OPEN PRAXIS

INTERNATIONAL
COUNCIL FOR OPEN AND
DISTANCE EDUCATION

The Best of Two Open Worlds at the National Open University of Nigeria

Jane-frances Obiageli Agbu
National Open University of Nigeria-NOUN (Nigeria)
oagbu@noun.edu.ng

Fred Mulder & Fred de Vries
Open Universiteit (Netherlands)
fred.mulder@ou.nl & Fred.devries@ou.nl

Vincent Tenebe
National Open University of Nigeria-NOUN (Nigeria)
vtenebe@yahoo.co.uk

Abel Caine
*UNESCO Mahatma Gandhi Institute of Education for Peace and Sustainable Development,
New Delhi (India)*
a.caine@unesco.org

Abstract

It will be wise for educational institutions, from primary to tertiary level, globally, to reflect on their position and profile with respect to the new concepts of Open Educational Resources (OER) and Massive Open Online Courses (MOOCs). Responses will be diverse of course but the potential is so manifest that many institutions probably will consider the benefits to outweigh the barriers. The National Open University of Nigeria (NOUN) has decided to combine its 'classical' openness with the new digital openness by fully embracing the OER approach and converting its complete course base into OER. Step-by-step, NOUN is currently implementing its strategy towards becoming an OER-based Open University with a special niche for MOOCs. During a launch event in December 2015, the first 40 OER-based courses were presented as well as the first 3 OER-based MOOCs. This paper therefore presents NOUN's OER strategy with insight on lessons learned. To the authors' knowledge NOUN is the first Open University in the world with such a full-fledged OER (& MOOCs) implementation route.

Keywords: Open, classical openness, digital openness, OER, MOOCs, Nigeria, NOUN

Introduction

The paper starts with discussing the 'classical' openness in education as utilized in the long-standing tradition of the Open Universities (OUs). We then move to the new kind of openness that emerged about 15 years ago, the digital openness, which gave rise to new approaches to open up education (OER, MOOCs), and brought new competitive players into the field. In the next section we consider the response of the OUs around the world to these challenging developments, which can be characterized as a paradoxical combination of being inspired by its tempting opportunities and staying reserved for a variety of reasons. It was because of the MOOCs that the sense of urgency to take a clear stand in this new world of digital openness significantly grew. Next, the paper presents the NOUN case in terms of the why, the what, and the how of developing itself steadily into an all-inclusive OER-based Open University with a measured share for MOOCs. The paper concludes with a few final remarks.

Open Education in perspective

Traditionally the Open Universities are offering a model of open learning or open education. Frontrunners in the early 'distance learning' mode were the University of London in the nineteenth century and the University of South Africa (UNISA) in the mid twentieth century. The start of a very successful OU in the UK around 1970 marked an expansive movement towards many successors in a full range of countries in Europe and around the world. These OUs represent major operations for a wide and vast population of learners not being served by the regular university system. Quite a few are so-called mega-universities enrolling millions of students (Daniel, 1998; Mulder, 2010, 2015).

The qualifier 'Open' in the name 'Open University' refers to the following set of possible features: (1) open entry (no formal requirements); (2) freedom of time; (3) freedom of place; (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). Not a single OU in the world is fully open in all these six aspects of openness, and what we actually see is a large diversity in the OU's institutional profiles. But, derived from their missions, OUs definitely score much higher than regular universities on these 'classical' notions of openness (Mulder 2010, 2015).

In the case of NOUN, which was founded in 2002, it can be observed that the institution is on its way to becoming a mega-university with enrolment of 455.837 students as at April 2016 (data facilitated by NOUN). NOUN has a particular focus on four out of the six open features, namely freedom of time, freedom of place, freedom of pace, and open to all people and target groups. For the other features of 'open'—open entry and open programming-, NOUN currently requires five basic credits in most of its entry requirements, while open programming is not really an option for students.

