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## **Breaking Boundaries and Building Bridges Across Knowledge-sharing Communities: OpenMed**

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The idea of breaking boundaries and building bridges that expand the opportunities for any citizen to benefit from universities as a source of knowledge, without having to become a fee-paying student, [has been](#) a core element of Open Education Practices (OEP) in the context of OpenMed; Opening up education in South-Mediterranean countries (<https://openmedproject.eu>). This international cooperation project<sup>1</sup> [involves](#) five partners from Europe and nine from the South-Mediterranean (S-M) region (Morocco, Palestine, Egypt and Jordan). It [focuses](#) on how universities from the designated countries, and other S-M countries, can join as community partners in the adoption of strategies and channels that embrace the principles of openness and reusability within the context of higher education (HE).

OEP's two fundamental concepts are that learners (i) have free and open access to knowledge; and (ii) can adapt and re-use existing teaching and learning resources, which are in the public domain, or have been released under an intellectual property license, allowing free reuse or adaptation by others (Weller, 2014).

Using openly available teaching resources enables educators to introduce learners to new forms of learning where they can also be involved in collaborating on compiling course material and resources (Petrovic-Dziedz & Trepanier, 2018). In addition, learners can benefit through skill development in digital fluency, pedagogies for participative-teaching techniques, the understanding of processes for appropriate licensing of OER and where to house them, and in the strengthening of international collaboration and connectivity (Affouneh et al., 2018; El Hassan, 2013).

It follows then, that, openness in HE teaching and learning should be commonplace practice for the equal and democratic access to knowledge. Such openness includes the

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<sup>1</sup> OpenMed is co-funded by the Erasmus + Capacity-building in Higher Education programme of the European Union (October 2015 - October 2018)

responsibility of universities to expand their social function and role as knowledge-sharing communities. Whilst Massive Open Online Courses (MOOCs) have enabled access to courses from institutions, including elite universities, to the world (considering international language proficiency, digital skills and internet connectivity); and Open Educational Resources (OER) and OEP are widely documented as means of opening up access to education at a more intimate level in fostering and democratizing access to education (Wiley, 2006; Beetham, Falconer, McGill & Littlejohn, 2012); there is a lack of substantive evidence on how such practices, and the use of technologies, in particular, can promote accessibility in relation to geographical access, minority access and reduction of access barriers (Fichten Asuncion & Scapin, 2014; Navarrete & Luján-Mora, 2013; Lane, 2012). Further, there is limited literature on OER usage from the perspective of academics and students in non-Western countries, who are often projected as the recipients and beneficiaries of OER (Hu et al., 2015). Indeed, there is limited evidence of how OER are localized and integrated into actual teaching and learning practices (Butcher & Hoosen, 2014), and despite the potential of OEP in helping strengthen intellectual, cultural, scientific and technological exchange for an increasingly global and knowledge-based economy, OEP and OER originating, specifically, from the S-M region are rare. As Zualkernan, Allert and Qadah (2006) contend, those advocating for open education are seeking to widen engagement, but the diffusion of OER requires more thoughtful consideration and understanding regarding the applicability and usability of these resources in different cultural settings. For example, in his seminal work, *Pedagogy of the Oppressed*, Paulo Freire (1970) described a misperception that may be an obstacle to the establishment of a successful open education learning environment. In this vision, education was conceptualised to that of a "banking" type structure, where the teacher (in this case, the means by which information is transmitted, i.e. the Internet) is the depository (of information) and the student is the beneficiary. A teaching environment that is created without space for interaction or, as Freire described, a climate in which problems are articulated, where the transmission of knowledge is multidirectional rather than asynchronous, cannot be considered as a teaching framework; rather, it becomes a vehicle of indoctrination. Therefore, instead of emancipating oneself, the learner remains oppressed.

A similar view can be taken of the nascent movement of OER, where information (in the form of OER) may have mistakenly assumed the role of "educator." Some have even claimed that the movement has taken on another meaning - where benevolent "suppliers" of OER, from developed countries, are in the presence of passive users in developing countries.

As earlier stated, such projects position “users” as recipients and beneficiaries of OER. If these knowledge transfer concerns are not critically considered, the risk is in creating an information society that looks like the map of the world in the 16th century, made up of those who colonize and those who are colonized. Therefore, whilst the open sharing of resources must be encouraged, if universities really want to invest in better teaching and research, the promise of OER lies not only in the accessibility of digitized information, but in the development of methodological approaches and mechanisms to manage and make sense of this information in a variety of dynamic teaching contexts.

