MEASURING OUTCOMES OF PUBLIC POLICY EDUCATION PROGRAMS

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Evaluating public policy education programs presents a number of significant challenges. We are beginning work on a cluster evaluation of eleven Kellogg-funded projects which promises to give us an excellent opportunity for learning to improve the art of evaluating public policy education programs.

The purposes of this paper are to review some methodological issues and measurement problems germane to such evaluation contexts, to inventory ideas for possible outcome indicators, and to describe the forthcoming cluster evaluation.

Measurement of Impact Indicators

Conceptualizing Impact Indicators

Any "particular [impact] indicator introduces both its own definition of the valued benefits of social programs and its own set of limitations as a measure of these benefits" (Burstein and Freeman, p. 30). That is, in evaluation contexts, the selection and definition of program outcomes to be measured are fundamental decisions that invoke an interplay of political, methodological and philosophical issues. Three examples of particular relevance to public policy education programs will serve to illustrate this argument.

First, and most concretely, possible impact indicators for policy education programs typically vary widely in substantive content. Two possible sets of indicators include benefits for individual participants and changes in the policy issues that the programs address. Selection of the former might reflect a primary valuing of education/learning, while selection of the latter might reflect a more politicized valuing of actual issue resolution. Neither is "right" or "better," nor are the two sets of outcomes mutually exclusive. But, at core, they represent quite different perspectives on the function and role of public policy education programs.

Second, outcomes of social programs, including public policy education, can be delineated in advance (*a priori*) and universally (e.g., across all program sites) or constructed as more emergent and

context-specific. *A priori* determination of impact indicators typically reflects a view of social research as theory testing and refinement.[1] In this view, the purpose of social inquiry is to assess the validity of theoretically proposed relationships, say, between program activities and intended program impacts. The theory then prescribes the outcomes to be measured, in advance and universally. Hence, this perspective makes certain assumptions about human behavior (e.g., it can be explained in lawlike propositional statements) and values the enhancement of social scientific knowledge (theory) above all else.

In contrast, a more emergent stance toward program outcomes reflects not so much the absence of theory as a belief in the idiosyncratic, context-specific, value-laden character of all human experience and meaning. From this perspective, measuring participant (or issue or program) status on theoretically-prescribed impacts may well miss the essential significance and meaning of the program experience for many participants. Rather, to capture such meanings, the evaluator must allow them to emerge from the setting and diverge from each other as well. Thus, pluralism and context-specific or "local" program understanding are among the key values represented by this perspective. (Incidentally, this is the approach we have chosen for the cluster evaluation to be described later.)

Third, impact indicators of public policy education programs can represent either acceptance of existing policy making processes or change-oriented critiques. For example, selection of participant or individual-level outcomes could reflect a belief that *there's nothing wrong with the system, we just need a more informed and actively participating citizenry for the system to work as intended*, whereas selection of structural or system-level impacts to measure (such as impact on issue resolution) could reflect a belief that *the system itself needs changing—for example, towards more equitable, just, and fair opportunities for participation by all and towards participation, not only in resolving issues, but also in determining which issues get on the public agenda.* These contrasting stances clearly represent different political views that are rooted in different philosophies and assumptions about the nature and role of science in society (Bernstein).

Measuring Impact Indicators

Although any given impact indicator carries its own specific measurement challenges and limitations, a number of more general measurement challenges are common to many public policy education contexts. These include 1) programmatic complexity and its attendant implications for the interwoven, multifaceted character of program impacts (whether individual or structural, scientific or localized, *a priori* or emergent) which are exceedingly difficult to measure; 2) the evolving, changing nature of program implementa-

tion and the consequent need to continually monitor the match between program and selected or emergent outcomes; 3) difficulties in fully identifying and adequately sampling intended program audiences, including actual beneficiaries as well as those put at disadvantage by the program; 4) the absence of "tried and true" measurement techniques for most impacts of interest; and 5), relatedly, of paramount importance in all measurement contexts, the considerable challenge of providing support for the validity of the inferences to be drawn from measurement efforts.

In response to these kinds of challenges, applied measurement experts urge evaluators 1) to maintain an attitude of skepticism toward our empirical data (instead of reifying them) (Burstein and Freeman), 2) to employ multiple philosophical and value frameworks, methods, measures and analyses in our investigations of social phenomena (Cook), and 3) to develop more rigorous procedures for monitoring and assuring the quality of the data we collect (Sechrest).