Digital openness flanking the 'classical' openness

Meanwhile, the term 'Open Education' is also being used in relation to the digital openness that has emerged and flanked the classical notions of openness in education. This was initiated by the 2001 OpenCourseWare (OCW) initiative of MIT, making available all its courses for use by anyone at no cost via the Internet. The term 'Open Educational Resources' (OER) was coined in 2002 when UNESCO underlined the enormous potential of this concept for its 'Education for All' ambition. Simply put, OER stands for learning materials that are online and available at no cost to anybody: learners, teachers, and institutions (Mulder, 2006, 2015; Weller, 2014). OER can be (re)used, revised, remixed, redistributed, and retained (Wiley, 2007, 2014). This sharing tenet is facilitated by the legal use of open licenses that work with copyright to give users certain automatic rights, such as those previously cited (provided for example, by Creative Commons).

Another push towards digital openness came in 2011 when the first Massive Open Online Courses (MOOCs) were offered. Since then MOOCs have boomed with top American universities as the first movers, financed with venture capital, hyped media attention, and favourable interest from politicians. Expectations of the potential of MOOCs as an educational tool were extremely high in the beginning, accompanied with claims that they would disrupt higher education. Currently we are witnessing a normalization of the MOOC movement, which meanwhile has extended substantially outside the US into Europe and other parts of the world. MOOCs typically are courses that offer online learning services, including learning communities, automated self-testing, peer review, and certificates of different kinds (although mostly not for credit). Quite often MOOCs are based on video lectures.

With the rapid expansion in the number of MOOCs, the number of students enrolling in each course is significantly less than enrolments in the initial offerings. Generally, MOOCs apply the classical open features 1 (open entry), 3 (freedom of place), and 6 (open to all people and target groups), but not 2 (freedom of time), 4 (freedom of pace), and 5 (open programming). Like OER, they are available on the Internet at no cost, but unlike OER, MOOCs are rarely openly licensed, therefore they lack the principle of sharing of the learning materials with anyone at any time (Weller, 2014; Mulder, 2015).

The emergence of OER and MOOCs mark relevant change agents in higher education. New and highly innovative players have entered the field of Open Education while traditional players still struggle with strategic dilemmas associated with OER and MOOCs (Mulder, 2015).

Response of the Open Universities worldwide

In 2006 the Open Universities in the UK and in the Netherlands were the first OUs in the world to launch their OER initiatives through OpenLearn and OpenER respectively. Both related to a small fraction of the full course base, targeted lifelong learners, offered a new easily accessible portal to higher education, and aimed to widen participation in higher education (Mulder, 2006; Schuwer & Mulder, 2009). The example set by OU UK and OUNL, both members of the European Association of Distance Teaching Universities (EADTU), was quickly followed by an EADTU project called MORIL (Multilingual Open Resources for Independent Learning), which was led by OUNL. An important output of this project was the growing awareness among all European partnering OUs of the opportunities of OER but also of the challenges and possible threats. Moreover, with most of the partners it resulted in limited OER pilots or considerations to develop an OER strategy.

In 2008–2009 EADTU organized three follow-up OER Seminars, two within the European context and one with a global scope (Africa, Asia, and Latin America). The global Seminar was organized in close collaboration with UNESCO in its Headquarters in Paris and explored the theme of OER capacity building. The intentions were promising and the spirit was stimulating (Mulder, 2010). The African delegation, for example, came to the conclusion that *'Africa intends to boost educational capacity with OER so as to suffice the large demand for education.'* In 2008 the global organization of OUs and similar operations, the International Council for Open and Distance Education (ICDE), published a report of its OER Taskforce chaired by OUNL. The title of the report, *'A Golden Combi?! —OER and Open, Flexible and Distance Learning'*, actually is a most concise summary of its major line-of-thought, emphasizing the exciting and challenging opportunities for OUs with OER (Mulder & Rikers 2008). In 2009 at the combined ICDE/EADTU Conference, the resulting Maastricht Message stated:

> It is evident that the increasing—and increasingly diversified—demand for higher education cannot be met through traditional means within traditional institutions. OER offer an unprecedented opportunity to advance both the international commitment to Education for All and to building inclusive knowledge societies.

The Maastricht Message has been presented in the closing session of the 2009 UNESCO World Conference on Higher Education in Paris. This has contributed to the inclusion of item 13 in the resulting UNESCO Communiqué: *'ODL approaches and ICTs present opportunities to widen access to quality education, particularly when OER are readily shared by many countries and higher education institutions'.* Three years later, at the 2012 EADTU Conference, it was concluded in an alerting keynote that *'OUs should consider to become (the) European OER Universities'* (Mulder, 2012a). Another keynote, at the 2012 ICDE Leadership Meeting, expressed this recommendation in other words: *'OER is fundamental to the OUs'* (Mulder, 2012b).

