

Policy Pathways, Policy Networks, and Citizen Deliberation: Disseminating the Results of World Wide Views on Global Warming in the United States

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Abstract

Leading a coalition spanning 38 countries, the Danish Board of Technology organized “World Wide Views on Global Warming” (WWViews) on September 26, 2009. WWViews represented a pioneering effort to hold simultaneous citizen deliberations focusing on questions of climate change policy addressed at the United Nations Climate Change Conference in December 2009 (COP15). Sponsors and organizers envisioned WWViews as a means to affect the COP15 negotiations, and the project included numerous strategies to influence policymaking. This paper examines the success of such strategies in the United States through the lens of “policy pathways,” routes of influence to affect the behavior of policymakers and policymaking bodies. Our analysis suggests the difficulty of connecting citizen deliberations to meaningful policy pathways, and the importance of recognizing and enlisting policy networks, which we define as the collection of relationships, nodes, or pre-existing organizational ties that can be mobilized in the service of agenda- or alternative-setting. Focusing on policy networks represents a promising strategy for planners and organizers of citizen forums, consensus conferences, or other deliberative gatherings to affect political debates that engage science and technology.

Introduction

On September 26, 2009, approximately 4,000 citizens—in 44 cities on 6 continents—participated in organized deliberations about climate policy. The Danish Board of Technology, in cooperation with universities, parliamentary technology assessment institutions, and non-governmental organizations (NGOs) from 38 countries, sponsored “World Wide Views on Global Warming” (WWViews; see www.wwviews.org) to occur in advance of the United Nations negotiations on climate change in Copenhagen in December 2009 (COP15). The authors of this paper helped to organize four of the WWViews deliberations (Golden, Colorado; Atlanta, Georgia; Claremont, California; and New Delhi, India), and also received funding from the National Science Foundation to conduct research on the WWViews process and its policy impacts (NSF Grant #SES-0925043).¹

Scholarly literature on citizen deliberations has continually emphasized the need to measure a diversity of impacts, and not just focus on formal policy outcomes.² Nonetheless, organizers of citizen deliberations, including ourselves, at times imply the likelihood of actual policy impacts when recruiting participants. Perhaps because of this, participants expect such outcomes.

We therefore focus in this paper on the efforts of WWViews organizers to identify and exploit “policy pathways,” which we define as *routes of influence with the potential to directly or indirectly affect the behavior of policymakers and policymaking bodies*. This analysis helps us appreciate the importance of “policy networks”, which we define as *the collection of relationships, nodes, or pre-existing organizational ties that can be mobilized in the service of agenda- or alternative-setting*.³ We argue that policy networks are critical to identifying and exploiting such pathways, especially for organizers of deliberative processes who may not be connected with such networks.

We begin by providing some background on the Danish Board of Technology, World Wide Views on Global Warming, and the existing literature on studying policy impacts of citizen deliberation. Next, we describe our research methods and present our analysis of the identification and exploitation of a number of policy pathways by WWViews organizers in the U.S. We conclude by discussing the difficulties of measuring policy impact—even for a citizen deliberation timed to coincide with a significant and publicized decision making event—and by providing recommendations to future organizers of citizen deliberations that stem from our delineation of policy pathways and policy networks.

Our evaluation of WWViews suggests that the U.S. organizers happened into a potentially effective policy pathway, utilizing a “proximate outsider” (our term) to gain access to high-level decision makers close to the COP15 process. Thus, in important ways, WWViews delivered on its promise to make citizen voices heard by COP15 negotiators. Our research also shows, however, that the WWViews message became just one part of an enormous cacophony of voices that reached a crescendo in the weeks before and during COP15; organizers were unable to access or make use of existing policy networks that might have helped break through this cacophony. The competition to be heard exposes the need for future organizers of such deliberative events to modify or temper their promises to participants at the very least and, ideally, to recognize the importance of long-term interaction with policy networks in designing effective consultation and communication strategies.

¹ The views represented in this paper reflect those of the authors, not necessarily of the National Science Foundation.

² DH Guston, ‘Evaluating the First U.S. Consensus Conference: The Impact of the Citizens’ Panel on Telecommunications and the Future of Democracy’, in *Science, Technology and Human Values*, vol. 24, 1999, 451–482; G Rowe & LJ Frewer, ‘Evaluating Public-Participation Exercises: A Research Agenda’, in *Science, Technology & Human Values*, vol. 29, 2004, 512–556.

³ The infrastructure metaphor of pathways points to a key distinction: networks are fluid entities whereas pathways are relatively fixed. This steers attention to the wide variation in connections and activity levels in networks.

Background

The Danish Board of Technology and consensus conferences

The Danish Parliament established the Danish Board of Technology (DBT) in 1995 as the successor to the Technology Board (a statutory body created in 1986). Acting independently, but subsidized by public funds, the DBT's mission is "to promote the ongoing discussion about technology, to evaluate technology and to advise the Danish Parliament (the Folketing) and other governmental bodies in matters pertaining to technology."⁴ While the DBT conducts expert analyses and educates the public broadly about technology, they are best known internationally for their development of the consensus conference model to directly engage citizens in technology assessment.⁵

Traditionally, consensus conferences involve the recruitment of a panel of approximately fifteen lay citizens who read vetted background materials on a somewhat or highly technical policy issue; convene to discuss the issue; interact directly with experts germane to technical, political, and ethical aspects of the policy issue; and finally produce a report or list of recommendations by consensus to share with policymakers and other interested audiences.⁶

World Wide Views on Global Warming

Anticipating the United Nations Climate Change Conference in December 2009, hosted by the Danes in Copenhagen, the DBT devised an ambitious plan for a global deliberation on climate change policy, scaling up a hybrid of their consensus conference and other participatory models: *World Wide Views on Global Warming* (WWViews). The DBT recruited partner organizations in 37 other countries to sponsor a total of 44 national or regional deliberations on September 26, 2009. Due to its geographic size and access to resources, the U.S. team (including the authors of this paper) held five separate panels (Boston, MA; Atlanta, GA; Golden, CO; Tempe, AZ; and Claremont, CA). This paper focuses primarily on the experience and efforts of the U.S. organizing team, which included faculty and staff from four universities (Georgia Institute of Technology, Colorado School of Mines, Arizona State University, and Pomona College), the Boston Museum of Science, the Loka Institute, and the Brookfield Institute.

WWViews included several aspects of a traditional consensus conference. First, organizers aimed to recruit diverse panels of lay citizens, demographically representative of their regions or nations. Second, organizers provided written background materials in advance and showed videos on the day of the event that communicated technical and political information as a basis for deliberation. While these materials were not "unbiased" – in the sense that any analytical intervention in climate change policy relies upon a mix of facts and values – they reflected the scientific consensus on climate change represented by the fourth assessment report (AR4) of the Intergovernmental

⁴ DBT, 'The Danish Board of Technology / About Us', , 2010, <http://www.tekno.dk/subpage.php3?page=statisk/uk_about_us.php3&language=uk&toppic=aboutus> [accessed 25 March 2010].

⁵ E.g., S Joss, 'Danish Consensus Conferences as a Model of Participatory Technology Assessment: An Impact Study of Consensus Conferences on Danish Parliament and Danish Public Debate', in *Science and Public Policy*, vol. 25, 1998, 2–22.

⁶ For a more detailed description, see DL Kleinman et al., 'A Toolkit for Democratizing Science and Technology Policy: The Practical Mechanics of Organizing a Consensus Conference', in *Bulletin of Science, Technology & Society*, vol. 27, 2007, 154–169.

