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Using Community Forums to Enhance Public Engagement in Environmental Issues

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Abstract

As environmental issues become more complex, the public may be less interested in becoming knowledgeable enough to participate in decision-making. Yet its input can be critically important in some community-based issues. A community forum is one tool designed to provide information, enable participants to ask questions to experts and create an open atmosphere for discussing an issue that requires relatively little investment from the participants. We used this tool to explore the issue of using wood to create electricity. Our results suggest that participants gained knowledge about

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the issue. As long as their concerns were addressed, nearly twice as many participants felt positive about such a proposed facility after the forum (81 per cent) than before (43 per cent, $n = 108$). Such activities could be successful strategies to engage the public in decision-making because they respect the real limits on time, attention and knowledge and enable people to participate at an appropriate scale. To reproduce this community forum, we suggest using credible but neutral experts, creating a nonjudgemental atmosphere, allowing people to ask their questions and sharing the results with elected officials.

INTRODUCTION

The urgency of many environmental issues suggests that educators should focus their efforts on decision makers at every level. Community leaders, elected officials, citizens and business owners all make decisions that affect the sustainability of their communities. In some cases, these decision makers ask experts to make official recommendations (such as setting interest rates). However, the public has an important stake in air and water quality and ecosystem health, and its engagement and approval is often necessary for a successful resolution to environmental problems (Wondolleck and Yaffee 2000). Choosing fuel sources for energy generation, for example, has a long-term impact, but because of its complexity and the requisite background knowledge to discuss this issue, engaging the public in meaningful discussions is a challenge.

Instead of actually working with the public, pollsters often gather data on public opinion and attitudes formed from previous knowledge, experience or values and use this to allude to how the citizens feel about an issue. Yankelovich (1991) suggests that *public opinion* is not helpful because often it is not based on current facts. *Informed judgement*, however, can be very useful in creating the reasoned deliberation that brings clarity to decision-making (Yankelovich 1991). If public engagement in environmental decisions is the goal, educators need to develop opportunities that raise awareness, provide information and enable citizens to easily participate in discussions of issues and solutions. Incorporating public participation into educational programmes should create more meaningful opportunities for citizens and more useful discussions for decision-making.

When our city commissioners explored using wood for electricity production, we took this opportunity to develop programmes that would enable people to learn and participate in the discussion. We recognised that citizens have time constraints and little relevant background knowledge about this issue, but that they also had sincere and important concerns. Community forums were used to provide information to interested members of the public, to answer their questions and learn about their concerns and to share their thoughts with community leaders. This article discusses this community forum model and provides our evaluation results and reflections.

STRATEGIES AND CHALLENGES OF PUBLIC ENGAGEMENT

Efforts to involve the public in environmental issues are used throughout the world, from citizen advisory boards to adaptive collaborative management (Jacobson, McDuff and Monroe 2006; Monroe, Andrews and Biedenweg 2007; Sirianni and Friedland 2001). These strategies vary in required commitments of time and resources and in their associated outcomes. Some strategies, such as public meetings, require less time and fewer resources, but generate little public engagement and are rarely perceived as helpful by the public or natural resource agencies (Fazio and Gilbert 1986; Toman, Shindler and Brunson 2006). In these meetings, both the problems and solutions are predetermined, and the meeting is actually a presentation on what has already been decided; the time for input has passed. Such strategies do not constitute participatory problem solving and are rarely a motivator for participation (Kaplan 2000).

In contrast, collaborative learning and social learning are strategies for engaging a small group of stakeholders and experts to work together through a complicated issue by exploring options, collecting data and learning about potential solutions (Daniels and Walker 2001; Keen, Brown and Dyball 2005; Sirianni and Friedland 2001). These strategies recognise that joint ownership of decisions creates collective responsibility for future directions (Andrews, Stevens and Wise 2002; Wondolleck and Yaffee 2000).

Although collaborative learning processes are powerful, some community environmental issues are not perceived as threatening enough for people to justify making long-term time commitments in a working group. For example, in Nebraska, a participatory watershed plan that sought meaningful public input was unsuccessful in involving the public, possibly because of the lack of a defined problem and citizen complacency with current conditions (Irvin and Stansbury 2004). In addition, the more technical or complex the issue, the less likely the public is to have sufficient background knowledge to be meaningfully engaged. People tend to avoid situations where they are confused or are unable to follow the discussion (Kaplan 2000; Kaplan and Kaplan 1982). When conversations with experts do not focus on the aspects that the public knows or cares about or the format does not welcome the type of participation people are willing or able to offer, is it any wonder that people do not attend?

