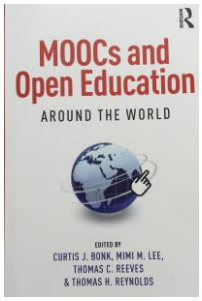

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OPEN(ING UP) EDUCATION FOR ALL … BOOSTED BY MOOCS?

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A foreword to a book can be expected to highlight some of the terms and issues included in its title. Given the thought-provoking and promising title *"MOOCs and Open Education Around the World,"* that is exactly what I will attempt to do. Two major, long-term developments will be described, one towards open education and the other towards online education, in which the recent emergence of the MOOCs is to be placed. "Open" and "online" are then combined into one reference model for Open Education with five components, the 5COE model. It is in the 5COE model wherein MOOCs can also be profiled. Finally, I will underline the distinctive value of using the expression "Opening up Education" (which goes with a dynamic flavor) on top of the (static) term "Open Education."

Towards open education

The first major development towards open education goes back to the nineteenth century when the University of London started its system of correspondence education, offering learning opportunities at a distance from the university premises. And in the mid twentieth century, the predecessor of the current University of South Africa (UNISA) was given a new role as a distance education university. The real break-through, however, came with the *start of the Open University in the UK* around 1970. During the next four decades, this successful initiative was followed up in many countries in Europe and around the world, leading to major operations reaching out to many learners who were not being served by the regular university system. In quite a few countries, for example, China, India, and Turkey, we now find so-called mega-universities enrolling millions of students.

The qualifier "open" in the name "open university" can stand for various attributes, including, (1) open entry (no formal requirements), (2) freedom of time, (3) freedom of place and (4) freedom of pace, (5) open programming (i.e., curriculum variety in size and composition), and (6) open to all people and target groups (i.e., a heterogeneous population, of all ages, and in different contexts; generally involving some type of combination of study

with a job or domestic or care tasks). There are no open universities that are fully open in all these six degrees or forms of openness. In fact, there is a large diversity in institutional profiles among open universities. But certainly, by their nature and mission, open universities score much higher than regular universities on classical notions and the above attributes of openness. Note, however, that the increasing blending of educational delivery approaches is blurring the boundaries of open and traditional universities.

Digital openness flanking the 'classical' openness

This increasing attention toward the word "open" in education is also being influenced by the digital openness that has emerged during the last two decades and flanked the classical notions of openness in education. Forms of digital openness were initiated by the 2001 OpenCourseWare (OCW) move of MIT making available all its courses for free on the Internet. UNESCO was quick in recognizing the enormous potential of this concept for its "Education for All" ambition and marked the movement a year later by coining the term Open Educational Resources (OER) (UNESCO, 2002). Simply put, these are learning materials that are online and available at no cost to anybody: learners, teachers, and institutions. OER can be (re)used, revised, remixed, and redistributed, which is facilitated by so-called open licensing (Wikieducator, 2014). OER and OCW are members of a family of digital openness that has its roots in the Open Source movement (for software) and includes other forerunners like Open Access (for scientific output) and Open Content (for creative works). Meanwhile this family has expanded in other areas like Open Data, Open Science, Open Innovation, Open Practices, and Open Policies.

Such open education trends, terms, and initiatives have significantly changed the world of higher education: new and highly innovative players have entered the field of open education in the midst of traditional players who are often struggling with strategic dilemmas associated with OER. These two worlds, however, are coming closer through blended models. Two relevant international milestones meanwhile are impacting developments around open education and OER: (1) The Cape Town Open Education Declaration (Shuttleworth/OSF, 2008), and, more recently, (2) the Paris OER Declaration (UNESCO/COL, 2012). The Cape Town Declaration is dedicated to a vision to go beyond OER and calls on commitment to pursue and promote the broader concept of Open Education. It has 2,727 signatories, by far most of them individuals. The Paris OER Declaration maintains a focus on OER specifically, and was adopted by the World OER Congress held at UNESCO in Paris on June 20-22, 2012. Its ten recommendations to States around the world range from "Foster awareness and use of OER" to "Encourage the open licensing of educational materials produced with public funds." Clearly, these open education movements are driven by values like equity, inclusion, diversity, quality, and efficiency.

Towards online education

The second major development, the one towards online education, was initiated in the 1950s with the advent of new technologies and media to be used in education. Radio and later television, recorded audio and video, computer applications and animations, computer-based learning, intelligent tutoring systems, and automated testing, were all being utilized in education. But generally such technologies never became mainstream. At best, each of these educational delivery mechanisms was viewed as an interesting or useful additive to regular education. The most transformative technological impact emerged in the 1990s with the advent of the Internet, which offered powerful forms of communication and interaction deemed essential for education. We have entered the digital era with the ever growing opportunities in online learning services, virtual learning activities, and, of course, digital learning materials.

