Chapter 4
A Hidden Dream: Open Educational Resources

Saida Affouneh and Zuheir N. Khlaif

Abstract Open-source materials are being used for education in a variety of contexts, and educators can reuse them to achieve different objectives in both higher education and public education. Educators in Palestine are using open education resources for professional development to improve their performance and learning. There are different advantages to open education resources; for example, they can reduce training costs, as well as the time and effort required by students and educators. Different open resources have emerged in Palestine, such as MOOCs and open learning objects for K-12.

Keywords Open education resources · MOOCs · Professional development

4.1 Introduction

Searching for new knowledge, good practices, recent articles and upcoming conferences is an interesting and rich experience nowadays. With one click, you can download hundreds of pages of eBooks and tens of articles in a few minutes. This was not the case in the early eighties, where you had to travel for miles to libraries and bookshops in order to be able to copy an article or the cover page of a recent book. It is only possible due to the current information and technology revolution, which has affected all aspects of human life, such as education, communication and work.

My own experience seems very exciting. From the time I was a child, I was eager to learn. I was born into a big family with many siblings and limited resources, and was always trying to save money in order to buy books to read (Saida's own experience). That led me to read very cheap books or any affordable magazines; many times, I read the newspapers or my mom's novels, which were usually not suitable for children. My passion for reading was enough to motivate me to continue

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searching for a way to learn. Suddenly I discovered the public library, where I could be a member by paying low fees. In those days, going to the library was not usual for people my age. Teenagers went there to meet their boyfriends or girlfriends, and not to read, so I faced questions all the time. But going home with books convinced my mom of my passion for reading.

Borrowing books or copying them was the other way to own a copy of a book. Sometimes I just enjoyed my own notes or summary of a book and to read it several times. Enrolling in university made my journey in learning easier due to the fact that each student needed to have a library card and had access to all existing resources. The limited resources in the library at that time forced me to spend hours and hours there every day, since there was only one copy of many of the resources, and that copy was either reserved or it could not be taken outside the library itself. Everyone knew that I would be in the library between classes, reading, studying textbooks and/or searching for new resources.

When I compare my experience while doing my thesis and those of my masters students today, I can feel the differences, and I really feel the blessing of the open resources that are available everywhere and at any time through open databases, libraries and D-space repositories.

4.2 The Evolution of Open Education

4.2.1 Definition of Open Education

Previous researchers have studied the concept of open education, and have done qualitative and quantitative research into the practices of different countries and universities in that area. Open education refers to practices including the sharing of information and ideas liberally, as well as the sharing of other platforms or methods used in the process of learning and teaching through technology (Blessinger & Bliss, 2016). Other researchers have defined open education as the process of making knowledge available to and easily accessible by the public by minimizing geographical, economic and other borders through the enhancement and development of technology. This is one of the reasons that, to some extent, people refer to open education as distance education, and within higher education, the nomenclature of 'open' is incorporated in the names of universities such as the Open University, Indonesia's Universitas Terbuka (meaning 'Open University'), the Open University of Hong Kong, University of the Philippines Open University and Allama Iqbal Open University. (Berti, 2018; Mossley, 2013).

Berti (2018) has defined open education as 'an emerging trend facilitated by the confluence of technology and imagination' (p. 25). The European Commission's Science and Knowledge Service has offered an explanation that expands on her definition, framing open education as that which guarantees different methods of formal

and informal education, regardless of any barriers for learners, to maximize the possibility for students to succeed, and which makes higher education accessible by eliminating the cost of educational resources. In the 2012 Paris OER declaration, the definition was refined and strengthened to '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. Open licensing is built within the existing framework of intellectual property rights as defined by relevant international conventions and respects the authorship of the work' (Mishra, 2017, pp. 275–276).

The adoption of OER has generally been a response to educational challenges, such as equity in education, sustainability and new trends. It has been supported by intergovernmental agencies, such as UNESCO and the Commonwealth of Learning, and philanthropic organizations, such as the Hewlett Foundation (Arinto et al., 2017). Open educational resources are teaching, learning or research materials that are in the public domain or released with an intellectual property license that allows for free use, adaptation and distribution (Vlasenko, n.d).

Open education and open educational resources grant the opportunity for instructors, students or self-learners to access the information available online for everyone, free of charge. For example, the resources include full programs, curricula, materials from teaching sessions in different formats, assessment resources, lab and classroom activities, pedagogical academic development materials and many more (Belawati, 2014).

