

Charter of citizen science and participatory research in France

Supporting and promoting collaboration between scientific research stakeholders and civil society

Preamble

Collaborative programs between the scientific community and civil society (as defined by the European Economic and Social Committee or UNESCO) are surging. Research organizations, universities and other higher education and research institutions are partnering with a growing number of associations, training organizations, NGOs and cultural and socioeconomic stakeholders in a variety of fields and sectors.

Stakeholders in citizen science projects are increasingly numerous and varied. They are motivated by scientific curiosity or a desire to solve complex problems, including economic, social, health, environmental, cultural, educational, ethical and identity-related challenges. This movement has also resulted in an array of initiatives led by ministries or local government authorities and is supported by the inclusion in the French Act of 22 July 2013 on higher education and research “to strengthen interactions between science and society”.

The development of participatory research and citizen science is expected to expand further and last following:

- the successful outcomes of many projects from a wide range of fields;
- the rise in the overall level of education in our society;
- the challenges of cohesion and solidarity our society now faces;
- the increasing willingness of citizens to get involved in public decision-making processes and a greater willingness of educational and research institutions to engage with citizens;
- the expanding possibilities made available by digital sciences and technologies.

As illustrated in the February 2016 “Citizen Science in France” report, the type and intensity of these interactions vary depending on the project: data production or analysis, fundraising, development of scientific questioning in response to real-world problems, joint development of research projects and programs, etc.

However, these many initiatives are not well known to most of society, the media or decision-makers. The motivations and results of the various involved stakeholders are also not well publicized. Finally, the success and dissemination of these actions are dependent upon respecting certain values, principles and conditions.

By adhering to this charter, the signatories agree to support the positive development of citizen science and participatory research. This charter complements the French National Charter of Scientific and Technical Expertise (2010) and the French National Charter for Research Integrity (2015), as well as various charters on partnerships.

Definition

The signatories adhere to the following definition: citizen science and participatory research are types of scientific knowledge production in which stakeholders from civil society, as individuals or groups, participate with researchers in an active and deliberate manner.

Shared values

Promotion of cooperation and production of public or common goods

Through their approaches, the signatories express their desire to promote the development of interaction and cooperation between civil society and the scientific community. These collaborative initiatives support the principles of nonrivalry and nonexcludability regarding the knowledge produced. They can be supported by joint management of these goods if the stakeholders express the need and agree to do so.

Respect for stakeholder autonomy and mutual recognition

The signatories acknowledge the diversity and legitimacy of the expectations and organizational structures of stakeholders from the scientific community and civil society. They agree to honor their respective autonomy and commit to the mutual recognition of citizen science stakeholders without instrumentalizing them. This mutual respect fosters capacity building and the ability of stakeholders to reflect, analyze and debate.

Knowledge diversity and stakeholders' power to take action

The signatories acknowledge the knowledge diversity of the different stakeholders involved in the citizen science initiatives. They recognize the role these initiatives play in strengthening stakeholders' ability to take action. These joint initiatives may also aim to enhance and encourage broad participation as well as support the social advancement of as many people as possible.

Ethical conduct and scientific integrity

The signatories agree to respect the following principles on ethical conduct and integrity, which aim to ensure the transparency of citizen science projects and the mutual respect of involved stakeholders. These principles concern the entire life cycle of each project: the motivations of the project stakeholders and the purpose of their collaboration, the development of the project objectives, funding, the use or creation of a shared language, the adopted scientific approach, and the dissemination and use of the results obtained. The signatories also agree to ensure ethical conduct in citizen science and participatory research.

A rigorous and shared scientific approach

The developed approach shall be of a high standard and ensure quality science in the work carried out as well as reliable and reproducible data. The project initiators and scientists who develop the research protocols shall strive to clearly describe all methods used and the necessary resources (tools, infrastructure, equipment, training, funding). All participants shall be able to participate in and fully understand the scientific process, as well as the end purpose of the results obtained from the project. They agree to carefully, objectively and honestly implement the protocols.

Explicit governance

The methods and level of individual or group involvement of scientific and civil society stakeholders in the governance of participatory projects vary depending on the project. The governance bodies responsible for managing the projects and coordinating the various involved stakeholders shall be explicitly indicated. The governance arrangements shall be determined by all project initiators and accepted by all participants.

Concerted use of data

All rights of reproduction, dissemination and use of data and knowledge shall be specified in advance for all program stakeholders, in line with current regulations, by means of a contract or agreement to general terms of use. Access to all and sharing at no cost are also possible.

Privacy policy

Personal data collected by a citizen science project shall be carefully managed in order to protect participants' privacy and obtain their informed consent.

Fair credit given to each stakeholder

All stakeholders' contributions shall be fairly credited and recognized. Scientists' involvement in participatory scientific research, and especially their leadership activities, shall be taken into account in the same way as any other scientific activity with regard to their career assessments and development. Recognition of stakeholders who are not professional scientists may take a variety of forms, which shall be clearly established from the project outset. In particular, scientific publications and other products resulting from the projects shall clearly mention the contributions of the various stakeholders.

Adapted evaluation of scientific initiatives

Citizen science initiatives shall be evaluated according to the same standards as any other scientific project: evaluation shall take into account the usual criteria with regard to the quality of the research and the results. Evaluations shall also take into consideration the initiatives' impact on participants and compliance with the principles specific to citizen science initiatives as set out in this charter.

Conditions for success

The signatories are aware that the success of citizen science projects also implies sufficient resources and quality implementation.

Efficient and timely resource management

The availability of human and financial resources, as well as equipment and infrastructure in many cases, is essential to conduct citizen science projects. There are a range of options to achieving these means: appropriate and long-term resource management, seeking alternative public and private funding, or pooling resources from the various stakeholders.

Adequate digital tools

Digital sciences and technologies are increasingly being used to facilitate the gathering, management and exploitation of data and to support interaction between stakeholders. The digital technologies put in place for the projects shall be accessible and relevant to the needs, abilities and level of commitment of the different users. They shall be deployed on a relevant geographical scale.

Providing support for stakeholders

The initiators of a citizen science project shall make efforts to support the various participants, work with stakeholders or professionals from the relevant sector to offer facilitation services, and provide educational tools and appropriate training.

Accommodations for educational stakeholders

Citizen science programs are part of a broader dynamic to instill educational principles through research from an early age. Deploying them in educational environments – whether academic or practical – requires taking into account several specific needs: training and support of all those involved (students, teachers, educators, inspectors, facilitators, mediators, volunteers), the time scale of those involved, inclusion in cross-cutting activities such as multidisciplinary education, the choice of fun and innovative pedagogical approaches.

This charter was signed by around thirty higher education and research institutions, NGOs and associations on March 20, 2017 at the Ministry of National Education, Higher Education and Research in the presence of Thierry Mandon, Minister of State, attached to the Minister of Higher Education and Research