In terms of the S-M context, it is evident that there have been significant education challenges in the region over the past 10 years in relation to access, accountability, quality and productivity. This can be seen in terms of the high demand for learners to access HE due to growth in the youth population, (Heyneman, 1997; El Hassan, 2013), and the shift to massification (Guri-Rosenbilt, Sebkova & Teichler, 2007) that is expected by governments determining the future of public institutions (UNESCO, 2010). We suggest here, that a change in attitude towards OEP is required, including new perspectives defining “open education,” with new attitudes developed towards collaboration and (digital) literacy. For example, in the S-M region, the term “open education” has been typically aligned with “online education,” a term often synonymous with lower quality education, with graduates awarded “open education” degrees not being viewed as having equal status within the labour market to peers holding traditional degree awards (European Commission: Egypt, 2017; Bouhlila, 2015; Elshamy, 2016; The World Bank, 2010). Further, the resistance to embrace institutional change, the mistrust of exchanging educational content and syllabi, and / or the poor adoption of new learning environments are also major constraints in higher education institutions in S–M countries (Commonwealth of Learning & UNESCO, 2012). Most universities are still locked into conventional strategies, and the evolution of tertiary education systems raises questions about the equity of access and outcomes (Cilliers, 2014). The mismatch between the current knowledge-based society, language, issues of cultural diversity, and inflexible teaching practices demands an entirely new *modus operandi* regarding how content is created, combined, updated and delivered. In parallel, the S-M is replete with learners who are very exposed to the Internet and social media and receptive to digitised content (Harbi, 2016). As Harbi argues, this population is a window of opportunity that would underpin the use of OER.

In the context of the above, the top-down governing systems of universities in S-M countries is viewed as one of the key factors viewed as hindering engagement with OEP at institutions within the region. Favouring a *bottom-up* and top-down approach, OpenMed ~~aims~~ to ensure that the Mediterranean university systems are better integrated into global academic and scientific cooperation networks, which is an essential factor in the integration of Mediterranean communities and economies (Scalisi, 2016).

In this chapter, the authors will share how OpenMed ~~is striving~~ focused on ~~to~~ nurturing a culture of openness across the partner higher education institutions. Findings ~~to date~~—from across the three main project phases will be presented. They included a review of open education initiatives, widening participation in OEP, and capacity-building opportunities for lecturers and other HE professionals. The chapter begins with a preliminary focus on the aims of OpenMed and the initial research phase which focused on the review of open education initiatives globally, and in the S-M in particular. Following this, the strategies used within the project, which ~~sought~~ are seeking to widen engagement in OEP in the partner region – addressing issues of policy, institutional change and capacity-building of academics in open education – are shared. The development of the OpenMed capacity-building course, “Open Education: fundamentals and approaches” will then be presented. As one of the first attempts to train university professors and PhD students in the field of open education in the Mediterranean region, the course ~~was~~ has been designed, developed and tested in a fully collaborative way among the OpenMed partners, representing a genuine experience of multicultural open education development (Wimpenny, Jariego, Affouneh et al., 2018). The chapter will conclude with key findings ~~to date~~ about intercultural learning in promoting bottom-up and top-down approaches to the sustainable integration of OEP, where concepts, approaches and methodologies have resulted from discussions and negotiations among experts with different national, linguistic and cultural backgrounds.

### **The OpenMed Project**

OpenMed ~~adopted~~ takes the 2012 UNESCO definition as a desirable end-point for a journey towards openness in education:

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. (UNESCO, 2012<sup>2</sup>)

In addition, apart from the creation and use of content, open pedagogic approaches that place “an emphasis in the network and the learner’s connections within this,” (Weller, 2014, p.10) [we](#)are key to OpenMed’s definition for OEP. However, whilst OpenMed [sought](#) as an aspirational goal that stipulates, as part of its service mission, that HE professionals and institutions engage in the creation and use of educational resources that fully fit UNESCO’s definition, the OpenMed partners also [acknowledged](#) that the uptake of OEP may also start with less ambitious goals, for example, by making copyrighted content publicly available on the Internet.

The overarching goal of OpenMed, therefore, [was](#) to raise awareness and facilitate the adoption of OEP and OER in the S-M countries, with a particular focus on HE in Morocco, Palestine, Egypt and Jordan<sup>3</sup>. OpenMed [fostered](#) the role of universities as knowledge providers not only to their on-campus students but also beyond the walls of institutions, especially towards disadvantaged groups (i.e. low-income peoples, gender equality, learners who are disabled, special needs education, people living in rural areas, learners at risk of low achievement, and refugees).

Five specific aims of the project [we](#)are to 1) raise awareness and widen HEI participation in OEP and OER; 2) define the agenda for the re-use of OER at HEI level; 3) define mid-term strategic roadmaps for the implementation of the OER agenda at local-institutional level, according to the local, cultural and institutional needs and strategies; 4) instruct university teachers about how to use and repurpose OER in a pedagogically-rich context and improve their digital competences; 5) pilot a start-up OEP and offer students flexible and up-to-date open contents and learning paths, with a link to the international community and the needs of the job market.

OpenMed [w](#)has focused on questioning how OEP can co-exist in HEI strategies and instructional materials in the S-M region. This includes [s](#)how universities rethink their mission,

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<sup>2</sup> [http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CI/WPFD2009/English\\_Declaration.html](http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CI/WPFD2009/English_Declaration.html)

<sup>3</sup> <https://openmedproject.eu/home/>

cost structure, international partnerships, and learning experiences. An important first phase of the OpenMed project was, therefore, to gather and analyse data about OEP globally and in the S-M region, in order to inform the subsequent work packages of the project and to facilitate the adoption of OEP at the partner institutions in the S-M region, at other universities in each of their respective countries, and at other HEI more widely. The overall aim of the review was to provide inspiration and insight into the current practices around OEP and to promote reflection and discussion about priorities for change for OpenMed.

