









# OpenMedScholars: Towards identifying competences for Open Scholars accross the Mediterranean

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### **Synopsis**

- 1. The project WP2: List of competences for the Open Scholar
- 2. Method to identify competences
- 3. Theoretical underpinnings: competence and scholar
- 4. Findings
- 5. Workshop aim & Activities
- 6. Discussion
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The OpenMedScholars project

## OpenMedScholars: a LH MENA funded project

**Goal**: Create a pool of scholars from the 5 countries involved (Morocco, Algeria, Tunisia, Egypt and Switzerland) who deeply understand the Open paradigm and act as catalysts and disseminators

#### **Specific aims:**

WP1: Identify institutional (and national) policies towards distance education, Open Science and Open Education

WP2: Identify a list of competences for the Open Scholar

WP3: Develop a technological sustainable environment to make the project's outputs accessible

https://tecfa.unige.ch/proj/OpenScholars/

https://www.hes-so.ch/en/hes-so/about-us/international/leading-house-mena

## WP2: List of competences for the Open Scholar

Identify a list of competences for the **XXIst century Open Scholar** to lay the ground for a competences framework. **Design a training** and identify features for a suited **professional development** environment for the Open Scholar.

#### **Outputs:**

- ➤ A list of competences for the Open Scholar in the Swiss-MENA context in view of elaborating a competences framework;
- > The design of a training for the Open Scholar;
- > The list of features for a suited professional development environment to support the Open Scholar.

Method used to identify competences

### How did we find the competences and the 3 categories?

- Identification of competences
- Systematic literature review in English with the 3 keywords: « open scholar », « open researcher », and « open educator » <a href="https://tecfa.unige.ch/proj/OpenScholars/WorkInProgress/WP2-SystematicLitReview.pdf">https://tecfa.unige.ch/proj/OpenScholars/WorkInProgress/WP2-SystematicLitReview.pdf</a>
- Definitions from the literature
- Review of existing competence frameworks (e.g. OpenGame, Open Educator, OER)
- SoTL (experience within the group of scholars)
- Identification of 3 main categories for the Open Scholar
  - Open Education (OE)
  - Open Science (OS)
  - Open Community (OC)
- => Theortetical underpinnings for the choice of sub-categories within categories:
  - OE: TPACK (Kohler & Mishra, 2013 based on Schulman)
  - OS & OC: UNESCO OS recommandations 2021

Theoretical underpinnings: competence and scholar

## Scholar / Scholarship

A scholar can be a student, a teacher, a researcher or any citizen with a genuine interest in science and knowledge. Usually, it refers to the **teacher and researcher's** activities in HE

Key components of the Scholar (Boyer, 1990):

- > Discovery: creation of new knowledge in a specific area or discipline
- > Integration: focus on interpretation and interdisciplinary work
- > Application: engagement with the wider world outside academia
- ➤ Teaching: "What we urgently need today is a more inclusive view of what it means to be a scholar a recognition that knowledge is acquired through research, through synthesis, through practice, and through teaching" (Boyer, 1990, p. 24, cited by Weller, 2011, p. 31).

## Open Scholar

(Cronin & Maclaren, 2018)

"The 'open scholar' began to emerge in the literature in 2009 (Anderson, 2009; Burton, 2009) and developed rapidly thereafter. Open scholarship was characterised as a "new type of education and scholarship context" which sought to maximise social learning, media richness, participatory and connectivist pedagogies, ubiquity and persistence, open data and research, and connections (Anderson, 2009). Weller (2011) proposed a definition of the open scholar encompassing open digital identity, open networking practices, use of open tools, and open publishing. Veletsianos & Kimmons (2012a) also proposed a definition of open scholarship as a set of phenomena and practices related to scholars' uses of digital and networked technologies for both research and teaching, all underpinned by "grounding assumptions regarding openness and democratization of knowledge creation and dissemination" (para. 3). Veletsianos and Kimmons articulated three major forms of open scholarship: open access and open publishing; open education (including OER and open teaching); and networked participation, also called networked participatory scholarship".