In addition, Sam Messick has recently proposed a broad, unified view of measurement validity as "an integrated evaluative judgment of the degree to which empirical evidence and theoretical rationales support the *adequacy* and *appropriateness* of *inferences* and *actions* based on test scores or other modes of assessment" (Messick, p. 5, emphasis in original). This view of validity encompasses, not only interpretations and inferences derived from empirical data, but also the uses, actions and, hence, social consequences of these inferences. Messick thus exhorts evaluators and other applied researchers to consider, not only the science, but also the values and ethics of assessment in their measurement decisions. In deciding on evaluation strategies we need to worry, not only about whether we draw valid inferences, but also whether our strategies encourage valid uses or actions. A paper-and-pencil knowledge test that excludes illiterate or less verbal participants in a public policy education program may not yield valid inferences. A critique of an existing policy process, derived from open-ended interviews of multiple participants but disseminated to only a few, may represent invalidity in terms of use or action.

Messick's unified view of measurement validity brings us back full circle to the argument advanced at the outset, namely, that all measurement decisions are imbued with political, value and ethical considerations. For measurement decisions related to the conceptualization and assessment of outcomes of public policy education programs, this argument appears to be particularly important. By definition, these programs are enmeshed in the political fray of public policy making, with the intent of improving it somehow. This "somehow" will vary from program to program, reflecting the inevitable diversity of situations and viewpoints in a complex, democratic society. In all cases, however, documentation of the effects or impacts of public policy education programs should constitute a

thoughtful, politically conscious and ethically responsible contribution to the policy making process.

Possible Outcome Indicators

With these challenges as background, then, let's look at some possible outcome indicators for use in evaluating public policy education programs. We begin with an assumption that public policy education has two main purposes: 1) to increase people's understanding of public issues and policy making processes and improve their ability to participate effectively, and 2) to contribute to the resolution of important public issues by helping people and communities move through the policy making process. Thus, in terms of outcomes, we would hope that, as a result of our efforts, beneficial changes would occur in the individuals who participate in our programs and in the issues our programs address.

Impact on Individual Participants

What individual-level outcomes might we measure? For ideas, we have turned primarily to literature in political science and education, neither of which are particularly helpful. Political scientists have devoted little attention to *teaching and learning* about politics and public affairs, while educators have shown little interest in *adult* learning about these topics. In addition, we have also reviewed a recent New England project in which, among other things, evaluation questions for community leadership programs were developed by a work group of extension educators (Feeney and Millar). For a set of categories for reporting possible outcome indicators, we have adapted Bennett's chain of events hierarchy. Bennett recommends assessing impacts on "KASA"—knowledge, attitudes, skills and aspirations—and on "practice change." We have taken the liberty of collapsing aspirations and practice change into a category labelled behavior (or behavioral dispositions).

Knowledge. First of all, under knowledge, surprisingly little has been done by political scientists, nor does the New England project (Feeney and Millar) include questions on knowledge. Political scientists have occasionally used scales with questions about such topics as the term of office of U.S. senators, the number of justices on the Supreme Court, the countries that are governed by particular political leaders or the name of the governor of one's state.[2] While such questions undoubtedly tap some level of political knowledge or awareness, are they really the questions we want to ask? What facts *are* important for a competent citizen to know? This last question seems critical to us. If we had a reasonable consensus on what people need to know in order to be competent participants in public affairs, we'd have a better idea of what we want to teach and, therefore, of what evaluation questions to ask.

Unfortunately, the literature in political science and education is remarkably unhelpful along these lines. Little systematic thought has been published on what citizens need to know in order to be effective participants in public affairs. School educators are the principal exceptions and they've had a difficult time agreeing with one another (Cherryholmes). Traditionally, political education in the schools has focused on legal aspects and formal institutions. More recently, other educators have pushed for increased emphasis on the informal aspects of political behavior. And now the latter have come under attack from yet a third group who argue that, in the absence of critical and reflective educational methods, teachers of political behavior end up encouraging students to accept the current state of political behavior as unchangeable.

