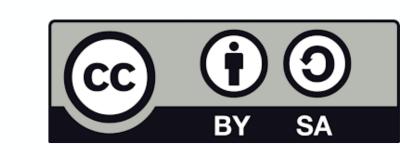
Open Scholar: What's That?

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Orientation

"Google Scholar" is widely used to search the scientific literature but have you ever thought about who a **scholar** might be? In our understanding, a scholar can be a student, a teacher, a researcher or any citizen with a genuine interest in science and knowledge. Aimed at newcomers to the field, this resource is about Openness, Open Education and Open Science. It is intended as an initial toolbox to understand the breadth and depth of the Open Scholar and the range of skills and knowledge required. Indeed, why should a scholar become an Open Scholar? Because "the opposite of open is broken" (<u>Jhangiani, 2017</u>). Because there is a need for a revival of the traditions of sharing and exchanging between scientists – as it was the case in the Middle Ages (<u>Langlais, 2015</u>) and more recently with the creation of the <u>Web</u>. Because in our knowledge society (<u>Valimaa et al. 2008</u>), collective intelligence (<u>Peters, Levy, 2015</u>), abundance (<u>Weller, 2011, chap 8</u>) and collaboration are needed to address challenges of the post-digital (<u>Ball & Savin-Baden, 2022</u>). The resource addresses epistemic and operational levels and is not linked to any course or qualification. It represents a workload of approximately 10 hours to potentially many more. The learning goals are, firstly, to discuss some of the basic aspects of the Open Scholar and, secondly, to use these knowledge and competences practically. The resource consists mainly of material from academics and in part from international organisations, generally produced in the Global North.

Introducing Openness

Key concepts and values of openness are transparency and freedom. From these values other unfold, i.e. sharing, responsibility, agency, ubiquitous ownership, respect, participation, democratisation, access, equity, etc. (<u>Baker, 2017</u>).

For a historical overview of Openness and Open Education, please read <u>Deimann, 2019</u>, <u>Weller, 2014</u>, <u>Peters & Britez, 2008</u> and <u>Peter and Deimann, 2013</u>.

The open landscape is made up of several domains, including Open Source Software, Open Science, Open Educational Resources, Open Technologies, Open Access, Open Data, Open Government, Open Policy, Open Galleries, Libraries, Archives, and Museums, etc.

All have in common values of Openness, share similar principles and generate value for and from perspectives of the common good. <u>Stacey's 2018</u> map captures the landscape with an insightful metaphor of a tree.

Focus on Open Science

Open Science: This is an umbrella term. <u>UNESCO</u>, in its 2021 recommandations says: "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."

Focus on Open Education

Open Education (OE): For the <u>European Commission</u>, "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".

Open Educational Resources (OER): "Are learning, teaching and research materials in any format and medium that reside in the public domain or are under copyright that have been released under an open license, that permit no-cost access, re-use, repurpose, adaptation and redistribution by others." (UNESCO, 2019). Understand OER with myth busting and a basic guide.

Open Educational Practices are inclusive of open pedagogy, often understood with respect to the use of OER but can also be conceived with more expansive conceptualisations, reaching out to social justice issues as developed by <u>Bali et al.</u>

Operationalising Open values

As a scholar, adopting these <u>Open values</u> (Open Ed SIG, 2017) in daily activities may mean a change in practices. You may undertake these changes at your own pace and searching for stances of <u>Openness</u> (Pomerantz & Peek, 2016) that make sense for you.

You may want to reflect on questions available in surveys on Open Scholarship (research oriented) or Open Educators (teaching oriented).

Operationalising Open Science

To get an insights into concrete day-to-day actions, you can consult the <u>FOSTER website</u>, which includes a handbook and the opportunity to up-skill and earn badges.

As a scholar, you may want to adopt the <u>DORA CV</u> - for Swiss scholars, you can find detailed information on the <u>SNSF website</u>, linking to <u>ORCID</u>.

To make your research data accessible, several open archive exist – in Switzerland there are <u>OLOS</u>, <u>YARETA</u>, <u>FORS</u> for instance.

As an author, you may want to adopt the green route that consists of publishing your article upon submission on an open platform like <u>Zenodo</u>. Once your article is published, should it not be <u>Open Access</u>, you can publish an author pre-print on an open archive like Zenodo or your institutional repository. To enhance collaboration, you may also share your research projects' on plateforms such as <u>Open Science Framework</u>.

Finally, as a reviewer, you may want to adopt <u>Open Peer Review</u> practices, as <u>Qeios</u> does in a very innovative manner.

Operationalising Open Education

If you are entirely new to OE, the first thing to do might be to engage with the community, for example Open Education Global which is one of the most active ones.

Where to start with OER? Find out what is available in your institution and start from there with the help of this <u>toolkit</u>. You may become an <u>open influencer</u>, inspired by South African colleagues' work (G. Fransman).

Should you be willing to design open textbooks in a participatory manner, this <u>handbook</u> with its case studies and "key takeaways" can help you get started.

If you like game-based learning, you can develop skills towards OER and OEP through the Open Game project – game and toolkit. Other guides exist for OEPs as the one based on the EU Open Education framework or the one by Huang et al. OEP have their 5R as do OER and sustainability. To know more about sustainability in education, you may want to read Sterling, 2021.

Finding relevant OER is still difficult but interesting OER repository <u>initiatives</u> are emerging. <u>Rubrics</u> to evaluate OER are also work in progress. You may also want to check <u>10 facts</u> about OER. Finally, Al is gaining momentum: to train in Al as a teacher, with an OER check the <u>Al4T textbook</u> and specifically on OER and Al, check the blog of the <u>UNESCO Chair</u>.

Focus on other Opens

Open Source Software and Hardware: Computer software and hardware and source code published under an open license may be used, studied, modified and distributed. It is copyleft rather than copyright oriented. It is a transparent toolbox: you can act, repair and adapt. More from the <u>guide all around Open Source</u>.

Food for thought and ideas for future research

Which are the next steps you would like to take? Would you like to engage with <u>Citizen Science</u> (<u>ex. 2023</u>), the <u>Commons, Policy</u>, technology, i.e. Al, or <u>economic models</u>? Or would you like to consider Openness at the philosophical level, reaching out to <u>epistemologies of the South</u> (2016, <u>ungoing</u>), e.g. <u>Buen vivir</u>, <u>Ubuntu</u>? Would you like to engage with the <u>roadmap</u> for Open Education drafted at an epistemic level? What about opening up to diverse knowledge systems (<u>UNESCO, 2021</u>, p. 15)? How to concretely go about it as a scholar? Can <u>radical participatory design</u> research bring insights to make these epistemologies visible (*vs* evidence-based research, e.g. <u>St. Pierre, 2006</u>)? These are just a few suggestions for opening up whole areas of research in the domain of openness. On an other subject, how do you consider <u>Open Washing</u>?

References, Societies, Conferences, Journals

Additional references are available: main journals, conferences, etc.; references on OE; other references on OE; references on OE;

Towards version 1.4 of this OER