



**2002 INTERNATIONAL SYMPOSIUM ON
TECHNOLOGY AND SOCIETY
(ISTAS'02)**

**SOCIAL IMPLICATIONS OF INFORMATION
AND COMMUNICATION TECHNOLOGY**

PROCEEDINGS

JUNE 6-8, 2002

RALEIGH, NORTH CAROLINA

SPONSORED BY:

IEEE SOCIETY ON SOCIAL IMPLICATIONS OF TECHNOLOGY

IN COOPERATION WITH:

NORTH CAROLINA STATE UNIVERSITY
PROGRAM ON SCIENCE, TECHNOLOGY & SOCIETY
DIVISION OF MULTIDISCIPLINARY STUDIES
CENTER FOR INFORMATION SOCIETY STUDIES
E-COMMERCE LEARNING CENTER
THE NCSU LIBRARIES

IEEE COMPUTER SOCIETY
IEEE EASTERN NORTH CAROLINA SECTION
ACM SPECIAL INTEREST GROUP ON COMPUTERS AND SOCIETY
ONLINE ETHICS CENTER FOR ENGINEERING AND SCIENCE
COMPUTER PROFESSIONALS FOR SOCIAL RESPONSIBILITY—RTP CHAPTER

Policy Debate on the Internet: Panelists Evaluate the Process

Kathleen Prosseda
North Carolina State University
kprosseda@nc.rr.com

Abstract

The 2001 North Carolina Citizens' Technology Forum provided a unique opportunity to study policy deliberation by average citizens using the Internet. Loosely based on the Danish-style consensus conference, all group work was conducted entirely online. Nine of the 13 citizen members responded to an open-ended questionnaire about their experiences. Four members of the content expert panel also offered their impressions. Despite some of the drawbacks of online communication, overall, citizens had favorable reactions. The average rating was 7.9 on a ten-point scale. Ratings provided by the experts were lower; the average score was 6.5. This may be related to the difficulty of presenting scientific information online. Both agreed that Internet forums have the potential to open up the policy debate by increasing opportunities for citizens to participate in the process. Findings of this evaluation will assist in the design of future online citizen panels.

1. Introduction

The first North Carolina Citizens' Technology Forum was held in the late summer of 2001 on the campus of North Carolina State University for the purpose of formulating policy recommendations on the topic of genetically modified foods. Two separate panels were convened. One met face-to-face and the other conducted their work entirely online. Using the Internet in a structured way to deliberate on issues of public concern is a relatively new development in the area of policy debate. This report provides an evaluation of the process from the perspective of the panelists and may shed light on the utility of this approach compared to face-to-face forums of this type.

2. The online panel

The Danish-style consensus conference served as the model for both citizen forums: panelists read background materials which were provided on the subject, discussed issues and implications, cross-examined a panel of scientific experts on genetically modified foods, deliberated on potential policy directions, and generated recommendations to inform elected officials and agency decision-makers. Both the online and face-to-face forums produced a report of their final recommendations on the future of genetically modified foods.

A professional facilitator was hired to coordinate the group interaction. Group decision-making software, Facilitate.com™, was used to assist consensus building among panelists.

While the face-to-face group met for three weekends over three months in traditional consensus conference format, the online forum needed some modifications. For example, online sessions were limited to two hours of computer time compared to the typical six-hour meeting days of the face-to-face panel. Internet sessions included both asynchronous and synchronous time (where all participants were interacting online at the same time). One online "weekend" consisted of three synchronous sessions over an eight-day period. Between sessions panel members could add comments to the website set up to host the group's work (readers may access the site at < <http://www2.chass.ncsu.edu/forum/> >).

Fifteen citizens were chosen for the online panel from among 162 applicants who responded to an advertisement in several local newspapers. Final selection attempted to match the composition of the group with the demographic pattern of the Research Triangle area in terms of age, gender, ethnicity, and education (see Table 1). In addition, seven local scientific experts on the subject of genetic modification were selected by researchers to participate in both the online and face-to-face forums for one or two panel sessions. These content experts addressed specific questions from forum members who desired clarification on an issue.

Two citizen members left the online group before deliberation began: a 23-year-old male student dropped after Session Three because of personal reasons and a 77-year-old retired male did not log on after Session One because of the "type of technology" (his words) and time commitment.