### **A Review of Open Education Practices**

While there are a few studies on the use of information communication technologies for enhancing education in the Arab countries (see for example, Tubaishat, Bhatti & El-Qawasmeh, 2006; Regional Focus Issues – Learning Technologies in the Middle East, IRRODL, 2009; Rhema, 2010; Jemni, 2014), the amount of research on OEP initiatives in the S-M region published at the time when the project started, in early 2016, was minimal. As such, the research stage drew on multiple sources and types of data, gathered and analysed with the aim of offering an overview of the state-of-the-art of OEP within the HEIs of the S-M partners of the project, and the region at large. In addition, a number of initiatives and insights from other areas of the globe were incorporated with the aim of sharing expertise and good practices. Special attention was paid to previous experiences that, for different reasons, could be transferable to the target region.

Country reports from Morocco, Palestine, Egypt and Jordan were included, providing demographic details as well as detail about issues regarding connectivity, governance and the legal framework of higher education within the region. A survey was also used to capture the level of participation in OEP within the partner institutions at the time of completion (early 2016), and also to identify the future goals of the participating institutions. The data gathered indicated the differences between the four countries in terms of the concept, definition, and practices of open education. Levels of involvement were different, and in some cases. the emphasis was more on showcasing examples of blended and eLearning.

Eleven case study initiatives of current practices in open education globally, and particularly in the S–M region, were included in the Compendium<sup>4</sup> (available in Arabic, French

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<sup>4</sup> <https://openmedproject.eu/results/compendium/>

as well as English) including examples of learning platforms, repositories, open access publication networks and MOOCs.

Experts in OEP, identified by the OpenMed partners, from the S–M region, Europe, and from the wider international open education community, were approached to comment on what they considered to be some of the key issues worthy of consideration regarding OEP and the S-M region, as well as more general insights into good practices.<sup>5</sup>

Five key themes were identified as a result of the review of the case studies gathered and interviews conducted, and a number of recommendations were proposed. These initial findings identified key endorsements from which the subsequent phases of OpenMed have developed. In brief, they included the importance of clarity about the justification for the provision of high-quality OEP and OER in HEIs; the necessary investment in infrastructure to ease process development and ways to transition materials and programmes; course accreditation schemes through institutions as a means of promoting OEP as a reputable form of learning; the need for resources to support the upskilling of staff; the importance of adopting a collaborative approach to the creation of OER; incentives to engage staff and students as co-creators of OER; understanding about how computer-mediated communication works, including how learners and teachers connect with one another, and build trust within networks; and finally, understanding licensing approaches and ways to formulate guidelines for other OER creators.

Based on this work, OpenMed fostered a regional debate with partners in the S-M region on the best strategies to embed OEP in universities, and the OpenMed OER Regional Agenda was developed. This document, starting from an understanding of the long-term challenges and priorities which are necessary for opening up higher education in the S-M countries, was brought together, presenting a set of strategic actions aimed at maximising the benefits of OER and OEP to increase the access, quality and the equity of HE in the region<sup>6</sup>.

### **Widening Engagement in Open Education Practices in the Partner Regions**

OpenMed understands the necessity to embrace integral and also inclusive actions that would be meaningful and relevant for the local beneficiaries, thus avoiding fragmentation of interventions. That is why the project envisions a multilevel and organic intervention which

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<sup>5</sup> <https://openmedproject.eu/category/experts/>

<sup>6</sup> <https://openmedproject.eu/results/oer-regional-agenda/>

articulated<sup>ds</sup> three key dimensions: contents, platforms and cultural aspects, briefly described as follows:

- Contents: understood as educational resources or pedagogic practices which are openly and freely shared, promoting their continuing remix (re-usability), updating and sharing.
- Platforms: hardware and software designed to simplify the interoperability of the resources, facilitating semantic structures (improving their findability) and the use of open standards and open source software that decrease costs and can trigger adoption practices.
- Cultural aspects: promoting the awareness and explaining the value of “openness”, describing the educational and also the inter-institutional benefits, and not only identifying best practices, but implementing the required incentives to foster these practices in a variety of teaching-learning environments.

Utilising a top-down approach (with recognition of the bottom-up or grass roots consequences), four “OER National Strategy Forums” took place between November 2016 and April 2017 in Morocco, Palestine, Egypt and Jordan, gathering educators, managers and decision makers from HEIs in the S-M countries. The objective of these events was to give the S-M higher education stakeholders opportunity to discuss, revise, and validate the OpenMed OER Regional Agenda as a long-term plan presenting challenges and priorities for strategic actions aimed at maximizing the benefits of OEP and the use, reuse and remix of OER for university course development, thus facilitating equity, access to and democratisation of HE. These events were also intended to widen participation in OEP, by showcasing outstanding cases of OER adoption and fostering networking among policy makers, university leaders, educators and OER experts from Europe and the S-M countries.

