

Comments on ‘Science 2.0’ Response to the European Commission Consultation on ‘Science in Transition’

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Preamble

This contribution provides some comments from the German Leibniz Research Alliance Science 2.0 to the EC’s Consultation on “Science in Transition”.

According to the Leibniz Research Alliance Science 2.0; Science 2.0 is a grassroots or bottom-up process which is currently happening. There are no research policies, few funding programmes or other incentives which have initiated or are driving this process. Researchers world-wide are adopting new participatory technologies simply because they are benefiting from

- an increased collaboration
- a variety of communication channels to ease communication within their scientific network,
- an open discourse of critiquing, suggesting, sharing of ideas and data, and
- technology-enhanced participatory science

The Leibniz Research Alliance Science 2.0 consists of 35 members across different fields of science including universities, research institutes and information infrastructure providers from Germany, Austria and Switzerland. The Alliance very much appreciates the efforts from the European Commission to conduct a public consultation on Science 2.0 and to pave the way for more structured measures to further support researchers in the ERA in their new scientific publication and research behavior.

This paper provides some feedback on the questionnaire of the consultation and the according background paper. It also refers to the response from Science Europe, which makes recommendations at a higher level, and to the questionnaire filled in by ZBW – Leibniz Information Centre for Economics.

Recommendations

The term Science 2.0

The Term Science 2.0 has not been well defined so far by the community. But it is often connected to the use of social media in scientific processes. Other popular terms are Open Science referring to open all phases of research processes, digital science or digital science communication. The consultation refers more to open science rather than Science 2.0. Also the EC should be aware that “Science 2.0” is a registered trademark by Ion Publications (cf <http://www.science20.com>) and that some scientific disciplines do not feel included when the

term Science 2.0 is used (e.g. humanities). To include all disciplines, the EC might think about changing the term.

We recommend the terms “Opening Science” or “Research 2.0”. This would also better justify why open access, citizen science etc. is included in the questionnaire.

The scope of Science 2.0

The scope of Science 2.0 as used in the consultation is far too broad and does include almost everything which otherwise falls under the term “digital science”. One should be aware that for some of the topics mentioned in the consultation well established communities exist (e.g. open access, open research data, altmetrics, text and data mining) or are currently being established (e.g. Citizen Science, Crowd-funding). Not all these communities do see overlaps with Science 2.0. For example, Science 2.0 enables Open Access but Science 2.0 does not necessarily have to happen in an Open Access fashion. Finally, it will be difficult if not impossible to define a road map for Science 2.0 if all these aspects mentioned in the background paper should be taken into account.

We recommend defining a stronger focus on what is being defined as “Science 2.0” by the EC.

A European Community for Science 2.0

Science 2.0 is happening everywhere and will significantly change research and publication processes. Still, there do not yet exist a European Community in Science 2.0 or national Science 2.0 networks in the EU’s member states. One of the very few, if not the only network is the German Leibniz-Research Alliance Science 2.0 which forms such a community through its annual international conference on Science 2.0 with participants coming from 11 different EU member states. This lack of a Science 2.0 community in the ERA makes it difficult to define a research agenda for Science 2.0.

We recommend kicking off an initiative (i.e. in the sense of a mapping exercise) to identify the key players and communities in Science 2.0 in Europe, to form a nucleus of a Science 2.0 community and to jointly develop a road map for Science 2.0 in Europe.

Science 2.0 Infrastructures

There is a significant lack in European infrastructures in the ERA to enable Science 2.0. Many of the infrastructures which are related to social media in Science 2.0 have their servers hosted by organisations/companies in the U.S. (e.g. Dropbox, Slideshare). Due to their high usability these tools are widely used by the European researchers, but without knowing that often European data protection law is violated when using these tools. Their use is subject to US data privacy laws which do not necessarily correspond to the respective national privacy laws in Europe. Storing relevant European content on servers in the U.S. (thereby granting access to this content) might conflict with the EC’s ambitions to build up a competitive ERA and European economy.

We recommend the implementation of policy instruments which would pave the way for the development of European infrastructures supporting Science 2.0.

Policy measures for Science 2.0

The bottom-up character of Science 2.0 bears risks to policy measures. These risks have their origins in the principle of “users add value” and the organic uptake of Science 2.0. This

also means whenever there are “external” efforts aiming at influencing the scientific community, these efforts might result in the contrary.

We recommend implementing policy measures which emphasize the driving role of the researchers in Science 2.0

Difference in disciplines

Another remark is that Science 2.0 heavily relies on the scientific discipline. For example, the Humanities are lagging behind natural and technical sciences, e.g. as regards the use of social media such as twitter for scientific communication. One reason for this lies in the difference of the publication culture. While in the humanities the “gold standard” of a scientific publication is still the monograph, natural and technical sciences often publish in forms of much shorter conference papers. This is why all policy instruments and funding opportunities should as far as possible take into account differences in the disciplines.