Despite all these promising intentions, initiatives, explorations and recommendations (given the perceived benefits of OER), the OU world is more or less stuck in doubt, hesitation or caution with respect to a full conversion to OER. One reason is fear of negative effects for the enrolments, although this seems to be based more on sentiment than on evidence (Carson, Kanchanaraksa, Gooding, Mulder & Schuwer, 2012; Janssen, Schuwer & Mulder, 2012). A second reason is the awaiting attitude of the institutions, in continuing expectation of a governmental policy supporting and incentivizing OER. And a third reason is the lack of consensus among academic staff on the need to embrace OER, partly infused by normal human behaviour, implying overall not to be in favour of change.

This combined attitude of concern, anticipation, and complacency was seriously challenged by the MOOCs movement. The competitive potential of the MOOCs from a new world of innovative players generated a stronger feeling of urgency to act in the traditional OU world. At the 2012 EADTU Conference previously referenced there was an emphatic proposal: *'Let's enter the MOOCs world with EU-OU style MOOCs with clearly more added value for learners than the US-based MOOCs'*. Which was widely applauded and followed up with an express call at the 2012 ICDE Leadership Meeting (quoted above) to extend this idea beyond Europe to the OUs at other continents. EADTU went remarkably fast and launched its MOOCs initiative called OpenupEd in April 2013, together with the European Commission. 11 partners from Europe and beyond (including Russia, Turkey, and Israel), almost all EADTU members, founded OpenupEd with 40 courses in a wide variety of subjects and levels and using 12 languages. OpenupEd applies a set of 8 distinct features: (a) openness to the learners (in the OU tradition); (b) digital openness (e.g. OER-based); (c) a learner-centred approach; (d) independent learning; (e) media-supported interaction; (f) recognition options; (g) focus on quality; and (h) a spectrum of diversity. OpenupEd is operating in a decentralized model where the institutions themselves are leading, and it is providing a central communication portal (rather than a platform). It is driven by service to the learners and societies (rather than by revenue) and is positioned in the public domain (rather than in the private sector). OpenupEd is open to partner with any university prepared to endorse the 8 common features and meeting the requirements for the OpenupEd quality label (Mulder & Jansen, 2015). Currently OpenupEd is one of the major MOOC providers in the world, but with a distinct brand, offering almost 200 courses, and engaged in a growing partnership, also outside Europe. Interestingly, what we so far have not seen happen around OER, did occur with the MOOCs: combine the best of the OU world and its classical openness with the new and innovative world of digital openness.

Following the 2013 ICDE Conference in China, where the question was raised: *'Will OUs be disrupted by the MOOCs movement or rediscover their mission and fully utilize the new power of OPEN?'*, UNESCO/Paris and the UNESCO Chair in OER at OUNL initiated to organize two explorative high-level Executive Workshops in 2014. One was for the leadership of the African OUs in collaboration with ACDE (African Council for Distance Education) in Victoria Falls, Zimbabwe (UNESCO 2015a). The other one was for the leadership of the Asian OUs in collaboration with AAOU (Asian Association of Open Universities) in Hong Kong (UNESCO 2015b). The idea was to inspire the African and Asian OUs and their collective bodies to start MOOCs initiatives similar to OpenupEd but with their own flavour and profile, and to link them to OpenupEd in a global network. Follow-up activities have been arranged and a firm and concrete result is the NOUN case, which will be described in the next sections.

NOUN's strategic response

Although more and more institutions are embracing OER, the concept is still pretty alien to many, especially institutions in West Africa. The OER journey at the National Open University of Nigeria

is a fairly young one. Specifically, on 6th December 2013, during the closing remarks for the 7th Pan Commonwealth Forum held in Abuja, Nigeria, NOUN's former Vice Chancellor Prof Vincent Ado Tenebe, declared his university's intention to embrace OER by opening up its course base into OER. That was a remarkable move, given the general reservations in the OU world to date to go that far, as described in the previous section. In 2014 NOUN actively participated in the UNESCO/ACDE high-level Executive Workshop on OER and MOOCs with the sole aim of sensitizing institutions in Africa on the need to embrace and practice these concepts.

