CHAPTER 1

HOW DOES OPEN EDUCATION WORK?

Markus Deimann and Peter Sloep

ABSTRACT

For an extended period of time education was mainly formal, that is a system with clear roles, goals and responsibilities. Education resembled an immutable and closed system with few, if any, connections to other parts of society. However, during the last century significant changes occurred in many areas of society, culminating in global reform movements to democratise education and to increase participation by opening up education. A current and prominent example of such a movement is Open Educational Resources (OER), which is a global attempt to facilitate the flow of knowledge, reduce the costs of education, and establish an educational system based on humanistic and moral values (i.e. sharing). Yet, recent developments are progressing at such an accelerated speed that it is hard to predict the ‘real’ value of OERs for educational purposes. Also, within OER little reference has been made to previous forms of Open Education, such as Open Classroom/Open Learning in the 1960s and 1970s or to the even older German progressive education (Reformpädagogik). Current OE forms can be characterised as a mixture of economical ('education as a commodity'), moral ('education as a common good') and social ('education as a shared enterprise') claims, each of which contribute to the emergence of Open Education. This
introductory chapter attempts to set the stage for a sound engagement with openness in education. It provides a conceptual framework that discusses major developments throughout the history of Open Education from a philosophical standpoint. Special attention will be paid to the concept of Bildung (self-realisation, self-cultivation) as an in-depth theory that can not only inform what happens when learners utilise OER but also allows one to reflect on the impact of OER on society. Selected cases of Open Education will be reviewed and then framed with the theory of Bildung. Eventually, this will lead to a set of lessons learned that are aimed at guiding current debates on Open Education.

Keywords: Open Education; Open Educational Resources; Massive Open Online Courses; access; democratisation

CURRENT SITUATION IN HIGHER EDUCATION: UNBUNDLING, DISRUPTING

Open Education has emerged as a complex phenomenon with heterogeneous philosophical roots, which however can be reconciled because they share a set of common beliefs and ideas. Many of these were not new but were brought together under a single umbrella term (Peters, 2008). One of the most important roots lies in Higher Education, in the way it changed over the last decade. Indeed, it has changed, almost to such an extent that we almost have forgotten what the ‘old’ system looked like. The change was accompanied by a broad belief among teachers, parents, students, and politicians that something was ‘wrong’ with the educational system, and we needed ‘grand’ transformations to ‘upgrade’ the system according to the demands of the economy and society at large (Brown, Lauder, & Ashton, 2011). This belief is expressed and reflected in terms such as ‘unbundle’ or ‘disrupt’ education, that is, in economical concepts (Sheets & Crawford, 2012). The development might be likened to what occurred to the music industry.¹ Its business model has long rested on selling packaged music in albums — often with pieces that many listeners did not want to hear in the first place — only now to be replaced by more individualised offerings such as those by iTunes or Spotify (Anderson, 2009). Similar developments have taken place in most online media (Carr, 2008). Some argue that in education we are currently witnessing an identical unbundling of the ‘complete package’ via online platforms such as Udacity, Coursera or their more ‘grassrooted’ counterparts Peer to Peer University² or Open Study.³ These
allow learners to pick only the single course that fits their intended portfolio. And this may serve as an illustration of one of the key principles of the functioning of the Internet outlined by Naughton (2012): ‘For the net, disruption is a feature, not a bug’.

However, to fully understand the various implications of the disruption of traditional education, one needs to distinguish between pedagogical and residential components (Walsh, 2011) to highlight that education is more than being taught in person by a teacher, being exposed to discussion sessions, and having to do ‘home’ work. Indeed higher education usually is also about extracurricular activities, collegiate sports and opportunities for peer interaction in different forms. By employing sophisticated technologies online and distance education, considerable progress has been made in expanding teaching beyond the walls of the classroom (Bates, 2005). However, they have been less successful at emulating the social components of the learning experience. It is thus a matter of some urgency to ask how the technological advancements that are so beneficial to the cognitive aspects of learning may be aligned with its social aspects.

Political stakeholders such as the European Commission are also beginning to warn civil society to ‘rethink educational strategies’, which in their view no longer fit the ever-growing demands of the labour market. According to this narrative, much more attention should be directed to ‘learning outcomes’ which are defined as the ‘knowledge, skills and competences that students acquire’. Additionally, they explicitly also draw attention to the catalytic effects of ICT and Open Educational Resources (OER).

At this point, that would be going too far. To understand the importance of Open Education for the educational landscape, we first need to delve more deeply into its history.