Table 1. Panel members

23 yo Afr-American male, student, 4-yr degree**
 25 yo Cauc. female, doctoral student, grad degree
 30 yo Cauc. female, public health nutritionist, grad degree
 32 yo Cauc. female, librarian, graduate degree
 35 yo Cauc. male, utility supervisor, 4-yr degree
 43 yo Cauc. female, recruiter, some college
 48 yo Cauc. male, salesperson, 4-yr degree
 49 yo Cauc. female, ad designer, high school
 53 yo Afr-American male, retired engineer, grad degree
 53 yo Cauc. female, freelance writer/editor, some college
 54 yo Cauc. male, stay-at-home father, 4-yr degree
 62 yo Cauc. female, registered nurse, 3-yr nsg. diploma
 66 yo Cauc. female, retired homemaker, high school
 70 yo Cauc. male, salesperson, 4-yr degree
 77 yo Afr-American male, retired printer, high school**

**These members withdrew

3. Evaluation results from citizens

Of the 13 remaining panelists, nine completed an online questionnaire about their experiences as forum members. One individual offered a narrative evaluation before the questionnaire was sent out. Citizens were asked open-ended questions about the strengths and weaknesses of the process, possible improvements, and the perceived usefulness of online forums as a policy tool for citizen engagement.

Finally, citizens were asked to rate their experience with this technology. Panelists were quite verbal in their response to the questionnaire and contributed 20 pages of feedback about the project.

Members of the expert panel were also asked to provide assessments. Four of the seven content experts returned the online questionnaire. Their responses will be discussed separately in Section 4.

3.1 Communication

Panel members mentioned many advantages of online group work. One noted the "equal opportunity

of commenting on the issues. The loud folks couldn't overpower the quieter ones." Another observed, "Without the noise of being heard, you can concentrate on what was being said." One individual, referring to his recent attendance at a conference, commented that "a lot of things go unsaid" in a face-to-face setting like that. Online talk relieves the pressure for an immediate response, writes another citizen. On the other hand, individuals can become "wallflowers," as one panelist pointed out, who may go a long time between contributions to the discussion.

Using the Internet to discuss policy issues seemed to benefit those who might otherwise not participate. One person shared, "I don't express myself orally as well as I do with the written word. I sometimes stutter." Another panelist remarked, "The anonymous communication allows shy people a communication medium that enables them to get around any social anxiety."

The convenience of staying in the home and avoiding travel appealed to several panel members. Work could be broken into small blocks of time; this is not an option for those attending all-day sessions on-site. Interacting online held another plus for one individual: "I could unobtrusively rummage through my stacks of information to find relevant figures, etc., in a way that would have been impossible-or at least embarrassing- in a face-to-face forum!"

There are drawbacks to online work, though. One is the occasional interruption in communication. Several individuals experienced computer glitches - inability to log on to the Internet at the hour of the scheduled session and to stay online at peak times. A passing thunderstorm caused one individual to leave the group discussion temporarily.

Many individuals reacted to the striking differences between online communication and face-to-face interaction. "The Internet option does not allow the nuances of personal, face-to-face communication. Without hearing vocal intonations, seeing body language, etc., there is, at times, a vital missing element in communication." Sometimes, online comments by the facilitator and fellow participants were interpreted by others as abrupt or rude.

One panelist wanted to meet other members of the panel but decided against it. "I am just enough like George Costanza to think that my experience would have been diminished by such an encounter. We all got to bring our imaginations to the table, and I think for the better." Online communication can mask the identity of participants with regard to appearance, age, and ethnicity. This can benefit the policy debate because individuals are less likely to respond to others based on their preconceptions and stereotypes.

Some respondents believed that the Internet was an advantage to those with quick responses, who type well, and are more visual. One respondent noted that the "speed of responses seems to have an influence in the course of the conversation...in [face-to-face] discussion, most do not use just one or two sentences to state or clarify an opinion. I felt at many times that those among us who were the best at 'sound bites' were most heard."

Another issue raised was that of unclear presentation of ideas that often required follow-up questions. Some panelists had trouble adjusting to the tempo of the discussion. "By the time I had formulated a response, the conversation had moved to a different area." Another panelist remarked that "sometimes the interchanges become confusing because keeping them in order of subject in not possible. It takes awhile, but adapting does eventually take place." According to one respondent, "online sessions are better suited for visual only folks. I lost context too often."

A few believed that some of the obstacles presented by online communication had a strongly negative influence on the policy discussion. "I was longing to hear something that felt like a full opinion/argument...I felt like I got mostly sound bites and that I wasn't truly engaged in thoughtful, reasoned discussion." She goes on to say, "I couldn't figure out the context of what was being written...I felt that the same people kept saying the same thing over and over again. This also made it tough to figure out when another person was willing to compromise on a topic or when I or we as a group needed to do so."