In terms of impact, the forums offered scope to build consensus within the academic communities on open education principles that will benefit HE in the S-M countries. As part of their work, “Institutional Roadmaps”, for the adoption of OEP at an institutional level, suitable for the S-M countries, were defined to inspire commitment for immediate implementation of the long-term strategic plan at universities managerial level. In the following section, the ways in which the partners have been engaging and promoting the development and adoption of OEP, addressing both top-down and bottom-up approaches, is shared.

### *Palestine*

With the stark reality of living under Israeli occupation for more than 50 years, the opportunity for opening up education in Palestine is viewed as an essential requirement to advancing scientific research being developed-in country on a global level, whilst also meeting the local community's needs by considering accessible, sustainable, economic, technical and human development (Affouneh et al., 2018.)

An early example of a move to OEP in Palestine can be traced to the beginning of the 1990s, when The Palestinian Liberation Organization (PLO) established Al Quds Open University, which started operating in 1991, in order to ensure education for Palestinians inside Palestine and to overcome all the difficulties of the Israeli occupation including the closure of many existing universities, financial restrictions and border control enforcements preventing Palestinians from studying abroad. The university's use of distance learning as a pedagogical approach enabled students to be able to study 25% of the time with their teachers, and otherwise to use online textbooks that were introduced as provided as self-learning guides<sup>7</sup>.

In Palestine, there are now 14 conventional universities in addition to Al Quds Open University (RecoNow, 2016). All of these institutions are enhancing technologies into their learning, and teaching in different ways and whilst there is no formal policy for open education per se in Palestine, efforts are underway to draft a suggested policy. As an example, at An Najah National University (ANNU) Palestine, open education is defined as, "learning without boundaries," where education should be offered to people without conditions

Two HEIs from Palestine, ANNU and Birzeit University, are partners in OpenMed. Both have had involvement in OEP and could be considered as leaders in their country. At ANNU, staff members engage in steps towards OER through producing online materials, either as recorded lectures or as open courses. In 2010, the university established two studios in order to produce video-based learning through recorded lectures that are broadcasted asynchronously through the university websites see (videos Najah.edu.). Through the studios, more than 260 courses were developed and more than 10 million viewers, across 45 countries, accessed their content (Affouneh & Amin Awad Raba, 2017).

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<sup>7</sup> [www.gou.edu](http://www.gou.edu)

In 2012, the E-Learning Centre (ELC) at ANNU was established in order to lead the process of building on the university's online offerings, including the design of blended courses. The team led academic staff through many phases including capacity-building, piloting of new modules, infrastructure development and course development. To date, more than 800 courses are available at ANNU, with 55 of them defined as "Open Courses" (meaning that anyone can access the course content, although to be accredited as having completed the course, there is a payment fee for assessment.)

In 2015, the ELC produced the first MOOC in Palestine called, "Discover Palestine", with 265 participants engaged over the first three cycles (with an average of 53 learners per cycle). Course distribution by participant was captured as 6.5% PhD; 34.8% BA/BSc; 32.6% MA/MSc; 15.2% Diploma and 10.9% Other. Learner distribution by gender was 54.3% female to 45.7% male, with a geographical reach of participants accessing the MOOC identified at 25 countries. What came as more of a surprise was that whilst the main thrust of the course was about sharing new narratives of Palestine to educate and inform a wide and more internationally diverse audience about Palestinian history, culture, architect, art, and culture, many Palestinians in exile and also local people from Palestine participated.

As such, the Discover Palestine team evidenced how, through the open discussion of learning experiences, an important opportunity was made possible for communities of learners, both local and global, to take part in the sharing of historical facts and cultural practices. Indeed, many of the MOOC students reported that the course was better than anything available at the "brick-and-mortar campuses" to which they had access (Affouneh et al., 2018, p.11). Further, the team now have the confidence to promote MOOCs for Arab learners as well as MOOCs for international learning communities. Alongside this they have decreased the previously required reading materials and instead added more content and links through generative learning resources. With a decreased number of assignments and with emphasis on socially-intensive and interactive learning experiences, the team has shifted its role to being less instructor-led and more as interlocutor / facilitator. Further, in producing more open courses, with licensed content, strategic level leads as well as university lecturers have increased understandings on the meaning and contribution of OEP and OER.

ANNU has therefore been developing its own institutional road map, based on the regional agenda, to consider how open education can be formally recognised as part of ANNU's educational policies. The road map has instigated a series of activities aimed to empower

academic staff as part of the university's strategic education plan, including: developing the university's infrastructure in order to transfer the university's campus into a smart campus; designing MOOCs promoting ANNUs courses as a tool to provide learning (translated into Arabic and English) to reach learners everywhere; offering academic development workshops to build the capacity of the faculty members in what is meant by open education and how to practice it; and, co-financing the establishment of a new centre for creativity in open education.<sup>8</sup>

The university strategic plan will continue to be reviewed in order to continually enhance OEP locally.