**WHAT IS OPEN EDUCATION?**

Open Education started as a reform project during the politically laden period of the 1960s and 1970s. Its aim was to liberate education from any form of oppression. Back then Open Education was understood as a ‘new panacea for our educational ills, created overnight by saviours or communists (or both)’ (Macdonald, 1975, p. 45). Highly influential was the report *Children and Their Primary Schools*, published in 1967 by the Central Advisory Council for Education (England). The council was chaired by
Lady Bridget Plowden, which is why the report soon became known as the Plowden Report. As the title indicates, the text takes a distinct perspective: ‘At the heart of the educational process lies the child’. Consequently, the report considered all aspects of primary education and provided generalisations, judgements and recommendations on the basis of the evidence it had collected (the work of developmental psychologist Jean Piaget acted as a major source of inspiration). However, many practitioners criticised the positive and affirmative tone of the Plowden Report and its alleged utopian perspective on the future of education.

Many of the problems the report revealed can be attributed to the lack of a clear definition of and perspective on Open Education, particularly on what is ‘open’ about Open Education. This is the major question in Hill’s paper (1975), in which he identifies several dimensions:

- Procedural openness: referring to technical aspects such as attendance;
- Normative openness: advocating that certain fundamental aspects like the choice of learning tasks and activities ought to be entirely the prerogative of the learners;
- Revolutionary openness: derived from a neo-Marxist perspective (...) ‘which views the availability to oppressed classes of genuine openness in curriculum choices and learning procedures as a means of accelerating cataclysmic social change’ (Hill, 1975, p. 9).

Vandenberg (1975) suggests that because there is little common understanding of the goals, openness provides a new perspective with which to analyse the entire educational process, that is as resulting from oscillations between the poles ‘openness’ and ‘closedness’.

Instead of providing a distinct philosophical position to develop pedagogy of openness, there have been lists of recommendations like the following (Tunnell, 1975, p. 17):

1. Students should pursue educational activities of their own choosing.
2. Teachers should create an environment rich in educational possibilities.
3. Teachers should give a student individualised instruction based on what he/she is interested in, although they should guide the student along educationally worthwhile lines.
4. Teachers should respect students. The following counts as exhibiting respect for the student:
   a) the student is granted considerable freedom; he/she is, for the most part, autonomous;
b) the student’s interest and ideas are considered to be important and he/she receives individual instruction and guidance based on his/her interests;
c) there is considerable interaction between teacher and student; they are considered to be equal in some sense;
d) students are rarely commanded; use of authority is minimised;
e) students’ feelings are taken seriously.

This list suggests that by combining the three classical components of instruction (teacher, learner and materials/methods), Open Education becomes very different from conventional approaches. Conventional approaches focus on the teacher and his/her competences and experiences, which legitimises the teacher’s superior position in determining learning content and methods (Walberg & Thomas, 1972).

To complicate matters further, Open Education is not the only form that was advocated in the 1960s and 1970s. Besides Open Classroom, Open Learning is another ‘open term’ that can be found in the literature (Boot & Hodgson, 1988). In contrast to the child-centred Open Education, it is intended ‘(...) to increase democratisation of higher education in terms of respect for individual differences and equal opportunity’ (Moisey, 1984, p. 5) and to provide easier access to education, personal freedom and social equality for all. It is thus a precursor of the ‘life-long learning’ paradigm and can be traced back to a UNESCO report from 1972 which argues:

The inadequate development of literacy programmes and out-of-school vocational training means that those who missed their chance of entering the school network at the outset find it less and less possible to educate themselves as they grow older. Thus, the universal right to education — in which contemporary civilization takes such premature pride — is often refused, by a complete reversal of justice, to the most underprivileged. They are the first to be denied their right in poor societies, the only ones deprived in the rich. (Faure, 1972, p. 71)

The report then goes on to introduce the concept of lifelong learning, based on a fundamental understanding of the role of education for each human being and for society at large:

Education from now on can no longer be defined in relation to a fixed content which has to be assimilated, but must be conceived of as a process in the human being, who thereby learns to express himself to communicate and to question the world, through his various experiences, and increasingly — all the time — to fulfil himself. (Faure, 1972, p. 143)

Many of the claims made in the UNESCO report have led people to rethink education, its goals and purposes. It can thus be argued that
despite the common belief that Open Education has focused only on formal educational settings, the impact is in fact on the ‘bigger picture’, that is the entire society: ‘I believe that open education is part and parcel of the social spirit and impulse for liberation that is reflected in such diverse phenomena as the counterculture’s attempt to escape the dehumanising and alienating role structure of our society’ (Macdonald, 1975, p. 53). It was this regard that led Illich (1971) to state in his book Deschooling Society that there is a strong link between the institutionalisation of education and the institutionalisation of society. Thus, schools are not to be considered as a dependent variable but rather the reproductive organ of a consumer society which is subdivided in distinct classes that differ in their economic power (i.e. not all learners can afford to go to school). This is the background against which Wedemeyer (1981) developed his now famous metaphor ‘Learning at the back door’ to emphasise the importance of non-traditional and non-formal learning for the formation of American society: ‘Learning at the back door had to be carried out wherever learners [i.e. settlers on their way westward], had a need to know, or wherever they could find materials or assistance. They learned at home, on the job, in offices, on farms, in libraries, at cultural events and community projects, and in church-related activities – almost anywhere, in fact, except in schools’ (p. 28).