Open access material aims to be globally and permanently reachable by groups of intellectuals, students and staff on both the physical campus of a university and in distance learning environments. However, there are also intellectual property rights and equity issues that are particularly relevant to the context of open and distance learning, where access to resources related to research articles and data is frequently problematic for students and staff (Krelja Kurelovic, 2016).

Distance education is defined as a method of teaching where the student and teacher are physically separated. It can employ a combination of technologies, including the Internet, multimedia, audio, text, animation, video and computer accessories. Today's version of distance education is online education, which uses computers and the Internet as the delivery mechanisms, with at least 80% of the course content delivered online (Allen & Seaman, 2011; Sengupta, Reshef, & Blessinger, 2019).

We, as Palestinians who are living in a unique environment where restrictions on mobility and checkpoints exist across the occupied land (Khlaif, Gok, & Kouraïchi, 2019; Traxler et al., 2019), define an open education resource as any learning object (digital or traditional) that can be reused in multiple contexts that educators can adapt to mitigate educational difficulties due to occupation and that can be used to achieve a specific learning goal or training aim. For that reason, the Palestinian Ministry of Education and Higher Education launched a website for public education teachers to upload their learning objects so that other teachers could use them in their classrooms. Furthermore, higher education institutions in Palestine (universities and community colleges) adapted open sources for learning management systems (LMS). These initiatives in Palestine reduced the running costs of developing learning objects for

different stages in the education system. In addition, they fostered collaborative work among teachers at schools in different districts.

Palestinian students, public education teachers and staff at universities use OER to acquire new knowledge and skills related to their fields of practice and study, since it can reduce the costs of training and save them time and effort. Because of political issues in Palestine, the MoE is using open resources to train teachers in Gaza, providing training objects and using Zoom, Skype and other tools (Khlaif, 2018).

4.2.2 Challenges of OER

Adopting OER in daily life is not without problems, because it affects the traditional rules, cultures, feelings and modes of learning in both public and higher education (Hood & Littlejohn, 2017). Moreover, the reuse of OER is challenging for users because these objects are stored in various repositories without a general description of their content or without metadata (Wang & Towey, 2017). The quality of OER is an emerging issue in the Palestinian context, because teachers and educators upload their objects and the system accepts these objects without peer review, or any public scrutiny (Okada, Mikroyannidis, Meister, & Little, 2012). There are also concerns about sustainability and business models (Algers, 2015; Downes, 2007), and a lack of trust in academic institutions and among educators that use them to create OER (Clements & Pawlowski, 2012).

According to our experience and based on the Palestinian context, a number of competencies are needed for exploring the tools to enable learning by using OER, to adapt content to societal rules (e.g., clear vision, a clear policy and legislation regarding public education as well as higher education), to identify learning goals and to gather the related content in the institutions. All these should be considered to ensure the ethical use of OER.

In Palestine, the term 'open education' was usually used to refer to Al Quds Open University (QOU), which was established in 1990 in order to offer education to Palestinian students who have suffered from closures and sieges and who have been prevented from traveling abroad due to Israeli military instructions. Despite all the challenges that Palestinians face due to the political and economic situation, they continue to value their educations and consider them tools for a better life. QOU was one of the earliest experiments in open education, following the model of Open University in the UK and Australia. Education was offered through different campuses and using textbooks and other resources. My work at QOU for many years, trying to develop new open practices through introducing more technology into teaching and learning, shows that there are many different practices that could be collected under this umbrella. The university was first established to provide adult education and then moved to serve young students who have fewer opportunities to attend regular universities, either for economic reasons or because they obtained low scores on secondary school exams.

In the twenty-first century, as a result of the information and telecommunication revolution, education has evolved in order to meet the technological needs of the new generation. Long discussions have been held between higher education policymakers, and many questions have been raised by educators, practitioners and policymakers about open education, e-Learning, online learning and digitalisation of education. Different terminology has been used to describe using different forms of technology to improve the quality of teaching and learning. Can technology improve the quality of education? Are we ready for this reform? What type of capacity-building do we need to do for our teachers? How much will that cost? These and many other questions have been asked, and no agreement has been reached. Pioneers at my university have taken the lead in implementing different types of blended learning in order to pilot it in their courses.

Many other higher education institutions have started to use open resources such as MOOCs for education. For example, An-Najah National University, which is located in Nablus, Palestine has been developing MOOC courses since 2014. Different open courses in different languages are available on the university website. These courses are open to the public to give people more information about Palestine, and are funded by the Ministry of Culture. Other universities have launched MOOC courses about wild plants in Palestine. The adoption of OER in the Palestinian context has been in response to educational challenges and to meet international and regional standards in higher education. However, we have concerns about the assessment process for OER, as well as the quality of these resources.