Embracing OER is quite a natural response for NOUN given its mission and vision statement that seeks to

> provide highly accessible and enhanced quality education anchored by social justice, equity, equality and national cohesion through a comprehensive reach that transcends all barriers and... to provide cost-effective, flexible learning which adds life-long value to quality education for all who seek knowledge (NOUN strategic plan 2013–2017).

The 'aha' moment for NOUN was triggered by the 2012 Paris OER Declaration (UNESCO/COL, 2012). This declaration recommends that States, within their capacities and authority: foster awareness and use of OER; facilitate enabling environments for use of ICT (bridging the digital divide); reinforce the development of strategies and policies on OER; promote the understanding and use of open licensing frameworks; and support capacity building for the sustainable development of quality learning materials. Moreover, it is recommended that States foster strategic alliances for OER; encourage the development and adaptation of OER in a variety of languages and cultural contexts; encourage research on OER; facilitate finding, retrieving and sharing OER; and encourage the open licensing of educational materials produced with public funds. Being aware of its position as a publicly funded university with a huge body of course materials which were also funded by the government, NOUN has concluded that it could—in line with its vision and mission—stimulate access, social justice, and equity in knowledge by opening up content through the use of open licenses.

Thus, in a bid to properly key into OER, NOUN decided to establish an OER unit in August 2014 and has since then continually dedicated itself to learning and understanding the tenets of OER. With its OER and MOOCs approach, which entail raising awareness, technical training, conversion of existing course materials into OER, and collaborating with institutions and organizations in OER and MOOCs, NOUN is addressing two main target groups: students and academics. Its current and potential students can legally access up-to-date course materials through online services with computers and smartphones. Moreover, it is beneficial for them as they are less dependent on the official printed course materials that are available in the NOUN study centres or on the existing illegal distribution channels with scans of printed course materials. The target group of academics first of all is located within NOUN but also extends beyond NOUN to the other universities in Nigeria. NOUN's academic staff, for example, is guided in writing courses that primarily use existing OER materials, while the leadership and academics of other universities are invited to join NOUN's initiatives to build a Nigerian open educational ecosystem. This ecosystem is characterized by a fruitful collaboration on the development of university courses based on shared resources that are being improved during their use in teaching and learning practices. Furthermore, MOOCs are to be used as a vehicle for widely taught subjects in foundation courses, currently offered in isolation by the universities. In the NOUN approach, the MOOCs are OER-based, so they are available for re-use and improvement by academics of other universities in Nigeria or elsewhere.

In December 2015, in a high-level Seminar aimed at presenting NOUN's OER strategy to Nigerian government and other stakeholders from both the public and the private sector, it was confirmed

that NOUN had entered the road towards becoming an OER-based Open University with a special niche for MOOCs. It seems fair to say that NOUN is the first OU in the world implementing such an 'all-inclusive' strategy and profile. It presented its first 40 OER-ized courses and its first 3 courses proposed to be MOOC-ified, as well as a new portal housing the courses and connected services (NOUN OER Portal). Moreover, it was announced that NOUN has become the first OpenupEd's associate partner from Africa and Asia (OpenupEd, 2015).