One person identified what she labeled a "strange group dynamic." It almost appeared, she wrote, that "1-3 particular people needed to ring in on a topic, before it was discussed or 'validated' by the group. I found this frustrating."

One individual commented that time spent online "wasn't always that productive." More than one participant felt rushed when it came time at the end of the forum to produce a written report of their recommendations. The forum required an extra session beyond those originally scheduled to complete the report writing.

"The 'rules' for consensus arrival seemed to change as the clock ticked down. While the eventual method seemed to be the logical choice, a vote, it seemed that there was a variety in the amount of time and effort spent in arriving at something to vote on...sort of like herding a bunch of cats." According to the assessment of one panelist, "the level of discussion suffered in an effort to complete the task." He offered several possible explanations: "not enough time allowed, lack of preparation on behalf of

the participants, lack of facilitator control or guidance, or lack of direction and goal understanding from group members."

3.2 Process improvement

A variety of suggestions were offered to improve the Internet version of the Citizens' Technology Forum. The progress of the earlier sessions was hampered, in the opinion of one member, by some participants who failed to invest the time and effort to read and understand the reference material provided. Rather than using the computer to read and review all the background material posted on the Forum website, several persons would have preferred reading hard copies of the documents. One panelist felt he would have been better prepared if he had had access to reference materials much earlier in the process, at least two weeks before the first synchronous session. "There was a lot of it for the average person, especially since some of it was technical."

Several panelists were disappointed that few participants contributed to the website during the asynchronous (non-group) sessions. "Using the asynchronous gives the panel members more time to compose recommendations or opinions, to review recommendations and opinions of fellow members, and the opportunity to continue to add afterthoughts in a sequential fashion." One member suggested that sponsors should stress the importance of this component and "perhaps require people to participate."

To introduce future panel members to the online conference system, one person suggested a practice session before the actual start of the forum. "They can adapt to the system, develop confidence, and be ready when the true sessions begin." This might have prevented one of the original panel members from withdrawing from the forum.

Most agreed that more time was needed for the process and many felt rushed in trying to formulate policy recommendations. One respondent proposed that, instead of spending two-hours online, panelists in the future might be willing to extend their synchronous sessions another half-hour.

One person emphasized that "flexible guidelines, rather than hard and fixed time limits" are the key to a successful forum. "I realize this could lead to long deliberations, but to me that's preferable to a rushed set of recommendations...with an inadequate amount of debate and dialogue about them."

The ideal strategy for a citizen forum, in the opinion of one panelist, would be a combination of

online and face-to-face sessions. This would help avoid the time crunch at the end because "we could say much more in two hours than we could in the same time on the computer."

3.3 Usefulness as a policy tool

There was general agreement that conducting a citizen forum on the Internet is a worthwhile endeavor. One obvious limitation mentioned by several is that the process is obviously restricted to those with Internet access, which would shut some out of the policy debate.

"It is a useful tool, but it should not substitute for face-to-face communication... I think its usefulness lies in its flexibility to engage those who may have difficulty meeting face-to-face due to disability or disposition."

"I feel like I had a voice on the subject of genetically modified foods. Most of the time a person feels powerless to have their voice heard." Another recommended that the online forum "be used often to really understand what such a wide range of average people are thinking." One woman acknowledged that it did require time and effort to learn the subject matter.

One individual doubted that sponsors could get a "consensus vote" with average citizens, and another questioned whether this forum was actually made up of average citizens. "The fact that the number of people who did apply was just about 150...suggests that large numbers of truly average people do not currently respond to such an opportunity."

Several commented on the potential benefits to society of the online forum concept. "In time, more and more people will not only become interested in such conferences, if they are regularly brought to the attention of the public, but will make efforts to become better informed themselves and to participate." Along the same lines, one participant felt the online forum was one way "to engage and seek opinions of the American public which is usually quite uninterested in policy of any kind until it hits their pocketbook or their standard of living."

Another decided that the Internet promotes "further conversations and exchanges" but shouldn't be relied on as the sole source of exchange. "I think it is great if it can engage people in policy issues in additional ways."