Open Education, as suggested by Egan (1975), is thus best understood ‘(...) as a reaction to [then] traditional forms of schooling, which are described as heavily academic, pre-packaged, sterile, the purveyors of a hollowed and ossified body of content being concerned with drip-feeding it to resisting children who see no value in it per se and no example of its enriching the lives of those who are purveying it. Open education is concerned to remove the obstacles which this bad kind of schooling has put in the way of children’ (p. 24).

Furthermore, Freire (1996) developed ‘Pedagogy of the oppressed’. He used the metaphor ‘banking concept of education’ that is typical for traditional education and which understands students as the ‘depositories’ or piggybank and teachers as the ‘depositors’. Of crucial importance in this concept is knowledge as a ‘(...) gift bestowed by those who consider themselves knowledgeable upon those whom they consider to know nothing. Projecting an absolute ignorance onto others, a characteristic of the ideology of oppression, negates education and knowledge as processes of inquiry. The teacher presents himself to his students as their necessary opposite; by considering their ignorance absolute, he justifies his own existence. The students, alienated like the slave in the Hegelian dialectic, accept
their ignorance as justifying the teacher’s existence — but, unlike the slave, the never discover that they educate the teacher’ (p. 53).

Open Education thus firmly reflects the educational mind-set of the 1960s and 1970s. As the following case study testifies, this mind-set also led to action: the implementation of the idea of Open Education in the United Kingdom by founding the Open University.

Historical Case Study: The Open University UK

A prominent example of the successful implementation of an open education strategy is the Open University (OU) in the United Kingdom. The OU started in 1969 with the mission to be open to people, places, methods and ideas. The reasons for this were, however, not solely humanistic or educational but also political and economical: ‘The OU came to embrace a policy of openness in a rather residual and strategic manner — the need to attract a larger audience to gain cost advantages, and a desire to avoid the hostility of powerful groups already in the conventional education market produced the impetus towards open access, as much as any positive intention to reform the exclusive nature of higher education or provide a ‘second’ chance for those unfairly excluded’ (Harris, 1987, p. 3). As will be shown later in this chapter, these reasons also drive current forms of Open Education, of which the Open CourseWare project probably is best known. Besides, the OU has also been a child of the 1960s with the politically driven desire ‘(...) to introduce a major egalitarian innovation into what had become a narrowly elitist educational system, and thereby provide a stimulus to economic and technological development’ (Bell & Tight, 1993, p. 133). They have also been greatly influenced by a general expansion of adult education and a series of educational experiments with radio and television that foreshadowed the range of possibilities of the near future. Advanced technological means were then used to set up a ‘fully integrated teaching system’ that focused on home-based ‘second-chance’ students, that is no formal entrance requirements were imposed (open access). However, due to research by its Planning Committee, special attention was given to practising teachers as a target audience, and the course structure was built around regular submissions of written assignments and a teaching schedule based on the calendar instead of the academic year. This turned out to be a good prediction of what became ‘reality’ because ‘in its first year of operation, 130,000 enquiries and 43,000 applications were received; 24,191 students were provisionally registered and 19,581 finally registered,
75 per cent of whom obtained course credits. The big demand (…) came from middle class, from the school teachers and from the professional groups’ (Bell & Tight, 1993, p. 134). Over the years, however, demand by teachers constantly decreased.

The OU soon became a source of inspiration for educators and politicians in many other countries. In 1974, Germany saw the start of the FernUniversität in Hagen, with a distance teaching approach but without open access for students. In 1984, the OU was founded in The Netherlands. It was modelled very much after the OU and did feature an open access policy. In this regard, Bell and Tight (1993, p. 128) conclude that ‘(…) the Open University idea must rank as one of the major British intellectual exports of the last two decades’. Despite its relatively early success, the OU faced criticisms targeted at its teaching model, which many commentators regarded as outdated. Since the production and distribution process slavishly followed the logic of mass production (invented and brought to perfection in the Fordism approach), innovations such as ‘Just-in-time-production’ were ignored and created an impression of an inflexible and rigid teaching system that denies the learners active participation and relegates them to being passive recipients of pre-fabricated material.

The End of the Early Open Education Movement

The period of Open Education that started in the 1960s was not very long lived; in fact at about the mid-1970s already it came under severe criticism. As elaborated by Smith (1997, p. 372), ‘(…) the political and economic climate had altered considerably, and the pendulum of change was moving in a more conservative direction. Open classrooms seemed too permissive, lacking in discipline and training in the basic skills, impossible to evaluate in any standardised way, and altogether misguided and miseducative’.

Along with a noticeable rollback to conservative politics (as evidenced by the ascendance of Margaret Thatcher to the role of Prime Minister in 1979) it was the report Teaching Styles and Pupil Progress (Bennett, 1976) that heavily challenged the claims of Open Education. In short, it purportedly showed that formal instruction is superior to informal learning.