A very important specific target group for the NOUN MOOCs is to be found among the large group of young people who have completed secondary school but are unable to gain access to a university in Nigeria, as shown in figure 1.
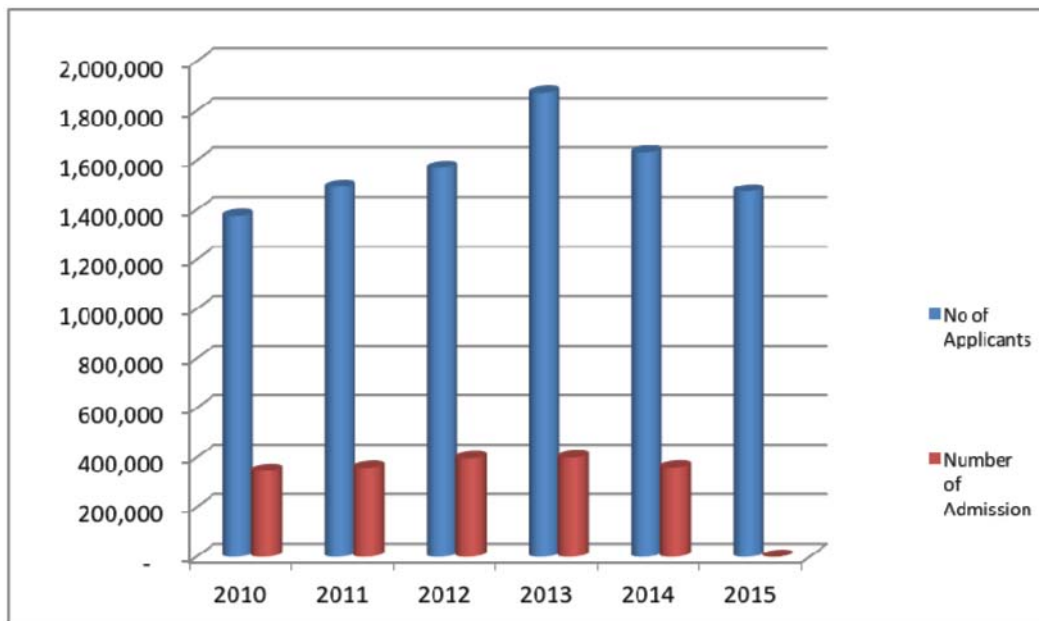

Figure 1: University applicants and admission statistics (JAMB 2010–2015)
Retrieved from http://jamb.org.ng/ (2015)

Statistics show that every year from the approximately 1.4 million qualified young Nigerians who pass the mandatory Joint Admission and Matriculation Board Exam (JAMB), not more than 400.000 can be placed at a Nigerian university. Imagine the frustration and feelings of unfairness among such a vast group of unplaced students who have to wait a whole year for a second chance to be admitted with no certainty at all. In fact, the accumulation of potential students who are not admitted year over year due to this process makes it even worse and therefore is giving ground to a serious societal problem. MOOCs could alleviate this to a certain extent since they offer this large group of non-admitted potential students an opportunity to use their idle time to update their knowledge and skills on relevant subjects. Two of the first NOUN MOOCs (*History and Philosophy of Science*, and *Information Literacy and Study Skills*) can serve well in this respect, and clearly future MOOCs for this specific target group will be developed and provided only if they are highly relevant to the group. As a consequence, part of this group of MOOC participants will, depending on their learning experience, enrol in regular NOUN educational programs. NOUN, growing towards becoming a mega-university, is relatively well equipped to accommodate such large groups of students which overall also is a service to Nigerian society.

A recent OECD report (Orr, Rimini & van Damme, 2015) emphasizes the role of OER as a catalyst for innovation but also identifies the contribution of OER to various key educational challenges. From the executive summary we quote: "The challenges concern teaching and learning, cost containment, the distribution of high-quality educational resources and reducing the barriers to learning opportunities, which together can improve the quality and accessibility of teaching and learning provision". This points exactly to where NOUN sees great potential benefits of OER and OER-based MOOCs, namely in widening access to and in raising quality of higher education in Nigeria. Nigerian academics should embrace OER when composing and compiling their courses and as a consequence they can collectively improve the quality of university education. University leadership is needed to encourage staff to generously share (that is give and take), thereby contributing to the Nigerian educational ecosystem.

NOUN's step-by-step initial stages of implementation

For the implementation of NOUN's OER strategy in August 2014, a new unit was created that reports directly to the Vice Chancellor. The NOUN-OER Unit currently houses three professional staff members, the head of unit, an instructional designer and an IT specialist, and is supported by a few external experts. The main task of the unit is to encourage integration of OER in all levels of teaching and learning of NOUN, addressing the academics in the schools as well as the staff of the departments responsible for instructional design, course publishing, library support, and IT. The OER unit has operated from August 2014 through three stages: sensitization, instrumentation and dissemination.

In September 2014 and February 2015, sensitization workshops were organized in which the concept of OER was explained and discussed. This included worldwide developments on OER and new forms of open education, worldwide standardized licenses like Creative Commons, (im)proper re-use, raising quality by sharing and re-use, etcetera. The workshops effectively generated deeper knowledge about OER among NOUN staff and tackled apparent misconceptions.