### *Morocco*

The diffusion of open education in Moroccan universities is closely linked to that of digital educational resources in general. As the use of these resources to date remains quite limited, one might suggest the uptake of OER is gaining traction but has yet to make its impact. Yet, in the context of the limited resources of Moroccan (and African) HE and training institutions, the OER movement has considerable potential.

The University Cadi Ayyad of Marrakech and Ibn Zohr University of Agadir are two partner HEIs in OpenMed. During the project, both have been examining how strategies and decisions for the integration of open education at the institutional level need to consider the importance of defining an appropriate framework in respect of each partner institution-teacher-student, which also represents the civil society. The added value being articulated, is to formalize and concretize the idea of quality education for all. Two considerations guide this statement. First, open education can expand access to education, knowledge transfer, social inclusion and the creation of collaboration and sharing culture. Secondly, there is a strong economic case for open education: the liberalization of publicly funded educational resources under open licenses, represents a return on public expenditure investment. This includes the development of OERs, as well as open frameworks for technology-enhanced learning and Open and Massive Online Courses (MOOCs). Additionally, it includes prior learning validation and creativity in open educational practices.

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<sup>8</sup> Whilst OpenMed funded the establishment of the new Creativity in Open Education Centre to support the university to develop open resources, the cost of the equipment was more than the existing budget allowed, and so ANNU contributed an additional 10, 000 Euros.

As an example, Ibn Zohr University (UIZ), believes that the best way to achieve this is through collaboration and through partnerships that focus on the four cornerstones of the evolving OER process: the creation, organization, dissemination and use of OER. The strategic combination of these elements within what the UIZ calls the "UIZ OER Architecture," will lead to the development of a dynamic, meaningful, rational and comprehensive OER strategy for education institutions in Morocco. As changes take effect and transform the university culture, it is expected that staff, departmental services (ICT department, quality assurance services, students, etc.) perceive the effects on students and the community as a whole. Supporting stakeholder dialogue and building the capacity of educators would ensure that the infrastructure needed for Open Education is taken into account and has sufficient resources, within the institution's strategic framework and long-term goals. Therefore, negotiation and development of such an infrastructure would also increase the virtual mobility volume in the Mediterranean countries, opening up new, flexible and educational paths, which expose students to international approaches and dialogues, with benefits to large scale in social and citizenship learners' issues. OpenMed is therefore an example of collaborative strategy adopted by the UIZ, which enables the institution to be meaningfully situated in relation to the other countries of the S-M and of Europe in general.

### ***Jordan***

The movement of OEP in Jordan can be traced back to the late 1990s, when the University of Jordan provided free and open e-learning courses, offered to learners, without the need for them to log into their Moodle e-learning platform. In 2010, the Jordan Open Source Association successfully proposed an Arab open education resources platform, which was originally due to be launched in June, 2011. Following this, a MOOC platform was launched in November 2013, as part of Queen Rania Al Abdullah's initiatives under The Queen Rania Foundation, which now operates under the name "Edraak."<sup>9</sup> The Edraak platform presents the Arab world with unique and vital opportunities to be part of the necessary revolution in online, open, education and learning. The vision of open education in Jordan was based upon the notion that OER offer opportunities for systemic change in teaching and learning through accessible content. Through a blended model of teacher-led knowledge and student-centered sharing processes, most Jordanian universities began to develop structures for sharing, accessing and bringing

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<sup>9</sup> <https://www.edraak.org/en/>

participants together, with the aim of providing more equitable access, as well as levels of learning.

Regulations and instructions on an institutional and national level have been continuously changing. The Ministry of Higher Education and Scientific Research (MOHESR) approved the blended model within 25% of programmes. Further, an alliance of three or more Jordanian universities can establish a fully online programme as well. However, MOHESR has expressed some constraints regarding quality assurance including the way exams are conducted, how learning outcomes are measured, and, how course funding and cultural perceptions are considered.

Challenges in the open education methodology, therefore, still exist in the academic medium in Jordan, where three main issues are of particular note: the governmental policies instructed by Ministry of Higher Education and Scientific Research; the alignment of these policies with regulations published by Jordanian accreditation institutes; and the cultural acceptability of open education and distance learning in general. Overall, students, instructors and policy-makers are gradually moving towards an increased acceptance of new methods of education systems, especially in the e-learning process. The following is an example from Princess Sumaya University for Technology (PSUT) and their E-Learning Centre (ELC) that represents the national goals and objectives of the Jordanian higher education system in open courses.

Since its establishment in 2016, the ELC at Princess Sumaya University for Technology (PSUT) has been operating as the core of distance learning, online courses and open educational resources. The ELC is one of the main operating units in the university and is connected to the president in the PSUT organizational system. The key ELC goals include the following, to 1) create a basis of multiple e-learning platforms and services to students, professors and staff; 2) promote and improve the methods of e-learning among youth and adult learners; 3) enable the opportunities of research and innovation in the e-learning field, and 4) provide professional training in e-learning to strengthen the overall learning outcomes and teaching techniques. The ELC staff install and operate e-learning's latest trends and technologies.. The ELC will also be offering e-learning solutions such as: augmented reality applications, virtual reality station for game-based learning, workstations to take online courses designed by PSUT departments, and access for open resources. The ELC will continue to

provide training sessions on how to use e-learning for maximum learning benefits and outcomes. In fact, this represents the whole ambition of open education in Jordan.