Open Education Coming of Age

Throughout the mid to late 1990s, an online courseware concept emerged. Online courseware (OCW) can be defined as ‘(…) initiatives in which
traditional degree-granting institutions convert course materials, originally designed for their own undergraduates, into non-credit bearing online versions for the general public’ (Walsh, 2011, p. 1). OCW gained tremendous momentum because of MIT’s now historic announcement. On April 4, 2001, the OCW consortium8 pledged that they

(...) would share the core academic materials — including syllabi, lecture notes, assignments and exams — from all of its courses freely and openly on the web, providing resources that educators and learners could use to improve a wide variety of formal and informal educational experiences. In the ten years since, more than 80% of MIT’s faculty members have voluntarily shared their teaching materials through OCW, amassing a collection of over 50,000 individual resources including documents, video, audio, simulations, animations and sample programming code drawn from over 2,000 courses. An estimated 100 million individuals have accessed these resources and hundreds of universities around the world have joined MIT in sharing their own course materials freely and openly on the web.

With the inception of the OCW initiative, another process of unbundling took place. As already mentioned in the introduction, the first and most catchy unbundling pertains to the pedagogical versus the residential components. With OCW, the pedagogical part is further subdivided: ‘Not only is the professor-created content offered without credit attached to it, but online courseware providers also typically strip away many of the interactions characteristic of traditional teaching — interactions which distance credit-bearing education efforts try to retain in some form’ (Walsh, 2011, p. 3). This is why OCW describes its content as materials, and not as (complete) online courses, which are offered to the general public instead of a predefined student population.

The revolutionary decision of MIT to make all its courses freely available to the public inevitably raises the question about their reasons to do so. Is it purely the humanistic desire to be altruistic, that is an elite institution’s ambition to serve society? If so, one could ask why it was in 2001 and not in 1980 or any other date within the last decades. Surely, technological advancements have contributed to the development, but this does not explain all of it because distance education has always (i.e. since its beginning in the mid-19th century with the correspondence model at the University of London) embraced technology to reach its remote learners (Peters, 2010). Moreover, education itself faced several challenges such as an increasing demand for access to education and the rise of costs which led to higher education being much more selective and expensive than ever (Walsh, 2011). Yet, the increased selectivity pertains only to the very top, the so-called Ivy League, whereas middle class institutions actually have become less selective.
Soon after MIT, the UNESCO Forum on the Impact of OCW for Higher Education in Developing Countries coined the term ‘Open Educational Resources’ and defined the ambition behind it as ‘The open provision of educational resources, enabled by information and communication technologies, for consultation, use and adaptation by a community of users for non-commercial purposes’ (UNESCO, 2002, p. 24). A few years later, the report Giving Knowledge for Free: The Emergence of Open Educational Resources commissioned by the OECD provided a slightly different version, which reads as follows:

The definition of OER currently most often used is ‘digitised materials offered freely and openly for educators, students and self-learners to use and reuse for teaching, learning and research’. OER includes learning content, software tools to develop, use and distribute content, and implementation resources such as open licences. (Hylén, 2007, p. 10)

In the same year, another major enabler of the early wave of OER, the William and Flora Hewlett Foundation, conducted a review, which offers a little background. It states that ‘at the heart of the movement toward Open Educational Resources is the simple and powerful idea that the world’s knowledge is a public good and that technology in general and the World Wide Web in particular provide an extraordinary opportunity for everyone to share, use, and reuse knowledge’ (Atkins, Brown, & Hammond, 2007, p. 5). Their understanding is that OERs are

(…) teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use or re-purposing by others. Open educational resources include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge. (Atkins, Brown, & Hammond, 2007, pp. 4, emphasis added)

These definitions indicate a significant development. Openness in OER has been transformed from ‘open provision’ without accounting for legal and technological requirements to a form of provision that is framed by Intellectual Property (IP) rights. According to the latter view, all other characterisations like cost are subordinate. This legal restriction also helps to avoid common misapprehensions that attempt to claim that OER must be offered at no charge, thus blurring OER with free, yet copyright protected resources. Indeed it would be somewhat paradoxical to advocate the position that OER must be offered for free, thus ignoring the creativity, effort and money invested by individuals or groups to produce the materials. It would also be very naïve to believe that someone would work on
OER just for the good of his health. What really matters is not the ‘free’ but the ability to revise, rework, redistribute and repurpose the materials, described by Wiley (2009) as the 4Rs. The Creative Commons licence model allows various, detailed licensing arrangements, which are described through the play on words ‘copy left’.