In July 2015 and November 2015, design workshops were organized in which concrete action plans were made for the adaptation of existing courses to OER, all to be published with a Creative Commons open licence (CC BY-SA 4.0). Tools were introduced for the delivery of self-print and mobile-ready versions of courses. The structuring and formatting of courses was considered, as well as proper re-use of and attribution to external resources and literature. Finally, the creation of podcasts was explored, and the navigation through instructional icons in the interactive versions for mobile devices. For students and academics, the published OER-based courses and MOOCs are shared in a dedicated repository (NOUN OER Portal: http://oer.nou.edu.ng/). Figure 2 gives an impression of the course materials of a MOOC downloaded as an electronic book on a smartphone.
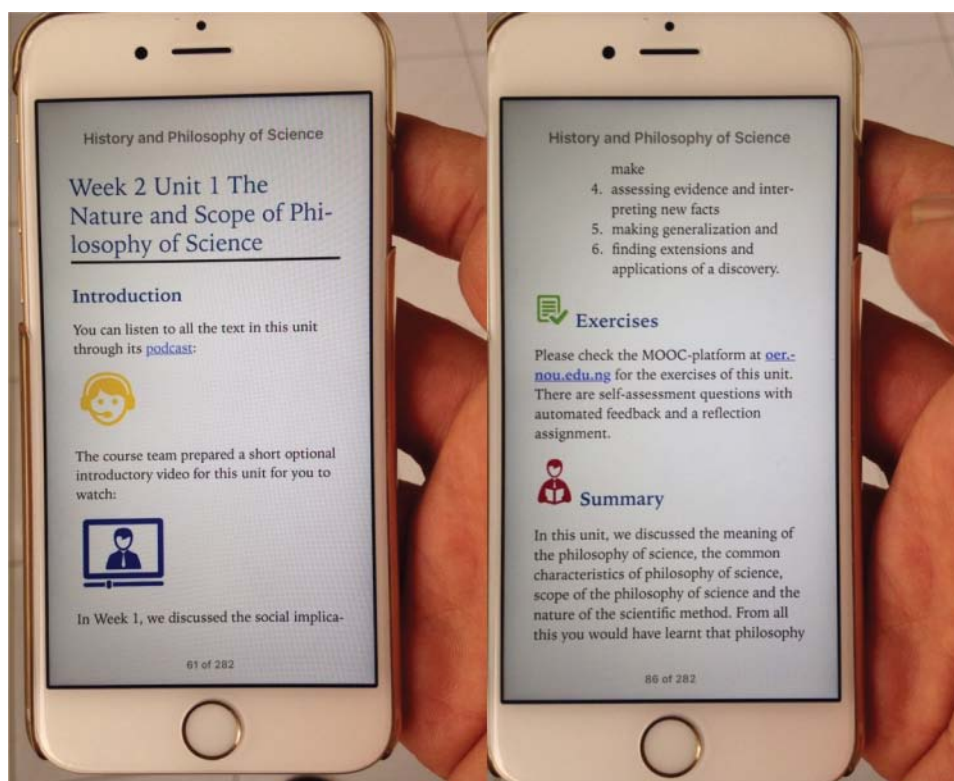
Figure 2: Snapshot of course material downloaded as an electronic book on a smartphone

The step-by-step creation of OER versions of course materials, to be published as regular courses or as MOOCs, is summarized in Table 1.

Table 1: Step-by-step creation of OER versions of course materials

Step	*Description*
Scan and OCR	Older courses that are only available in print are scanned, and Word versions are created using Optical Character Recognition
Apply template	A dedicated template is applied for self-print in PDF and use as an electronic book in ePub format for mobile phones and tablets
Check references and proper re-use	References and proper re-use are checked; when non-OER material is found, this is to be replaced by the academics
Create metadata	Metadata, including the CC BY-SA 4.0 license, are associated to make the course easy to find in repositories and with metadata crawlers
Recreate tables	Tables are recreated to fit small screens of smartphones and tablets
Recreate images	Images are recreated as needed depending on quality and resolution
Utilize navigation icons	Icons and hyperlinks are added for navigation in the document
Check the content	The course team checks the final version of the course content before publication
Convert to ODT	The Word files are converted to Open Document Text for re-use by other academics

