



In Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy
Nicholas Weller

Will defend his dissertation

**Practicing Democracy: Improving Participatory Technology
Assessment for Sustainability Challenges**

Abstract

Participatory approaches to policy making and assessment provide one mechanism to respond to post normal science challenges such as climate change by addressing uncertainty and the limits of expertise (Funtowicz and Ravetz, 1993). Yet these approaches face distinct challenges related to navigating the perspectives of experts and influencing policy making. Participatory technology assessment (pTA) relies on deliberation to capture informed public opinion that can guide policy making. I use a practice theory approach to examine the ideas, materials, and types of knowledge that shaped two pTA exercises (Shove et al., 2012). The first project consisted of eight public forums about climate change resilience in science centers across the US. The second focused on public forums about a renewable energy ballot proposition in Arizona. I relied on survey data collected from participants, interviews with policy makers and experts associated with each project, and an analysis of project notes and meeting minutes.

Findings centered on four themes: Promoting learning, building capacity to host pTA events, fostering good deliberation, and policy relevance. Survey data showed that pTA promoted participant learning about some topics. Project organizers engaged in iterative discussions to negotiate how learning goals related to dominant ideas from the policy and expert community. Practitioners sought to build capacity for future pTA engagements at science museums and other community hosts. However, recruiting participants and engaging policy makers proved challenging to some partner institutions. Promoting participant dialogue that blended participants' values with expert and policy considerations shaped many decisions about pTA activities. However, some decisions resulted in discussion dynamics that ran counter to the goals of pTA. Outputs from the climate resilience forums provided a unique assessment of public values about

different climate-related hazards but other goals and external factors limited impact on policy making despite the team's experience in engaging policy makers. Project planners navigated concerns about framing and particular methods of engagement through creating activities that were solutions-agnostic and respected a variety of world views. A commitment to pluralistic engagement amongst a team with various backgrounds (e.g., public engagement, policy outreach, academic backgrounds) was critical to meeting the goals of pTA.

Tuesday, July 2, 2019
10:00am
Wrigley Hall Room 401

Faculty, students, and the public are invited.

Supervisory Committee:
Daniel Childers, Chair
Ira Bennett, Member
Paul Coseo, Member
Sonja Klinsky, Member