Collaboration between citizen science projects

Barbara Heinisch, Centre for Translation Studies, University of Vienna, Austria

Collaboration between citizens and academic researchers is a major area of interest within citizen science. Up to now, far too little attention has been paid to the collaboration between citizen science projects themselves. There are (inter)national citizen science projects that cover the same or similar topics and that would allow for synergies, including the re-use, joint use or exchange of data, participants, methods, resources and infrastructures.

A workshop during the Austrian Citizen Science Conference 2018 examined needs for cooperation among citizen science projects as well as barriers to collaboration.

The 20 participants were primarily researchers who were partly also citizen scientists from German-speaking areas in Europe. Natural sciences, social sciences, interdisciplinary projects and one humanities project were represented.

They addressed the forms of cooperation, the advantages and disadvantages of as well as obstacles to collaboration. Other topics were interfaces, infrastructures and platforms that are already available and the framework conditions for collaboration between participatory projects.
The findings show that cooperation in the form of (informal) exchange of knowledge, experience and good practices is crucial. The participants advocate the creation of a platform for exchange (of ideas, good practices, lessons learned). They also emphasise the importance of networking (to find potential collaboration partners).

A report summarising these results may serve as a basis for stakeholders to take strategic action to encourage collaboration in the citizen science community. Further (more extensive) studies may analyse already existing cooperation schemes and combination options of citizen science projects including the merging of projects and the associated challenges.

Forms and levels of collaboration

Associations and networks

Associations in Europe, North America and Australia have formed to create a shared understanding of practices, opportunities and standards in the field of citizen science. They are institutionalised hubs for sharing knowledge and practices to increase the impact, quality and reputation of citizen science. Associations such as the European Citizen Science Association play a key role in building a community (of practice), providing guidelines and advancing and (re-thinking) scholarship. They aim at collaboration, cooperation and shared efforts as well as fostering exchange on a global level and at providing support for local communities.

Broker for information exchange
Networking events
Researchers' Night or Citizen Science Days
Thematical overlaps between projects
Exchange between citizens and researchers on all levels
Joint recruitment of participants
Recommending other projects
Publishing and disseminating best practices
Submitting joint funding applications
Sharing data
Joint use of personnel and resources
Finding new cooperation partners
Conferences
Citizen representatives at universities
Administrative units at research institutions serving as hubs
International exchange

Sharing of knowledge, good practices

Platforms for exchanging ideas, good practices and experiences or for finding cooperation partners as well as networking are important means to promote cooperation between (participatory) projects. Researchers adopting a citizen science approach may require meta-information on citizen science projects, including information on starting a project, important aspects to consider when implementing a project or mistakes to avoid. Therefore, exchange of experience between researchers (and citizens) in participatory projects is crucial

Pros and cons of collaboration

Advantages

Multilingualism as an asset
Obtaining advice
Exchange of ideas
New ideas
More democracy
More visibility
Plethora of methods
Joint use of platforms
Different perspectives
Joint use of infrastructure
More relevance
Joint use of resources
Different competences complementing each other
More data for all
Strengthening the citizen science network
More outreach
Capacity building

Disadvantages

Different languages
Spatial distance
Terminology
Different mindsets
Making compromises
Temporary employment
Sensitive topics or confidentiality
Different meta competences
Different (disciplinary) project cultures
Different motivations
More administrative effort
Benefit is not guaranteed
Different contributions of time and effort
Losing flexibility
Communication is more difficult
Different educational requirements
Job risk
Competition
Clashing perspectives
Self-elimination of researchers
Stealing of ideas

Overlaps

Projects may overlap in different aspects. There might be spatial, temporal or thematical overlaps. These overlaps would allow for exchange of data, participants, methods, tools, resources, etc.

Project directories

Websites listing citizen science projects make a wide array of topics in and types of citizen science visible (in a certain region). International and national directories in Australia, Europe and North America may help researchers and citizens to find cooperation partners.

Framework conditions

Temporal overlaps
Spatial overlaps
Responsibility
Ownership of material developed in a project
Legal conditions
Political conditions
Openness
Funding
Common values
Contact
Sympathy
Mutual trust
Thematical overlaps

(Metadata) Standards

The Data and Metadata Working Group intends to develop international standards for data and metadata in citizen science to facilitate data sharing and data interoperability. Currently, this working group develops the PPSR_CORE (public participation in scientific research) core metadata standards. These standards cover two data categories: Project metadata that describe activities and citizen science projects on the one hand, and observational metadata that describe the collected data, on the other. The first step is data interoperability between data repositories, such as citizen science project directories in North America and Australia.

More information

Please contact: Barbara Heinisch
barbara.heinisch@univie.ac.at

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