Step	Description
Convert to PDF	The Word files are converted to Portable Document Format for self-print by students
Convert to ePub	The Word files are converted to electronic book in the ePub 3 format and checked for navigation and hyperlinks using different types of smartphones and tablets
Create podcasts	For some courses an audio mode is created through podcasts, using restructured versions of the original course and text-to-speech software linked to the ePub and PDF versions as an MP3 file
Publish the OER-based course on the portal	Course modules are published in their editable format (ODT), printable format (PDF) and mobile format (ePub) on the portal; the original Word files and images are kept for internal use at NOUN

Further …

The December 2015 launching Seminar marked the beginning of the dissemination to other universities, training institutes, quality agencies, interested individuals, and the Ministry of Education, thereby promoting the re-use of NOUN's OER-based courses and MOOCs in Nigeria and—why not?—beyond. The NOUN-OER Unit is dedicated to serve this development, sharing its newly built expertise through workshops and presentations, by giving support and advice, and by composing and providing a handbook with guidelines. NOUN is prepared to collaborate with institutions and organizations in OER-related activities leading to further innovations in online Higher Education in Nigeria and in a broader international context.

NOUN's OER strategy effectively requires the publication of all new and revised courses as OER. So the production of OER and MOOCs is becoming a regular operation for many more academics, instructional designers, librarians and IT specialists. All these staff are to be trained and advised by the NOUN-OER Unit. In the production of the OER-based courses a specific template will be provided in order to professionally print books as a whole or in part to be made available on a needs-basis to the students in the study centres.

NOUN has become involved in the Global OER Graduate Network (GO-GN 2013–2016) which connects PhD researchers and their supervisors from different parts of the world in the area of OER, MOOCs and Opening up Education. GO-GN was initiated by the Dutch OER UNESCO Chair in 2013 and now encompasses more than 35 PhD researchers, one of them being from NOUN. In 2016 NOUN will increase its volume of PhD research, in order to better underpin, monitor, and evaluate its activities.

NOUN's OER agenda is very ambitious. By the end of 2017, 50% of NOUN's complete course base should have been made available as OER and about 20 MOOCs should have been developed on the most pressing learning needs in Nigeria. And indeed the distinct invitation to other Nigerian universities to partner with NOUN in OER can further accelerate the development of OER in the country.

Conclusion

Since 2002, with the conception of the term OER, UNESCO has been an active and strong global player in the OER movement through its persistent and influential advocacy for OER. A decade later this was marked at the World OER Congress in Paris, organized by UNESCO in collaboration

with the Commonwealth of Learning, with the 2012 Paris OER Declaration (UNESCO/COL, 2012). In the follow-up of this declaration, UNESCO has operated an OER program of which one of the action lines was to reach out with OER (and OER-based MOOCs) to the Global South. This initiative included the organization of the two 2014 Executive Workshops for the leadership of the African and the Asian OUs as previously mentioned. NOUN's strong interest and determination quickly led to a dedicated track with intensive UNESCO involvement and guidance, and with expert support from the Dutch OER UNESCO Chair team.

Meanwhile NOUN is growing into a real OER-based Open University, providing great benefits for many learners, in particular in Nigeria, and for Nigerian society at large. This may indicate a fruitful and manageable route towards mainstreaming OER in Higher Education. And in combining the best of two Open Worlds NOUN will hopefully be considered as an inspiring and promising exemplar for its colleague OUs around the globe.

Acknowledgments

References

Carson, S., Kanchanaraksa, S., Gooding, I., Mulder, F. & Schuwer, R. (2012). Impact of OpenCourseWare publication on higher education participation and student recruitment. *The International Review Of Research In Open And Distributed Learning*, *13*(4), 19–32. Retrieved from http://www.irrodl.org/index.php/irrodl/article/view/1238

Daniel, J. S. (1998). *Mega-universities and Knowledge Media*. London: Kogan Page. Retrieved from https://books.google.nl/books?id=Sy3nDKphDAkC&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false

GO-GN (2013–2016). *Portal of the Global OER Graduate Network*. Retrieved from http://go-gn.net/