The ELC is viewed as a venue for learning solutions, and a space and place to add significant value to PSUT as an information and communication technology (ICT) institute in general, and to students and scholars specifically. This is through incorporating activities focused on enhancing collaboration and an “active team study experience,” and establishment of research groups within universities (i.e. open education consortiums). The ELC is aimed to provide a unique experience for the public, undergraduate and graduate students in Jordan.

In summary, OEP in Jordan are arguably still in the early stages, but with all the efforts both top-down and at grassroot levels, from policy makers to instructors, and in being partners in projects with a high profile such as OpenMed, progress can accelerate in the right direction.

### *Egypt*

The first initiative in open education in Egypt was in 1991 with a focus on making education and learning available to those who missed the opportunity to get into the conventional HE system, and to those who wished to pursue HE in order to enhance their careers. The definition of *open* at that time related to access to online only course offerings. With rapid advances in ICT, and recent changes in teaching and learning strategies, the Ministry of Higher Education initiated the Distance Learning Project (2010) with the objective to enhance the quality of open learning in Egypt. The project was based on adopting a blended learning approach, combining e-learning with face-to-face and virtual classes, as well as video-streaming and satellite transmission. Building on the favourable outcomes of this project, the Supreme Council of Universities (SCU) (2016) decided to make a major overhaul of the existing open learning system. Changes were based on the need for a comprehensive evaluation of existing practices and the recent trends in OEP in different countries. The SCU has since established a set of guidelines for universities to develop and run blended learning programmes. As set in these guidelines, the main objective is to make education and learning available to everyone, any time, and at any location. Flexibility is also maintained since the newly adopted system is a credit-hour system that allows students to choose from elective courses. Programmes are carefully linked to the needs of the job market and the strategic goal of sustainable development, and learning objectives have to be clearly defined.

Since the newly adopted system has an e-learning component, the SCU has continued to develop its profile in online education, through the establishment of open education centres in several of its universities, as a service provider. The role of these e-learning education centres is to help in producing online interactive courses to train faculty members in using learning management systems, and training administrators on issues related to registration, evaluation, advisement, and other administrative issues. E-learning education centres also offer incentives to encourage professors to participate in producing the e-content of the courses. In the existing system, students have to register for a programme and pay tuition fees.

The SCU initiative is built on a number of factors that aim to contribute to its success. Such factors include the readiness of faculty members to improve teaching methods and develop learning materials, the availability of supporting technologies to produce the courses, and the willingness of students to use technology as a tool for learning.

What is evident is that OEP and programmes offered by the Egyptian governmental universities vary in their definition of “open” and reflect the character of each university, and ways to meet the needs of the surrounding locale. Participating in OpenMed, Cairo University and Alexandria University are taking the lead on re-defining the concept of open in line with the UNESCO definition, and are focused on spreading awareness of OEP and OER and taking direct action to model such practices. Key steps taken to date have focused on raising awareness about the importance of OER and its benefits among the academic community (faculty members, administration, students); establishing a lab in each university to produce OER (one of the intended outcomes of the project); providing the technical support by training technical staff in the labs; training faculty members to produce OER; emphasizing its importance in enhancing the teaching/ learning environment; and, adopting policies to evaluate the current and upcoming development of OER in the short-term, in order to give feedback to the designers/creators, and as necessary to make any quality changes recommended in order to develop them. A further example of change in practices is at Cairo University, which does not currently have a formal policy or strategy on OEP; however, the university is pursuing the development and expansion of OER through co-operation with the Egyptian Knowledge Bank, and is aiming to develop an institutional repository from which it can release educational content under open licenses. As will be explained in the following section of the chapter, academics from both Cairo and Alexandria University are actively participating as members of “local learning circles,” as part of the OpenMed online course collaboratively designed and

delivered by OpenMed partners. The members of these learning circles will then cascade what they have ascertained and act as trainers and transmitters of knowledge to colleagues in their universities and other universities, thus creating a sustainable model for the continuing development of staff working with OER and OEP in Egypt.

### **OpenMed Capacity-building Course: “Open Education: Fundamentals and Approaches”**

The OpenMed course “Open Education: Fundamentals and Approaches” ~~was has been~~ designed as part of the third project phase. The course ran as a pilot from September 2017 to March 2018, involving 70 teachers from across the partner HEIs. Following this pilot phase, the course ~~was has been~~ revised, based on the feedback received by learners and facilitators.