Panel on Climate Change.⁷ Third, while each WWViews site included up to one hundred participants, multiple facilitators reduced the size of conversational groups to approximately ten individuals. Fourth, organizers compiled the results for policymakers and the public.⁸

On the other hand, WWViews differed from consensus conferences in key respects; WWViews sought to create a space and method for deliberation that spanned the globe – an ambitious and experimental procedure that demanded many adjustments to the Danish model for a consensus conference. First, all deliberations occurred on a single day, drastically shortening the time available for discussion, which led to much more structured and constrained conversations. Second, participants had no dynamic interaction with experts—expert information came only through reading materials and videos. Third, while deliberations mimicked the character of consensus conferences (e.g., inclusive facilitation, respectful debate, etc.), participants generated their policy preferences and recommendations primarily through voting on a set of carefully structured questions. For all but the last session—which allowed the brainstorming of messages to send to COP15 delegates—citizens discussed particular policy questions pre-determined by the event organizers and then voted their individual preferences. Because of this degree of standardization, organizers had the ability to compile the results, first from each site and then from all 44 deliberations across the globe, generating a website that displayed both global and comparative data.⁹

Studying citizen deliberations

A great deal of scholarship informs the design and execution of experiments and initiatives in citizen deliberations over controversial public policies. At the theoretical level, for example, notions of ideal speech conditions¹⁰ and norms for effective deliberation¹¹ inform methods of participant recruitment and strategies for facilitation of discussion. Broadly speaking, scholarship on deliberative theory, and consensus conferences in particular, situate a project like WWViews as both worthwhile and feasible.¹² More relevant to considering the scaling up of citizen deliberation to the global level, prior research has analyzed the successes and challenges of exporting the consensus conference model beyond the boundaries of Danish culture.¹³

⁷ IPCC, *IPCC Fourth Assessment Report: Climate Change 2007 (AR4)*, Intergovernmental Panel on Climate Change, 2007, <http://ipcc.ch/publications_and_data/publications_and_data_reports.shtml> [accessed 12 April 2011].

⁸ DBT, *Policy Report: World Wide Views on Global Warming - from the World's Citizens to the Climate Policy-Makers*, Danish Board of Technology, November 2009, <<http://wwviews.org/node/242>> [accessed 13 December 2010].

⁹ For multiple analyses of WWViews, see *Citizen Participation in Global Environmental Governance*, M Rask, R Worthington & M Lammi (eds), London, Earthscan Publications, 2012; for compiled results of the deliberations, see www.wwviews.org.

¹⁰ J Habermas, 'Towards a theory of communicative competence', in *Inquiry: An Interdisciplinary Journal of Philosophy*, vol. 13, 1970, 360 – 375.

¹¹ J Mansbridge et al., 'Norms of Deliberation: An Inductive Study', in *Journal of Public Deliberation*, vol. 2, 2006, Article 7.

¹² Joss, 2–22; RE Sclove, 'Town Meetings on Technology: Consensus Conferences as Democratic Participation' in *Science, Technology, and Democracy*, DL Kleinman (ed), Albany, State University of New York Press, 2000, pp. 33–48; G Rowe, R Marsh & LJ Frewer, 'Evaluation of a Deliberative Conference', in *Science Technology Human Values*, vol. 29, 2004, 88–121; Kleinman et al., 154–169.

¹³ Guston, 451–482; A Mohr, 'Of being seen to do the right thing: provisional findings from the first Australian consensus conference on Gene Technology in the Food Chain', in *Science and Public Policy*, vol. 29, 2002, 2–12; M Nishizawa, 'Citizen deliberations on science and technology and their social environments: case study on the Japanese consensus conference on GM crops', in *Science and Public Policy*, vol. 32, 2005, 479–489.

While many evaluations of consensus conferences have focused on issues of process,¹⁴ in this paper we focus on the question of policy impact. We do so while mindful of others' efforts to promote evaluations that take into account broader outcomes of citizen deliberations. For example, Guston proposes a framework to expand evaluations of consensus conferences beyond "actual impact concretely affecting some legislative, regulatory, budgetary, or other decision"¹⁵ to a suite of categories:

- *Actual Impact*. Has there been any change in relevant legislation, funding, regulations, or any other concrete consequence to any authoritative public decision?
- *General Thinking*. Has there been any change in relevant vocabularies, agendas, problem statements, or any other political aspect regarding the substance of the policy issue discussed or the process/role of consensus conferences?
- *Training of Knowledgeable Personnel*. Has there been any learning by elite participants (experts and those organizing the activity) regarding the substance of the policy issue discussed, the process/role of consensus conferences, participants' knowledge and role, or the sponsoring organization?
- *Interaction with Lay Knowledge*. Has there been any learning by mass participants and mass nonparticipants (the public) regarding the substance of the policy issue discussed, the process or role of the consensus conference, or citizens' knowledge and role in civic engagement?¹⁶

In a similar vein, Rowe and Frewer encourage attention to a mixture of *acceptance criteria*, which include representativeness (democratic and demographic), independence (from the sponsoring body), early involvement of the public "as soon as value judgments become salient," influence ("a genuine impact on policy"), and transparency; and *process criteria*, which include participants' access to appropriate resources, clear task definition, structured decision making, and cost-effectiveness.¹⁷ Both papers point to the breadth of variables that one might consider, not only in evaluating a citizen deliberation exercise but also in planning one¹⁸.

¹⁴ E.g., AA Anderson, J Delborne & DL Kleinman, 'Information beyond the forum: Motivations, strategies, and impacts of citizen participants seeking information during a consensus conference', in *Public Understanding of Science Online First*, , 2012, <<http://pus.sagepub.com/content/early/2012/06/15/0963662512447173>> [accessed 17 July 2012]; JA Delborne et al., 'Virtual Deliberation? Prospects and Challenges for Integrating the Internet in Consensus Conferences', in *Public Understanding of Science*, vol. 20, 2011, 367–84; DL Kleinman, JA Delborne & AA Anderson, 'Engaging citizens: The high cost of citizen participation in high technology', in *Public Understanding of Science*, vol. 20, 2011, 221–240; M Powell et al., 'Imagining Ordinary Citizens? Conceptualized and Actual Participants for Deliberations on Emerging Technologies', in *Science as Culture*, vol. 20, 2011, 37–70; M Powell, J Delborne & M Colin, 'Beyond Engagement Exercises: Exploring the U.S. National Citizens' Technology Forum from the Bottom-Up', in *Journal of Public Deliberation*, vol. 7, 2011, Article 4, 47 pages; G Rowe & JG Gammack, 'Promise and perils of electronic public engagement', in *Science and Public Policy*, vol. 31, 2004, 39–54.

¹⁵ Guston, 451–482 (p. 459).

¹⁶ Adapted from Table 5, 'Schematic Research Protocol,' Guston, 451–482 (p. 460).

¹⁷ G Rowe & LJ Frewer, 'Public Participation Methods: A Framework for Evaluation', in *Science Technology Human Values*, vol. 25, 2000, 3–29 (pp. 10–16).

¹⁸ Also see L Hennen et al., 'Towards a framework for assessing the impact of technology assessment' in *Bridges Between Science, Society, and Policy: Technology Assessment - Methods and Impacts*, M Decker (ed), Berlin, Springer, 2004, <http://opac.fzk.de:81/de/oai_frm.html?titlenr=58562&server=//127.0.0.1&port=81>; Rowe and Frewer, 512–556.