For a considerable time, OER focused on the open provision of resources to equip the ‘life long learner’ for the demands of the 21st century by initiatives such as OpenLearn (Open University UK) or MERLOT (Multimedia Educational Resources for Learning and Online Teaching). This is problematic insofar as little effort was made to change traditional teaching and learning practices, which originated though in a ‘pre-open age’ with a strictly teacher-centred approach. Consequently, the Open Learning Content Observatory Service (OLCOS) project warns ‘(...) that delivering OER through the still dominant model of teacher centred knowledge transfer will have little effect on equipping teachers, students and workers with the competences, knowledge and skills to participate successfully in the knowledge economy and society’ (Geser, 2007, p. 12). The warning is aimed at shifting from providing mere open content to developing open practices around OER, which led to the term ‘Open Educational Practices’ (OEP).

The OPAL project is one of the few examples of efforts made to move Open Education beyond content. In the project’s view, OEP ‘(...) constitute the range of practices around the creation, use and management of open educational resources with the intent to improve quality and innovate education’. The project intends to differentiate between forms of the utilisation of OERs according to objectives and methods. While the claims made on behalf of OEP are certainly a step in the right direction – after all, education is fundamentally concerned with the application and modification of knowledge, skills and attitudes that have been learned from models (teachers, books) – it has never been a simple transmission from a source of wisdom to a receiving student. The extrapolation to Open Education, however, is tricky because of the variations of openness. Catering for technical openness is a lot easier than accommodating normative openness, let alone revolutionary openness. Moreover, some specifications are rather meaningless, or what do you think if you would hear of an Open Professor which has been suggested as part of the Open Education Ecosystem? There are certainly limitations to interpretations of the term ‘openness’, which should be taken more seriously and rigorously in order to avoid undermining the values of Open Education.

Perhaps a clearer picture of OEP emerged when the so-called ‘Massive Open Online Courses’ (MOOCs) appeared in the educational landscape.
McAuley, Stewart, Siemens, and Cormier (2010, p. 4) provide a detailed account:

(...) a MOOC integrates the connectivity of social networking, the facilitation of an acknowledged expert in a field of study, and a collection of freely accessible online resources. Perhaps most importantly, however, a MOOC builds on the active engagement of several hundred to several thousand ‘students’ who self-organize their participation according to learning goals, prior knowledge and skills, and common interests. Although it may share in some of the conventions of an ordinary course, such as a predefined timeline and weekly topics for consideration, a MOOC generally carries no fees, no prerequisites other than Internet access and interest, no predefined expectations for participation, and no formal accreditation.

Such MOOCs are called connectivist MOOCs or cMOOCs, which reflect the importance of the connections learners make among themselves. In 2008, George Siemens and Stephen Downes launched one of the first cMOOCs that were modelled after the previous definition. It was called CCK08 (Connectivism and Connective Knowledge). All course content was available through RSS feeds, and learners participated with their choice of tools: threaded discussions in Moodle, blog posts, Second Life and synchronous online meetings. The CCK course was repeated in 2009 and 2011, several other courses followed (e.g. change11). They each attracted more than 1,000 participants and drew the attention of media from all over the world. Significantly, the big interest in this new form of online teaching and learning caused some Stanford University professors to develop their own kind of MOOCs, referred to as xMOOCs to differentiate them from the cMOOCs. Money to quick start them was provided by venture capital seeded to spin-off companies such as Udacity and Coursera as will be shown in Chapter 2.

The emergence of those platforms marks a new chapter in the development of Open Education, which can be dubbed ‘Recaging and taming the beast OER’. This turn of events is similar to the change Open Education went through. After its early phases in the 1960s and 1970s and after a period of opening up methods and structures, it witnessed a consolidation resulting in more conservative approaches. But whereas back then the shift was triggered by a lack of empirical support for the claims that were made on its behalf (i.e. there was no evidence indicating that ‘open’ approaches actually produced better learning results than did traditional teaching), the current change should be attributed to economic reasons. Providers of these kinds of open xMOOCs utilise a closed learning infrastructure, which requires registration to participate in them. Commercial xMOOC providers seem to have learned the lessons from the classical cMOOC experiments, in
which many learners struggle with complexity and the underlying pedagogy of abundance (Cross, 2013; Kop, Fournier, & Mak, 2011). So why is more structure not provided to overcome feelings of confusion and to have more control of what learners are doing? This question is to be answered differently according to the standpoint of the observer. From an economical perspective, more openness certainly endangers the probability of success and hence the revenues for the vendor. Returns on investment are key in the current outcome-driven society. Therefore, a lack of success reduces the attractiveness of the course, which means fewer people will be willing to pay for it. However, from an educational viewpoint openness is a vital condition for rich learning experiences. This is shown in the section where we introduce the concept of Bildung as a distinct form of reflective learning that has a significant stance on openness. But before doing so, we will summarise our conclusions with respect to Open Education.

Open Education Summarised

Open Education, then, has gone through a series of waves. In the beginning, Open Education was a protest movement against restrictions of the educational system. This led to a wave of opening up the classrooms to include alternative methods for a modified education (child-centred approaches). As those methods failed to meet the high expectations one had (revealed by a lack of empirical support) a new wave flooded the educational landscape: a re-orientation towards traditional, that is closed, approaches. Interestingly, the next opening wave has not been initiated by political motives (protest against something) but by technological affordances. As a consequence, this opening wave has a much more positive connotation. This positiveness is also reflected by the emphasis on the rights-based educational model, which is a political instrument introduced by the UNESCO’s Universal Declaration of Human Rights in 1948. Article 26 reads:

(1) Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit.

