WP1: Identify respective institutional and, if possible, national policies towards distance education, Open Science and Open Education in each of the five countries

Introduction

1. Objectives

The objectives is to describe the situation of distance education, Open Science and Open Education in each partner country of the Open Med Scholars project in 2023: Algeria, Egypt, Morocco, Tunisia and Switzerland.

Specific objectives are following:

1. Identify relevant laws at the state's level;
2. Identify bodies / authorities and their roles at the state's level;
3. Identify bodies / authorities and their roles at the level of Higher Education Institutions (HEIs) (if appropriate and different from 2);
4. Identify policies, strategies, roadmaps, etc. and projects at the institutional level (Universities for Morocco, Egypt, Tunisia and Switzerland and CERIST for Algeria);
5. List international impactful dimensions integrated in the institution (e.g. UNESCO / ICESCO Chairs);
6. Understand how and where Open Education and Open Science can fit in the landscape.

2. Content, target audience and defining concepts

This introduction to the country reports provides some understanding of concepts related to distance and open education. The definition of concepts related to laws, e.g. policies, strategies, international treaty, acts, etc. have been defined in a separate report by a legal expert, Maria Assunta Cappelli. The report is entitled *Open Science and Open Education: First Look into Legal Frameworks Concerning Switzerland. Report produced within research projects funded by the LH for MENA region* and is available from: https://archive-ouverte.unige.ch/unige:177149 .

Target audience are academics, students and decision makers.

3. Defining concepts in education

Distance education

"Distance education, is a teaching model that is usually asynchronous and always distributed. That is, there is no need to attend classes in a specific physical environment and usually not at a particular

time. The student receives and accesses the content to engage with their studies, then completes and transmits evaluation and often collaborative activities, and can ask their teacher questions through mediated means: initially by traditional mail, telephone, fax, and during the last decades, through various online tools (Alfonso, 2003; Sangrà, Vlachopoulus & Cabrera, 2012)" (Anderson & Rivera Vargas, 2020, p. 209).

Four contexts of distance education have been identified in the literature (Bates, 2005; Sangrà et al., 2012):

1. distance education without virtual environments, i.e. print, audio and video tapes;
2. distance education with complementary virtual environments, i.e. original model described in 1) to which telecommunications have been added in the 1990s;
3. teaching in dual or bimodal environments, i.e. blended learning;
4. teaching in virtual environments (e-Learning), i.e. "This term is used to describe distance learning that essentially uses the tools provided by the internet (through virtual environments) as a means of transmission of knowledge, communications amongst and between students and teacher and the management of the education process" (Anderson & Rivera Vargas, 2020, p. 209).

To these four contexts, we add the tele-teaching one that prevailed in the 1970s and revived with the sanitary crisis of 2020 (Duccini, 2013; Haughey, 2013; Mouchot, 1973).

Characteristics: distribution of the teaching model; technology (print, virtual, internet, etc.) to mediate teaching and learning processes.

Open Science

"Open science is defined as an inclusive construct that combines various movements and practices aiming to make multilingual scientific knowledge openly available, accessible and reusable for everyone, to increase scientific collaborations and sharing of information for the benefits of science and society, and to open the processes of scientific knowledge creation, evaluation and communication to societal actors beyond the traditional scientific community. It comprises all scientific disciplines and aspects of scholarly practices, including basic and applied sciences, natural and social sciences and the humanities, and it builds on the following key pillars: open scientific knowledge, open science infrastructures, science communication, open engagement of societal actors and open dialogue with other knowledge systems" (UNESCO, 2021).

Characteristics: access, share and reuse of multilingual scientific knowledge; open processes of knowledge creation, evaluation and communication; open engagement of societal actors; open dialogue across knowledge systems; open infrastructure.

Open Education

"Open education is an umbrella term under which different understandings of open education can be accommodated. It goes beyond open educational resources (OER) and open research outputs to embrace strategic decisions, teaching methods, collaboration between individuals and institutions, recognition of non-formal learning and different ways of making content available". The European Commission understands it as: "a way of carrying out education, often using digital technologies. Its aim is to widen access and participation to everyone by removing barriers and making learning accessible, abundant, and customisable for all. It offers multiple ways of teaching and learning, building and sharing knowledge. It also provides a variety of access routes to formal and non-formal education, and connects" https://joint-research-centre.ec.europa.eu/what-open-education_en .