## Competence framework for scholars

#### Edudemia competence framework (Helfenberger):

- > Teaching and learning
- > Empowerment
- Academic community
- Professional commitment
- Institutional commitment



#### **ENGAGEMENT PROFESSIONNEL**

Toutes les compétences associées au développement continu des compétences pédagogiques, à l'apprentissage tout au long de la vie et à une attitude positive face au changement.



#### **ENGAGEMENT INSTITUTIONNEL**

Toutes les compétences liées aux activités des enseignant-e-s en relation avec les départements et les institutions, notamment au service de l'enseignement et de l'apprentissage.



#### **ENSEIGNEMENT ET APPRENTISSAGE**

Toutes les compétences en matière de planification des modules/cours, de coaching, d'évaluation formative et sommative de l'apprentissage ou encore de gestion des cours/modules.



#### **EMPOWERMENT**

Toutes les compétences visant à favoriser l'autonomie et la professionnalisation des étudiant-e-s, ainsi qu'à différencier et personnaliser leur parcours de formation. Grâce à ces compétences, les étudiant-e-s développent les capacités nécessaires à leur activité d'apprentissage.

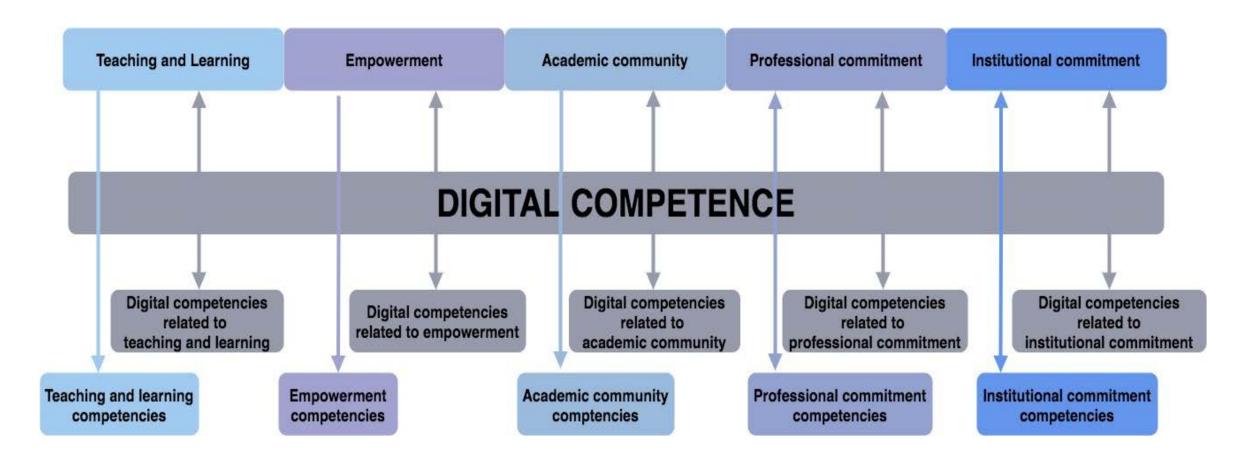


#### **ACADEMIC COMMUNITY**

Toutes les compétences liées aux échanges académiques, scientifiques et pédagogiques mis au service de l'enseignement et des étudiant-e-s.

https://blog.unidistance.ch/edudemia-un-referentiel-de-competences-pour-valoriser-lenseignement-superieur

## Competence framework for scholars - Edudemia (2)



## Competence: a definition from the perspective of activity theory

What is a competence (consensus in the literature)?

- > it is linked to action
- it is the goal-oriented ability to cope with certain tasks (or a more or less large class of tasks) in a given context
- ➤ it consists of elements such as knowledge, functional competence and behavioural competencies (Coulet, 2011)

Process and definition: The characterisation of competence necessarily involves the description of the organisation processes of the activity.

"A dynamic organisation of activities that are mobilised and regulated by a subject in order to cope with a given task, in a given situation" (Coulet, 2011, p. 17).

