

8. Stimulate new publishing models for knowledge transfer

The problem

Although digitisation, globalisation and the development of the Internet have tremendously changed and accelerated communication in general, the scientific communication process remains fairly traditional. Excessive time periods between submission and publication, payment walls, embargos and other access barriers impede the transfer of knowledge. This obstructs the evolution towards an open and transparent academic process and the associated knowledge exchange with society at large. We train students to use scientific literature but when they leave universities they can no longer access This should change. Innovative models for knowledge transfer, like citizen science and crowdsourcing, are primarily seen as 'nice to have' and are not sufficiently embedded in regional and national research and innovation strategies.

The solution

- Encourage the development of publishing models that provide free access for readers/users.
- Bring in more competition into the academic publishing market; we need sustainable long-term funding for open access publishing models and auxiliary open access services (like DOAJ).
- Foster the development of new models for academic communication, beyond the traditional scientific articles.
- Explore alternative ways of releasing research results, of commenting on them and of measuring their impact.
- Facilitate bringing in new users – such as citizens– into the research process.

Concrete actions

- **All partners:** mobilise stakeholders for a fair, balanced and innovative publishing system by fostering structured dialogue among all stakeholders and sharing expertise and best practices. Take stock of the information needs among SMEs and explore how open science can help fill those needs.
- **National authorities and European Commission:** give political backing to universities in their negotiations with publishers about access to content.
- **Research Performing Organisations:** collaborate closely in negotiations with publishers, in order to reach agreements in which open access is the standard. Include citizen science into the mainstream.
- **Publishers, Research Performing Organisations and individual researchers:** experiment with new, faster ways of publishing, such as immediate publishing based on open peer review (flipped publishing). No longer accept disclosure clauses.
- **Publishers, Research Performing Organisations, individual researchers and research funders:** promote widespread application of citizen science as a knowledge transfer. This includes that the output of citizen science projects should be accessible.
- **National authorities, European Commission and research funders:** encourage parties to develop new models for knowledge distribution and for the various academic disciplines using start-up money, and guarantee sustainability in the long term by adequate funding. Broaden the Open Library of Humanities to the Open Library of Sciences for library consortia.
- **Research funders and Research Performing Organisations:** provide start-up money for alternative open access publishing models so that they can become established and sustainable. Provide less specific funding tracks, more flexible funding (including open science components in research proposals, faster calls), better promotion of funding possibilities for young/new/innovative stakeholders, including small-scale initiatives. Have specific research output translated to specific target groups, such as patients.
- **Research funders:** bring in new users, allow for new forms of funding, like crowdfunding. Think in 'terms of 'problem spaces' and develop Joint Open Science Initiatives (JOSIs) around a societal challenge. Make cross-border funding easier and fund risky projects more aggressively. Be critical in financing commercial entities with a poor record on open science adoption.
- **Research libraries:** act as publishers of open access for their institutions; create a database of open science best practices.
- **Publishers, Research Performing Organisations and individual researchers:** remove barriers to citizen science by charging no APCs and allowing citizens without institutional support to publish as well. Allow for the publication of negative results/data.
- **Funders, publishers, Research Performing Organisations and research libraries:** support discipline-based foundations that help flip subscription journals to FAIR open access by providing funds for APCs and transition by 2020.
- **Universities, university libraries, publishers and funders:** promote 'bulk' processing of APCs to reduce administration overload among researchers.

Expected positive effects

- Quicker, more effective knowledge transfer;
- Involving far more actors in the innovation of models for academic communication;
- Transparency in costs and fair pricing.