Since the emergence of the Internet, technological capacities have evolved with increasing rapidity in terms of the speed, interactivity, and potential reach of new technologies and online platforms. Digital materials are reproducible under almost no cost. Broadband has given us the opportunity to reach learners in every corner of the world. With 2.7 billion people already having online access, such resources represent a powerful potential for educating the people of this planet.

Massive Open Online Courses

A very strong and rather sensational push came in 2011 when the first Massive Open Online Courses (MOOCs) were offered that were truly massive. In actuality, the first MOOCs had come from Canada a few years prior in 2008. They were of a different type, striving more for fundamental openness than to have a massive audience. They were labelled cMOOCs, distinguishing them from the so-called xMOOCs initiated in 2011 by American Ivy League universities. MOOCs, especially xMOOCs, have boomed since then, in large part, due to the fact that the first movers were top American universities like Stanford University and MIT. At the time, significant venture capital was brought in, the media hyped the movement, and politicians spoke out very favorably about MOOCs. Expectations were extremely high in the beginning; indeed, many claimed that it would revolutionalize or even disrupt higher education (e.g., Barber, Donnelly, & Rizvi, 2013; Boxall, 2012). Recent developments mitigate, to some degree, these projections into the future and may ultimately result in the normalization of the movement. But, howsoever this movement will proceed, MOOCs are definitely a relevant change agent influencing higher education today.

Meanwhile it is no longer possible to cover MOOCs adequately with one definition. As shown by the chapters of this book, there already is much variety in terms of MOOCs and several derivatives like distributed open collaborative courses (DOCCs), leading to different categories of MOOCs. Without a doubt, MOOCs are courses that differ from OER and online

learning materials by offering online learning services, including learning communities, automated self-testing, peer review, and certificates of different kinds, although generally not for credit. In addition, unlike static online documents, MOOCs are quite often based on video lectures plus facilitated interaction or discussion forums.

Regarding massiveness, we already observe major differences in scale that may significantly increase with the rapid expansion in the number of MOOCs. With respect to openness, MOOCs have an open entry on the Internet at no cost. With MOOCs, there is freedom of place, but generally there is no open licensing policy. In addition, most courses in a MOOC environment run in a fixed or predeterminate schedule, and the content is only available during that schedule for registered users (not for institutions).

'Open' and 'online' combined in one reference model with five components

I have argued that it is useful to make a distinction between the two major developments in terms of change, namely towards open education and towards online education. Let us now proceed with an attempt to combine them in one overarching reference model, thereby reducing the overlap and emphasizing the convergence. Such an approach was deemed highly necessary having observed that the frequent use of the term open education generally lacks a clear and solid description of what is meant by it. The same problem holds for online education. Unfortunately, as noted below, Wikipedia does not assist in an exploration of the terminological jungle (Wikipedia, 2014).

> ***"Open education*** *is a collective term to describe institutional practices and programmatic initiatives that broaden access to the learning and training traditionally offered through formal education systems. The qualifier "open" of open education refers to the elimination of barriers that can preclude both opportunities and recognition for participation in institution-based learning. One aspect of openness in or "opening up" education is the development and adoption of open educational resources.*
>
> *Institutional practices that seek to eliminate barriers to entry, for example, would not have academic admission requirements. Such universities include The Open University in Britain and Athabasca University in Canada. Such programs are commonly distance learning programs like e-learning, mooc and opencourseware, but not necessarily. Where many e-learning programs are free to follow, the costs of acquiring a certification may be a barrier, many open education institutes offer free certification schemes accredited by organisations like UKAS in the UK and ANAB in the USA where others offer a badge."*

The Wikipedia description lacks a good level of overall clarity, analytical value, and practical utility. To Wikipedia's defense, however, it stipulates that open education is a collective term. This observation - that it is a catch-all type of concept - begs for an analytical and practical framework to be used as a reference model. My colleagues and I have developed such a framework which we call the "5COE model" and is overarching not only for open education but also for online education (Mulder, 2012; Mulder & Janssen, 2013). Recently, we have offered a more refined version (at present, only available in Dutch; see Mulder & Janssen, 2014). 5COE stands for "Five Components for Open Education." The model contains three components on the supply side and two components on the demand side of education, which are required to fully specify Open Education in a broad scope, incorporating also its online instrumentation.

The first supply-side component of the 5COE model is ***Educational Resources***. With the qualifier "Open" added to it, this stands for OER. While OER was already described, for completeness we would like to refer here to an internationally recognized definition (UNESCO/COL, 2012):

> *"Open Educational Resources are teaching, learning and research materials in any medium, digital or otherwise, that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions."*

Educational Resources by themselves do not fully comprise education. Along these same lines, Open Educational Resources do not comprise all aspects of open education. Additional, complementary components are required.