Focusing on Policy

While acknowledging these calls for diverse evaluations of deliberative exercises, this paper takes as its starting point a focus on the *policy pathways* identified and exploited by U.S. organizers of WWViews. This lens of analysis encourages attention to “actual impacts”¹⁹ and “influence,”²⁰ but also permits the consideration of reasoned *attempts* to affect policy that do not bear fruit. In other words, a project might successfully identify and exploit a policy pathway without having any *actual* influence on a policy decision.

Critics might question this focus on policy by arguing that such a narrow purview dooms our evaluation to becoming an indictment of citizen engagement exercises. Indeed, as Guston observes of the first consensus conference held in the U.S., “The single greatest area of consensus among the respondents [panelists, experts, steering committee members] was that the Citizens’ Panel on Telecommunications and the Future of Democracy had no actual impact. No respondent, not even those governmental members of the steering committee or expert cohort, identified any actual impact.”²¹ If policy impacts do not represent the strength of citizen deliberations, then why do they deserve our attention at the expense of a more comprehensive evaluation of outcomes of WWViews?

One reason is that most deliberative events explicitly aim to influence policy makers, and WWViews was no exception. For example, DBT recruited the official host of COP15, the Danish Climate and Energy Minister Connie Hedegaard, to serve as a WWViews “ambassador” to the climate convention, and thus as a pathway to decision makers. In its public communications DBT described the transmission of WWViews results to COP 15 delegates as an “opportunity to be heard,” and in at least one case local organizers in the U.S. stated flatly that the exercise would “influence climate change policy-making on a global scale, and thereby impact the health of our planet.” These examples reveal both a clear intent and considerable confidence that relevant policy pathways could and would be exploited.

Similarly, participants themselves began the deliberation with some optimism that their discussions and recommendations would contribute to the COP15 negotiations. We surveyed participants at all five U.S. sites with a written instrument in advance of the deliberations, asking, “What are your reasons for participating in the WWViews process? Please rate the importance of the motives below.” As shown in Table 1, the participants ranked involvement in climate decision making the highest among the nine motives in the survey (note that this item also has the lowest standard deviation).

¹⁹ Guston, 451–482.

²⁰ Rowe and Frewer, 3–29.

²¹ Guston, 451–482 (p. 462). Comments by an anonymous reviewer noted that Guston’s analysis did not take account of one of the objectives of that first consensus conference in the U.S. Namely, the project aimed to test whether U.S. citizens would have sufficient interest and capacity to participate in a deliberative exercise. The positive result has enabled subsequent consensus conferences and deliberative exercises (including WWViews), which represents an actual impact, if only on the margins of Guston’s somewhat narrow definition.

Table 1: Motivations to Participate in WWViews²²

REASON FOR PARTICIPATING IN WWVIEWS	MEAN	STANDARD DEVIATION	NUMBER OF RESPONSES
To be involved in decision making on climate change (Q4) ²³	1.75 ²⁴	1.04	326
To enhance my understanding of alternative perspectives to my personal opinion of climate change (Q9)	1.81	1.12	324
To learn about the subject of climate change (Q2)	1.89	1.10	325
To learn how I can act more environmentally friendly in my everyday life (Q8)	2.10	1.41	325
To be part of a global citizen deliberation, regardless of topic (Q5)	2.90	1.85	324
To meet with other people and get to know them (Q3)	3.36	1.74	324
To travel and have new experiences (Q7)	3.75	1.97	324
To have discussions with other people, regardless of topic (Q6)	3.86	1.91	324
There is no specific reason why I will participate (Q1)	5.64	1.75	315

We also asked participants to respond to a written survey with open-ended questions circulated shortly before the deliberation. Thirty-nine participants from the Golden, Colorado site returned these surveys by email. One question asked, “What are your expectations for the deliberation? Do you think the world wide set of deliberations might make a difference either at the climate change convention or less directly in climate change policy at any level?” Responses reflected a mix of optimism, realism, and pessimism. We provide a short, representative list of responses here:

- I am sure it will make a difference.
- My expectations are that those of us involved in this deliberation are taken seriously in regard to our concerns about Global Warming and forwarded on to the Copenhagen Climate Conference.
- I hope it will make a difference, at whatever level it can reach. It's important to make an effort otherwise nothing will happen.
- As someone who has struggled with impossible social issues most of my life I appreciate the benefit of even small steps in the right direction. This is a very small step in the right direction.
- Honestly, I guess I don't. Of course we hope that our few voices will be listened to, but I think other factors will be considered in climate change policy.

These responses suggest that participants did not have simple opinions about the potential for WWViews to impact global climate policy. They arrived at the deliberation with diverse and complex understandings of the political realities of global climate negotiations and the power of citizens to make a difference in policy debates. But overall they were optimistic that WWViews would have an impact on climate policy.

After participating in WWViews, citizens reported a similar posture toward expected policy impacts. In an exit survey, they again ranked involvement in “decision-making on climate change” as their top choice from a list of possible motivations (see Table 2). Other categories of questions showed that strong majorities believed that WWViews was a “meaningful contribution to political decision making” (category: dialogue results); that the

²² We are grateful to Netra Chhetri, who compiled and provided us with the U.S. data from the WWViews repository of international survey data.

²³ Responses sorted by mean, placing the most agreed-upon reasons first in the table. The order of appearance of each question on the survey is indicated in parentheses.

²⁴ Seven point scale ranging from “absolutely agree” coded as 1, to “absolutely disagree” coded as 7. “Neither agree nor disagree” was coded as 4.

deliberation “made me feel that citizens’ voice is relevant for policy makers in the field of global climate change” (category: impact on participants); and that “[t]he results have to be framed and communicated in a way that gets the attention of decision makers” (category: event evaluation criteria). Given the mixture of optimism and realism reflected in the open-ended surveys (discussed above), we suspect that participants may well have understood these ranking tasks as referring to a mixture of the *quality* of their collective input and their *expectations* for its impact. Taken together, however, the quantitative and the qualitative data offer compelling evidence that most participants expected, experienced, and evaluated WWViews as an exercise with the potential to influence climate change policy.

Table 2: The Importance of Policy Impacts to Participants

Exit survey category and question	Percent agree ²⁵	Mean ²⁶	Standard Deviation	Number of Responses
<i>Motive</i> – “To be involved in decision-making on climate change”	87.1	1.68	1.13	325
<i>Dialogue results</i> – “The results achieved are a meaningful contribution to political decision making on climate change”	72.8	1.98	1.20	317
<i>Impact on participants</i> – “Participation in the WWViews Event made me feel that citizens’ voice is relevant for policy makers in the field of global climate change”	71.8	2.01	1.20	323
<i>Event evaluation criteria</i> - “The results have to be framed and communicated in a way that gets the attention of decision makers”	85.5	1.62	0.98	318

Both these survey data and our own experiences as WWViews organizers point to the centrality of policy pathways as an intellectual framework that shaped expectations for actual impact. Put simply, WWViews certainly had impacts apart from affecting climate change policy (civic education, for example), but participants and organizers were clearly motivated by the prospect of influencing the UN negotiations at COP15. Such aspirations represent a strength of participatory approaches to decision making, but it is one that will diminish over time if not realized in practice.

From policy impact to policy pathways

Focusing directly on policy impacts would create a methodological quandary, given that change is the key element in Guston’s definition of “actual policy impacts,”²⁷ and it is quite difficult to measure change stemming from a qualitative exercise such as WWViews. To meet this criterion, one would need to demonstrate a causal relationship between a citizen deliberation and a change in the position of a policymaker, or some other “concrete consequence.” This would require creating a highly structured before-and-after design to measure the change, correlating the timing with the specific output of a deliberation, and ruling out other factors operating at the same time. To illustrate with an analogy, if the report of a consensus conference were a billiard ball, we would need evidence of it hitting a target ball and moving it, while making sure that no other balls interfered with the target.