There have been efforts to involve larger numbers of citizens in less intensive collaborative learning opportunities. Community dinners, study circles, scenario workshops, charrettes and planning cells are strategies that have been recommended for discussing community-based natural resource issues (Ogden et al. 2003). In the United Kingdom, 'deliberative and inclusionary processes or procedures' (DIPS) include citizen juries and round-table discussions to engage the public in policy debates (Owens 2000). In the United States, the National Issues Forum, a coordinated, town-hall-style moderated discussion allows citizens to learn and share opinions while collecting data to report to Congress (Matthews 2006). These examples suggest it is possible to develop practical strategies for complex environmental issues about which

citizens care but do not threaten their livelihoods and where people are willing to invest an evening but not a year.

MEETING THE CHALLENGES OF PUBLIC ENGAGEMENT

Opportunities to engage people in local environmental issues, then, must provide understandable and meaningful information, answer their questions and address misconceptions, offer varying levels of engagement and enable them to engage in decision-making without feeling embarrassed or helpless. Such opportunities should build on the qualities that make public participation in small groups successful (Renn, Webler and Wiedemann 1995) but, where possible, provide shortcuts to the lengthy process of building trust, competence and expertise as well as increase the number of participants (Abelson et al. 2003; Foster-Fishman et al. 2001). Kaplan and Kaplan's (2008) Reasonable Person Model (RPM) speaks of these criteria by suggesting that environment and programmes can be designed to help people understand issues and provide avenues for them to be meaningfully engaged in positive activities. RPM offers several guidelines that provide a framework for our community forum.

The first is that people need information that makes sense and allows them to explore possibilities (Kaplan and Kaplan 2003, 2008). Providing appropriate information in a forum requires that organisers understand what the audience knows and where it tends to become confused. Doing so requires that misconceptions are carefully acknowledged and addressed. It also requires that credible experts are involved to present technical and complex information, as long as the presentations do not make participants feel stupid or helpless, but rather satisfy people's need to learn, explore and be involved (Kaplan and Kaplan 1982). These assumptions suggest the following:

- An audience analysis or pre-forum interviews should be conducted to help design an educational programme that builds on what people already know and provides new information they need to know. Generally, the public has a different way of looking at the issue than the expert, and communication between these two mental models requires at least an understanding of these differences.
- Two-way communication that enables people to ask questions, offer clarification and continue with subsequent questions leads to greater clarity and understanding than listening to information for two reasons: participant questions focus the discussion on information that is relevant and meaningful to that individual, and clarification and follow-up questions offer opportunities to address misconceptions that may be preventing the participant from fully understanding the concept (Dunwoody 2003; Monroe 2005).
- Examples of how other communities have wrestled with this issue can help people believe they are not alone and that solutions are not impossible, which can help them create visions for their future (Kaplan 2000; Monroe and Kaplan 1988). The availability of information and access to experts may also attract citizens to the process (Kaplan 2000).

Another element of RPM (Kaplan and Kaplan 2003, 2008) suggests that our ability to engage in environmental problem-solving can be enhanced with information that enables us to take meaningful actions and to believe that we have the ability to take these actions. Certainly, case studies and examples of other communities' decision processes can assist, but so too can the following criteria of a community forum:

- People appreciate choices in their voluntary educational opportunities (Merriam, Caffarella and Baumgartner 2007), and should be allowed to decide their level of involvement and commitment. Interested participants could choose to pick up fact sheets, read more information, attend additional meetings or organise subsequent activities.
- Although public engagement for the purpose of education is laudable, people often want to know that their informed opinions and ideas will be shared with decision makers. Some strategy for doing so could be an important outcome of the process. In Nepal, for example, community citizens created a video-letter to be shared with public officials (Grieser 2000). The opportunity to make a difference through participation is an important intrinsic motivator for involvement in environmental issues (De Young 2000).

When these criteria are satisfied, a community forum becomes an opportunity to engage citizens in learning about a local issue and offering thoughtful opinions and suggestions about how a problem might be solved. This type of citizen education can help create 'informed judgement' and enable people to contribute more than just impressions and opinions (Yankelovich 1991).

