



**International  
Federation of  
Library  
Associations and Institutions**

## **CONSULTATION: THE RIGHT TO ACCESS AND TAKE PART IN SCIENTIFIC PROGRESS**

**Response by:** The International Federation of Library Associations and Institutions (IFLA)  
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### Main obstacles to access and participation in scientific knowledge and its applications

- 1. What are the main obstacles to ensuring the right of all persons to access scientific knowledge and its applications, within and between countries? Please provide an example.**

Historic inequalities between and within countries have cumulative effects on access to scientific knowledge and participation and representation in the scientific process. Through this, they also lead to a situation where scientific progress serves some better than others, a situation that requires urgent and meaningful action.

In particular, and in recent decades, the digital divide has deepened disparities in the realisation of cultural rights (including the right to science). The spread of open access and open science – a movement enabled by the spread of the internet – is highly welcome from the perspective of the fulfilment of cultural rights, but needs to be accompanied by universal connectivity if it is not to become a factor of exclusion. While the share of the population without internet access is higher in general in least developed countries, it is also a challenge in remote, rural, or underserved locations everywhere, as well as for particular groups (those living in poverty, and still, far too often, women).

Meaningful connectivity, however, is about more than just the physical possibility to get online. Further gaps in digital literacy among populations within and between countries create additional barriers to meaningful access. As highlighted in the conclusions to the Futures of Education Summit, education systems too often have not been updated to teach the skills necessary to make use of the internet, and adult learning and education are not given the attention and investment it deserves.

The other pillar of connectivity is content. As highlighted above, the spread of open access and science has explicitly sought to overcome the phenomenon of paywalls, which served to exclude less wealthy institutions and individuals from access to research publications in order to maximise the profits of publishers (with researchers themselves seeing no financial benefit). Initiatives such as Research4Life do offer selected institutions in developing countries free access, but this is sub-optimal, given that publishers can choose which titles to make available, and non-affiliated researchers have few options.

Progress towards open access has been welcome, but it is vital to be attentive to the risk that barriers to access are replaced by barriers to publish, for example through high article processing charges (APCs). While there are some initiatives to offer waivers for researchers from developing countries, it is hardly ideal to oblige some researchers to beg for special treatment. Recent initiatives, led by UNESCO, to advance the cause of diamond open access (i.e. without payment by either authors or readers) are very welcome, and point the way to taking back control of science communication from profit-extracting companies.

Additional questions come from the fact that much research takes place in English, risking excluding those who do not feel comfortable in the language, for example as in the MENA region. There are also legitimate questions about how research agendas are defined, and the level of civil society involvement in this. We address questions around indigenous knowledge also below.

Another area of concern is around the lock-in of researchers into particular structures, especially with the vertical integration of different elements of research services by major publishing companies. Similarly, we are concerned that models of research evaluation – in particular those that favour impact factors often defined by publishing companies themselves – can also skew behaviours, and so limit researchers' independence.

Without action to address these imbalances, the body of research is lacking diverse perspectives, and researchers themselves are not as free to pursue priorities as they should be.

Looking beyond more 'traditional' forms of science, libraries have experience of engaging their communities in citizen science. Here too, English language dominance has presented a barrier to participation in some regions; there is strong experience among libraires of the importance of tailoring citizen science programmes to local needs, languages, and cultural context.

As stated in the [2022 IFLA-UNESCO Public Library Manifesto](#), local public libraries can be important points for connectivity and access to information in general, including scientific knowledge, and support digital and information literacy learning needed to enable meaningful access. Importantly, public libraries also have a role in wider science and research, allowing non-affiliated researchers to engage, as well as 'ordinary' citizens to get access to (and support in using) research outputs.

### Adoption of specific measures

- 2. Please describe how scientific freedom is respected, protected and promoted in your country. In particular, what kind of protection from interferences and threats from political, religious or commercial entities is offered? What are the main challenges? Please provide examples.**

IFLA notes with concern that censorship is experienced throughout the scientific process in many parts of the world. This includes censorship in the form of certain types of research or international collaborations being discouraged or defunded for politically motivated reasons, all the way through to notable examples of geographic censorship by publishers who do not provide access to all titles or articles in specific countries. For

example, climate science researchers in Australia have [suggested](#) that they have been censored or unable to fully report their findings to the public.

IFLA's perspective is international, and we function as an international non-governmental body that advocates for the principles of freedom of access to information and the belief that universal and equitable access to information is vital for the social, educational, cultural, democratic, and economic well-being of people, communities, and organizations.