²⁵ Percent of responses in top two categories.

²⁶ Based on a 7 point scale where 1 = “absolutely agree”, 4 = “neither” and 7 = “absolutely disagree.”

²⁷ Guston, 451–482.

In fact, studies of the policy process indicate that there is no input to policy discussions that consistently produces change in the positions of decision makers; those positions are shaped by a multitude of inputs and judgments considered by the decision maker over a long period of time.²⁸ Our inquiry must therefore shift from asking whether WWViews met the criterion of “actual impact” (it likely did not) to whether the project identified and exploited policy pathways that gave it the best chance of influencing the climate change policy discussion in 2009.

Privileging policy networks

While the notion of policy pathways creates methodological advantages—specifically, negating the need to measure “actual impacts” while emphasizing intention and strategy by organizers—its narrow focus ignores important frameworks that explain how interest groups increase their influence on policy discussions. Scholars have consistently noted the importance of cultivating relationships with decision makers and participating in the debate over time, leading to long-term engagement within *policy networks*. The term *policy network* gained currency in the 1970s with the formulation of the concept of *issue networks*,²⁹ and scholars have variously emphasized relationships, actors, resources, and shared beliefs and ideas.³⁰ Kenis and Schneider provide a description that provides the most traction for our study:

A policy network is described by its actors, their linkages and its boundary. It includes a relatively stable set of mainly public and private corporate *actors*. The *linkages* between the actors serve as channels for communication and for the exchange of information, expertise, trust and other policy resources. The *boundary* of a given policy network is not in the first place determined by formal institutions but results from a process of mutual recognition dependent on functional relevance and structural embeddedness. Policy networks should be seen as integrated hybrid structures of political governance.³¹

Research on the policy process has thus moved from a linear approach that identifies different stages of the policy process, starting with agenda-setting and ending with implementation and evaluation, to a systems or network approach that provides a more nuanced understanding of the complexity and interrelatedness of the elements of the policy process. For example, Kingdon’s multiple-streams framework sees the policy process as made up of three distinct streams of actors and processes (a problem stream, a policy stream and a politics stream) and emphasizes the

²⁸ PA Sabatier & H Jenkins-Smith, *Policy Change and Learning: An Advocacy Coalition Approach*, Boulder, CO, Westview Press, 1993.

²⁹ H Hecló, ‘Issue networks and the executive establishment’ in *The Political System*, K Anthony (ed), Washington, D.C., The American Enterprise Institute for Public Policy Research, 1978, pp. 87–124; H Hecló & AB Wildavsky, *The Private Government of Public Money: Community and Policy inside British politics*, Berkeley, University of California Press, 1974.

³⁰ PM Haas, ‘Introduction: Epistemic Communities and International Policy Coordination’, in *International Organization*, vol. 46, 1992, 1–35; TJ Lowi, ‘Four systems of policy, politics, and choice’, in *Public administration review*, vol. 32, 1972, 298–310; RAW Rhodes, ‘Power-dependence, policy communities and intergovernmental networks’, in *Public Administration Bulletin*, vol. 49, 1985, 4–31; RAW Rhodes, *Policy networks in the British government*, Oxford, Oxford University Press, 1992; J Richardson, ‘Government, interest groups and policy change’, in *Political studies*, vol. 48, 2000, 1006–1025; RB Ripley & GA Franklin, *Congress, the Bureaucracy, and Public Policy*, Homewood, IL, Dorsey Press, 1981; Sabatier and Jenkins-Smith; FW Scharf, *Games real actors play: Actor-centered Institutionalism in policy research*, Boulder, CO, Westview Press, 1997.

³¹ ‘Policy networks and policy analysis: Scrutinizing a new analytical toolbox’ in *Policy Networks: Empirical Evidence and Theoretical Considerations*, Boulder, CO, Westview Press, 1991, pp. 25–62 (pp. 41–2).

role that policy entrepreneurs play in effectively bringing together these distinct streams in order to create policy change.³² Moreover, most of the policy network models and theories see policy change as emerging from conflict and bargaining among groups organized around shared knowledge, perceptions, and beliefs.³³

It is also helpful to consider multiple models or theories of democracy when discussing citizen deliberations and their policy impacts. Deliberative democracy differs from representative, direct, and pluralistic forms of democracy; and each form implies different scenarios for translating the public interest into governmental action. Most importantly for our discussion on WWViews, deliberative democracy views the legitimacy of decision making as dependent on public deliberation, characterized by critical reason giving and reflective thinking that produce decisions that are acceptable by all. As opposed to influencing policy through advocacy (a strategy highlighted by pluralistic forms of democracy), deliberative democracy theorists argue that citizens can influence public policy by actively participating in the debates that shape policy. Ideally, not only does public deliberation improve democracy and make it more meaningful, it also leads to a more involved public and more legitimate decisions.

The spectrum of theories of democracy poses a particular conundrum for citizen deliberations that hope to create policy effects, in particular because various models of democracy foster very different citizen access to policy pathways and networks. Under representative, direct, or pluralistic democracies, citizen forums can only indirectly influence decision making. Furthermore, unlike *established* policy networks that might function under multiple models of democracy, deliberative exercises emerge from *temporary* gatherings of people, often selected precisely to avoid interest group membership.³⁴ At the same time, event organizers and participants rarely (in our experience) have particular models of democracy in mind when participating in such events, and tend to assume that policy pathways will appear and be exploited by virtue of the event taking place at all (undoubtedly an unusual occurrence in the U.S. context). What then are realistic expectations for either policy influence or impact from a citizen forum?

To answer this question, we return to the developmental roots of much of deliberative democratic practice: Denmark, a country that Dryzek and Tucker refer to as an “actively inclusive democracy.”³⁵ Danish political institutions seek out citizen voices and have crafted the consensus conference as a particularly powerful way of hearing them. In essence, consensus conferences in Denmark have policy pathways built into them; conference reports are actually read and referred to by policymakers as part of the political culture – although this practice has recently come under attack.³⁶ U.S. democracy, on the other hand, is “passively inclusive”³⁷; that is, the U.S. political process operates on the expectation that if citizens want their voices heard outside the electoral process, they will organize themselves to exert that influence, primarily in the form of “special interests” or lobbying. If Dryzek and Tucker are correct, we would not expect a project like WWViews to have much success in the U.S. political context, which does not provide regularized pathways for incorporating deliberative results into policy deliberations.

Methods

All authors of this paper both helped to organize WWViews deliberations and participated as researchers of the process and its outcomes. Thus, we have occupied multiple roles—fundraisers, organizers, recruiters, survey designers, facilitators, spokespeople, outreach coordinators, interviewers of participants and project staff, data

³² JW Kingdon, *Agendas, alternatives, and public policies*, 2nd ed., Longman Classics, 2002.

³³ Heclo, pp. 87–124; PA Sabatier & H Jenkins-Smith, ‘An advocacy coalitoin model of policy change and the role of policy oriented learning therein’, in *Policy Sciences*, vol. 21, 1988, 129–68; D Stone, *Policy Paradox: The Art of Political Decision Making*, Third ed., New York, W.W. Norton & Co., 2012.

³⁴ For a critique of this aim, see Powell et al., 37–70.

³⁵ JS Dryzek & A Tucker, ‘Deliberative innovation to different effect: Consensus conferences in Denmark, France, and the United States’, in *Public Administration Review*, vol. 68, 2008, 864–876.