Equally important is how a community forum should not be structured. Although the experts' contribution is critical, they should not attempt to be persuasive and win converts. This practice can create defensive postures among those not predisposed to agree. Persuasive tactics make it easy for opposing forces to draw battle lines and rally their supporters. Creating a neutral atmosphere and using a facilitator to help the experts maintain this tone should create a better learning environment.

METHODS

The Wood to Energy Outreach Programme and the need for local energy discussions enabled a group of researchers from the University of Florida to explore the use of community forums as a strategy to educate and engage the public in a local environmental issue. The issue of whether to use local wood for electricity production in Gainesville, Florida, is complex, involving forest management, transportation, supply and cost estimates, power production, economic impacts and land-use preferences. The issue is further complicated by the fact that most Americans know very little about their energy sources (NEETF 2002); a reliance on imported fossil fuels has reduced people's awareness of the sources and impacts of their energy use. Finally, the issue is drawing attention because concern for climate change is prompting communities to explore possible strategies for reducing their dependence on fossil fuels.

Our research team of economists, engineers, foresters, energy experts and educators designed and conducted a series of community forums to provide citizens with an opportunity to become aware of the issue, to deliver new information, to answer questions, to learn what concerns participants and to share citizen feedback with elected officials. We were able to use the results of a written survey previously conducted with county residents to better understand their concerns and knowledge level. We structured the public forum as follows:

- A neutral facilitator introduced the forum, coordinated questions, diffused contentious situations and encouraged participation.
- A group of experts, rather than a single one, presented information to reduce the possible perception that there is only one way to look at the issue and to acknowledge that the issue is complex. No 'one answer' was advocated.
- Each expert took five minutes to explain basic concepts associated with one aspect of the issue: wood as a carbon-neutral fuel; potential sources of wood, forest ownership and sustainable forest management; and the availability and cost of wood and economic impacts. The residents' survey data were helpful in selecting the key concepts and framing the explanations.
- After the 20–30-minute presentation, the facilitator requested questions and comments from the audience. The interactive discussion accounted for at least half the total forum time.
- Participants were asked to complete pre- and post-forum surveys. As an incentive, homemade cookies were offered. Pre-forum survey sections included attitudes and knowledge levels about using wood for energy, citizen influence on community decisions and the importance of public engagement. Post-forum surveys contained similar knowledge and attitude questions and additional sections on issue concerned and community meeting characteristics. Additionally, it had a section to write questions or comments. The survey and consent process were approved by the University of Florida Institutional Review Board.

We conducted six community forums in the evening or during lunch at different locations throughout Gainesville in November and December 2006. Forums were held at community organisation meetings (e.g., Sierra Club, Kiwanis Club) where the participants were those who came to a regular monthly meeting and also those at public libraries for the general public, where participants responded to a flyer, newspaper or radio announcement. The forums lasted no longer than 90 minutes. From 4 to 60 people attended each, for a total of 172 participants. All participants were invited to complete a forum survey.

RESULTS

Forum surveys were voluntarily completed by 108 participants. As an outreach strategy to inform those who attend community meetings, the forums were successful. Pre-forum survey responses show that more than two-thirds of the respondents considered

themselves 'Not at all knowledgeable' (34 per cent) or only 'Slightly knowledgeable' (37 per cent) about using wood for energy (see Figure 1). The post-forum responses suggest many of these respondents felt more knowledgeable; more than 90 per cent of the respondents considered themselves 'Slightly knowledgeable' (45 per cent) or 'Fairly knowledgeable' (46 per cent). Also worth noting, the category of 'Very knowledgeable' fell from 6 per cent in the pre-forum responses to 3 per cent in the post-forum responses, suggesting that perhaps some participants realised that there is more to know than they originally thought.

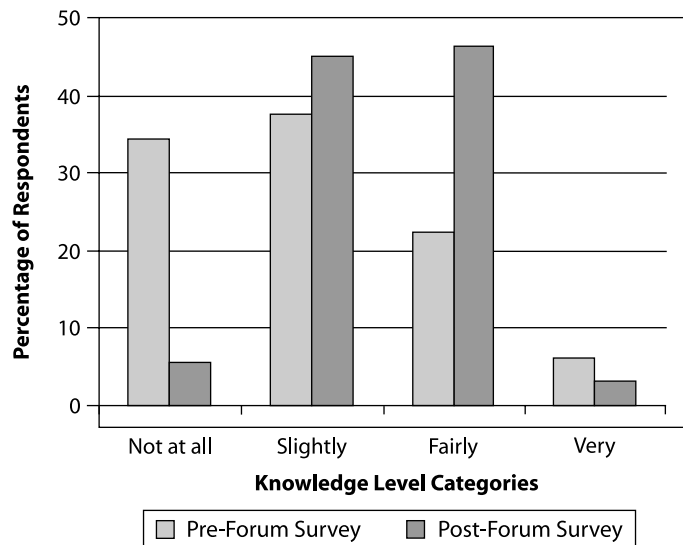


Figure 1 Survey respondents' self-reported gaining knowledge by participating in the community forum

Source: Authors' own.

