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Designing Public Participation Processes

Theory to Practice

The purpose of this Theory to Practice article is to present a systematic, cross-disciplinary, and accessible synthesis of relevant research and to offer explicit evidence-based design guidelines to help practitioners design better participation processes. From the research literature, the authors glean suggestions for iteratively creating, managing, and evaluating public participation activities. The article takes an evidence-based and design science approach, suggesting that effective public participation processes are grounded in analyzing the context closely, identifying the purposes of the participation effort, and iteratively designing and redesigning the process accordingly.

Government administrators, officials, and community leaders have long recognized the value of public participation for a variety of purposes, processes, and decisions (Cooper, Bryer, and Meek 2006; Rosener 1975; Yang and Pandey 2011). However, they frequently do not have a good understanding of how to design participation processes to achieve desirable outcomes. Fortunately, there is an extensive base of research from which to glean advice on participation process design that offers clear, though nuanced, direction for practice. The purpose of this article is to present a systematic, cross-disciplinary, and accessible synthesis of relevant research and to offer explicit evidence-based design guidelines to help practitioners design better participation processes.

To integrate relevant research into a set of practical participation process design guidelines, we tap into insights from the evidence-based practice movement and from the developing design science literature. The *evidence-based practice movement* originated in medicine, where it refers to "the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients" (Sackett et al. 1996) and is accomplished by integrating research evidence, professional expertise, and the preferences and concerns of patients (Bauer 2007). It now cuts across many disciplines, including public administration (Heinrich 2007), urban planning (Forsyth 2007), and public policy making and service delivery (Boaz et al. 2008). Public affairs professionals face a number of challenges in enacting evidence-based practice, however, including gaining access to, knowing how to read and critique, and having time to review applicable research; discerning its relevance to organizational contexts; and dealing with conflicting findings across studies (Krizek, Forsyth, and Slotterback 2009). In addition, many practitioners rely on professional colleagues for information and also are faced with an overload of information available online (Durning et al. 2010).

We respond to these challenges by offering a systematic and accessible review of the evidence related to the design of public participation processes.

We respond to these challenges by offering a systematic and accessible review of the evidence related to the design of public participation processes. The relevant research is diffused across a diverse range of disciplines, research methodologies, contexts, and subject areas. We reviewed more than 250 articles and books. Though many of the materials were not written specifically to answer the question of how best to design public participation, they offer incisive lessons for designing participation. While each of us is an academic, each also has substantial experience with the design of participation processes; we drew on each type of experience as we met regularly over the course of many months to discuss the research and develop a concise set of practical guidelines. We are selective with citations here, balancing an effort to point readers to the primary references (e.g., the earliest written, most frequently cited, most comprehensive, or most generalizable sources) with a representation of the breadth of disciplines and practice fields of relevance to public administration. Readers will note divergences in the types of support among the recommendations that we make. Some have emerged through extensive study;

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Table 1 Design Guidelines for Public Participation

Assess and design for context and purpose
1. Assess and fit the design to the context and the problem
2. Identify purposes and design to achieve them
Enlist resources and manage the participation
3. Analyze and appropriately involve stakeholders
4. Work with stakeholders to establish the legitimacy of the process
5. Foster effective leadership
6. Seek resources for and through participation
7. Create appropriate rules and structures to guide the process
8. Use inclusive processes to engage diversity productively
9. Manage power dynamics
10. Use technologies of various kinds to achieve participation purposes
Evaluate and redesign continuously
11. Develop and use evaluation measures
12. Design and redesign

Note: These are interrelated, iterative tasks, not a step-by-step template.

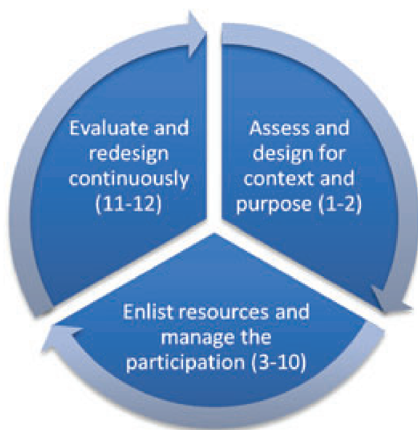

Figure 1 The Cycle of Public Participation Process Design and Redesign (Numbers indicate the corresponding design guidelines.)

others, though supported by less empirical evidence, are well supported by logic and theory. Our intent was to glean and synthesize the most relevant guidance for practitioners from this research.

At the same time, it is important for practitioners to couple this evidence with their own expertise and knowledge of their specific contexts, drawing on research "while also incorporating the tried and true, or locally relevant, methods for specific environments and contexts" (Krizek, Forsyth, and Slotterback 2009, 470). Therefore, while research literature offers a wealth of practical guidance to enhance the outcomes of public participation processes through better design, we synthesize it here in the form of *design guidelines* for creating, managing, and evaluating public participation activities in order to accomplish desired outcomes (see table 1 and figure 1).