³⁶ ‘False economy’, in *Nature*, vol. 480, 2011, 5–6.

³⁷ Dryzek and Tucker, 864–876; JS Dryzek, *Foundations and Frontiers of Deliberative Governance*, New York, Oxford University Press, 2011.

analysts, principal investigators, and liaisons with the Danish Board of Technology. Such diverse modes of involvement give us unique insight into WWViews, but also require us to develop our claims with reflexivity and to remain open to critique by those unaffiliated with the project.

Data for this paper include a variety of sources, collected by our research team, project organizers in the U.S. and other countries, and the staff of the Danish Board of Technology:

- Survey data of participants before and after the WWViews deliberations³⁸
- Publications and communications distributed by the DBT and project organizers
- Notes from planning meetings (conference calls) involving the U.S. WWViews organizers and researchers
- Interviews of DBT and U.S. project organizers and staff
- Interviews with staff members from related organizations in Washington D.C., after COP15
- Interviews of a sample of WWViews participants from U.S. sites
- Observations of the WWViews deliberations
- Observations of the COP15 negotiations.

Policy Pathways and Evidence of Impact

While this paper does not provide an exhaustive inventory of every policy pathway identified and exploited by U.S. organizers of WWViews, we reflect upon the three most prominent strategies to achieve policy impact: dissemination (communicating results directly to decision makers), amplification (seeking media coverage to indirectly influence decision makers), and organized events (influencing decision makers directly in an assembled audience or indirectly via other attendees).³⁹ We remind readers that the scope of this paper does not permit the consideration of the multiple and intensive efforts by WWViews partners in other countries to influence their governments, delegations, and negotiators.⁴⁰

Dissemination

Our primary strategies for disseminating WWViews results directly to relevant decision makers yielded mixed results in terms of our ability to identify and exploit policy pathways—routes of influence that could reach those who negotiated on behalf of the U.S. at COP15. Efforts ranged from involving local officials in WWViews events; to targeting the U.S. delegation to COP15; to providing results to the U.S. Department of State, which led negotiations at COP15 and prior meetings; to organizing a briefing for the White House Office of Science and Technology Policy (OSTP). Taken together, our experience suggests that our ability to access existing *policy networks* determined our success or failure in identifying and exploiting meaningful *policy pathways*.

Informing COP15 Delegates

Early strategy sessions among U.S. WWViews organizers identified the importance of reaching out to the U.S. government's official delegation to COP15. We imagined that these individuals would understand the WWViews results, judge them as significant indicators of Americans' preferences for U.S. action at COP15, and in a best-case scenario, use WWViews results to justify positions and action taken by the U.S. negotiating team.

Having identified these important targets, in a conceptual sense, we quickly hit a road block in this policy pathway when we learned from the U.S. Department of State that the government would not publicly announce the identities of its delegation until shortly before COP15, and that only the four or five “principal delegates” in a group numbering several hundred would be publicly identified. This development complicated our tidy notion that a delegation could be identified and contacted in the two months between the WWViews deliberation and COP15.

³⁸ See note 22.

³⁹ The first two terms, “dissemination” and “amplification,” come from the DBT's strategic plan for WWViews.

⁴⁰ For broader considerations of the WWViews project, see Rask, Worthington and Lammi.

Nonetheless, by researching attendance at preparatory meetings for COP15 and vetting this list with an independent U.S. expert on international climate change policy,⁴¹ we identified 63 probable delegates from 13 different institutional homes: executive departments, agencies, White House offices, and Congress.

What we did not know, however, was how these people were connected to one another, and who else mattered in the formulation of the U.S. position for COP 15. In other words, our list identified potential “targets” for the dissemination of WWViews results (likely U.S. delegates), but we lacked the expertise and connections to gain entrée to the broader policy network in which the delegates were situated. This reflected our lack of prior engagement with such a network, which is much more complex than a list of individual delegates. It is also possible that, in the U.S. in particular, such networks are in great flux given the lack of a concerted climate policymaking effort generally, and would have been difficult to identify even in ideal conditions. Thus, as U.S. organizers, we did not identify and exploit what we initially thought of as the most obvious policy pathway for the dissemination of WWViews results to key decision makers, and we recognize that the very metaphor of policy pathways may have impeded our ability to prioritize the understanding of and engagement with the more complex policy network.

In addition, a subset of the WWViews research team attended the COP15 meetings in Copenhagen in December 2009. Our “observer” status gave us permission to enter the Bella Center, the highly secured complex hosting all official activities associated with the U.N. meetings – including formal plenary sessions, ancillary meeting rooms, sanctioned exhibits, an expo for affiliated organizations and companies, and delegation offices for most participating countries. We had access to the Bella Center on all except the final two days of negotiations, and we brought many copies of the full WWViews results report and hundreds of index cards to refer people to the WWViews website. We struck up many conversations, in hopes of fortuitously reaching a delegate, and we made some effort to deliver the results directly to the U.S. delegation offices. Neither strategy represented a viable policy pathway—stemming partly from our naïveté as COP attendees and partly from our position as clearly outside of the networks of those negotiating at COP15. While we certainly informed a number of people at the Bella Center about WWViews, we do not view this strategy as a successful policy pathway, at least in a narrow sense.

Enrolling Elected Officials from Local Jurisdictions

In addition to pursuing direct contact with delegates, we surveyed the political landscape and targeted elected officials representing federal, state and local jurisdictions in or near WWViews sites. To varying degrees, each site successfully reached out to a number of politicians. Table 3 highlights the local efforts to enroll elected officials to endorse WWViews or consider the project’s results.

⁴¹ We are grateful to Professor Marilyn Brown of Georgia Institute of Technology for sharing her expertise and perspective.

Table 3: Efforts to include decision makers in WWViews events

Atlanta, GA	<ul style="list-style-type: none"> • Mayor of Atlanta: Mayor’s Sustainability Initiative arranged for the Mayor to give opening remarks to the citizens on the day of consultation. • Congressional delegation offices: all invited to summary session, none attended.
Boston, MA	<ul style="list-style-type: none"> • Ian Bowles, Massachusetts’ Secretary of Energy and Environmental Affairs: gave opening remarks at WWViews event. • Congressman Edward Markey: showed interest in speaking at WWViews event, but became sick and was unable to attend. His office asked for results from deliberation.
Golden, CO	<ul style="list-style-type: none"> • Senator Mark Udall: sent a representative to speak at the beginning of the WWViews deliberation. • Senator Michael Bennett: contacted, but no formal response. • Governor Bill Ritter: difficulty in contacting him through proper channels. • Denver Mayor John Hickenlooper: helped arrange for alternate deliberation site. • Interior Secretary Ken Salazar (former Colorado Senator): contacted, but no formal response.
Claremont, CA	<ul style="list-style-type: none"> • Senator Barbara Boxer: declined invitation to make opening or closing comments but agreed to facilitate communication of results with staff of Senate Environment and Public Works Committee, which she chaired. However, follow-up with her office to implement this plan was unsuccessful. • Congressman David Dreier: declined invitation to make opening comments. • Governor Arnold Schwarzenegger: did not respond to invitation to make opening comments. • State Senator Fran Pavley: declined invitation to make opening comments.
Tempe, AZ	<ul style="list-style-type: none"> • State Congressman Harry Mitchell invited to attend; made brief opening remarks. • Arizona State Land Commissioner Maria Blair invited to attend; made brief opening remarks.