Component 2 (on the supply side) is ***Learning Services*.** With the qualifier "Open" added to "Learning Services," this term can be abbreviated to OLS. OLS stands for a wide range of online and virtual services which are meant for tutoring, advice, meetings, feedback, communities, teamwork, presentations, consultation of sources, navigating the Internet, testing, examining, etc. In contrast to OER, OLS may be available free of charge or at a cost.

The third component (on the supply side) is ***Teaching Efforts***. With the qualifier "Open" added in, the term becomes "Open Teaching Efforts" or OTE. The concept of OTE relates to the human contribution to the educational content or experience being provided (that generally has to be paid for). This contribution includes the efforts of teachers, instructors, trainers, developers, and support staff in their various roles, in a professional, open, and flexible learning environment and culture.

It is not sufficient to view education solely from the supply side. There needs to be a match with the requirements on the demand side.

Component 4 (on the demand side) is ***Learners' Needs***. When we add "Open to," this term becomes "Open to Learners' Needs" which is abbreviated to OLN. This first demand side component of the 5COE model refers to the wish of learners for education that is affordable, doable, interesting, of good quality, and that also generates benefits for them. Learners' desire for openness may also relate to the 'classical' openness (open entry, freedom of time, place and pace, open programming, and open to people and target groups) as well as to facilitating lifelong learning (e.g., recognition of prior learning or practical experience, credentialing, and bridging between informal learning and formal education).

Finally, the fifth and final component (second one on the demand side) is ***Employability & Capabilities development***. When we add "Open to" to this term, it can be abbreviated as OEC. In effect, OEC implies that education can be expected to suit the changing society, to prepare for the labour market, and to be effective on the pronounced role of knowledge, innovation, and globalisation, Moreover, education should offer scope for new (21st century) skills, critical thinking, creativity, ethics, and responsibility, as well as for personal growth and citizenship.

We are using the umbrella term "Open Education" (OE) with its five components, mentioned earlier, to embrace both open and online education. The diagram in Figure 1 illustrates the 5COE model.

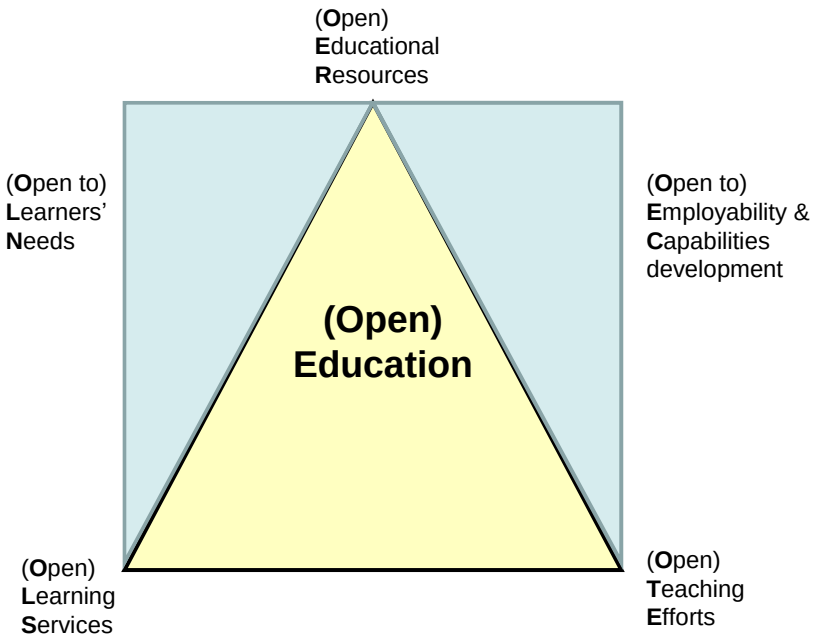

Figure 1. Education and Open (including Online) Education in five components (The 5COE Model).

Open and online is a profile choice with much room for diversity

We all know that there does not exist a single ideal model for education. This perspective, of course, also holds for open (and online) education. Stated another way, Open Education should not be considered a new doctrine for all to follow or to use exclusively.

There is no reason for all higher education institutions and organizations to aim at 100% openness in all five components. On the contrary, each institution can choose its own specific profile in terms of the degree of openness in those five components. Universities of applied sciences and vocational institutions and colleges, for example, can be expected to be more interested in OEC (Open to Employability and Capabilities development) than research universities. Universities with a MOOCs or open education related strategy will emphasize OLS (Open Learning Services) much more than traditional universities staying away from the use of MOOCs and open education. In terms of OLN (Open to Learners' Needs), universities catering to lifelong learners and part-time studies like OUs will out vie mainstream universities which are primarily focused on young adult learners (e.g., 18 to 22 year olds) and full-time studies. University Colleges cherishing small-scale education (such as seen in the Cambridge/Oxford model) will likely have a stronger focus on OTE (Open Teaching Efforts) than comprehensive universities with large-scale operations. Finally, the cMOOCs initiated in Canada can be said to be 100% OER-based, whereas xMOOCs such as those hosted by edX, Coursera, and NovoEd, and offered by many prestigious universities in the United States, are still far from that level. Furthermore, to date, MOOCs generally are very supply driven; consequently, they do not score high on the two demand-side components of the 5COE Model, namely, OLN and OEC.