Our synthesis is informed by insights from the developing *design science* literature, which emphasizes a focus on desired outcomes to be achieved in a problematic real-world situation, strong client and holistic orientations, deliberate use of evidence-based substantive and procedural knowledge, and understanding and specifying responses that fit the particular context (Van Aken 2007). Design science involves utilizing a combination of existing research and well-understood practice to develop solution-oriented design principles that are contingent (Simon 1996). That is, these principles are situation and context specific, which means that they are necessarily somewhat general, require thoughtful adaptation to specific situations (Boyne and Walker 2010), and typically are readapted in response to emerging conditions (Cross 2011).

The design science focus of this article signifies a shift from typical *social science,* which generally involves hypothesis testing to establish general patterns of causality, to the *design science* framework of developing and testing conjectures, taking a problem-solving approach, and adapting research-based evidence to context-specific, contingent, and emergent circumstances. Despite a growing desire to innovate in the public sector, there is limited recognition among public administrators of design science as a viable way to promote adaptation and change, perhaps because of the sector's risk-adverse culture and structural barriers (Bason 2010; Cowan 2012; Moore and Hartley 2008).

It is very important, however, *not* to overemphasize the difference between design science and what probably has *always* been true of the best public administration in practice. The difference is simply the heightened emphasis on purpose-driven, context-sensitive, holistic, user- and stakeholder-oriented, evidence-based designing and designs. Bringing a design science framework into the work of public administrators is meant to invite practitioners to reconceive their activities explicitly in terms of an ongoing, active process of *designing* (a verb), which is typically iterative and involves testing various ideas and prototypes before settling on the "final" design (a noun) (Romme and Endenburg 2006). Practice is thus seen as a *response* to explicit or implicit designs—and based on practice, those designs very well may need to change (Wenger 1999).

Thus, we find it neither feasible nor advisable to generate "rules" or a step-by-step design template for organizing public participation. Indeed, a consistent implication of design science and of the diversity of evidence-based research findings synthesized here is that successful public participation requires designing iteratively, in response to specific purposes and contexts. As Nabatchi notes, "design choices are not made in a linear fashion" (2012b, 3). Therefore, we synthesize the evidence into design guidelines that we invite public administrators to consider to help them accomplish the goals of their public participation processes.

The Design Guidelines

Design to Address Contexts and Problems

Design guideline 1. Ensure that a public participation process is needed, fits the general and specific context, and is based on a clear understanding of the challenge or problem (a part of the specific context) for which public participation is a desirable part of the response.

> Participation processes must fit the context in which they are taking place.

Participation processes must fit the context in which they are taking place. The policy change literature emphasizes the importance of understanding the general and more specific contexts and staying alert to changes in them (e.g., Crosby and Bryson 2005; Gaus

1947, 6–19; Sabatier 2007). The general context includes broad social, demographic, political, technological, physical, and other features and trends in an organization's environment. The specific context refers to those parts of the organization's task environment that are directly relevant to the achievement of the organization's goals, including key stakeholders, applicable mandates, resource availability, and so on (see Scott and Davis 2006).

The decision-making and design science literatures emphasize the importance of understanding the problem or challenge to be addressed in such a way that it can be solved, the wrong problem is not solved, and solutions do not create the problem that they were meant to solve (Wildavsky 1979). They also assert that possible solutions will need to be explored before the "real" problem is understood (Janis 1989; Nutt 2002). Doing so calls for iteratively juxtaposing possible definitions of "the problem" (that is, that part of the context that motivates the design of solutions) with solutions in order to gain clarity about purposes and desired outcomes (Brown 2009; Van Aken 2007).

Different kinds of problems or challenges call for different solution responses. Designs for participation must be tailored to assist with developing those responses. For example, problems that are primarily technical or operational are not likely to call for substantial changes in the applicable knowledge or technology base, stakeholder relationships, broad organizational strategies, or governance mechanisms. Line managers, operations groups or teams, and program, product, project, or service coproducers or recipients are the most likely people who will need to be involved. In contrast, problems that are more complex and politically charged are likely to require changes in the applicable knowledge or technology base, new concepts, and changes in basic stakeholders or stakeholder relationships. Governing or policy boards, senior staff, and an array of key

Table 2 Multiple Purposes of Public Participation, with Associated Design Considerations and Proposed Outcome Evaluation Criteria

Purposes	Design Considerations	Proposed Outcome Evaluation Criteria
Meet legal requirements—for example, to provide public notices of upcoming actions or in preliminary scoping efforts for environmental impact assessments (Brody, Godschalk, and Burby 2003; