool ideated by Laurillard and her team, the Learning Designer<sup>19</sup>. Along this challenge, the educators (coming from both school, adults’ education and higher education) were invited to re-think their pedagogical practices under the light of the Learning Designer, a tool that addresses reflection on Learning modes (learning by assimilating; by conversation; by collaboration; by practice) as described in Laurillard’s taxonomy (Laurillard, 2012). Furthermore, underpinning the concept of “teaching as a design science” the participants were invited to peer-review other colleagues’ designs, and to share refurbished designs, that remained within the “Learning Designer” as open educational resources.

Connected to the above mentioned strategies, one of the recommendations as a result of the OERTest project is in fact improve the transparency and accountability in teaching, to promote openness in education. This could be possible through the inclusion of metadata that would make the OER structure and design easier to understand. The metadata should be about: a) an overview on the

16 <http://ouldi.open.ac.uk/>

17 A tag cloud or word cloud (or weighted list in visual design) is a visual depiction of user-generated tags, or simply the word content of a site, typically used to describe the content of web sites. Tags are usually single words and are normally listed alphabetically, and the importance of a tag is shown with font size or color. Thus, it is possible to find a tag alphabetically and by popularity. The tags are usually hyperlinks that lead to a collection of items that are associated with a tag. Wikipedia definition, [http://en.wikipedia.org/wiki/Tag\\_cloud](http://en.wikipedia.org/wiki/Tag_cloud)

18 <http://buildingcommunityknowledge.wordpress.com/international-learning-design-challenge/>

19 <http://web.lkldev.ioe.ac.uk/LD/>

content, learning outcomes and suggested assessment methods, as if the resources were to be used by an independent educator to be later on integrated in an own path; or by the learner in self-paced activities. Furthermore, the scholar or team producing an OER could investigate whether assessment and recognition of the own OER could be feasible within the own institution, by independent learners; as well as enacting agreements for prospective students to have recognized learning through the developed OERs. All this activity promote pedagogical reflection on the nature, structure, outreach and overall quality of the resources created (Raffaghelli, 2014a).

Some deterrents to implement this “open professional learning community” regard not only fairly motivating scholars by providing them information to understand motivation and digital skills by scholars, but also pedagogical knowledge and skills. In fact, building on an extensive bunch of research on the area of Learning Design, Dimitriadis, McAndrew, Conole, & Makriyannis (2009) pinpointed the hindrance to share open educational resources. In their study, they explored the difficulties found by educators to build on prior OER to make the own designs for OER. As Dimitriadis et al expressed «teachers do not fully understand the resources and therefore they cannot effectively use them» (Dimitriadis et al., 2009, p. 200) suggesting that «if the design of OER is made clearer to teachers and learners, this is likely to ultimately make resources more usable» (Dimitriadis et al., *op. cit.*, p. 201).

This was instead contested by T. Beaven (2013), who found studying the professional conversations of teachers from undergraduate language courses that they engaged actively in the use and reuse of OER in a planned or improvised way, being their practice based on their professional knowledge and curiosity to get to know other professional practices. A limitation of her study is that the OER considered were used by all in a similar professional context, which is not the case of Dimitriadis' study.

There is a further dimension to promote collaborative designing for (open) learning. According to Persico & Pozzi (2013), the representation of learning designs is not enough to facilitate sharing and reuse of pedagogical plans. A provision of tools for storing, sharing and reusing learning designs should be accompanied by tools and spaces that support reflection and collaboration. And these last two activities are the base to enact designing for open learning (Conole, 2012).

What all these studies reveal is the need to work out carefully the solutions for openness, through a reflective and collaborative approach where the academics understand the context of production and possible impacts of their efforts to open resources, practices and even entire courses. Building on Ghislandi (this issue), the quality of open higher education could be achieved by engaging in collaborative and open processes of designing for learning; in line with the concept of *mediated quality*, designing for open learning could be the process that *mediates* professional learning at the base of (open) *quality literacy*, and hence, of a (open) *quality culture*. However, designing for *open* learning, with the reflective and collaborative processes entailed to promote a “scholarship of *open* teaching and learning” (shall we call this SO<sup>2</sup>TL?), go beyond the activity of the academic as “solo player”. It requires institutional support and strategic planning, where the creative part of professional learning is accompanied by “hard” elements of professional development, namely, reward of creative efforts as well as integration into a strategy of organizational development towards an open learning culture.



## 5. Strategies to open-up higher education: the case of DIPSCO<sup>20</sup>

This brief case study will illustrate how a quality open learning culture could be cultivated by means of promoting a scholarship of open teaching and learning.

The case study is based on the experience undertaken within the Department of Psychology and Cognitive Sciences (DIPSCO), University of Trento. The Department has showed growing awareness regarding innovation in the Higher Education pedagogical models. The work of the unit started in 2000, with the implantation, by the University of Trento, of an experimental laboratory to support the introduction of new educational technologies in higher education, following the last educational research developments on technology enhanced learning environments. One of the research focus was the introduction of innovative pedagogical approaches via the technological “affordances”<sup>21</sup>, as part of HE new models (P. Ghislandi, Calidoni, Falcinelli, & Scurati, 2008). This important approach was institutionalized through the creation of DOL (Didattica Online), a rectorship special project that aimed at supporting faculty of the whole Trento University in technological and pedagogical innovation, and that made important contributions to bring the advances of eLearning. DOL introduced the adoption of Learning Management System MOODLE<sup>22</sup>, as support to several institutional projects, from the undergraduate to the post-graduate level; it customized this Learning Management System (LMS) and studied the integration of web technologies (particularly, in the recent years, with the explosion of web 2.0 tools) to offer teachers personalized services. Regarding pedagogical innovation DOL elaborated several strategies: information on new technologies and their application across the different disciplinary fields to improve teaching; coaching to teachers interested in implementing eLearning modules; reorganization and delivery of educational resources to students; innovation in the assessment system. DOL became an institutional department of the Trento University in 2005, establishing since then an institutional strategy to support pedagogical innovations and quality with the adoption of technologies. DOL was in tight connection with the research activities undertaken by the research unit at DIPSCO denominated labINDIA (laboratorio Innovazione Didattica Accademica, i. e. Laboratory for Innovation in Academic Teaching and Learning) along several national funded projects (2003, 2006, 2009), in an interaction among base research, development and implementation of innovations. On these bases, this interdisciplinary group has been planning a strategy of intervention to “open up” educational practices during the period 2012-2013; this activity will be implemented in the period 2014-2020 in line with the European strategic plan development EU2020<sup>23</sup> and the spe-

20 This paragraph builds on a prior article written with Patrizia Ghislandi and Remo Job (Ghislandi, Raffaghelli & Job, 2013).

21 The term “affordance” is used in the literature (from its early definition by James. J. Gibson in 1977) to mention the possibilities given by an object, in this particular case, the object of technological environments and tools. An object can in fact allow certain actions performed or imagined, and block others.

22 Moodle is a Course Management System (CMS), also known as a Learning Management System (LMS) or a Virtual Learning Environment (VLE). It is a Free web application that educators can use to create effective online learning sites. [www.moodle.org](http://www.moodle.org)

23 [http://ec.europa.eu/europe2020/index\\_en.htm](http://ec.europa.eu/europe2020/index_en.htm)

cific ET2020<sup>24</sup> programme, which represent a concrete benchmark to address educational innovations. The framework of intervention is based on the following 4 elements, that go hand in hand with the 4 elements of a *quality literacy*:

- Knowledge on Openness: Understand the policy context as well as educational research with regard to the openness of learning and teaching in HE. This implies good information instruments and processes, as well as understanding that openness is a progressive strategy with impact at micro (pedagogical practices) meso (communities of practice) and macro (institutional and business models)
- Experiences for Openness: To promote and support an intentional use of tools along the courses design, delivery and assessment that lead to production of open educational resources as well as flexible integration of them in personalized learning pathways.
- Evaluation of Openness: to generate qualitative and quantitative self and peer-evaluation practices, spaces for best practices sharing, communities of practices for participatory reflection of the results collected through practice, in order to promote debate about the key dimensions, processes, tools to support an open learning culture within the specific context of University of Trento.
- Innovation for Openness: to develop, pilot and analyze innovative practices as the result of the participatory evaluation processes implemented. This implies a process of continuing improvement of open teaching and learning strategies.

The envisaged implementation of this approach is as follows:

*First step, based on existing resources*

- The generation of web spaces and communities of practice that support concrete information on the policy context and the research advances in the field of open teaching and learning. This activity can be based on the existing area space managed by the DOL unit, but connected to labINDIA, which will provide web repositories with useful resources, case studies, illustrative material, and examples.
- Specific tools for self-evaluation will be made available online within the above mentioned web spaces. These would allow teachers to monitor the quality of their own open courses, from the design to the evaluation stage.

*Second step, based on new resources*

- The establishment, inside labINDIA, of an observatory on learning and teaching practices, that should support the work of the Deans and the Rector, in understanding the state-of-the-art of designing for openness within their university and in the Italian / European and international context.
- New research and development would be coordinated within labINDIA which would network both inside the institution, mainly with DOL, and outside the university, with several key stakeholders locally and nationally, as well as at the European and International level.

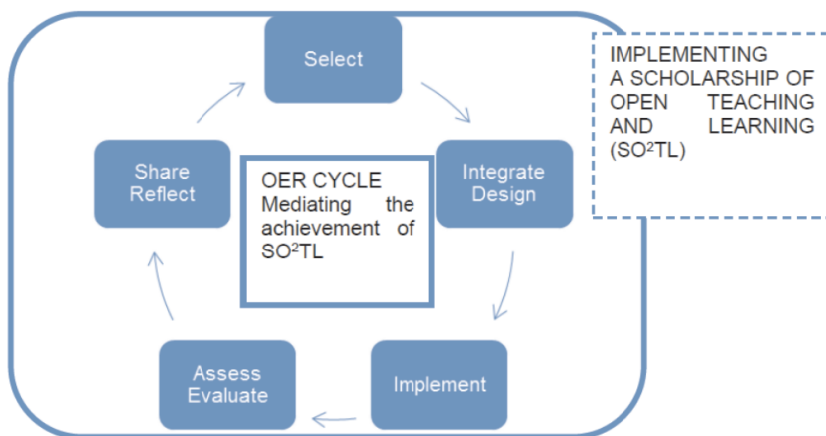
24 [http://europa.eu/legislation\\_summaries/education\\_training\\_youth/general\\_framework/ef0016\\_en.htm](http://europa.eu/legislation_summaries/education_training_youth/general_framework/ef0016_en.htm)

One of the foci of the research activity will be the forms of professional development within the academic staff. To this regard, elements considered crucial are:

- Initial formal training on open education aimed at researchers and academic staff entering a teaching activity at undergraduate level.
- Engagement in a professional community of practice open to all the academic staff for the open pedagogy in HE. This would encompass particularly the integration of new learning pathways, laboratories of learning design, proposals to integrate formative assessment, adoption of educational technologies as well as eLearning, generation of open educational resources, participation in MOOC-massive open online courses as teaching staff.
- Additional training for PhD students regarding pedagogical approaches in higher education to achieve concrete skills for open education.
- Support to piloting of innovative pedagogical practices and further evaluation of impact.
- Forms of reward to the best practices as well as for the continuity of open approaches in teaching, on the basis of concrete results in learning outcomes, mainly based on peer and self-evaluation. This approach would reinforce the climate of collegiality and professional community necessary to support authentic quality in teaching and learning within an *open learning culture for quality in Higher Education*.

The leading questions, addressing the research and training activities are:

- Which are the reasons preventing academics to participate/promote Open Educational Practices (OEPs), including MOOCs?
- How can be the academics supported in analyzing the own participation to OEPs?
- How can be supported the academics, supposed to be in low stages of OEP implementation (*outsiders of quality open teaching and learning*) in selecting appropriate/quality OER?
- How can be supported academics, supposed to be in medium stages of OEP implementation, in designing for OEP?
- How can be supported academics, supposed to be in high stages of OEP implementation (including MOOCs engagement), in implementing and integrating schemes of quality assessment of the own and peer OEPs?
- Which kind of professional learning is achieved through the deployment of OEPs?
- How can be supported academics in their reflection about the own professional development across the process of implementation of OEPs? How is this connected with their professional identity as *scholars of open teaching and learning*?
- Which kind of outcomes have the engagement in OEPs for the overall quality culture in the organization?
- Which kind of benefits arise from cross national interactions between academics engaged in OEPs across the institutional/national frontiers?