Our translation of: « une organisation dynamique de l'activité, mobilisée et régulée par un sujet pour faire face à une tâche donnée, dans une situation déterminée »

## **Findings**

## Categories and sub-categories to classify Open Scholar competences

Category

Subcategories

#### **Open Education**

- OER
- Open pedagogy: open learning, open teaching, open practices, open assessment

#### **Open Science**

- Open Scientific Knowledge: open research data, Open source software, open hardware, open publishing, open peer review
- Open Science
  Infrastructures: open access,
  open tools, open standards
- Open Research : open innovation, open methodology

#### **Open Community**

- Open engagement of societal actors
- Open dialogue with others knowledge systems
- Open collaboration

### **Digital Competences**

## Competences related to the Open Education category

#### **OER**

- OE1. Understand the potential advantages of adopting OER and open education approaches in different contexts
- OE2. Distinguish between Copyright,
  Open Licenses and Public Domain
- OE3. Choose and use Creative Commons Licenses
- OE4. Effectively search for high quality OER relevant to your teaching
- OE5. Reuse and adapt OER
- OE6. Revise/modify OER for your course
- OE7. Create and share OER

Please note that the current number, i.e. OE1, is an ID and does not reflect any ordering!

#### **Open pedagogy**

- OE8. Recognise different interpretations of 'openness' in Massive Open Online Courses (MOOCs)
- OE9. Recognise different types of open educational practices (OEP) and initiatives
- OE10. Take into account open educational practices in your course design and development.
- OE11. Adopt open assessment approaches (for ex. renewable assignments) in your course design
- OE12. Integrate accessibility and Universal Design for Learning (UDL) concepts into OEP to address the needs of specific groups of learners
- OE13. Integrate awareness of cultural contexts in your OEP and design for diversity, equity, inclusion, and epistemic justice
- OE14. Empower learners to enable personalised, diverse paths and engage them outside academia
- OE15. Engage in a process of scholarship of teaching and learning to continuously update your knowledge related to OE
- OE16. Be aware of policies (incentives, etc.) to value engagement in OE in your professional path
- OE17. Integrate open ethical principles in your practice with a critical mindset
- OE18. Follow ethical and legal guidelines in gathering and using information

### Competences related to the Open Science category

## Open Scientific Knowledge

- OS1. Use open research data to design effective research experiences
- OS2. Store, save, archive open data
- OS3. Support, develop, and manage research data
- OS4. Master practices to create metadata and to annotate your research data
- OS5. Practice and share knowledge of open publishing
- OS6. Practice and share knowledge on open peer review

## **Open Science Infrastructures**

- OS7. Master data capturing and data analytics tools
- OS8. Use open tools (e.g. repositories, software, hardware, open source, services)
- OS9. Be aware of open standards
- OS10. Use licencing in the digital environment
- OS11. Be aware of open science infrastructures, governance and policy

#### **Open Research**

- OS12. Respect copyright and intellectual property in the digital environment
- OS13. Respect research integrity and ethics
- OS14. Use open reproducible research (e.g. open lab/notebooks, reproducibility guidelines)
- OS15. Know how to deal with open access
- OS16 Develop research on open science projects
- OS17. Design and deploy open innovation
- OS18. Have and maintain persistent identifiers (e.g. ORCID, PUBLON)
- OS19. Encourage students to contribute to open source projects

## Competences related to the Open Community category

## Open engagement of societal actors

- OC1. Involve citizens into the research design as full participants from the research question to data analysis and interpretation
- OC2. Analyze and discuss benefits and barriers of particular open paradigm, including cases from within your own region or discipline
- OC3. Involve citizens, communities and professional actors to contribute with content and practices in course design
- OC4. Network and advocate to share values and practices of Openness (transparency, freedom, agency, empowerment, etc.)

## Open dialogue with other knowledge system

- OC5. Communicate with people and stakeholders outside the scientific community (e.g. NGOs and the mainstream media)
- OC6. Consider diversity in the content and in knowledge creation processes
- OC7. Adopt open and transparent research practices (e.g. co-design the entire research process)
- OC8. Engage in responsible research and innovation (RRI)

#### **Open collaboration**

- OC9. Manage contracts adopting new funding models (e.g. crowdfunding) and research reporting
- OC10. Develop skills in collecting data and doing collaborative research with non-scientists
- OC11. Integrate into your scholarly practice social and online collaborative tools
- OC12. Contribute to and share developed software as open source to the community
- OC13. Share with the community research and professional data collected on an individual basis
- OC14. Contribute to collective projects (for ex. software development) to advance a given topic

Workshop aim & Activities

## Today's workshop: aim and suggested process

#### Help us:

- Provide feedback on the competences identified
- Prioritise key competences for the Open Scholar
  - Open Education
  - Open Science
  - Open Community

Resources: expertise of each individual and group wisdom in addition to material provided

#### Hands on!

Activity 1: Feedback on identified competences

- ➤ You spread in 3 groups, each working on one dimension OE, OS or OC
- ➤ Each group goes through the competences and comments them on a likert scale from 1 to 5 (1: not really needed 5: very much needed) answering 3 questions:
  - 1. To what extent do you think this is a competence needed for the dimension your group is working on?
  - 2. Do you have any comment with regard to a competence?
  - 3. Do you see any additional competence that is important and should be added?

On the padlet, you rate each competence available using the stars (1 to 5)

> Present your findings in the large group and group discussion

#### **Padlets**

Open Education: <a href="https://unige.padlet.org/barbaraclass/open-scholar-open-education-dimension-6816qjcjojyrn768">https://unige.padlet.org/barbaraclass/open-scholar-open-education-dimension-6816qjcjojyrn768</a>

Open Science: <a href="https://unige.padlet.org/barbaraclass/open-scholar-open-science-dimension-i5huvpuful57c6zb">https://unige.padlet.org/barbaraclass/open-scholar-open-science-dimension-i5huvpuful57c6zb</a>

Open Community: <a href="https://unige.padlet.org/barbaraclass/open-scholar-community-dimension-17svdn071servjp">https://unige.padlet.org/barbaraclass/open-scholar-community-dimension-17svdn071servjp</a>

#### Hands on!

Activity 2: Prioritise competences for one dimension

- > You spread in the same 3 groups, each working on one dimension OE, OS or OC
- For the following respective case studies, identify and order the 10 competences that will be the most useful for the scholar to complete the task. Please note that the current number (e.g. OE1; OS3; OC5) is an ID to make the discussion easier!
- Present your findings in the large group and discussion

## Case studies (1)

Case study for the Open Education dimension – *Open Scholar: teaching services* You are a teacher and have been teaching your course for 10 years. From one year to the other, you have made some changes but this time you have heard about new possibilities, have met a peer-teacher from Africa teaching the same course and really feel the need to engage in a new course design. You discuss together and discover that he uses other resources shared by scholars from all over the world. You realise that the same course relates in fact to very different content and want students to take advantage of this. In your turn, you want to belong to a community of scholars who share their resources (syllabus, course content, activities, students' outputs, etc.).

## Case studies (2)

Case study for the Open Science dimension – *Open Scholar: research services* You are a doctoral student in your last months of your thesis and are ready to start writing THE article on your findings. You are very excited to share your results with the scientific community and looking forward to new interactions through peer feedback. You want to analyse your research data using an accessible software that can be customised according to your needs; you want the community to be alerted on your study from now and make your work-in-progress available and to end up publishing it on Open Access; you are also planning to get funding to continue your study; you would like to take it to a larger scale, i.e. reaching out to crowdsourcing; and you want to make sure your scientific identity is active and updated on the different researchers' plateforms to value all this work.

## Case studies (3)

Case study for the Open Community dimension – *Open Scholar: community services* As a scholar, you are passionate about your topic and want to share this passion outside academia. You work for the faculty of languages and you specialise in sign language. You engage with your community to share your know-how to the general public and to provide specific services whenever you can. You engage in events where you do advocacy about the issue and you train different communities on the special needs of the deafs. All these experiences will enable you to go back to academia with lots of interesting ideas that you can integrate in your practice. You end up codeveloping new teaching and research programmes with well reputed deaforganisations.

## Discussion

After the workshop, the discussion goes on...

... within the OEG community, at:

https://connect.oeglobal.org/t/competences-for-the-open-scholar/5310

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