Janssen, B., Schuwer, R. & Mulder, F. (2012). A business model approach for OER in Open Universities. In A. Okada. *Open Educational Resources and Social Networks: Co-Learning and Professional Development*. London: Scholio Educational Research & Publishing. Retrieved from http://oer.kmi.open.ac.uk/?page_id=2304#.Vo5KYvnhDIU

Mulder, F. (2006). *The advancement of Lifelong Learning through Open Educational Resources in an open and flexible (self)learning context*. Heerlen: Open Universiteit (Dies address book, pp. 35–44). Retrieved from https://www.ou.nl/documents/10815/c101366f-faf6-4796-abec-06d069ac8278

Mulder, F. (2010). *Open . . . .* Heerlen: Open Universiteit (Rectorate farewell address book, pp. 5–25, in Dutch). Retrieved from https://www.ou.nl/c/document_library/get_file?uuid=0be0bd20-1a82-467e-abc4-02b7e65fdc91&groupId=10815

Mulder, F. (2012a). *OER & OpenEd for OUs*. Keynote presentation at the 2012 EADTU Conference in Paphos, Cyprus. Retrieved from https://www.dropbox.com/home/Public?preview=EADTU+2012+OER+%26+OpenEd.ppt

Mulder, F. (2012b). *Opening up Education*. Keynote presentation at the 2012 ICDE SCOP Meeting in Dubai. Retrieved from https://www.dropbox.com/home/Public?preview=ICDE+SCOP+2012+Opening+up+Education.ppt

Mulder, F. (2015). Open(ing up) education for all . . . boosted by MOOCs? In C. J. Bonk, M. M. Lee, T. C. Reeves, & T. H. Reynolds (eds.). *MOOCs and Open Education Around the World* (pp. xviii-xxvii). New York: Routledge.

Mulder, F. & Jansen. D. (2015). MOOCs for Opening Up Education and the OpenupEd initiative. In C. J. Bonk, M. M. Lee, T. C. Reeves, & T. H. Reynolds (eds.). *MOOCs and Open Education Around the World* (pp. 130–142). New York: Routledge.

Mulder, F. & Rikers, J. (eds.). (2008). *A Golden Combi?!—OER and Open, Flexible and Distance Learning. Final Report ICDE Global Task Force on OER*. Oslo: ICDE. Retrieved from https://www.dropbox.com/home/Public?preview=ICDE+2008+OER+Task+Force+Report.doc

NOUN (2013). *NOUN strategic plan document 2013–2017*. National Open University of Nigeria.

OpenupEd (2015). *News item: First Nigerian MOOCs from NOUN.* Retrieved from http://openuped.eu/15-news/111-first-nigerian-moocs-from-the-national-open-university-of-nigeria-noun

Orr, D., Rimini, M. & van Damme, D. (2015). *Open Educational Resources—A Catalyst for Innovation*. OECD Publishing, Paris. http://doi.org/10.1787/9789264247543-en

Schuwer, R., & Mulder, F. (2009). OpenER, a Dutch initiative in Open Educational Resources. *Open Learning, 24*(1), 67–76. http://dx.doi.org/10.1080/02680510802627852

UNESCO (2015a). *News item on the African high-level Executive Workshop on MOOCs*. Retrieved from http://www.unesco.org/new/en/media-services/single-view/news/unesco_supports_open_moocs_in_africa/#.Vo6CHvnhDIU

UNESCO (2015b). *News item on the Asian high-level Executive Workshop on MOOCs*. Retrieved from http://www.unesco.org/new/en/education/resources/online-materials/single-view/news/five_asian_open_universities_adopt_open_licensing_and_moocs/#.Vo6FQPnhDIU

UNESCO/COL (2012). *2012 Paris OER Declaration*. Retrieved from http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CI/CI/pdf/Events/Paris%20OER%20Declaration_01.pdf

Weller, M. (2014). *The Battle for Open: How openness won and why it doesn't feel like victory*. London: Ubiquity Press. http://dx.doi.org/10.5334/bam

Wiley, D. (2007, August 8). Open Education License Draft. *Iterating toward openness.* Retrieved from http://opencontent.org/blog/archives/355

Wiley, D. (2014, March 5). The Access Compromise and the 5th R. *Iterating toward openness*. Retrieved from http://opencontent.org/blog/archives/3221