We would note that we categorically do not see obligations to publish open access as representing any sort of constraint on scientific freedom. A key justification for scientific/academic freedom is the benefit that it brings for wider scientific and intellectual progress, something that is held back when publication only takes place in journals that impose paywalls.

Crucially, we believe that scientific and academic freedom depends on the possibility for scientists themselves to come together and develop transparent and clear community norms under their own authority, much as we argue for libraries in their work.

We do argue that a lack of progress towards Open Access and Open Science in all countries does pose a threat to scientific freedom in that it means that not all researchers are able to benefit from access to the full range of existing knowledge when carrying out their own research. We therefore believe that stronger and more explicit recognition of the importance of Open Access and Open Science as drivers of sustainable development is necessary.

Libraries in individual countries have long been key players in advancing open science and development, and today in particular are playing a key role in ensuring that the two come together for the benefit of all. They maintain Open Science infrastructures, free from interferences and threats from commercial entities, and providing advice and support to researchers. However, this is quickly becoming a very commercialised space, and libraries are often under pressure to adopt commercial solutions. Further investment in open infrastructures is essential.

Further, libraries are well-placed to call out inequalities, such as the low number of global south journals on platforms such as Web of Science, and work with policymakers to urge progress not just to find ways around barriers, but to remove them.

Finally, we are concerned that new efforts to regulate Artificial Intelligence, and the text and data mining (TDM) necessary to train algorithms will have a negative effect on academic freedom. Anything that obliges researchers to seek additional permissions to carry out TDM, or to use publisher-owned tools to do so, risks having a serious chilling effect on science in this area.

**3. Please provide information on measures adopted to:**

- **Ensure and develop scientific education for all, including adult education;**
- **Develop and disseminate accurate scientific information in formats available to all;**
- **Protect and promote science journalists in sufficient number to ensure democratic and genuine debates on scientific issues.**

Libraries around the world are key elements of the infrastructure for meaningful access to scientific information and education for all, and in particular in ensuring discoverability and interoperability of openly published resources that may not otherwise be found. Public libraries are particularly important for filling gaps in connectivity, scientific education, and in access to relevant, localised, information for the communities that need it the most.

For example, a [public library in Ghana](#) initiated a reproductive health education project in response to needs in the community. This programme fills a gap caused by a lack of adequate information due, in part, to the failure to include sex education in school curricula, as well as to societal taboos.

A similar initiative can be found in [Cuba](#), where 52 Havana City librarians working in collaboration with the National Centre for Sexual Education have been trained as health promoters to consult with library visitors, and to provide printed information such as newsletters, scientific papers, and medical guides.

Research libraries can also play an important role in developing and disseminating accurate scientific information that is relevant for their users. For example, the Auckland University of Technology Library's [Te Ara Poutama library guide](#) contains an set of resources on Hauora Māori (Māori Health) and indigenous research methodologies.

Partnerships between libraries and healthcare professionals can be beneficial for strengthening access. For example, the [Mental Health Bridges](#) project (USA) is a collaboration of library professionals in research and libraries of medicine with mental healthcare professionals. Its online tool was created to enable health literacy skill development for people with mental health issues.

Finally, investment in open infrastructures and platforms to publish and disseminate scientific knowledge, such as diamond open access journals, can help make scientific research more broadly accessible.

IFLA's [2022 statement on open access \(OA\)](#), "[10 years of the IFLA open access statement: a call to action](#)" stresses that "Full and immediate free access to research outputs and publications ensures that everyone – including researchers, policy makers, citizens, scientists, and the public – has the data, evidence, and knowledge they need to address societal, environmental, and global challenges".

Greater bibliodiversity and the need for diverse routes to open access, responding to local circumstances and needs, in a highly-constrained budgetary environment are necessary to ensure outcomes are equitable for libraries and their users.

#### Connecting science and policy-making

- 4. As recommended by the Committee on Economic, Social and Cultural Rights, "States should endeavour to align their policies with the best scientific evidence available", (General Comment 25, para. 54). How is this principle implemented, following which kind of procedure? How is this implemented in case of scientific dissensus?**

As IFLA works on the international level, it has engaged with partners to advocate for international policy that recognises the vital role of information for development, and influences national policy to do so as well.

IFLA was vocal during the development of the 2030 Development Agenda to advocate the important role that access to information has in supporting development by empowering people to make informed decisions and exercise their civil, political, economic, social and cultural rights. IFLA's [Lyon Declaration](#) (2014) called for Agenda 2030 to recognise the crucial role of access to information in supporting development.

IFLA further joined partners [ARTICLE 19](#) and the Global Forum for Media Development ([GFMD](#)) to [call for](#) good governance, access to information and independent media to be at the centre of the post-2015 development agenda.