(2) Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and
fundamental freedoms. It shall promote understanding, tolerance and friendship among all nations, racial or religious groups, and shall further the activities of the United Nations for the maintenance of peace.

The UNESCO perspective on education is heavily influenced by the experiences from World War II. In recent times, conceptions of education have clearly shifted towards regarding it as a marketable commodity. Given the dominance of Ivy League colleges and their promotion of ‘open’ courses, this may foreshadow a development that has been described by Jarvis (2010, p. 225) as follows: ‘The rhetoric of the market is that only the best quality commodities will survive, but its reality is that only the strongest and largest organisations survive irrespective of the quality of the product they sell’. Clearly, if this was to happen, it would be an infringement of the UNESCO Declaration.

Consequently, in a time period much shorter than the early phase of Open Education, the MOOC wave gave rise to a movement that can be characterised as a recaging and taming of the beast OER. Despite the lofty ideals of the original, cMOOCs, as captured in the definition by McAuley et al. (2010), platforms such as Coursera do not provide courses that are open according to the 4R principles (Wiley, 2009), even though enrolment is free. This narrowing is shaping the way individuals engage and participate with the open digital world. In the next section, a special theoretical lens will be introduced to shed light on the emerging mechanisms of opening and recaging from an individual point of view.

**OPEN EDUCATION AND BILDUNG AS KINDRED SPIRITS**

For an extended period of time, Bildung was known as a central concept for reflecting individual and social developments in German culture, literature and science. Especially, during the German Idealism period (late 18th till early 19th century) Bildung reached a zenith when writers such as Humboldt, Schelling or Schiller proposed the notion that reality is only a product of thinking and knowledge, thus rejecting the ideas of realism and materialism. In this view, there is no ‘independent’ reality; instead reality is construed by the individual’s mind. Bildung then refers to the free, dialogical and dialectical interplay between the person and the world; it is aimed at self-realisation and the full unfolding of innate potentials.
It is important to stress that Bildung is a goal in itself and should therefore not be utilised or exploited to reach external goals. Consequently, Bildung stands in stark contrast to the concept of qualification. Being qualified refers to an instrumental state, which is achieved in order to serve society and only thereby himself or herself. Moreover, Bildung can only be achieved when the person interacts with an ‘opponent’ outside of him or her. The biggest possible opponent is the world, which is therefore the classical resource for Bildung. OERs provide such a tremendous potential for Bildung because they provide open and unrestricted access to a wide ‘world’ of digital resources, for example in the form of ideas or materials (Deimann, Open Education and Bildung as kindred spirits, 2013). Finally, Bildung in the classical understanding as a fundamental human activity was not an elite principle but open to every human being — a philosophical ancestor to the rights-based educational model (see above).

In recent times, several scholars have been working on a reformulation of Bildung, partly because the context of the original concept (Idealism) has come under severe criticism. One such attempt was provocatively articulated by Adorno (2006) in his ‘Theorie der Halbbildung (Theory of Semi-Bildung)’ based on the experiences of cruelty during the Nazi regime in Germany; he claimed that Bildung failed to ensure the conditions of a human society. Another approach to reformulate Bildung is linked to the process of learning and emphasises Bildung as higher-order learning. Essentially, whereas learning is typically depicted as the activity of receiving, processing and storing information in a given mind-set (the framework through which the person perceives the world), Bildung changes this mind-set by opening up the mind to new perspectives. This becomes apparent when the individual is confronted with problems that cannot be solved with hitherto used strategies that have been acquired with the help of received learning processes. Consequently, these processes need to be expanded so that better strategies can be learned. Bildung is understood to engage the person in such processes of reflection and deliberation to modify or transform the person’s frame of reference. This is why the theory is also called the Transformative Theory of Bildung (Koller, 2003).

**An Integrated Perspective**

Humboldt in his classical writings conceptualised Bildung as the interplay between the person and the world, with the individual seeking to unfold his or her potentials to become a fully developed human being. There is a close
interaction between the two components inasmuch as the world provides access to different cultures and their artefacts, which in turn constitute the ‘breeding grounds’ for personal development. Against this background it can be argued that open access to digital representations is an ideal condition for Bildung, as economical, physical and other obstacles are minimised. On the other hand, openness can also stress the specific characteristics of Bildung, that is as an unpredictable process that is hard to control for teachers and that helps coping with problems that cannot be solved with existing learning strategies. In this regard, learning in a cMOOC entails many challenges (determining when, where and what to learn) that are usually taken care of by a teacher. Transferring teaching roles to the learner is – despite the belittling rhetoric of some administrators and politicians – a complex task (Sloep, 2013b) that can be connected to the process of Bildung as a form of higher order learning (Deimann & Farrow, 2013).