Perhaps more interesting, the community forum model changed attitudes about using wood for energy. Acknowledging that their concerns were valid and explaining where choices could be made to alter the design of a wood-to-energy facility enabled participants to imagine an acceptable proposal. Pre-forum surveys showed that 43 per cent of respondents felt positive or highly positive about a wood-to-energy proposal in their county. The post-forum survey provided options regarding the energy plan (e.g., wood sources, transportation, management), and if the choices marked as favourable were included in the plan, 81 per cent of respondents felt positive or highly positive about a wood-to-energy proposal. We cannot know if these respondents would have approved such a proposal from the beginning or if the promise of having some influence over the proposal design attracted respondents to this position.

The results of the survey and a summary of the discussion were presented to the Gainesville City Commission, as promised at the forums. Although it is not possible to know the impact of this activity, the commissioners recently approved a bid for a wood-to-energy facility.

The community forum model seems promising as one part of an outreach strategy for engaging the public with experts. Credible speakers and an opportunity to ask questions to experts were rated as the most important aspects of community meetings (see Table 1), suggesting that the opportunity to learn relevant information can be a powerful motive to public participation. Other outreach strategies should continue to be used, however, for those residents who do not belong to community groups or who are unable to attend a community meeting. In Gainesville, newspaper articles and city commission meetings provided other venues for information, but these did not allow for questions, were unable to address misconceptions and did not poll participants for opinions.

Table 1 Average Scores for Community Meeting Characteristics

Community Meeting Characteristic	Average Scores*	<i>n</i>
Credible speakers	4.55	84
An opportunity to ask questions to experts	4.52	83
An opportunity to learn about issues	4.45	83
An unbiased facilitator	4.41	84
An opportunity to share ideas with community leaders	4.38	81
A comfortable atmosphere for contributing ideas	4.38	82

*(1 = good to have, 3 = important, 5 = absolutely essential)

Source: Authors' own.

The discussion portion of the forum was lively and interactive, with participants asking thoughtful questions. Written comments from the participants spanned the range of helpful ideas and were useful for improving subsequent forums; here are examples of such comments:

- Great presentation. Very interesting. Applause for involving local citizens in learning about possibilities and feeling empowered to get into the discussion.
- Appreciated this explanation. I am still confused about how trees used for energy will not contribute to increased carbon.
- Introduction too long and simplistic. Too much material to begin presenting at 8:30 pm.
- Very good information. Has this been or will this be presented to the city commission?

Figure 2 depicts the community forum model. Because it brings together educators, experts and citizens in a neutral atmosphere, the participants are able to interact and learn from each other. Even though they did not directly interact with decision makers, survey comments suggested that participants were more comfortable having their views reported en masse. One respondent explained that she did not have enough knowledge to speak to a commissioner, but still cared and wanted her voice recorded.