While WWViews organizers knew that none of these elected officials would join the delegation to COP15, we assumed the existence of pathways of communication and influence between these officials and federal decision makers. In particular, U.S. Congressional representatives had the power to engage with legislation, committee hearings, and federal agency activities—all processes that we believed could inform the position and actions of the U.S. delegation to COP15. This strategy would require resources to contact and sustain engagement with elected officials, but a funding proposal to support it was unsuccessful. Despite the partial success in engaging officials depicted in Table 3, the “indirect pathway” strategy thus fizzled for lack of resources.

Organizing a briefing at the Office of Science and Technology Policy

The White House Office of Science and Technology Policy (OSTP) first came into focus as a target for the WWViews results in early April 2009 in a conversation between Richard Sclove, the U.S. team’s liaison to the Danish Board of Technology, and Andrew Light of the Center for American Progress (CAP), a Democratic Party think tank. Light knew that the State Department would represent the U.S. at COP15, with Todd Stern—Light’s former colleague from CAP—as the lead negotiator. This connection, indicative of the informality of policy networks, gave Light two significant insights that guided WWViews dissemination efforts. First, Light did not believe that the State Department would be receptive to WWViews, in part because of the enormous demands of preparing for a major UN summit on a short timeline in a reconfigured organization with new leadership (President Barack Obama had been inaugurated only two months prior to this conversation). Second, Light expected the President’s Science Advisor and Director of the OSTP, John Holdren, to play a significant role at COP 15. In contrast to the Department of State, however, Light anticipated a receptive audience to WWViews by OSTP. He reasoned that Obama’s first act as President had been to sign an Open Government Initiative, and the person selected to head the effort, former New York University law professor Beth Noveck, was operating out of OSTP and had previous experience with deliberative exercises.⁴²

⁴² E.g., BS Noveck, ‘Unchat: Democratic Solution for a Wired World’ in *Democracy Online: The Prospects for Political Renewal Through the Internet*, PM Shane (ed), New York, Routledge, 2004, pp. 21–34.

While Noveck may have offered an entry point to OSTP, the WWViews team ended up securing a formal briefing through what we are calling a “proximate outsider” who had become a part of the WWViews advisory network to disseminate results. Proximate outsiders may provide one way of accessing policy networks, thereby providing access to meaningful policy pathways. David Rejeski, a veteran in Washington science and environmental policy circles, headed the Woodrow Wilson Center for International Scholars’ innovation program.⁴³ In one of the many emails circulating among the WWViews advisory group, Rejeski mentioned that he might be able to arrange a briefing with appropriate officials in the Obama Administration. Further discussion led Rejeski to conclude that OSTP was the best target, and he subsequently arranged for Sclove to conduct a briefing on WWViews on November 24, 2009, attended by several staff of the OSTP and one representative from each of the White House Council on Environmental Quality and the Office of Management and Budget. The White House Office of Energy and Climate Change also received an invitation, but did not provide a representative, so one of the OSTP staff later personally delivered copies of the WWViews policy report with a cover letter commending it to them.

Accounts of the meeting by Sclove and two other attendees converged substantially, reporting that Sclove’s audience showed interest and some surprise at the strong disposition of U.S. citizens to recommend dramatic action on climate change, as reported in the WWViews results. Some questions arose regarding whether the WWViews results represented a broad public (e.g., whether “greens” were overrepresented among WWViews participants), and discussion considered ways to amplify the results, such as follow-up online deliberations that would engage a greater number of people. Our main contact at OSTP best articulated the value of the briefing during an interview several months later:

There was this fear that perhaps all the people going to Copenhagen were getting ahead of the public or going in a different direction, and it’s good to have that reassurance that we’re not. That’s the primary value for policy makers, because policy makers want to be representing the people and don’t want to be going in the opposite direction of the people. ..[S]ometimes policy makers have to act with a long term [vision], even if big segments of the public aren’t ready for it, but other times one wants to represent what a thoughtful group of citizens would do, and the idea that in going to Copenhagen the Administration position is fairly close to what an informed group of citizens would do is ... a powerful reassurance: we’re not making this up. It’s also encouraging that if the American people as a whole could have this type of dialogue and consideration of the science and the other issues that they might come to the same conclusion... [this] could guide the inevitable process of explaining what the policy makers are trying to do, or will do if we get to this [climate change] legislation.

The functionaries who received the reports did not shy away from noting their political value. Both of the White House officials interviewed in March, 2010 suggested that the results remained relevant on Capitol Hill and for the COP 16 meetings in Cancun later in 2010. In effect, they pointed us to other nodes in the policy network (as did other Washington insiders interviewed at the same time), which suggests the importance of knowing and engaging such a network early in a project.

Amplification—Using the Media as a Policy Pathway

Before discussing the success of WWViews to attract the attention of local, national, and international media, it is important to consider the rationale behind media strategy for a citizen deliberation. Setting aside the value of media coverage as validation, either at a personal level for WWViews planners or at the organizational level for funders of the deliberation, media represent two possible pathways to influence public policy. First, media coverage might encourage more meaningful public dialogue and deliberation about climate change policy—a diffuse, and perhaps weak, policy pathway that relies upon uncoordinated citizen action spurred by exposure to the issue. Second, WWViews planners, at least in the U.S., assumed that decision makers would pay greater attention to WWViews if covered by the mainstream media. This was an assumption we should have challenged more critically, given the complex factors that influence policymakers’ attention and focus.⁴⁴

⁴³ Created by Congress in 1968 and situated on Pennsylvania Avenue midway between the Capitol and the White House, the Wilson Center has the mission of bringing the worlds of scholarly learning and public affairs into fruitful interaction.

⁴⁴ Kingdon.

Generally speaking, WWViews organizers had high hopes that the event would garner significant attention from the mainstream media. Early planning documents from the DBT and from U.S. organizers encouraged each WWViews site to develop its own media strategy. According to these documents, “The WWViews deliberations will be held worldwide during a single 36-hour period, and publicized immediately via the World Wide Web, building excitement, drama, and media interest throughout the day.”⁴⁵ U.S. organizers in particular hoped that WWViews would be able to “generate media coverage that contests stale ‘pro’ and ‘con’ narratives by presenting the results of deliberations by diverse groups of everyday citizens.”⁴⁶

The amount and quality of media coverage of WWViews fell short of the expectations reflected in these early documents.⁴⁷ Some stories in the U.S. and elsewhere may have momentarily “broken through,” yet WWViews likely never became a story with enough traction to garner the attention of policymakers or to significantly influence public debate. To be fair, media coverage of WWViews would have been difficult to procure even in ideal circumstances. Schneider and Delborne argue that events like WWViews would be seen by most newsrooms as “environmental” stories.⁴⁸ Yet, as an environmental story, WWViews lacked a number of characteristics that would have marked it as newsworthy: it was not an “image-event”⁴⁹; the conflict narrative, if there was one, was not immediately evident⁵⁰; and the political events to which it was most clearly tied—the COP15 negotiations—were still months away. Furthermore, resources were limited. Few U.S. sites had dedicated and experienced staff who could mobilize press coverage. Instead, most WWViews staff and volunteers were focused, above all, on making the deliberative events happen, often with very small budgets and few personnel.

Schneider and Delborne argue that perhaps the focus of future deliberative events such as WWViews should be not on garnering media coverage per se, but rather on building effective relationships between institutions: universities, which have a public education mission; organizations that have effective mechanisms for public outreach, such as museums of nature and science; and media organizations with a public service mission, such as some arms of the British Broadcasting Corporation (BBC) in the U.K. or Public Broadcasting Service (PBS) in the U.S. Such long-term relationships might serve to leverage the experience and expertise of each institution, building networks between institutions that are interested in promoting public dialogue.⁵¹ The focus, in other words, should not be solely on attempting to score media “hits” in hopes of falling into a policy pathway, but on building networks for public outreach.