One may argue that learning in the digital era represents a prototypical starting point for Bildung. Although learning in the pre-digital age was a highly common endeavour which entailed several prescribed steps and which gradually came to lose its importance for Bildung, learning in digital contexts is much more complex but arguably also more conducive to Bildung. This can be illustrated, for instance, with the process of information seeking, which is the first step of knowledge acquisition. Before Google and the Internet of today were born, information was typically retrieved from a library that had a well-structured catalogue that made it easy to find relevant information. Moreover, forms of quality management were in place, guaranteeing that users knew that they could trust the information found. Compared to current search practices one might think that information seeking has become much easier because you do not have to go to the library anymore and borrow books. It suffices to just sit at home at your desktop computer or in a café with your laptop and enjoy the power of modern information and communication technologies. Actually, this is only one part of the story because many of the erstwhile trustworthy factors have become fragile. Google manages quality management differently than the local library and this affects search results. Therefore, to judge the value and the validity of the information, special competences are required, which are not yet taught in formal education. Thus, the development of new skills to build a new framework of ‘digital learning’ is an important process of Bildung.

Digital learning is still complex, that is each step has now a new quality and new competencies or literacies are needed to successfully perform
them. Recently, the Mozilla Foundation issued a Whitepaper\textsuperscript{20} for a ‘Framework for Web Literacies’, which are defined as follows:

At its most basic, ‘literacy’ is the ability to read and write something. As we’re focusing on Web Literacies the ‘thing’ that we’re reading and writing is the Web. In addition to this, however, as people become more literate we expect them to think critically and be able to look at the world from more than one perspective. For someone to be ‘literate’ they have to be aware that they are literate and be accepted within a wider community of literate peers. (see Footnote 20)

It then differentiates between four core competencies that reside broadly in one of the four areas of Web Literacies:

- **Exploring** — I navigate the Web while learning, questioning and evaluating what it has to offer.
- **Creating** — I create things with the Web and solve problems while respecting the work of others.
- **Connecting** — I communicate and participate appropriately in one or more Web communities.
- **Protecting** — I protect the Web as a public resource for free expression.

These literacies resonate with the process of transformative Bildung described by Marotzki and colleagues (2003). First and foremost, information has to be transformed into knowledge — this is somewhat reflected in the shift from Open Educational Resources (providing access to resources) to Open Educational Practices (adopting OER in creative teaching and learning). Second, knowledge has to be reflected upon, considering its constitution, its reach and its utilisation, which is referred to as the competency ‘Exploring’ in Mozilla’s framework. Third is the articulation in public spaces, which is referred to as the competencies ‘Connecting’ and ‘Protecting’. The close relationship indicates that digital learning differs significantly from traditional learning and that, thereby, Bildung has become much more relevant as a solid theoretical underpinning to guide the development of new skills and competencies.

**SUMMARY AND CONCLUSION**

This chapter has sought to provide an in-depth analysis of Open Education, and also to lay the foundation for an appropriate analysis of current hypes like MOOCs. Going back in the history, it was shown that Open Education has emerged as an innovation movement following certain
waves that were triggered by political, technological and/or economical factors. So, for instance, in the early phase during the 1960s and 1970s, heated political debates about the power of education over children took place and people like Freire lobbied for ‘Pedagogy of the Oppressed’. However, due to the lack of consistent empirical evidence for its success, Open Education lost much of its vibrancy until digital technology caused a revitalisation in the beginning of the 21st century. This time it was not a movement against but a movement in favour of something, namely the unrestricted proliferation of education for everybody around the globe. It was argued that for the first time in the history of humankind, technology has enabled us to make education available not only for middle or upper class but also for the poor because costs for production and distribution have dramatically decreased. Moreover, technology was not considered as a means in and for itself but linked to a certain understanding of knowledge, that is as a common good that should belong to the general public and not only to universities or commercial institutions. However, it was the prestigious MIT that kicked off the first global OER initiative, thus also establishing a certain form of ‘cultural imperialism’. This was inspired by a belief that content is no longer ‘king’, that is the flagship product of the university. Due to the availability of digital tools, virtually everybody can now produce, distribute and curate content on a large scale without a large financial budget. There is also a growing market for interactive open textbooks using services like Kno or iBookstore.

By the same token, entire courses are becoming less important for the added value of universities. In fact, universities are beginning to outsource them to start-ups like Udacity or Coursera, which has fuelled a debate on whether such xMOOCs disrupt higher education. In this regard, it is, however, questionable whether these mass courses that are based on inferior learning theories (behaviourism) and didactical models (‘drill and practice’) can equip learners with skills needed for the 21st century. Despite the current hype around MOOCs, it still remains unclear how MOOCs of either kind can provide a learning experience that is akin to traditional courses. It is also disputable whether xMOOCs in particular, which are based on short video snippets, multiple choice tests and automatically graded exams, are suitable for humanities disciplines like law or archaeology.