Similarly, we are currently [advocating for cultural rights](#) to be integrated into the post-2030 development agenda.

We also argue for the importance of strong library services within governments at all levels which can act as [permanent science-policy interfaces](#). Through their understanding both of the wider scientific landscape, and knowledge of the needs of officials and legislators, they complement more formal process to bring scientific knowledge into policy-making.

Overall, the open movement provides an opportunity for more equitable participation in science, but there is more work to be done to ensure national and international policy support diverse participation. This includes advocating for rights retention in favour of researchers and their institutions, secondary publishing rights for any publicly-funded research, permissive licensing practices, and business models that do not threaten the core public interest in access to research and so the fulfilment of the right to science. We are interested, in particular, in models of copyright that accept that research is fundamentally different, and so do not follow the profit-extracting model that has dominated in the last decades.

- 5. In particular, what kind of science policy interface platforms, understood as channels connecting science with policymaking, have been put in place, to ensure input of scientific information in decision-making processes? What are the challenges and the elements necessary for the efficiency of such interfaces? How is the agenda set and who participates in these institutions?**

We would note the answer above that highlights that libraries themselves represent a key science-policy interface. We argue that there should be access to library services in all parts and levels of government that need to base decisions on wider research evidence.

#### Participation in science

- 6. How is 'citizen science' (ordinary people doing science) understood in your country? Is it considered important, and what measures have been put in place to support it, particularly in terms of access to information and data,**

**and participation in decision-making? What are the challenges? Please provide an example.**

Citizen science is understood more broadly than ordinary people doing science. It is public participation in the scientific research process, and involvement can range from helping to define the research question, to gathering or contributing data, to validating findings. This is of growing importance because citizen engagement can increase the impact of science.

Libraries around the world are leading the way in citizen science. Good practices were [shared](#) during a session on citizen science at the World Library and Information Congress 2023. An example is a project to transform branches of the Los Angeles Public Library System (USA) into neighbourhood science hubs with a focus on locally relevant issues.

IFLA has [noted](#) that these programmes can be particularly impactful in terms of climate empowerment.

As stated above, the localisation and relevant contextualisation is key to a successful citizen science programme. It is important that the scientific projects that citizens participate in are properly described and communicated so that citizens have an understanding of the context for a project and their participation in it. It is also a challenge to ensure that the data gathered in the course of a citizen science project remains accessible to the public.

In order to decentralise citizen science, libraries should be considered as primary partners among the local scientific communities from the beginning. Working with localised NGOs, such as the [Adopt a River](#) non-profit in the South Durban Basin (South Africa), can provide opportunities to connect with local government and civil society organisations to amplify impact.

**7. To what extent are indigenous sciences and alternative sciences acknowledged, supported and included in policy decision-making? How is the conversation ensured between science and other kinds of knowledge?**

The CARE principles provide a framework for indigenous data sovereignty, placing control over the application and use of Indigenous data and Indigenous Knowledge for collective benefit in the hands of the relevant communities.

Some countries, like Australia, recognise the CARE principles, but have more work to do in terms of incorporating these principles in respect to scientific knowledge. This requires better information policy decision-making and addressing complexities relating to cross-jurisdictional data sharing.

Although there is still space for support and inclusion of Indigenous sciences in national policy decision-making, there are projects in the civil society sphere that support more equitable approaches to science and knowledge access.

Initiatives like the [Respectful Terminologies Project](#) of the National Indigenous Knowledge & Language Alliance (Canada) seek to undo harm in the way information, including scientific and health information, is categorised. It seeks to create an open,

online platform of preferred vocabulary to describe Indigenous people, places, heritage, traditions, knowledge, and culture.

The [Labriola National American Indian Data Center](#) at the Arizona State University Library (USA) is an example of an Indigenous-led library centre where Indigenous students and community members can celebrate and critically engage with scholarship and creative works. It emphasises the medicine of the land, and connection to place for the wellbeing of the students and the community, and its staff offer culturally relevant information and research support to Indigenous students.

**8. What are the limits to the right of every person to take part in scientific progress and in decisions concerning its direction and for which purposes? Please provide examples if any.**

Clearly scientific participation, like any human right, is qualified by the need also to fulfil other rights. Any limitation, however, needs to be necessary, proportionate and transparent. We believe strongly in the power of community norms to define and enforce appropriate limits, as this offers a more nuanced approach to what are often complicated questions. As indicated above, we do believe strongly that copyright, while representing a structuring element of business models in the arts and creative sector, should not be placed on a podium in the field of research, given its emphasis on restricting access in order to drive up prices.

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