

## [Developing a Guidebook for Community Science](#) [1]

Submitted by Raj Pandya on Fri, 2015-10-30 18:37 Wednesday, January 6, 2016 - 16:00 to 17:30

**Event:** [Winter Meeting 2016](#) [2]

**Session Type:** [Breakout](#) [3]

**Room Location:** [Thurgood Southwest](#) [4]

**Expertise Level:** [Beginner](#) [5]

**Collaboration Area:** [Partnership](#) [6]

### **Abstract/Agenda:**

It is a truth universally acknowledged that a community in possession of a good challenge must be in want of some data. Whether it is a city worried about climate vulnerability, a neighborhood interested in reducing health impacts from air pollution, or a region concerned about potential conflict from trans-boundary water issues, the utility of data is obvious – especially to the people who have the data. Nevertheless, it is very challenging to connect that data to application. Communities may not appreciate the relevance of data, might not have the time or energy to deal with its complexities, might be overwhelmed by the choice of tools, or have trouble connecting data to the tools and data they already have. All of these challenges, have aspects of a social and interpersonal challenge: how do people from very different backgrounds and cultures, with different skills, rewards, incentives and vocabulary connect and work effectively together. It would be helpful to have a guidebook for data providers who want to engage with community leaders and be part of solving real-world problems.

I'd like to propose a session to build such a guidebook. We would begin with a series of lightning talks: ideally 6 success and 6 cautionary tales, drawn from experience. The talks wouldn't be about the projects, they'd be about what worked and what didn't. A round-robin discussion where anyone could add additional stories or experiences would supplement these examples: the result would be a series of vignettes of what has worked and what hasn't. Breakout groups – one for success and one for caution – would distill these vignettes into a series of do's and don'ts. Together, we would produce a concise actionable guide, with illustrative examples, for data providers who want to work with communities.

### **Notes:**

While I can commit to inviting some projects I've been lucky to work with through AGU, this session will depend on submissions from the ESIP community. Please sign up for the lightning talks – and you can sign up to share both successes and lessons-learned from the same project.

### **--- Notes from the Session at Winter Meeting 2016**

NSF funding cuts to geosciences. How can we do more with less funding? How can we engage communities?

- “science is a little bit like sex... you can do it alone but it's more fun if you don't”

ACADEMIC REWARD STRUCTURES ARE NOT PERFECTLY ALIGNED WITH COMMUNITY VALUES / IMPORTANCE

- Citizen science efforts can create a level playing field between scientists and community members, especially when considering pro bono work

## **IMPORTANT: citizen science: How does “MY DATA” look**

- can the person find their data in the whole sea of data
- they can see and track their own data

## **Why would citizens collect science data?**

- What's the motivation for people to collect data on local environment?
- pride, local knowledge, civic responsibility... role model, engaging, volunteering activities... etc.

## **OKAY but who owns the Data??**

- intellectual property. someone collects it... it goes into a database... we will acknowledge you (maybe? long list of people? maybe that doesn't even work...) - somehow there has to be a resolution about ownership of the data. best up front to make sure everyone is on the same page.
- Climate data in village locations with really specific calendars. local context. expansive about what “data” means... and what's important.
- Engage the whole community - who's at the table. “if you're not at the table, you're on the menu”

## **SHOW ME YOUR BUDGET AND I'LL SHOW YOU YOUR VALUES.**

- Raise money through crowdsourcing.
- Project leaders are beholden to the community that they are working in. Accountability and money

THE ANSWER TO: (I'm a specific scientist... how can I engage with the community) and the answer is, YOU are also a scientist. So you can bring your scientific framework to communities.

## **Stories, Remarks, Questions and Advice from the community:**

- You have to listen to what is /not said/ -- things that are not said that are most revealing.
- It seems like it's important ahead of time to say: if our hypothesis is true, here is the action that we will do from this... and engage community to help with the “take the action” piece. -- so as you are hypothesizing... you should come up with frameworks for the steps to take afterward, ie: to motivate the public, or to elicit citizen science when folks are more inclined to participate if they are feeling like they are given tools from the scientists that help them with data collection
- Shape the process, but also help people that they don't have to be an expert to participate.
- ALSO what do you want: sit down with the city leaders -- LISTEN to the city leaders and

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everyone just wants someone to talk to because there is so much climate data / so many models.. it's hard to know, all they really want is to be able to talk to someone and have them listen to what they need and what they are focused on to bring about some specific data or resources that would be useful.

- Stories / Case Studies / Story Maps = Important!

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**Teaser:** Help Develop an Illustrated Guidebook for Community Science

**Accepted:**

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[Co-design](#) [11]

[Collaboration](#) [12]

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