Perhaps we can at least agree that knowledge in three major categories is worth measuring: *government* (the formal, legal aspects), *the process* (political behavior), and *the issues*. In the case of knowledge about government, test questions from the National Assessment of Educational Progress seem to us to be on the right track. Examples include:

> Below are listed four of the many jobs done in a city. Which one of the jobs is done by the health department? Selling food / Directing traffic / Putting out fires / Inspecting restaurants.
>
> The head of government in the United States is the President. Which one of the following is usually the head of government in a town? The mayor / The governor / The chief of police / The school principal.
>
> If a citizen of the United States wants to find a statement of his civil rights, in which of the following should he look? In the Bible / In the Constitution / In the Articles of Confederation / In the Declaration of Independence (National Assessment of Educational Progress).

These questions emphasize facts such as the levels, branches or departments of government responsible for particular services or regulations, the lines of accountability in a particular unit of government, the requirements of law and how to find out what the law is if you don't know. Such facts can reasonably be expected to contribute to *citizen competence* in the sense that not knowing them can easily diminish one's effectiveness in the political arena.

Regarding knowledge about the process, test questions on political behavior are illustrated by the following true-false statements used by the designers of a course on "American Political Behavior":

> In recent Presidential elections, over 80 percent of eligible voters have voted on election day.
>
> Individuals who hold jobs as owners of businesses, managers of businesses, lawyers, and medical doctors have more influence on the decisions of government than do individuals who are manual workers or clerks.

In the United States Congress, committee chairmen are likely to have more influence in decision making about the making of laws than other Congressmen (Patrick).

These questions appear to have been worked out less carefully. It's good to know that turnout in Presidential elections has not come close to 80 percent in recent years, but does it really damage one's citizen competence to *not* know it? A more thoughtful discussion of knowledge about the process, in our view, is provided by Eyler and Halteman, who define a politically sophisticated person as one who 1) comprehends politics "as a process involving interactions among competing interests and not merely as a set of mechanical procedures for making a bill into a law" (p. 28); 2) identifies multiple power centers instead of assuming that a decision can be made by a single individual or board; 3) appreciates the necessity of organized group action; and 4) understands that "political pressure—the ability to sanction with votes, money, or other values—is generally more effective than merely communicating issue information" (p. 29). Their measures of political sophistication rely on the coding of responses to open-ended questions about problems the respondents think are important and the process of getting legislative changes made.

Finally, the specific substance of what we want people to learn about the issues will be different for each educational program, but presumably includes knowledge about the current situation, its causes, implications for different segments of the population, available alternatives and expected consequences of each alternative for different segments. In addition, it can be argued that the single most important body of knowledge public policy educators can help people acquire is knowledge about the other side(s) of an issue, and we've already noticed in the short time we've been working on the cluster evaluation that many of the projects are thinking along these lines.

Attitudes. Political scientists have devoted a lot of attention to the measurement of attitudes. The most commonly measured attitudes have been trust and efficacy.

Trust is most often measured by asking for opinions on how often the government can be trusted to do what is right, how much tax money is wasted, whether people in government know what they're doing, whether they are "crooked" and whether the government is run "by a few big interests looking out for themselves" (Abramson).

Efficacy is most often measured by agreement or disagreement with statements such as, "Sometimes politics and government seem so complicated that a person like me can't really understand what's going on," and, "I don't think public officials care much what people like me think" (Abramson).

Here, again, there has probably not been enough careful thought about the attitudes that would characterize a competent citizen.

Efficacy seems pretty clearly desirable; we would expect competent citizens to feel efficacious. But what about trust in government? Is trust or distrust, or neither, a sign of competence?

Other attitude measures reported in the literature include "interest in public affairs" (Jennings and Niemi), "civic tolerance" (Long and Long), "political realism" (Long and Long), "power orientation" (Balutis), "willingness to compromise" (Balutis), and "opinions about politics" (Balutis). Some of these seem important—characteristics that citizens *should* have—but, in some of the more interesting cases, the choice of questions to comprise a scale can be criticized. In others, the actual questions are not reported in the literature.

Finally, of course, political scientists (as well as the news media) have devoted a lot of attention to attitudes (or opinions) about issues. Examples are a dime a dozen:

> In general, do you feel that the laws governing the sale of handguns should be made more strict, less strict, or kept as they are now?
>
> Do you feel that nuclear power plants operating in this country today are safe enough with the present safety regulations, or do you feel that their operations should be cut back until more strict regulations can be put into practice? (*Gallup Reports*, various issues).

It is easy to imagine situations in which public policy educators would want to use questions like these.