⁴⁵ “U.S. Media and Dissemination Plan,” WWViews internal document, 2009.

⁴⁶ R Worthington, WWViews internal memo, 2008.

⁴⁷ It is important to note that some media successes were garnered by WWViews sites around the world—DBT’s own publicity efforts secured one episode of significant television coverage, and media coverage in Australia intersected with official political discourse on climate change, though the relationship between the two is complex. For the most part, however, there was no notable or significant media coverage of the event when situated within larger media contexts as a whole.

⁴⁸ J Schneider & J Delborne, ‘Seeking the Spotlight: World Wide Views and the U.S. Media Context’ in *Citizen Participation in Global Environmental Governance*, M Rask, R Worthington & M Lammi (eds), London, Earthscan Publications, 2012, pp. 241–60, <<http://www.earthscan.co.uk/?tabid=102844>>.

⁴⁹ KM DeLuca, *Image Politics: The New Rhetoric of Environmental Activism*, New Jersey, The Guilford Press, 2006.

⁵⁰ Alison Anderson, *Media, culture, and the environment*, New Jersey, Rutgers University Press, 1997, , pp. 118–9.

⁵¹ Jen Schneider and Jason Delborne, pp. 241–60.

Organized Events—Staging Policy Pathways

The third strategy for identifying and exploiting policy pathways involved the staging of events that followed the WWViews deliberations. The following discussion suggests the breadth of possible actions and identifies a fairly successful, albeit camouflaged strategy to reach decision makers with the results from a citizen deliberation. Namely, by inviting elected officials to serve on a panel or take part in an event, which benefits them by creating an opportunity for public exposure, the VIP participants become de facto audience members for the project.⁵²

Local Follow-Up, Pomona College

At the scale of local organizing, and building on the previously mentioned dissemination strategy of inviting local officials to give opening remarks before the WWViews deliberation, several U.S. sites organized follow-up meetings with WWViews participants, scientific experts, and decision makers. For example, Worthington and Grace Vermeer (an undergraduate who helped organize the WWViews deliberation in Claremont, CA and attended COP15 as an observer) put together an evening panel discussion at Pomona College six weeks after the WWViews deliberation. They assembled a panel that included an expert on climate change impacts in Southern California, two WWViews participants, and an environmental historian. This event was designed to stimulate activity on two policy pathways. First, a follow-up communiqué to WWViews participants summarizing the event and WWViews results from the local, national and global levels included an invitation to contact their elected representatives with their retrospective thoughts on WWViews and climate change policy. Second, the organized panel kicked-off a student letter-writing campaign to representatives from their home districts around the country.

This event failed to tap into existing policy networks that might have influenced climate change policy, but a second event in September 2010 was more successful in bringing well-placed academics, advocates, and officials together. However, the timing was too late and resources too limited to activate this network for policy input. Both events achieved other goals—namely, outreach to additional citizens and the provision of valuable feedback to WWViews organizers to learn about participants' experiences as citizen deliberators—but no significant potentials in policy networks were exploited. Following the pattern indicated in Table 3, other WWViews organizers had even less success than in California organizing follow-up meetings, leading the U.S. team to cancel plans for such an event at the final site.

Trans-Atlantic Event, Museum of Science – Boston

The unique characteristics of the WWViews organizing team in Boston created several outreach opportunities not pursued by other U.S. WWViews sites. Specifically, the Museum of Science, Boston (MoSB), a member of the Association of Science-Technology Centers (ASTC), hosted the Boston WWViews deliberation and organized several events that leveraged their experience in educating and engaging the public on scientific issues. For example, MoSB staff arranged for a follow-up event the day after the deliberation in the MoSB exhibit hall. WWViews participants joined experts and some local officials in discussing the WWViews process and results.

More impressively, an ASTC/IGLO (International Action on Global Warming) initiative brought together MoSB, Cité des Sciences et de l'Industrie, Paris (a prominent French science museum and ASTC member), the Danish Board of Technology, and several COP15 delegates for a trans-Atlantic event on December 5, 2009, just weeks before COP15. The program reviewed the WWViews project for the 400 people in Paris and 60 in Boston, who were linked to one another and to Copenhagen by internet video. Panelists included Jean-Pascal van Ypersele, deputy chair of the Intergovernmental Panel on Climate Change (IPCC); Sandrine Mathy, president of the Climate Action Network; Peter Schultz, former director of the U.S. Climate Change Science Program Office; and Bob Corell, chair of the Climate Action Initiative and global change program director at the H. Heinz Center for Science,

⁵² For a discussion of the strategic construction of audiences during highly politicized scientific controversy, see JA Delborne, 'Constructing Audiences in Scientific Controversy', in *Social Epistemology: A Journal of Knowledge, Culture and Policy*, vol. 25, 2011, 67–95.

Economics, and the Environment.⁵³ These actors and the many others on the panel play significant roles in networks that are relevant to climate policymaking; building relationships with such networks may provide improved access to policy pathways in the future.

Two important factors contributed to the success of this event. First, the Boston WWViews team included the participation of multiple organizations with diverse skills and broad links to various networks of significance. The MoSB, with deep experience in designing public outreach events, was able to focus on dissemination, while other partners coordinated other tasks (e.g., the Brookfield Institute took responsibility for organizing and facilitating the deliberative process). This division of labor was not possible at other U.S. WWViews sites, where university personnel wore the many hats of recruitment, event planning, facilitation, dissemination, and publicity. Second, the MoSB's connection to the ASTC network enabled this event to include numerous high-profile individuals who work closely to the policy process on climate change. As other examples have shown, policy networks facilitated policy pathways.

Discussion

Broadly speaking, the WWViews U.S. sites and the overall project delivered on their promises to participants to deliver their messages to U.S. COP15 official delegates and other decision makers. We did this in Washington, D.C. and in Copenhagen, with professional attention to written and oral reports, media coverage, and organized events. Yet, although we have direct testimony from our Washington D.C. interviews that the results were heard and received positively by key staff members of the U.S. delegation, we have no indication that they changed any position that the delegates took. Instead, to the extent that they received attention, they reinforced the main message the delegation wanted to deliver in Copenhagen: action is necessary. Using the billiard ball analogy, the WWViews ball hit its target—albeit a somewhat glancing blow—in the direction it was already going.

Indirect pathways apparently produced even fewer “concrete consequences.” Local contacts produced no tangible results, and the attempt at media coverage achieved little success because the event itself was not sufficiently “mediagenic” to attract attention in September 2009 and became only one among hundreds of possible media stories by the time of COP 15 three months later. Staging events brought WWViews in closer contact with some decision makers, especially by tapping into diverse and widespread networks, but again, the policy impact remains highly uncertain.

In retrospect, we view our focus on *policy pathways* as relatively ineffective in helping WWViews make a meaningful difference in climate negotiations. This point deserves some careful attention and humble reflection. First, we structured our thinking about the dissemination of WWViews results within the framework of policy pathways. This perspective, we now believe, led to a number of dead-ends and required great effort for very little payoff. Second, we structured our analysis of WWViews' policy impact around the concept of policy pathways. We imagined that policy pathways would provide a middle ground level of analysis that would inform strategic action to create “actual impacts” as well as identifying the myriad barriers in the way of making and measuring real policy impact. We now view this perspective as similarly misguided.