Our roadmap for integrating OER in both practice and policy in education is linked to the institutional and strategic plan of the Ministry of Higher Education in Palestine and the required process for implementation, including the timeframe, priority level and the expected results and impact of using OER over the short and long term.

4.2.3 Advantages of Open Education

There are a lot of benefits to using open education and open resources in different aspects of the educational system in any country. For example, open education has extended the possibilities and provided new opportunities for educators and students to broaden their knowledge and skills in different fields, with fewer costs. Open education has introduced learners to nontraditional ways of learning by sharing and reusing knowledge and information between different institutions to achieve specific goals. Furthermore, OER have linked informal and formal education by using different resources. Many OER allow teachers and learners to access learning materials with permission to edit and modify the content to meet their needs and expectations. Students, educators, non-profit organizations and job seekers can benefit from open education by joining the right programs, which can facilitate the recruitment process. Open education helps faculty and students reach out to other institutions and universities, which can improve collaboration between learners and universities in different parts of the world. It should also be taken into consideration that open education is

cost-effective, since it is not necessary to print textbooks, and that it promotes informal learning by not requiring credentials. Judith and Bull (2016) have stressed the importance of open education's enhancing the quality of learning by allowing more participants to be involved in it, which results in a more personalized and efficient learning process (Berti, 2018).

4.2.4   The Dilemma of Policy and Practice

Conole (2010) concentrated on using a suggested framework to bridge the gap between policy and practice in e-learning in higher education. He compared different contexts and factors that influence the width of this gap and found ten main points that have a real impact which are congruent with Conole's study (2007). I served as the head of the national committee to develop e-learning policy for the Ministry of Education and Higher education. With my team, I developed the policy for e-learning, which was discussed in the Prime Minister's Cabinet and was included and reflected in higher education as a new law. Furthermore, I was the founder of the e-Learning Center at An-Najah National University. My main objective for the e-Learning Center was to change the culture of open education to be part of the university. My team developed the university policy for e-Learning and open education through:

- Preparing two MOOCs
- Training faculty members on best practices in open education
- Participating in many conferences and workshops.

An-Najah National University now has thousands of recorded lectures and hundreds of open courses. In addition, its D-space repository includes all papers, eBooks and theses as open resources for learners. All the scholarly work it produces is shared online and free to access by students and colleagues.

4.3   Reflections on Life Experience

I was very lucky to go through such a rich learning experience despite the fact I did it the difficult way, where I learned all the time through doing and working very hard. Open education was just a dream, not only for me, but also for my country and the Arab region. People appreciated radical teaching and sat in rows in classrooms with blackboards and tough teachers with loud voices, tough hands and loving hearts.

Working at Open University and implementing open education practices in an environment where everyone is ready for that differs from working from scratch to build the culture of open education. In a convenient university, the experience needs to change attitudes, practices, policies and expectations. Trying to convince everyone, starting from the management level and moving to the teachers' levels, is

very challenging due to the fact that everyone is questioning learning quality. The easiest answer to the quality issue was to ask the same question of how you ensure quality in traditional classrooms, and then reflect that in open education where all the material is accessible by everyone, anytime and anywhere, with no conditions. Unfortunately, however, you cannot convince everyone, and that question continues to be raised in relation to open education.

Other strategies including trying to shift the teachers' minds from considering developing open resources (OR) as a burden to considering it as a way to improve their professions (and as PR material for their CVs) is another way to address the quality question. Using ORs to introduce ourselves as experts and good practitioners to the scholar community is a strong argument to lead and is also easier since teachers can directly see its impact on their career development.

4.4 Limitation of Open Education and Open Educational Resources

Open education has indeed made the learning process more flexible for learners. However, it still faces some challenges as it still emerging, and its adoption process is still in the early stages. OP requires a clear system to help people adapt to its concept and to ensure the quality of the resources offered online. Another limitation is the traditional mindsets of organizations regarding sharing information within those organizations and between the students and teachers. There should be awareness campaigns explaining the necessity of global sharing. Limitations due to the cost of resources are also a challenge, as many organizations are financed by governments, which restrict content development by teachers. The latter often requires more funding, since it involves special software and hardware. The language barrier can further restrict the process of open education development. The Paris OER Declaration (2012) suggests that localization of the language in content development can ensure the flexibility and diversity of content. Some countries' scarce resources and their intention to use traditional teaching methods due to the lack of digital competencies can be an additional barrier. Finally, the biggest challenge is the mindset of the people, which needs to be shifted to be more open to adapting to new methods of learning (Krelja Kurelovic, 2016).