The diverse profile among institutions regarding their degree of openness here in the early portion of the 21st century is being mirrored through a better serving of the characteristics, circumstances, and needs of the highly diverse people and target groups in society; such individuals increasingly aspire for greater access to higher levels of education. Naturally, the opening up of education to whatever degree provides relevant mechanisms to facilitate this long-standing need of learners and societies. And it also generates a series of potential benefits, even when this takes place through a blending of approaches that are respectively "open" and more "closed" (e.g., online combined with on-site).

We can say that the tendency towards opening up education in all five components should be applauded whenever realized. However, our appreciation of the OER component should be more than just applause, but embracement. My colleagues and I in the OER world strongly argue that 100% OER is what all institutions and teaching staff should aim for. We contend that major benefits will appear regardless of institutional identity, learning philosophy, target groups, and educational sector. In fact, governments should embrace OER as a no-regret option, since OER can serve - quite remarkably - all three governmental

responsibilities for education; that is, to promote and ensure accessibility, quality, and efficiency, at the same time (Mulder, 2013).

Open(ing up) Education for All, boosted by MOOCs?

It is time to reflect back on the title of this foreword and make some concluding remarks…

1. MOOCs are definitely a significant change agent in higher education. They mark a break-through of the powerful merger of two major long-term developments, towards open education and online education, respectively.
2. There is a strong need for an analytical and practical framework for the container concept and term open education that can be used as a reference model for all those occurrences of the words ”open” and “online” in education, learning, and teaching. The proposed 5COE (“Five Components for Open Education”) model is intended to serve this goal. This model contains three supply-side and two demand-side components. In line with the goals and premises of this particular book and the assortment of chapters which you are about to read, the 5COE model can be applied to position and profile a wide variety of open and online educational initiatives and projects of whatever size and scope, including MOOCs.
3. The foreword’s title refers to “Open(ing up) Education,” in part, to indicate a need to change the common expression “open education” to now verbalize it as “Opening up Education.” That change, while rather subtle, is highly important since it underlines the dynamics of the processes and strategies involved. Moreover, it accounts for the diversity of educational opportunities and experiences that people increasingly desire. Not all aspects of education should be equally open, with an exception of the educational resources for which it can be argued that full openness (or OER in a broad sense) is beneficial for all learners, teachers, educational institutions, and governments. In this regard, I “openly” express my thanks to Iiyoshi and Kumar (2008) who were likely the first ones to introduce the expression “Opening up Education.” Along these same lines, I wish to compliment the European Commission for using this expression as an umbrella title for a highly significant initiative launched in September 2013 (European Commission, 2013). This particular program addresses two major goals, namely: (1) to innovate teaching and learning for all through ICT, and (2) to reshape and modernize EU education through OER.
4. In the foreword’s title, I explicitly incorporated UNESCO’s “Education for All” mission by amalgamating it with “Opening up Education.” Through this terminology, it is hoped that the reader will recognize the ultimate goals that could be assigned to the global movement of OER, Open Education, Opening up Education, and MOOCs as well. There is much to be delighted about with the arrival and expansion of the MOOCs including the media attention and politicians’ interest that they have generated as well as the promises that they provide. But the real measure from learners, teachers, educational institutions, and societies at large would be whether

and how the MOOCs will boost "Opening up Education for All" on a global scale, cherishing diversity. And that remains to be seen.

As you browse through the pages of this book on "*MOOCs and Open Education Around the World*," you will be drawn into an inspiring tour d'horizon. The editors have succeeded in bringing together contributions from a broad spectrum of themes, perspectives, and backgrounds while maintaining an appropriate level of overview and connection. With this comprehensive volume, you can learn from examples of MOOC providers in different countries as well as from case studies on pedagogy, quality, innovation, lifelong learning, and learning for development. At the same time, your impending chapter readings will take you beyond current norms and practices and allow you to dive into historical developments, fundamental matters, considered opportunities, and perspectives for the future.

What all these chapters share is the carrying concept of openness, albeit with differences in scope and significance. This foreword is an endeavour to crosscut the various contributions to this book with one leading question: "To what extent do the practices and experiences related to MOOCs and open education described in this book on one hand, and the reflections and models of MOOCs and open education provided on the other hand, contribute to an integrative view on and way forward towards truly opening up education for all?" I will let you decide as you read through the remaining pages and chapters of this book. Feel free to write to me with your personal perspectives and thoughts.

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