Citizen / Civic / Community Science

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What counts?

Who is a citizen?

What counts as science?





Contested Boundary Terms

"Citizen"

- Political designation
- Volunteer monitors
- Amateur naturalists
- Crowdsourcing
- Public participation
- Non-expert / lay expert
- "The Public"

"Science"

- Singular method
- Institutional norms
- Validity, Replicable, Generalizable
- Western perspective
- Quantify data
- Experts and credential

Two Basic Types (with Overlaps)

Top Down

Institutional Problem Definition

Participants as proxy for instruments / sensors

Proprietary Data Acquisition

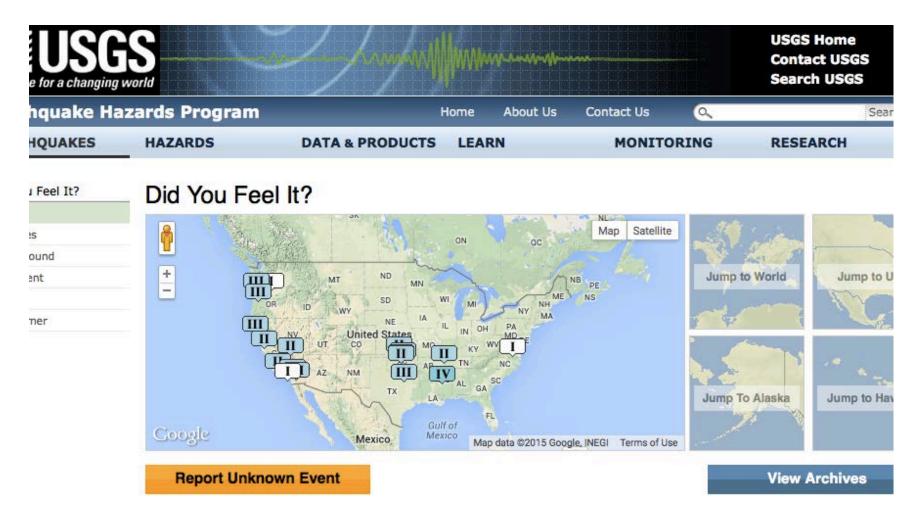
Grassroots

Place-Based Problem Definition

> Community Knowledge Generation

Participants as empowered actors

Top Down



"Citizen as data collector or proxy censor"

Grassroots

Public Lab for Open Technology and Science

http://publiclab.org



"Community as scientist or knowledge creator"

Some Ethical Challenges

- Technology & access hurdles
- Reciprocity in sharing knowledge with citizens / community
- Collaboration practices & norms
 - Citizen science protocols
 - Challenges to data quality
 - Authorship and other forms of intellectual property
- Deficit model of citizens via education

Connection to Water Group Recommendation: "Baby Legs"



Website Resources

- Citizen Science Association: <u>http://citizenscienceassociation.org/</u>
- Public Lab (DIY Science): http://publiclab.org/
- Civic Laboratory: http://civiclaboratory.nl/
- Cornell Lab's Citizen Science hub: http://www.birds.cornell.edu/citscitoolkit
- Informal Science: http://informalscience.org/
- Scistarter: http://scistarter.com/
- Community Collaborative for Rain, Hail, and Snow (CoCoRaHS): http://www.cocorahs.org/
- Marine Debris Tracker: <u>http://www.marinedebris.engr.uga.edu/</u>
- Disastercollaboratory: http://Disastercollabortory.com