A group of scholars recently defined OE as: “Open Education is both an umbrella term and a complex ecosystem that operates on a number of very different levels. It is inherently open in the way it functions and cannot be captured by a single definition. It considers knowledge as a common good. Its intrinsic values of freedom and transparency assure contribution and access to the discovering of all forms of knowledge, under the sole condition of respecting authorisation to access it, e.g. indigenous knowledge. It is articulated around the remaining values of responsibility, sharing, justice, agency and ubiquitous ownership (Baker, 2017). It is neither synonymous of free nor of extractive approaches. It strives to find sustainable models at all levels – epistemic, legal, social, economic, political, ecologic, infrastructure, etc. Open Education represents an alternative approach that exists since the Middle Ages and is at the heart of the establishment of European universities (see for ex. Peter & Deimann, 2013, p. 9). It is a means (Paola Corti, 2022, private communication) to foster knowledge societies by leveraging collective human intelligence.” https://edutechwiki.unige.ch/en/Open_Education_Roadmap

At the European level, the European Commission has set up a framework to introduce Open Education in HEI (Inamorato dos Santos et al., 2016).

In the Mediterranean region, initial roadmaps to introduce Open Education in HEI exist from the OpenMed project: https://openmedproject.eu/results/roadmaps/ (Wimpenny et al., 2022)

Characteristics: way of carrying out education; accessible, abundant, customisable and connected learning; knowledge is considered common good; intrinsic values of transparency and freedom; it is a means not an end in itself.

Open Knowledge

The history of Open Knowledge as a concept is double. On one hand, it is closely related to international declarations and to the Open Source Software movement and Open Contents coined by Wiley on this model (García-Peñalvo Francisco et al., 2010; Wiley, 2022). The “Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities” in 2003 was done during the Conference on Open Access to Knowledge in Sciences and Humanities hosted by the Max Planck Institute and is important because it links the Open philosophy with the missions of HEIs to make knowledge open (García-Peñalvo Francisco et al., 2010, p. 523).

On the other hand, it was key in the 1960s and the source for introducing Open Education under which Open Science would fall. “Open knowledge production is based upon an incremental, decentralized (and asynchronous), and collaborative development process that transcends the traditional proprietary market model. Commons-based peer production is based on free cooperation, not on the selling of one’s labor in exchange of a wage, nor motivated primarily by profit or for the exchange value of the resulting product; it is managed through new modes of peer governance rather than traditional organizational hierarchies and it is an innovative application of copyright which creates an information commons and transcends the limitations attached to both the private (for-profit) and public (state-based) property forms (I based this formulation on Michel Bauwens’ P2P Foundation work at the P2P Foundation < P2P Foundation).” (Peters, 2016, p. 11)

Characteristics: decentralisation, collaborative, P2P, access, freedom.

Openness

“Openness is a philosophical concept that goes back to the Middle Ages and concerns access to knowledge for all, freedom and citizenship. It is also a complex politico-socio-technologico-economic construct based on transparency and freedom as essentials within an ethics of participation.

Furthermore, it is an epistemological doctrine which puts philosophy and science centre-stage to achieve open criticism in-line with democratical principles. Finally, openness in terms of management, refers to modes of collaborating also based on democracy (Baker, 2017; Deimann, 2019; Peters & Britez, 2008) » (Class et al., 2023).

Openness goes back to the concept of Open Society conceptualised by Bergson in 1932 and Popper in 1945 (Class, 2023; Peters, 2016; Pomerantz & Peek, 2016).

Characteristics: critical mindset, freedom, citizenship, participation, democracy, peace

Interpretation

From these 6 concepts' characteristics, distance education can be considered as the basic process, i.e. distributed and mediated education, while Open Science and Open Education refer to intentions, values and practices that still need to find ways to be operationalised.

To discuss these ways, the International Council for Open and Distance Education was founded in Canada in 1938, supported by the Norwegian government and UNESCO. The council especially publishes the scientific journal Open Praxis since 1993, previously under the name of ICDE Bulletin.

It is also widely discussed in communities of practice and by individual scholars since the 1960s in our recent history (e.g. Deimann & Farrow, 2013; Peters & Britez, 2008; Weller, 2011, 2014).

Since the fall 2022, AI is disrupting the field of education, distance and open education but this topic goes beyond the present project. Swissuniversities has produced a position statement: https://www.swissuniversities.ch/en/news-1/statements/kuenstliche-intelligenz-in-der-hochschullehre .

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