

REPORT

Interactive session “How responsible is Citizen Science?”

Tuesday 8th November 2016 at the Museum für Naturkunde Berlin.

Contact Person / Responsible of session:

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1. About the session

Session held in the European Stakeholder Round Table on Citizen and DIY Science and Responsible Research and Innovation (RRI) as part of the DITOs project. This interactive session was coordinated by Fermín Serrano, Foundation Ibercivis, with a strong support from Claudia Göbel, MfN, and Daniel García, RRI Tools.

The main goal was to promote reflections and two-way dialogue between key stakeholders representing different communities in the context of citizen science and responsible research and innovation. Outputs, including this report, will be used for the policy paper on RRI that the ECSA is preparing.

Link to the website of the event:

<http://ecsa.citizen-science.net/events/ecsa-events/european-stakeholder-round-table-citizen-and-diy-science-and-ri>

The session was arranged in three main phases: conceptualization, discussions and wrap up. Finally the time for each slot was:

- 5 minutes introduction of the session format by Claudia Göbel, MfN, and Fermín Serrano
- 10 minutes talk: RRI in a nutshell, Daniel Garcia, La Caixa Foundation & RRI Tools
- 10 minutes talk: RRI in the context of TD research, Thomas Völker, JRC
- 40 minutes World Café for Discussion on Citizen Science and RRI areas
- 20 minutes wrap-up

The list of attendees will be published.

2. World Cafe Discussion design

Up to five tables were designed, following key issues on citsci and major features of RRI. The list of topics per table and the leading questions were:

1. Public engagement & inclusion & Gender equality. What are the most innovative cases of significant collaborations with independent citizen scientists? why? could you implement them in your context?

2. Open Access & Ethics. Even if research data is made open, are there reasons to place restrictions on how the data is used by downstream users?
3. Science Education. What are the best cases of citizen science education that link with RRI? why?
4. Governance & sustainability. What are the best cases of institutional change and uptake indicators for citizen science and RRI?
5. Open table, overarching questions linking citsci and RRI. Is citizen science responsible? what should we do to be responsible?

During the introduction, some key issues were outlined in order to raise also deeper reflections among the participants. For example:

- it is recommended to expand current academic reputation systems and evaluation criteria to account for social impact and engagement. Finding alternative metrics and incentives for scientific curricula that recognize social engagement may help to support this. Early involvement of the different stakeholders in the project design process is important in order to understand the different experiences and challenges of participating groups and to adapt the project design accordingly.
- Citizen Science implies handling data in a very sensible way, taking into account intellectual property rights, fundamental personal data protection rights, ethical standards, legal requirements and scientific data quality. Clear ethical guidelines and appropriate data licenses are needed for EU-wide data policy.
- Educational programs should stress collaboration between schools and scientific institutions, which needs to be reflected in scientific and educational value systems. These plans should cover key aspects of Citizen Science.
- We need measurement indicators and metrics to assess public engagement activities and the impact achieved at different levels (scientific, societal, economic, environmental, behavioral...) for the wide range of projects of Citizen Science.

3. Report of the discussions, debate and

We brought together more than 60 citizen science experts, practitioners and policy makers from all around Europe. However, the lack of cultural diversity was mentioned several times.

Participants had freedom to pick up a RRI feature, to choose one table, and to find new questions. They had cards to write major issues and flipcharts were available too. Participants were invited to balance EU scale while considering the features of each specific project and local environments.

Table 1 reported things that work well and other that do not work so well. As good cases mentioned, we have DIY sciencespaces/hackspaces that are completely horizontal. People can appear without scientific knowledge and they got exposed to scientific thinking. No leaders, no agenda, they just come to give it a try. Another example coming from the far east where there are many environmental problems and scientific communities are working with people who are affected with the problems which are subject of research. If you want to study a problem, e.g. dementia or air pollution, go and talk directly with the people involved.

“It is about the repeated sentence: nothing about us without us”.

Among the things to improve, it was acknowledged that some citizen science projects they only talk and advertise in circles very intellectual, not really economic or socially diverse. The fact of doing this in a university or in a museum leads to thoughts like “I’m going to see my friends in the pub instead”. As a result, our cultural diversity is not very good and it is a massive issue.

Another pertinent example is Open Air Laboratories that also mixes topdown and bottom up which is nice. And environmental agency has an archive but quite often environmental problems happen to be raised by the community and by the time when local government starts to do something about it it costs 10 times much to do it as it would when it was first raised by the community.

Table 2 had the added difficulty of having two issues to deal with. It was discussed about the nature of structural reforms needed to increase public engagement in Science, what does it exactly mean.. About indicators, we should concentrate on quality and not in quantity as it is the case now, since researchers are promoted without considering the way that research is done with the communities. Those indicators must be meaningful and we need to decide for whom is this meaningfulness (it raise different angles). So indicators have a meaningful relation.

Also the concept of engagement was under revision. How do we involve people? do we connect institutions leading to better science, citizen-based? It is required better training for researchers to be more communicative and to educate people to understand the scientific work

“We have to make institutions more open. Only one open-doors day is clearly not enough, we need to enrich the contact with the people.”

Table 3 outlined barriers and difficulties related to the different levels of interests also cultural barriers. The time available and resources in general i.e. money are issues also. It is also mentioned pre-existing level of education considered as input of the process, and the information required to get engaged in a given CS project, but also increasing knowledge in the process as flowing of the process. Techniques used in CS can also be considered in CS endeavors. But it is acknowledge that no process can be perfect or consistent and there must be some barriers. knowing that can be helpful.

“It was discussed about formal and informal settings, not only in classroom-like environments”

About the sustainability of a projects. if we create a CS endeavour to continue afterwards, it should be more than only data, there must be a follow-up where the citizens themselves keep the education process on. This table also talked about the need two way discussions from the very beginning to reframe the problem research and agenda, aligning with the real need of the people. When addressing citisci education indicators, remind that accounting has to be accountable. As good example, students universities and science shops are nice, embedding real problem in education to identify the question and students to work with the community.

Table 4 focused on ethics. Restrictions on data availability should be defined by the project’s research questions. The project’s questions should be defined by all participants in the project, including of course citizens. Besides what stated above, citizen science

projects should try to make collected data as openly accessible as possible, except for a) Sensitive personal data, and b) Sensitive environmental information (e.g., location of endangered species).

For policy makers (especially those at the EC): they should open up the discussion on how open data can be used by private companies for products or services subject to restrictive licenses (copyright, patents, etc.). This is one recurrent concern from the research community regarding open science: “does open science mean companies will make profit with our findings without having to pay anything for accessing our results, methods and data?”

Due to the lack of time available, since the lunch was already prepared and the agenda was tight, and the fact that the person in charge of reviewing Table 5, the session concluded then with a big applause in the room.