3.4 Citizen ratings

Panelists were asked to respond to the following question: Overall, how would you rate your online experience with the consensus conference format on

a scale of 1 to 10? (1 = extremely difficult and frustrating, 10 = very easy and rewarding)

Citizens tended to have a favorable experience participating in this online forum. The average rating was 7.9, based on 11 responses. To assess whether a negative experience had perhaps prevented some from providing feedback, the non-responders were contacted. Of the four who did not answer the questionnaire, two agreed to provide a rating. One assessed it as an "8" and the other a "5." (These are figured in the above average.) The lowest score assigned was "5" (n = 2) and there were two assessments of "10." The appeal of online deliberation was strong for some panelists.

Eight panelists believed that the final report represented the consensus of the group. One member, however, disagreed and had considered at one time being listed as a dissenting member on the final report but changed his mind. He wrote, "it wasn't obvious in the moment [during policy deliberation] that the sum of marginally acceptable recommendations" might lead to an unacceptable final report. "I've read the report and I don't care for the tone of it."

This panelist raises an important issue about the possible limitations of group writing and editing online. In fact, a fellow citizen considered this part the "worst thing about it." She gave a good review to the forum overall, though, with a score of "8."

4. Feedback from the experts

Four content experts of the seven cross-examined by the citizens responded to the questionnaire. They raised many of the same issues regarding communication on the Internet. One woman wrote that it took her a long time to answer citizens' questions because she got caught up in grammar and spelling. Sometimes the discussion shifted by the time she had posted her message. Another admitted, "It was difficult to follow who was saying what on the web."

Because the experts participated in both the Internet and face-to-face forums, they could provide some comparisons between the two styles. One felt that there were more "active exchanges" online. She attributed this to the anonymity of the Internet which probably encouraged some to speak up. "Some people almost never spoke in the face-to-face sessions."

During the Internet forum, one person felt like his slow typing hampered his ability to explain the technical knowledge he was called on to share. "Face-to-face is always better," he remarked.

because it allows more in-depth focus on issues of importance." Another expert noted that it was difficult to get in all he wanted to say in response to some questions.

Several commented that it was harder to educate online since there were no visual cues to inform them whether participants understood. As one expert put it, "No question that it is important to gauge the level of comprehension by body language while explaining technical information...[and] it is always easier to assess attitudes in face-to-face meetings."

As far as process improvement, three of the four recommended adding video/voice capabilities. Another thought that allowing some reading time during the process would slow the pace. "It went very fast, and I had a hard time keeping up."

4.1 Experts' views on usefulness

All four responding to the questionnaire affirmed that they could trust the citizen forum in general to contribute to public decision-making in their technical field. One panelist called citizen involvement "essential" for the policy process, but one of his colleagues cautioned that it should not be the sole factor in choosing a policy strategy. Also mentioned was the importance of organizers and facilitators ensuring balanced time for both sides of an issue. Citizen panels should represent a broad spectrum of society, another wrote.

When asked their views on citizens' ability to absorb complex technical issues and make useful policy recommendations, all replied that they were confident that citizens could learn. One expert pointed out that issues needed to be presented in "everyday language." "Whether they can make useful policy recommendations," he goes on, "is another question because of the nature of many policy decisions."

A fellow panel member offered a different opinion. "In a way they are in a better position than we are in making decisions. We, as scientists, could get caught up in details. One concern is that if they are presented by one-sided views they can be swayed (this is very true for us, too)."

One content expert actually changed his mind about the role citizens could play as a result of participation on the panel. "I would say I have more confidence than when I went into the forum. I was impressed by their ability to see both the big picture and the minutia."

4.2 Expert ratings

Experts were also requested to provide a rating of the online forum on a scale of 1 to 10. Answers ranged from 5 to 8. The average score was 6.5, almost one and a half points lower than the citizens' assessment. This could be related to the awkwardness some experts faced in presenting scientific information online.

5. Conclusions

Evaluating this online forum for policy debate is challenging because it is hard to separate the process from the technology used to support it. Citizen members and content experts encountered many of the same communication issues. Citizens seemed to make adjustments to some of the hindrances identified and gave the online format favorable ratings. The opportunity to participate with a group of fellow citizens and the novelty of the online experience may have influenced their perceptions in a positive way.

Experts had the added responsibility of ensuring citizens' questions about genetically modified foods were adequately answered, and the task was not easy to do online. This could account for their lower scores.

For the most part the strengths of citizen involvement in policy deliberation seemed to outweigh the weaknesses for this particular panel. Citizens and experts agree that citizen forums based on the consensus conference model allow the public a unique opportunity to participate more fully in policy debate on scientific issues.

Findings of this evaluation will assist in the design of future online citizen groups.