After this initial discussion of Open Education, the concept of Bildung was introduced as a theoretical backdrop to better judge the educational value of OER and MOOCs. It was argued that although Bildung and Open Education were developed as unique concepts and unrelated to each other, they do share the same humanistic beliefs and can thus be
characterised as kindred spirits: Bildung accounts for the philosophical realm and describes a complex interaction of the person and the world to fully unfold the person’s innate talent and personality, whereas Open Education provides the means for the realisation of Bildung from a technological perspective. Together they can provide a much more comprehensive picture of what learning in open digital environments really means.

Looking at the recent transformation from MOOCs to Open Courses, which have actually compromised the original 4R principles, the potentials for Bildung are minimised by a rigid regulation of learner’s behaviour. In addition to that virtual platforms face the challenge of providing authentic experiences that are typical for college education and that are conducive to Bildung because at real colleges there is more opportunity for interaction with peers and teachers in face to face situations. Just memorising facts in a learning quiz is surely not that kind of experience that is typical for Bildung. It is thus important to continue with critical investigations of innovations because they bear the danger of blurring educational/philosophical and economical arguments. This has become apparent during the current ‘Great Unbundling of Education’ (Staton, forthcoming), which leads to a decline of the cultural values and experiences that are typically generated in traditional (bundled) HE and which also affects the process of Bildung (Bildung as the mastering of cultural contexts). On the other hand, initiatives like the Peer to Peer University with its ‘Mechanical MOOC’ demonstrate that the extraordinary success of particularly xMOOCs in terms of student numbers does not only lead to a greed of gain but also to innovative approaches that can unveil a broader understanding that is very akin to the substantial traditions of Bildung. The following quotation, dating back one decade already, foreshadows the growing importance of the interdependence of Bildung and the Internet:

Not only has cyberspace as a new space of culture and Bildung changed the social surroundings, it has also changed ‘man himself’. The coordinates of what being human, knowledge, time, space, property, body, intelligence and consciousness may be are shifting. Effects on Bildung such as an increased flexibility and an increased reflexivity will — to a high degree — be caused by the internet. (Marotzki, Nohl, & Ortlepp, 2003, p. 237)

It is in this light that we would like to see the development of openness in education in general and of alleged instantiations of it, such as OERs, OEPs, cMOOCs and xMOOCs, in particular.
NOTES

1. This analogy is inspired by the blog post “The End of the University as We
Know It” (http://the-american-interest.com/article.cfm?piece=1352).
4. ‘Rethinking Education Strategy’ launched by the European Commission,
5. The full report is available online via http://www.educationengland.org.uk/
documents/plowden/
6. One of us described procedural openness as logistic flexibility, with normative
openness being similar to content and didactic flexibility (Sloep et al., 2012).
Logistic flexibility is connected to the freedoms of ‘place, pace and time’ that are so
characteristic of Open and Distance Education. Clearly, content flexibility speaks to
OERs.
pdf
ware-celebrates-10th-anniversary/
9. For all full report, see http://unesdoc.unesco.org/images/0012/001285/128
515e.pdf
10. This is exactly the strategy applied by the German school publishing industry.
It is aimed at avoiding the fact that ‘true’ OER intrudes their market and thus
endangers the oligopoly. Seemingly they are in favour of OER and so a study to
explore the potentials of ‘free online resources’ has been mandated (http://www.
digital-lernen.de/nachrichten/diverses/artikel/bildungsmedien-online-uni-augsburg-
erforscht-open-educational-resources.html).
11. Interestingly, critics concerning the closed nature of the educational system
have already been articulated during the first period of Open Education, in particu-
lar by Wedemeyer (1981). Currently, little reference is made to such authors, which
gives the impression of a lack of historicity.
lines.pdf
15. As one of us (Deimann) referred to it in a public address.
16. See for example the attempts to visualise learning on the net in the form of
badges, http://openbadges.org
18. Representatives of open courses regularly use the right-based education model
to legitimise their business strategies (see for instance http://www.nytimes.com/
2013/01/07/education/massive-open-online-courses-prove-popular-if-not-lucrative-
yet.html?partner=rss&emc=rss&r=2&).
19. This has become especially apparent in the process of the Bologna reform
with its emphasis on training/apprenticeship (functional education) to the detriment
of Bildung (education in itself).

21. As argued by Blackall (2009): ‘In many respects, OER and the Creative Commons licenses help propel US centred ideas of copyright and intellectual property, indirectly inserting such ideas on the back of moral concepts such as sharing, freedom and openness, as though sharing, freedom and openness didn’t exist before, and that the only way to protect such notions is with legal instruments that recognise copyrights in the first place’. See also Sloep (2013a), who sees the cultural imperialism of MOOCs as an instantiation of Michael Sandel’s argument form coercion (Sandel, 2012).


REFERENCES


How does Open Education Work?