From a pedagogical perspective, the course ~~has~~ adopted Fink’s (2003) integrated approach to course design. Whilst a Western taxonomy, it was adopted through its focus beyond rote learning, or straightforward application of skills, towards the development of more creative, engaging and reflective “significant” learning experiences as both process and outcome. As such, the course ~~is~~ adopted an active learning approach, composed of three phases. Phase one ~~dealt~~ s with an intense face-to-face element, bringing together the learners participating in the pilot phase of the course, with the aim of creating a learning community, including the introduction of the learning activities. During phase two, learners ~~worked~~ ed through a number of online learning activities, during which they ~~we~~ are expected to take a number of course modules and complete assessment tasks proposed. This phase ~~operated~~ is run through Local Learning Circles (P2P University, 2015), whereby groups of learners ~~meet~~ et face to face to collaboratively work through the online activities. Each learning circle ~~was~~ is coordinated by a team of local facilitators, who ~~were~~ are in charge of organising meetings, supporting learners, assessing activities, and reporting back to the wider OpenMed partner community.

In terms of content, the training programme ~~covered~~ eds the following five modules/learning units: Introducing Openness in Education; Open Licensing and Copyright; Creating and Reusing OER; Localising OER and MOOCs; and Open educational Practices. In phase three, following the online learning experience, learners ~~we~~ are expected to apply the skills they ~~had~~ ve acquired to develop a *final project work* aimed at opening up their teaching. The project work ~~was~~ is fully integrated with the online phase and ~~built~~ eds upon five steps that ~~we~~ are taken at the end of each module:

- Step 1. Pledge to open up a course/ or teaching;
- Step 2. Identify open licenses to be applied to teaching courses,
- Step 3. Use OER in teaching,
- Step 4. Localize OER to a specific course/context, and
- Step 5. Develop an open teaching plan and share it with a learning community.

~~Ideally, each project work resulted in should end up with~~ the creation of some type of OER, formally licensed and complemented by a tailored, open teaching strategy. The intention being that these resources and contents ~~would beare~~ used thereafter by the learners who produced them – as well as by other educators - within their teaching activities.

### **Intercultural Learning and Promoting Bottom-up and Top-down Approaches to the Sustainable Integration of OEP**

In responding to the need to break boundaries and build bridges across knowledge-sharing communities, OpenMed has supported positive action amongst academics working across both shores of the Mediterranean in promoting cooperation networks, necessary for the integration of Mediterranean communities and economies (Scalisi, 2016). This has included ways to support academic capacity-building in appreciating the value of adopting OEP in terms of building skills in digital fluency and engaging in the use and creation of OER as a means of sharing, combining and updating teaching and learning content (Weller, 2014; Wiley, 2006). In particular, a focus has been on ways to consider the influence of cultural diversity when considering the exchange of educational content as a means to democratise access to education (Butcher & Hoosen, 2014; Maya Jariego, 2017). Following Aman (2017) and Patel (2017) this has included an active decolonization approach which embraces diverse knowledgies and languages as reciprocal exchanges of cultural wealth.

The OpenMed course is an example of an open and intercultural learning experience in a number of ways. For example, it ~~was~~ based on a pedagogical approach that privileges collaboration and reflection for individual learning, leaving space for co-creation among learners from different cultural backgrounds. In adopting Fink's (2003) integrated approach to course design, the OpenMed course ~~aimeds~~ to create a significant learning experience for those involved, building upon the different cultural and contextual backgrounds of participants, and enhancing social interactions with others (Herbert, 2006). The course ~~was has been~~ designed and produced in a fully collaborative fashion by a multi-national team composed of experts

across a range of participating HEIs from Europe, the Middle East and North Africa, taking into account, as much as possible, the features and needs of the target population and the learning habits of each involved community. As Forsman (2012) contends this is key to providing experiences that allow awareness of cultural diversity that can, in turn, contribute to academic development. In addition, the course contained [eds](#) a module on adaptation of OER and MOOCs to the specificities of the involved target communities. This module develops the competences to adapt OER to the local contexts of the Middle East and the Maghreb, as well as to address an international audience, in this way, a more thoughtful consideration and understanding regarding the applicability and usability of these resources in different cultural settings is enabled (Zualkernan, Allert & Qadah, 2006). Furthermore, the course [was](#) based on collaborative local learning circles, where learners had [ve](#) the possibility to customize and localize the course to their needs, encouraging the application of course content to real-life problems. This included [ds](#) having facilitators who care about the subject of OEP and who desire to engage with learners, and who have good systems in place for feedback and assessment (Fink, 2003). Through the course discussion forum, the learning circles offered [ed](#) a space within which to discuss course themes, through intercultural and peer- to- peer learning experiences, allowing for the exchange of views, practices, and ideas among colleagues coming from different universities, countries and cultural settings (Gervedink Nijhuis et al., 2013). As noted by Deardorff (2009), an important focus for fostering intercultural learning concerns the ways in which the content is delivered and how it engages learners in the process and through a pedagogy which values the intercultural resources learners themselves bring. The active learning approach adopted by the course, and underpinned by Fink's (2003) experiential and constructivist pedagogy, provided [ds](#) a very practical approach towards open education, with the idea that, after having taken the course, academics / teachers should be able to use OER and implement open teaching practices in their daily work. Further, the course [adoptedtakes](#) a strong contextualisation approach, starting from the fact that many resources and courseware of good quality exist that could be shared and adapted to the needs of the learning communities (Wimpenny et al., 2018).