Fortunately, however, and likely due to the collaborative nature of this paper and project, our analysis and experience point us to the significance of policy networks. Policy networks enabled us to present WWViews results to decision makers. Policy networks facilitated the media coverage of U.S. WWViews. Policy networks fostered our ability to include local and state officials in conversations about WWViews, enhancing dissemination in terms of citizen education and outreach. And policy networks helped define the limits of the reach of our influence on the highly complex and charged environment of climate policymaking: the central policy network that developed and negotiated the U.S. position at COP15 remained largely inaccessible to us.

⁵³ ASTC, ‘Transatlantic Conference’, in *ASTC/IGLO Newsletter*, Association of Science-Technology Centers / International Action on Global Warming, January 2010.

Recommendations

In the spirit of encouraging links between scholarship and practice, we offer a final section of recommendations in lieu of a formal conclusion. We hope that these recommendations will speak to organizers of citizen deliberation events, and also that they will inform the thinking of those interested in the links between public opinion and policymaking more generally.

Although a number of recommendations present themselves after organizing an event as vast and ambitious as WWViews, we emphasize four for future deliberative organizers to consider:

1. Emphasize multiple types of impacts
2. Consider the maturity of the issue
3. Recruit “active” participants
4. Leverage existing policy networks and practitioner networks.

We explore each of these recommendations briefly below.

Emphasize multiple types of impacts

While organizers can and should emphasize the policy-relevance of a deliberation when recruiting participants, as well as strategies to make citizen voices heard, they should avoid promising too much in terms of “policy impact.” They could note, for example, that the process of policy change is long and unpredictable, and that the impacts of a citizen deliberation may not conform to a linear model of influencing public policy. To illustrate, as discussed earlier, the analysis of the first U.S. consensus conference, which addressed telecommunications policy in 1997, found no actual impact.⁵⁴ However, this deliberation later had an impact in a different policy area, serving as a touchstone for a provision in the *21st Century Nanotechnology Research and Development Act* of 2003 that called for “...the convening of regular and ongoing public discussions, through mechanisms such as citizens’ panels, consensus conferences, and educational events.”⁵⁵ Similarly, a second WWViews deliberation on biodiversity in 2012 was incorporated into the decisions text of the Eleventh Council of Parties of the UN Convention on Biodiversity, which called on member countries and other stakeholders to support future deliberations as a communications method that supports strategic goals for “...mainstreaming of biodiversity, participatory planning, knowledge management and capacity-building.”⁵⁶

Organizers can also clarify and highlight other goals of a deliberation, such as the event’s potential to identify policy alternatives not within mainstream policy discourse; educate and activate citizens to become involved in issues over time; foster institutions’ interest in spreading new forms of deliberative democracy; introduce deliberative democracy to new political/cultural environments; and create links spanning the traditional boundaries that prevent global citizens from cooperating with one another. Organizers might even think about deliberative events as an opportunity to educate and empower participants not familiar with how certain policy processes work. In addition to providing a clearer and more complete picture of the effects deliberations can have, this information can help interested participants visualize ways in which they can sustain their involvement with the issue, should they wish to do so.

Consider the maturity of the issue

When organizing the forum agenda and assembling the background materials, organizers may want to take into account the maturity and status of the topic within existing policy networks. Where controversies exist, organizers can ensure that citizen participants hear many perspectives and have the opportunity both to make sense of

⁵⁴ Guston, 451–482.

⁵⁵ P.L. 108-153, Section II.

⁵⁶ Convention on Biological Diversity, *Advanced Unedited Copy of COP-11 Decisions*, , 2012, , p. 21, <<http://www.cbd.int/cop/cop-11/doc/2012-10-24-advanced-unedited-cop-11-decisions-en.pdf>> [accessed 11 November 2012].

disagreements and to suggest different terms of debate. Early-stage issues may leave more room for reframing and input than those that are already deadlocked among powerful actors. When possible, focus the forum on these early-stage issues to take advantage of more of the benefits of deliberation.

For issues that have matured in policy discourse, organizers can include some focus on aspects that are early stage. For example, when addressing climate change in a citizens' forum, they may include discussions over how to make choices about adaptation technologies and the financing of research and the transfer, construction, and deployment of technologies.

Recruit “active” participants.

Most deliberative exercises aim to recruit non-affiliated citizen participants in order to maximize the potential for participants to adjust their viewpoints and reduce the potential for committed advocacy to emerge during deliberation. Doing so lends additional legitimacy to the deliberative process by differentiating it from standard partisan exercises or stakeholder meetings. While consensus conferences may involve stakeholders as experts or members of the steering committee, various criticisms have emerged regarding the strategy of recruiting only “ordinary citizens” for the deliberative panel.⁵⁷ Especially with respect to this paper’s analysis of policy pathways and networks, recruiting “blank slate” participants virtually guarantees that none of the citizen deliberators would have ties into existing policy networks relevant to the issue at hand. In contrast, “active” participants may exist within such networks and will more likely carry their learning and experience into future activity around the issue—possibly creating leverage for a deliberative forum’s results. We recognize that this recommendation has the potential to undermine the credibility of a citizen forum by adding fuel to the critique that any particular panel of participants was not “representative,” but we encourage future organizers to consider and experiment with this apparent tradeoff between legitimacy and ongoing impact.

Leverage existing policy networks and practitioner networks

In concert with involving citizen participants who might already participate in policy networks, organizers might explore more institutionalized links between a deliberative process and existing policy and practitioner networks. Several strategies for partnering with different kinds of organizations offer various potential benefits:

- Nonpartisan organizations give credibility to the claim of representing thoughtful citizen opinion.
- Organizations that exist at the center of policy networks provide routes of communication into such networks.
- Advocacy organizations have expertise in exploiting particular policy pathways.
- Media organizations (e.g., PBS, BBC) create opportunities for the broad dissemination of results.

As but one example, Oregon passed legislation in 2011 to create an independent commission to oversee the “Citizens’ Initiative Review” (CIR). Piloted in 2010 by a coalition of deliberative practitioners and academic researchers and conducted formally for the first time in 2012, the CIR embodies a deliberative process for a randomly selected and demographically balanced group of voters to analyze statewide ballot initiatives. While the CIR is funded by charitable donations rather than public funds, Oregon state law requires that the “Citizens’ Statement,” which represents the key findings of the CIR process, appears in the statewide voters pamphlet distributed prior to the election (see <http://healthydemocracy.org/citizens-initiative-review/>).

Finally, we recommend creating or joining a practitioner network, distinct from the one-off project teams that have undertaken many U.S. deliberations to date. Some of the U.S. partners of WWViews have taken a step in this direction by launching a network: “Expert and Citizen Assessment of Science and Technology (ECAST).”⁵⁸

⁵⁷ Kleinman, Jason A. Delborne and Ashley A. Anderson, 221–240; Powell et al., 37–70.

⁵⁸ www.ecastnetwork.org; also see D Sarewitz, ‘World view: Not by experts alone’, in *Nature*, vol. 466, 2010, 688; RE Sclove, ‘Perspectives: Reinventing Technology Assessment’, in *Issues in Science and Technology*, vol. Fall 2010, 2010, <http://www.issues.org/27.1/p_sclove.html#>.

In sum, our analysis of the WWViews deliberations suggests greater overall attention to the policy context for engaging citizens in technoscientific controversy. As more political struggles connect with aspects of science, technology, and engineering, democratic practices must adapt to a landscape that mixes fact and value, evidence and belief, and expertise and power. If future organizers of deliberative forums recognize the role of policy networks, the citizens they gather will have a greater chance of having their work lead to meaningful policy impacts.

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