Coop's Scoop: Federal Citizen Science Tool Kit on next #CitSciChat

October 6 2015, by Caren Cooper

Credit: Hadzabe after hunt by Andreas Lederer, farmer by David Baldi, children working in Georgia 1909 (Library of Congress), and Information Technology logo by Jhonathan Zamarchi

Senator Chris Coons (Delaware) has made it unambiguously clear that federal agencies should embrace crowdsourcing and citizen science. Senator Coons introduced the Crowdsourcing and Citizen Science Act, the first proposed bill to clarify that all military branches, commissions, and executive branch agencies have the authority to harness the expertise of the public to more effectively carry out their missions.

Governance practices change with the economic basis of society, which are varied and change over time. After the transition from hunter-

gatherers to agrarian society, there was a shift to industrial societies. Now these classifications are proliferating with the most recent shift to an information society, as well as a network society. The newest economies are mediated by communication technologies, in which sharing information and the production of knowledge are key commodities.

A prominent feature that shapes civilization is overlooked when we define a type of society by its dominant economic sector. That feature is leisure time. The quality of humanity's future may depend less on what people do on the job and more on what people do off the job. An individual's most valuable expertise may be put to use after punching out of the employment clock. Millions spend their non-work time assisting in scientific research, a process known as citizen science.

Citizen science is a story repeated over and over again. When ornithologists need data spanning states and countries, they ask bird watchers. When entomologists want information about bee pollinators in cities, they ask gardeners. When meteorologists want to forecast fine-scale patterns in weather, they draw on observations by people with rain gauges. When people want to know whether a neighboring industry is polluting their air or water, they collect and analyze samples with home tests kits, send samples to professional labs, or make hardware alternatives. Citizen Science has been an independent innovation in a wide range of disciplines, which goes to show how science needs the public just as the public needs science.

How To: Step by Step

This toolkit shows five basic process steps for planning, designing and carrying out a crowdsourcing or citizen science project. At each step, you'll find a list of tips you can use to keep your project on track. See the process steps

Case Study Overview

Case studies in this toolkit serve as models and provide success stories and challenges to consider while planning a project. You can browse through agency case studies to get ideas for a project of your own. Browse case studies

Resource Library

The resource library provides a list of all resources in this toolkit which you can browse through by category. You can also find resources within each of the process steps in the "How To" section of the toolkit. View resources

Map of Federal Crowdsourcing and Citizen Science Projects

Database of federal crowdsourcing and citizen science projects courtesy of the Commons Lab.

Federal Crowdsourcing and Citizen Science Community

The Federal Community of Practice on Crowdsourcing and Citizen Science (CCS) meets monthly to share lessons learned and develop best practices for designing, implementing, and evaluating crowdsourcing and citizen science initiatives. Learn more about the CCS

Other Innovation Communities

- Challenges and Prizes ⧉
- OpenGov ⧉
- Ideation CoP ⧉
- DigitalGov ⧉
- Data.gov ⧉
- SocialMedia CoP ⧉

Learn about these communities

Screenshot of tool kit created by Federal Community of Practice on Crowdsourcing and Citizen Science

Over 40 Federal agencies recognize the power of the non-work time of the public in producing new knowledge. These agencies belong to the Federal Community of Practice on Crowdsourcing and Citizen Science (FCPCCS). Representatives from these agencies developed an open, online tool kit to guide agencies (and others) in best practices for the design and implementation of citizen science projects to meet agency missions.

Last week, colleagues and I celebrated the [tool kit](#) at a citizen science forum, hosted by the White House Office of Science and Technology Policy and the Domestic Policy Council, called "Open Science and Innovation: Of the People, For the People, By the People."

Industrial societies function with a high division of labor, but today we are networked to manage information exchange to collectively make discoveries, irrespective of one's type of employment. Senator Coon's bill will help ensure that our government agencies open doors to public participation in order to reach our collective potential. With citizen science, we can transition to a collaborative society.

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