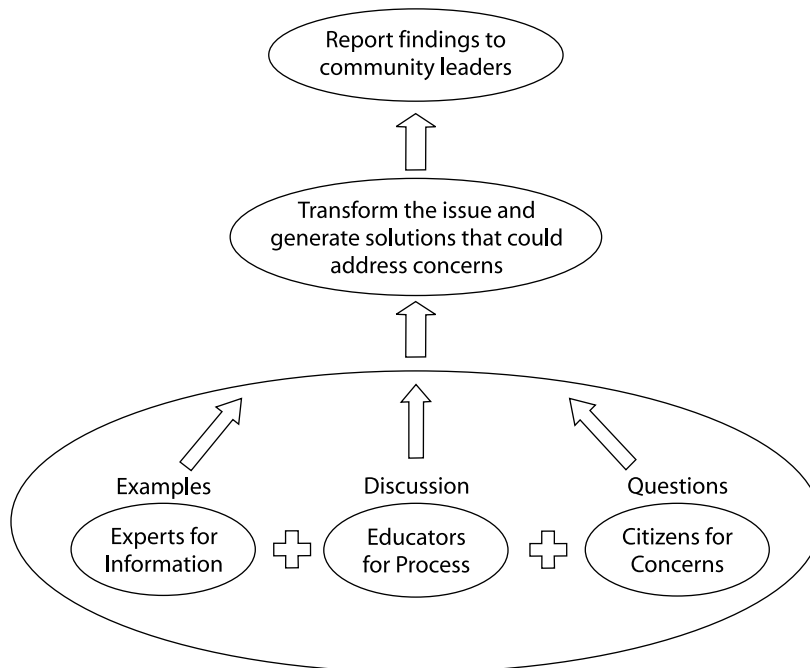


Figure 2 The community forum model brings educators, experts and citizens together to discuss and learn about environmental issues

Source: Authors' own.

REFLECTION

With the benefit of hindsight, we offer the following suggestions to those who are interested in developing a community forum.

We were surprised at how little the public knows about energy. Throughout the series of forums, it was important for us to remain flexible and revise our presentation based on participant feedback. We simplified slides and vocabulary, reduced or omitted details and provided analogies. Educators played a key role in helping experts simplify and streamline their presentations.

It is possible to create an atmosphere conducive to social learning with specific actions:

- introducing the survey as a way for participants to teach the experts what is important and share their values and perceptions about the issue
- sincerely suggesting that the experts do not have the answer, only information to share
- asking experts to avoid phrases that suggest they have the solution and that citizens should just listen, such as 'You've got to understand that...'

- responding warmly to conflicting opinions by saying, ‘That’s a very important suggestion’
- researching and then responding to the questions presenters cannot answer during the forum by email or postal mail

Misconceptions can make it difficult for people to understand new information. The benefit of a community forum is the opportunity to engage people in a discussion that reveals potential misconceptions and allows the experts to offer new ways of seeing the situation. Experts should be prepared to explain common misconceptions, such as why burning wood is carbon-neutral.

Publicity is important. If the issue is not front-page news, people may not make a special trip for a meeting. The well-attended meetings were those held in conjunction with organisation meetings. Announcements that make clear how the issue relates to the public and why their ideas are important could help attract people to a forum (Merriam, Caffarella and Baumgartner 2007; Toman, Shindler and Brunson 2006). Framing the issue in the context of sustainability may help environmental issues seem relevant to those who care more about economic development or social justice.

Our results cannot be generalised to the entire community as we did not address the needs nor hear the concerns from those who did not attend. However, the results may be reasonably indicative of the interests of those community members who are likely to become engaged in a local issue. This model represents a strategy that is more likely to access a greater cross-section of the interested public than a traditional public meeting because the latter attracts people who already have an opinion and a community forum is more likely to attract people who are curious and willing to learn.

It is a challenge to organise a forum on a controversial topic and not be perceived as leaning towards one solution. Admitting which areas represent uncertainties and suggesting where experts are making informed guesses might be useful. In addition, it may be helpful to organise a series of forums that explore all potential solutions, complete with advantages and disadvantages; and include failures among the case studies—in our case, communities that chose not to use wood for energy.

CONCLUSION

Public participation strategies come in many shapes and sizes. On one extreme is a formula-driven public meeting in which public opinion is dismissed as being uninformed and the agency continues with business as usual. At the other is a lengthy, stakeholder-driven process to redefine a problem and create new solutions. Neither extreme is attractive to the majority of busy, thoughtful-but-not-too-knowledgeable community members.

Our experience with community forums suggests that they are an attractive alternative for people who care about an issue, want to learn and are willing to make a minimal contribution to a decision. Educators and community organisers can develop programmes that create an atmosphere conducive to learning and enable people to

make a meaningful contribution to a decision. Although the expert presentations in our forums were based on earlier survey results, participants were able to shape the ensuing discussion by their questions. Participants also contributed to the responses, helping answer questions where they had expertise. It could be most beneficial if the tone of the event is one of sharing and learning, not of persuading and convincing, and if the issue is portrayed as having many alternative avenues. Experts have an important role in these meetings—to provide information, answer questions and address misconceptions. Surveys and comment cards could help organisers summarise participants' views and present them to decision makers.

New strategies to educate and engage citizens in exploring community issues are critical. Achieving a more sustainable society may indeed rest on our ability to educate and motivate people to participate in creating a new vision for a better world.

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