



Inclusive Science and European Democracies

Policy Brief Series  
Promoting Deliberative Participation in Europe  
**VALUING CITIZEN ENGAGEMENT IN  
SCIENCE GOVERNANCE**

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## Innovation Targets

- Taking **Citizen Science** initiatives, in all their diversity, as a **Methodological Toolbox** to improve participation and deliberation in Democracy.
- Taking the **role of science-based knowledge** in public policy and democratic decision-making – central to knowledge societies – to improve **Participatory and Deliberative Processes** and to complement **Representative Democracy**.

## Consortium

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# Valuing Citizen Engagement in Science Governance

In this policy brief, ISEED proposes an inclusive and participatory approach to decision-making modelled on citizen engagement in different forms of science-driven projects.

The conclusions of our research emphasize that the governance of science should embrace a range of interests and contributions coming from alternative styles of scientific research.

To achieve this, we suggest overcoming a naïve model of neutral and top-down type of expertise and endorsing a model of decision making which also includes the contribution of citizens as providers of potentially valuable knowledge. Such plural and interactive model is crucial for knowledge-based democracies in Europe.

## OUR POLICY RECOMMENDATIONS

1. **Rethink** the 'Governance' key in RRI through the lens of citizen science, in particular by strengthening the relationship between the policymaker and the citizen scientist, which presently appears lacking.
2. **Pursue** a policy of making citizen science, whenever possible, an attribute of scientific research starting from the very drafting of research projects.
3. **Design** citizen science projects as training grounds for the creation of a democratically 'engaged citizen', and for the creation of social networks where such citizens can acquire a much-needed sense of belonging. School curricula could be used and rethought in view of fostering such networks.
4. **Promote** multi-layered forms of "public engagement", where the "public" refers not only to citizens but to a variety of social and political actors, including underrepresented groups and people lacking citizenship status.
5. **Encourage** institutional commitment towards making citizens more skillful in deliberation, which entails awareness of how to use technological tools (such as the Argument Extractor tool piloted by ISEED, that is a digital tool able to analyse the causal form of arguments in online debates) in interaction with more traditional, non-necessarily digital, forms of argumentation.

## RESEARCH OVERVIEW

Our research has produced an analysis of the notions of "public understanding of science", "lay expertise" and "inclusive objectivity" in the context of how science is used in political decision making, in view of assessing how citizen participation in science can become an added value for science, democracy and citizenship. This led to the recognition of best practices and recommendations in relation to citizen science, governance, public engagement, and scientific research design.

## METHODS

Our methods included conceptual analysis, bibliographical research, and philosophical/theoretical assumption testing, pursued in a constant informative exchange with the results and outputs of the empirical research conducted in ISEED.



*National Workshop in Italy. UNIVE.*

## RESULTS

Our research suggests that:

- The notion of lay expertise offers a tool to criticize an elitist take on representative decision making, contributing to the strengthening of the relationship between policymakers and citizen scientists.
- Public understanding of science must address the different types of public problems that call for social deliberation and inclusive decision making.
- The idea that objectivity should be inclusive implies endorsing, context by context, a variety of interests and needs including those of under-represented groups of citizens, thus encompassing multi-layered forms of “public engagement”.
- Participation is a diversified notion, that includes diverse levels of engagement, a variety of actors, and a range of domains implementation.
- The most suitable model of public sphere is that of a community of equal and yet epistemically diverse inquirers, able to contribute, in a variety of forms and ways, to public debate and to the production of socially useful knowledge.

## DISCUSSION

The rationale for each of the recommendations above is as follows:

- Good governance should suit alternative models of scientific inquiry and not only traditional empirical science, as it appears to be prevalent at present.

- Endorsing such a policy will allow turning 'lay expertise' into an added value of research and using it as a tool to contrast an elitist perspective of expertise.
- The creation of social networks is pivotal for citizens interested in being involved in science-related projects, in that they can share data knowledge, enhance self-confidence, and learn to trust the tools made available by the shared work process.
- The diversified experience of participation offered by citizen science projects (e.g. collaborative, co-productive) could be used as an instructive model to rethink public engagement as a multi-layered form of participation.
- As the cost and problems of organising large-scale face-to-face interactions are formidable, digital platforms and tools may be seen as an inevitable pragmatic solution. However, the online world is viewed by many with concern. How to balance offline in-person interaction with inclusive online spaces, while preserving the values of democratic debate, is a priority for both platform developers and offline communities. Of course, bottom-up awareness of availability of technological tools and of how to use them is mandatory for such a balance to occur effectively.

## RELEVANCE TO POLICY-MAKING

We would like the recommendations above to be of interest to:

- Policy makers in local governments (regional and national level): to make them aware of, and/or reiterate to them how to choose the best/most suitable practices in science governance and citizen engagement, to encourage a new kind of pluralistic evidence-based policy design, able to rely on a variety of sources, styles of collection of facts and levels of interventions, and to launch practicable interactions between the policymaker and the citizen scientist.

- ▶ Research institutions and scientific agencies (such as UKRI or JRC): to reinforce the importance of including citizen science in research projects, starting from the very design of research plan, and to promote the adoption of RRI principles in pursuing research.
- ▶ The education sector (schools, universities/higher education institutions and institutes): to further science literacy at different levels of learning (including awareness of the value and role of science in society), to stimulate the interaction between scholars/researchers, governmental institutions and the public, and to promote diversity and inclusion in policymaking.
- ▶ Citizen/civil society organizations (politics, health, science advocacy): to consolidate the idea that citizen engagement in science-related projects champions democratic changes at the community level, by cultivating active participation, nurturing deliberative skills, and incentivizing the creation of more “engaged citizens”.

ISEED maps and explores how inclusive science can support European democracies.

For more information feel free to contact us at: [communication@iseedeurope.eu](mailto:communication@iseedeurope.eu)

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*Authors: Chiara Lovati and Eleonora Montuschi*

*Series Editor: Sophia Efstathiou*

*Designer: Sarah Santos*



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