OpenMed has stimulated transition and transformation in how reconfiguring an open education learning space (within a networked context) has facilitated partners' own learning, as well as institutional, formal and informal, experiential, interactive, online and social learning (Oblinger, 2006), while embracing a top-down and bottom-up approach to educational change. Together, with project partners and wider educational community

networks, change has been mobilized by influencing senior management through the Educational Resources (OER) Regional Agenda<sup>10</sup>, the development of Institutional Roadmaps, and by training opportunities, to inspire educators themselves to embrace and adopt OEP. The alignment of all these strategies ensure an inclusive and equitable access to quality HE in the Mediterranean region.

Whilst the partners ~~we~~are working to a closer resemblance of the UNESCO (2012) definition of OER to appropriately target and mobilise their institutional practices, as well as influence national and regional agendas and education and policy strategies, work on this continues, as does the cultural acceptability of open education and distance learning in the S-M in general (Elshamy, 2016). Nonetheless, ~~preliminary~~ findings about the collaboration and learning dynamics experienced in the pilot run of the OpenMed Open course ~~we~~are largely positive, based on qualitative feedback mainly provided by the learning circle facilitators, and on the analytics gathered from the course platform (Sakai<sup>11</sup>). Information sharing and collaborative learning ~~took is taking~~ place, not only within the local learning circles within institutions – but also within and across the countries participating in the pilot. This ~~was~~ an encouraging finding that indicates the collaboration readiness of universities from the S-M to engage in regional dialogues, learn from one another’s experiences and display a willingness to discuss common challenges and innovative solutions, as advocated by Fink (2003). Further, a wide range of useful project works ~~have~~are ~~being~~ developed, both based on the work of individual learners and of small teams from the same learning circles. This encouraging evidence suggests that the OpenMed course ~~has~~is not only ~~offered~~ing a meaningful learning experience to participants (Falconer & Littlejohn, 2007), but ~~has~~is also ~~resulted~~ing in the creation of a set of artefacts (i.e. OER, new curricula, new teaching strategies, etc.) that will represent an important knowledge bank for open education in the S-M region.

Whilst OpenMed ~~has been~~is making great strides in its efforts to mobilise change in widening participation in OEP and use of OER, and moving from theoretical goals to actual practices, the move from institutional level practices to national levels of impact for each partner, while

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<sup>10</sup> Starting from an understanding of the long-term challenges and priorities which are necessary for opening up HE in the S-M countries, the Educational Resources (OER) Regional Agenda presents a set of strategic actions aimed at maximising the benefits of OER and OEP to increase the access, the quality and the equity of HE in the region.

<sup>11</sup> Sakai Platform, Digital Open Learning Platform <https://www.sakaiproject.org>

not straightforward, *is* ongoing. Alongside the National OER Strategy Forums<sup>12</sup>, which provided opportunities for the S-M higher education stakeholders to discuss, revise, and validate the open educational Resources (OER) regional agenda *being* developed by OpenMed, partners in Morocco have developed and published a National Declaration<sup>13</sup>. This Declaration is addressed to the Moroccan and International authorities, educational institutions; primary and secondary schools, private and public universities, as well as all organizations and individuals involved in education and training - including galleries, libraries, archives centers and museums. As such it is intended to further support, enhance and develop OER and OEP in the country, with academics from Cadi Ayyad University in Marrakesh and Ibn Zohr University in Agadir leading the project. The Declaration, published in French and English, is now serving as a petition, requesting international endorsement from the open education global community, before being presented to the Moroccan Educational Authorities at governmental level, and other dignitaries such as rectors and deans. The Declaration is gathering widespread support and is almost at its target of collecting over 85 signatures out of the initial 100 requested.

A key challenge remains in changing perspectives across all levels of education policy, development and practice, and in developing and re-positioning open education within the respective regions as valid and significant. Managing this transition will take time and requires a focus at all levels of education not only in providing the necessary leadership and resources required to develop strategic planning and academic development, but in working with academic champions locally and in direct engagement with students.

## **Conclusion**

Open education is not only about learning and practice, it is also about giving and sharing in order to produce knowledge to the digital community. Knowledge must be shared and spread, teachers encouraged to network and collaborate on course development, and institutions discouraged from fragmentation and the production of their own slight variations on the same course (Weller, 2014). As project partners, OpenMed has stimulated transition and transformation in how reconfiguring an open education learning space (within a networked context) has facilitated partners' own, and others' formal and informal, experiential,

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<sup>12</sup> <https://openmedproject.eu/results/national-oer-strategy-forums/>

<sup>13</sup> <https://openmedproject.eu/oer-morocco-declaration/>

interactive, online and social learning (Oblinger, 2006). From the start, the partners ~~were~~ ~~have~~ ~~been~~ encouraged to consider their own cultural practices and expectations of one another and have been challenged to embrace a range of OEP whilst striving to adhere to UNESCO's definition. The project partners continued to find ways to navigate a way through their similarities and differences in terms of demographic, cultural and institutional characteristics during partner meetings and in developing project frameworks and outputs to cascade onto others.

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