Skills. Under the heading of skills, we encounter a different pattern of attention in the literature: careful thought about the skills citizens should have, but very little measurement. Educator Fred Newman, for one, has provided a thoughtful discussion of the skills students should acquire in the schools. His list includes policy research skills, moral deliberation skills, advocacy skills, group process skills and skills in managing citizen action efforts. The New England project (Feeney and Millar) includes a few items designed to measure skills (or at least people's perceptions of their own skills—for example, the extent to which they believe their listening, speaking, writing, goal-setting, time management, conflict management and other leadership abilities have improved. For the most part, political scientists and educators have shown little interest in measuring the political skills of ordinary citizens.

Once again, an exception is Eyler and Halteman, who note that political skill is hard to measure since it's "ultimately expressed in action," but that "the ability to design political strategy" is surely a prerequisite (p. 29). To tap this ability, they code responses to open-ended questions to reflect respondents' tendencies 1) to identify important issues that correspond to the legislative agenda, 2) to describe information-seeking strategies that focus on learning about alternatives, views of opposing sides, consequences of alternatives,

sources of information, sources of influence, impact on the public and what actors are involved in the decision making process, and 3) to offer "strategic" as well as "substantive" solutions—for example, not only "build more power stations to solve energy problems," but also "line up the major power producers in the state behind an energy bill that will provide them with incentives" (p. 30).

Behavior (or Behavioral Dispositions). Political scientists have devoted a lot of attention to studies of political participation. Forms of participation typically studied include voting, various types of campaign-related activity, and (to a lesser extent) such issue-related activity as speaking or writing to public officials about an issue or active membership in organizations that work on community problems (e.g., Verba and Nie).[3] The previously mentioned New England project includes similar questions about political behavior as well as others oriented more closely to the specific objectives of educational programs in extension. For example, one question asks respondents to

> Describe the process you used in one or more of the following components of group problem solving:
> - differentiated between a symptom and a problem
> - determined what individuals and groups were affected and what their goals or value preferences were
> - determined whether the issue was a public or private issue
> - identified alternative approaches to an outcome
> - explored impacts or consequences of solutions
> - identified appropriate level of resolution
> - selected solution
> - planned and implemented the solution (Feeney and Millar).

Footnote on Equality and Consensus. Politics is a quintessentially collective, not individual, phenomenon and this would seem to have important implications for evaluation. Even when we measure individual outcomes we may want to interpret them in different ways.

For example, in addition to knowing whether people's knowledge or skill is increasing, we may also want to know what is happening to the degree of *equality* in knowledge and skill. Is the gap between the more and less knowledgeable (or skillful) growing or shrinking? The same thing would be true of changes in behavior. Are we helping to equalize participation and influence, or is our effect mainly one of making the strong stronger and the weak no better off than they were?

Likewise, when we measure change in attitudes, should we also be looking at what is happening to the degree of *consensus* in attitudes? What if our programs lead to major shifts in attitudes, but people move farther apart rather than closer together? Alter-

natively, what if we stimulate only minor changes in attitudes, but the changes that do occur bring people closer together?

Impact on Issue Resolution

The next step in Bennett's hierarchy after "practice change" (behavior) is "end results." These are notoriously hard to evaluate. The only questions on end results offered by the New England project are open-ended ones that leave the difficulty of resolving ambiguities up to the respondents (not a bad strategy, of course—we don't mean to be critical):

> Did you influence the outcome of a public policy decision? Please explain.
>
> Were your efforts [in working on a public policy issue] effective? What were the indicators of your degree of effectiveness? (Feeney and Millar).

The difficulty of evaluating impacts on issue resolution stems primarily from two facts: 1) issue resolution often takes a very long time, and 2) an educational program, at best, will be only one among multitudes of influences on the ultimate decision. It seems to us, however, that creative use of the issue evolution/educational intervention model (House) might help overcome some of these obstacles. The basic assumption of the model is that educators can determine the stage an issue is in and then design appropriate educational interventions. A further assumption is that the interventions should help move the issue to the next stage. The question, then, is whether it would be possible to evaluate a public policy education program, not according to its impact on the final resolution of an issue, but according to its success in moving the issue from one stage to the next.

We have not worked this idea out completely, but the possibilities are intriguing. As our colleague Dan Decker has pointed out, the issue evolution model may or may not be an accurate *descriptive* model of how decisions are actually made, but, even if it falls short in that regard, it might still be a useful *prescriptive* model, guiding educators' efforts to help improve the process. Outcome indicators for each stage should help us tell whether we're making progress toward issue resolution and when it's time to "shift gears" and move on to educational interventions appropriate for the next stage.