A case study found that there are several challenges that accompany adopting OER within a course in a higher education curriculum. The major ones include limited staff knowledge of OEP, copyright issues, discoverability issues driven by diffuse nature of OER repositories, finding context-suitable resources and adapting material across contexts (Judith & Bull, 2016).

According to Vlasenko (n.d.), there are limitations and disadvantages of open education and distance education:

1. The individuality of work and limitation of interactions with other students, since group work is limited and there is little or no oral communication with

other classmates and teachers, which results in the lack of the critical thinking and problem-solving skills that are developed by interacting in a classroom.

2. The limitations of technology and accessibility can be a barrier, especially for people who are still terrified of using technology. Moreover, a computer and high-speed internet are requirements for open education and distance learning, so it can cost a lot to set up facilities, especially those for live communication. Since, distance learning programs sometimes need high-tech tools which could be expensive. These tools can be used to develop new learning materials for courses, updating them, and marketing the courses.

3. Some students live outside the study area, which, in a traditional learning process, requires them to order some materials that need to be mailed to them. However, in distance learning, they do not need these materials to be mailed to them.

4. Distance learning is different than traditional learning in the sense of feedback. In distance learning, students do not get immediate feedback; they have to wait for review and comments from their teachers.

5. Distance learning is not recognized worldwide. Some employers might not accept online degrees, or it can be less suitable for some fields (Vlasenko, n.d.).

4.5 Usage of Open Education

Massive open online courses (MOOCs), open digital textbooks, and video lectures are the most popular open educational resources. The greatest number of MOOCs in Europe is provided in Great Britain (234 courses), followed by France (137 courses) and Germany (111 courses). At the global level, 27% of MOOCs originate from the USA, 17% from India, 13% in China, and 4% each from Great Britain, Australia and Canada, while the remaining 31% come from other countries (http://www.moocs.co/). Accordingly, mostly OERs in well-known repositories are in the English language: 96% on OER Commons, 94% on Curriki, 89% on Merlot, 70% on Coursera and 83% on edX. However, the MIT Open Courseware repository, the leader in the OER initiative, has translated some courses and other educational materials into at least 10 languages (Gutonber blog, 2018).

OER received support in a recent study by Inside Higher Ed (2018) survey on school leaders and teachers' opinions on technology. Presidents strongly agreed (61%) or agreed (30%) that 'textbooks and course materials are too expensive'. 85% of presidents also agreed (85%) or strongly agreed (52%) that colleges should adopt free and openly licensed online educational materials. Presidents of doctoral universities, whether public or private, were slightly less likely than their counterparts in other institutions to agree, at 49% and 40%, respectively.

Distance and open education are the best solutions for students who have trouble attending traditional classes; they allow those students to attend educational programs according to their schedules without affecting their personal or professional lives. A person only needs a computer and an internet connection to finish an online program

anywhere and anytime. Moreover, the numerous option a person can find online can have a significant advantage of giving them their choice of education and providing them with different specializations in different fields. Like other researchers, Vlasenko (n.d) has mentioned that open education offers students cost savings by not requiring them to spend money and time on commuting. In addition, Open education offers free movement and availability for students. A student can also learn while working; they fit their learning programs to their schedules, which gives them more income and stability without the financial stress that comes with the traditional learning (Gregson & Hatzipanagos, 2015).

4.6 Conclusion

The purpose of the current chapter was to introduce the Palestinian experience in using open education resources in both higher and public education, as well as the challenges of developing this new paradigm. Educators in Palestine have defined open education resources as reusing learning objects in a different context in the learning process as well as in the professional development programs. Many national initiatives on the level of universities and the Ministry of Education have been adapted to develop open education resources such as MOOCs, recording lectures and using a digital repository to upload theses and academic papers that can be freely accessed by students, non-profit organizations and local communities.

Despite developments in OER, there are many challenges confronting open education, including trust, source quality and lack of developer competencies. More efforts are needed in order for Palestine to be a part of the open education world, and especially to increase and enrich the content of open resources in Arabic. Universities and other higher education institutions should have a clear vision and plan to develop and use OER. It is a culture issue that takes a long time to be resolved, since attitudes and practices are not easy to change unless the change is part of national policy and institutional plans.

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Zuheir N. Khlaif research interests are in the areas of technology integration and microlearning in both K-12 and higher education. Zuheir has extensive experience in training teachers to use and design technology activities for classrooms, and has conducted many workshops for training teachers to use open resources in their practice. He has published many articles in international journals. He is now designing activities and conducting research related to STEM projects.