

As we learn how to be academics, researchers and scholars, we find out very early on that the production of knowledge encompasses much more than asking great questions and answering them. The large majority of time is spent in methods and protocols to ensure that our answers are ethical, correct, verifiable, and somehow accessible to at least a handful of other people. Producing new knowledge is very expensive, and most of us have limited access to resources to support it. In fact, it is not uncommon to see governments cutting down the budget lines dedicated to research and education, affecting not only researchers, but the whole chain of knowledge creation and transfer, and even public policies in other countries (such as public health recommendations and species' conservation).

By sharing these resources and the results of the research cycle - datasets, protocols, reports, images, etc. - we wouldn't need to invest more to re-do something that was already done, and we could more easily build on top of other people's knowledge to create an interconnected and global network of human knowledge. Just like knowledge mobilization, this resource-sharing strategy also enhances inclusion by promoting knowledge exchanges between equity-seeking, underrepresented or excluded groups, and by "reducing inequalities in access to scientific development, infrastructures and capabilities among different countries and regions" ([UNESCO Recommendation on Open Science, 2021](#)).

My first contact with the open movement was when I was a teen and my older sister was an undergrad at a public university in Brazil. She was learning to use scientific papers for her assignments and she showed me [SciELO](#), a public, open access publishing platform from Latin America, with scientific papers free to access. By the time I was an undergrad, I learned that this was not the case for the majority of the scientific literature. There are many scholarly products behind a paywall, which are not even remotely accessible to a Brazilian student like I was. I understood quickly that accessibility to these papers would make a difference between professionals who could maybe afford to pay to go through those paywalls and those who can't. I have decided then that I should get involved in what I learned later that was called the "open movement" and open scholarship practices, in the hope that students and professionals from the next generations would face less barriers to access research resources.

What does "open" mean?

The Open Scholarship practices help scholars to optimize the impact of their research endeavours. It includes concepts such as open access, open education, and open data, each of them characterizing a specific aspect of sharing knowledge, but also flourishing as interdependent concepts, sometimes. Whenever you come across the term "open", it means that someone has thought about how other people could (or could not) re-use that product and has expressed that through an open license document with legal value. It also means that values related to equity, accessibility, inclusion and diversity are somehow playing a role in how this product was produced, designed and shared.

People often think that “open” means “free”, but that’s not always true. For example, you might need to buy open source hardware, but the fact that it is “open” means that if you find a bug or have a suggestion for improvement, you can make a contribution directly to the project. Or you can start your own prototype of your own hardware based on the one you’ve bought!

Another example is “open data”. When someone collects data for a specific research project, they start a research lifecycle that can either end with the publication of a paper, or get a “stretch” when deposited with a license on a data repository. Publicly depositing data allows other researchers to skip the process of collecting that data all over again, wasting resources and slowing down the production of new knowledge. If you have 20 minutes and want to reflect on data sharing, I recommend watching [this documentary](#) about sharing data years after collection.

Sharing data also helps to make your research trustworthy, because anyone can reproduce the analyses and check if the results are true. It’s also important to notice that data sharing is a practice that does not overwrite the right to privacy, and very often human data cannot be shared publicly. There are ways to account for that and still be part of the “open scholarship” movement, as long as the researchers are fully transparent about their processes.

A movement for change

The open movement tries to empower people to overcome the limitations of resource sharing in knowledge and culture production and usage. With that vision in mind, the Institute for Neuroscience and Neurotechnology of the Simon Fraser University is leading a revolution to make it possible for every member of the SFU community to implement open practices to their academic routines. Our role will be to connect all the open scholarship initiatives already in place at SFU (such as the open access and open data hubs at the Library, the Public Knowledge Project at Publishing, and the Open Educational Resources office), grassroots movements and the Knowledge Mobilization Hub to promote community-led events and programs to support students, faculty and staff to design their scholarly products under the “open lens”.

There will be many opportunities to contribute and collaborate to this movement! We will need community leaders to help us organize events and workshops, people to help us spread the word and to mentor other community members. If you want to keep an eye on what we’re doing, sign up to our newsletter [here](#).

Just like the KM Hub, we want to do more with what we know “by intentionally co-creating, disseminating, and implementing research”. If our dreams are to come true, in 10 years the whole SFU community will think of open scholarship as the only way that they know how to do things. It will not be a matter of resources or infrastructure – we will all be working together to share what we have the privilege to produce for the benefit of all.