Thus, in Stage 1, *Concern*, an educator's objectives might be to clarify concerns by investigating existing conditions, their causes and their implications for people in different situations. To be able to move on to Stage 2, *Involvement*, participants in the issue would need to determine whether the concerns are legitimate public problems (potentially deserving public action, rather than simply private problems), who the responsible decision makers are (given the causes of the conditions of concern), and who else is affected (given the implications). Relevant outcome indicators might include judg-

ments about the quality of arguments in favor of public action (are they reasonable or persuasive? do they reflect an accurate understanding of existing conditions, causes and implications?). Other indicators might include evidence as to whether appropriate policy makers have been targeted and whether likely sources of support and opposition have been identified.

Note that some of the data for such an approach to evaluation would probably come from individual participants, but would be analyzed differently than they would if we were interested in individual-level outcomes. Additional data sources might also be used, such as content analysis of the news media, minutes of meetings and other documents, or systematic observations of the process by knowledgeable informants (an advisory group assembled by an educator, for example) or by the educators themselves.

A similar process of identifying objectives, desired outcomes, outcome indicators and sources of data could be carried out for each of the other stages of issue evolution (Hahn).

The Cluster Evaluation

Our project is a cluster evaluation of eleven public policy education projects funded by the W. K. Kellogg Foundation in collaboration with the Farm Foundation. Each project was required to be developed and implemented by a coalition of two or more organizations. The projects are listed in Table 1. Located throughout the country, they include a wide diversity of undertakings. Some have been developed by coalitions of extension organizations; others by extension organizations plus other, nonextension groups; still others by two or more nonextension organizations with no extension involvement at all. In some cases, the coalitions existed before the proposals were written; in others, formation of a coalition is part of the project. Some projects are confined to a single state; others are multi-state or even national. They focus on a variety of issues and target different audiences, including citizens, community leaders, policy makers and various combinations of two or more audiences. Some projects have determined in advance what issues will be covered; others will allow issues to emerge from the audiences. A wide variety of educational strategies and instructional methods have been proposed and the projects vary in their relative stress on content, process or a balance of the two.

The leaders of each of the projects met with Kellogg and Farm Foundation staff at a networking conference in January, 1989, to establish communication links and address aspects of project and cluster evaluation. The Kellogg Foundation's conceptual framework for evaluation focuses on *context*, *implementation*, and *outcomes*. Context is defined broadly to encompass any external factors that might influence project success. Implementation refers to the processes,

Table 1. Kellogg/Farm Foundation Innovative Policy Education Projects

Organization	Title	Contact Person
American Agricultural Editors' Association	Communicating America's Farm Policy	Lyle Schertz
Bread for the World	Trade and Development: Trade Policies, Third World Development, and United States Agriculture	Don Reeves
Iowa State University	Iowa Public Policy Consortium: A New Institutional Structure for Public Policy Education in Iowa	Mark Edelman
League of Women Voters/ Public Voice	Food Forum Education Project	Mary Stone Ellen Haas
Cornell University/ Pennsylvania State University	Northeast Network: Food, Health, and Agriculture	Audrey Maretzki Carol Anderson
Pennsylvania State University	National Groundwater Policy Education Project	Charles Abdalla
Texas A&M University	Policy Options and Strategies for Total Community Adjustment: A Texas Program Model	Ronald D. Knutson Dennis Fisher
University of Arizona	The Rural-Urban Interface	Nancy Cole-Huber
University of Georgia	The Global Food Web	Charles Norman
University of Illinois	Farm Policy in an Interdependent World	Laurian Unnevehr
University of Minnesota	Restructuring the Upper Midwest: Policy Issues and Choices	Jane Stevenson

interactions and day-to-day activities of a project. Regarding outcomes common to all projects, a framework emerged at the networking conference, visualizing the projects as aiming to produce *a more informed citizenry about public issues and about the policy making process.* These individual-level knowledge outcomes are visualized as leading, in turn, to the behavioral outcome of *a more involved citizenry* and then to the system-level outcome of *an improved policy making process.*[4]

Each of the projects will be responsible for its own evaluation. Our task as cluster evaluators is twofold: first, *to assess what difference it has made for Kellogg and the Farm Foundation to require that the*

projects be developed and implemented by a coalition of organizations; and, second, *to provide a comparative analysis of contexts, implementation, and outcomes across the eleven projects, exploiting whatever common or comparable data we can find (or induce)*. Our approach will involve initial site visits to each project during the next few months, analysis of a variety of other data sources (including project documents, records and annual progress reports to the Kellogg Foundation, supplemented with telephone interviews) and final site visits in 1991–92.