**Fig. 2. The OER Cycle as springboard to achieve SO²TL**

		OER USAGE		
		Low OER and MOOCs selection	Medium OER and MOOCs design	High OER and MOOCs implementation, assessment, evaluation
Learning Architecture	High Social Practices, Collaboration, Sharing (reflection in Action) • Open Objectives • Open Methods	A	B	C
	Medium Dialogue Procedures, Rules (Know-how) • Closed Objectives • Open Methods	D	E	F
	Low Knowledge Transmission (know what) • Closed Objectives • Closed Methods	G	H	I

**Table 2. The Process of implementation of OEPs (OPAL, 2011, p. 4)**

The frameworks that could be used to understand the practices aligned with the concept of a scholarship of open teaching and learning are two: one regarding the OER cycle, that addresses reflection and collaboration not only to create but to self and peer-evaluate open resources and practices. The second one could be worked out building on the OPAL project framework, which is a useful instrument, already tested, to analyze open educational practices at pedagogical and institutional level.

## Conclusions

The University as institution has moved in the last 50 years from providing education for the elites, to a massive institution that educates professionals for the knowledge society. As a result, the university struggles today to find its own space, balancing autonomy in research and teaching, promoting sustainable business models, increasing participation of students, improving the quality of the education delivered; there is an intense search for better connections with the

society and the labor market (U. Ehlers & Schneckenberg, 2010). In this context, the Open Education movement could be deemed as a “Trojan Horse” (Conole, 2012b) to introduce reflection on teaching and learning processes in connection with the learning culture, steering to quality in higher education. We claim that opening up education can be assumed as a *via maestra* to generate institutional innovations resulting in more integrated and sustainable HE institutions. However, the resistance found across Europe, and particularly in Italy, require specific strategies, that tend to have long-term impacts. In fact, the amount of evidence introduced here showed clearly that the technologies and its affordances, as well as the “pushing” effect of the high interest for openness in the policy context do not do the trick. Careful processes of support to reflection from the pedagogical level to the institutional and policymaking level are necessary.

In sum, the elaboration of a framework to promote a scholarship of *open* teaching and learning should be based on:

- Enabling academics to understand the phenomenon
- Providing a set of technologies and networks supporting professional learning, that facilitates the access to examples of practices and cases of cultural contextualization of those practices.
- Generating spaces for reflection on open educational practices, as part of an overarching model of quality at institutional level.
- Recognize and reward efforts for open teaching promoting open learning.
- Put open teaching in relation with research and vice versa.

As we emphasized in this article, much is to be done, and the efforts of the educational community to implement projects, to evaluate them, and to share case studies will enable more reluctant institutions to think about the potential offered by open education. However, this must be a slow process. As Margiotta expressed, it is a matter of fact that naturalizing and integrating distance education within pedagogical practices imply the reconsideration of key concepts like learning and knowledge, and this will take time. Indeed, while the debate on MOOCs goes on, the human condition is polarized. As Margiotta goes on saying, «to an élite that lives on their own in their own spaces, an opposed majority is not able of having access to the most essential elements to survive. In line with this, there is also the phenomenon of vast and multifaceted communities in the cyberspace, that behave as élites their selves, for the digital divide is not being overcome in spite of the many initiatives, and networked learning, in spite of the enthusiasm, do not go beyond certain borders.» (Margiotta, 2012, p. 7, my translation).

Reinforcing this idea, we should remember Tripathi’s (2006) statement: “*Technology transfer without appropriate cultural transfer is not sufficient*” (Tripathi, 2006, p. 7).

In this article, it was shown the case of DIPSCO, a Department within the Italian (and European) context. While there has been an intense work to introduce technology enhanced learning approaches, the progress is slow and requires the full engagement of both academics and students in a bottom-up approach. It is expected that the generation of “hubs of excellence for openness” will have a growing and systematic impact in the institutional model. Connecting tightly pedagogical innovation with educational research, in a perspective of *open scholarship* of teaching and learning, will lead to the visibility of results, and the possibility to generate opportunities of dialogue at wider levels, with the dissemination and exploitation of the model, to move (local, Italian, European) higher education into a *quality open learning age*.



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