Here are some of the questions we plan to ask during the initial site visits:

- Who are the coalition members? What was their past contact prior to initiation of the current project? What are their reasons for involvement? Were other organizations considered for the coalition that are not participating? How was the coalition formed? What are the principal milestones in the coalition's history? What is the nature of participation by the various members? What problems or failures have occurred? What successes have there been?
- How will the educational program be implemented? Who are the target audiences? What issues will be addressed? How are they selected? What instructional materials and methods will be used? Will the emphasis be on content, process or both?
- What are the significant features of the context surrounding the program (e.g., geographic distance between member organizations; similarity and difference of focus; uniqueness of the area, coalition, or project—in short, any conditions that create significant opportunities or constraints for the project)?
- What are the desired outcomes for target audiences? What are the desired outcomes for the policy making process? (If further questions are necessary on the last point: What are the key policy decisions that will be made in relation to the project's issues? How are those decisions normally made—in other words, what's the process? What is the desired relationship between the project and that process?)
- What are each project's plans for evaluation? What commonalities are present among the projects? What can be done to help exploit them?

Data analysis during the three-year course of the project will yield evidence on the impact of the coalition requirement. For example, we expect to be able to report findings on 1) *sustainability of the coalitions* (How many of the coalitions are expected to continue? How many of the coalition partners are expected to join new coalitions for similar purposes?), 2) *perceptions of what difference the coalition experience made* (How were individual coalition partners affected? What is their assessment of how implementation and outcomes differ from what they are, have been or would have been

without coalitions?), and 3) *relationships between different types of coalitions and different implementation strategies and outcomes* (Do coalitions formed before funding seem more or less successful in terms of individual or issue outcomes than ones formed after funding? Are coalitions without extension as a partner more or less likely to target multiple audiences, allow audiences to select the issues or emphasize a balance of content and process?).

With respect to the analysis of project contexts, implementation and outcomes, we will rely primarily on each project's definition and assessment of these variables. We will attempt to synthesize their findings and see if we can reach some general conclusions. One potentially interesting question is *whether certain implementation strategies seem to "go together."* For example, do projects that target citizens also tend to emphasize process assistance, allow audiences to identify the issues and focus on newly emerging issues? We can also look for interesting *relationships between implementation strategies and certain kinds of outcomes.* For example, are significant individual impacts more likely to occur in projects that allow audiences to identify the issues? Or do projects that target multiple audiences tend to have greater impacts on the process than ones that address only citizens or only leaders or only policy makers?

Conclusions

In terms of the present paper, however, we are most excited by the opportunity provided by the cluster evaluation to advance the state or the art of evaluating public policy education. At the networking conference in January, one participant noted that we seem doomed to continue evaluating programs by asking about "publications and body counts." We need to know what constitutes a successful program, he said. Another participant asked, "How do we know when we're done?" By the end of this project, we hope to have notably better answers to those questions than we have at present. Following our initial site visits, we look forward to reporting the outcome indicators and evaluation strategies which the developers of eleven exciting public policy education projects are planning to use. The remainder of our project will be, in part, an inquiry about the success and failure, not only of the projects themselves, but also of their evaluation strategies. How did they resolve the philosophical and methodological dilemmas? What questions did they find to be good ones? What data were useful? What data collection and analysis methods worked? What evaluation questions and strategies do they recommend for future use?

NOTES

1. In evaluation contexts, the theory to be tested or refined may be closer to local program theory, practitioner wisdom or theories-in-use (Argyris et al.) than to "grand" social science theory (Trochim).
2. For a critique of this and other instruments to measure political knowledge, see Hepburn.

3. At least one writer has developed a "willingness to participate" scale, but the actual questions are not reported in the literature (Balutis).
4. Other outcomes identified at the conference were an *increased number of coalitions sustained and contributing to improved public decision making* and *increased demand for public policy education.* At least some of the projects are also interested in *linking rural and urban interests* and having an *impact on extension.*

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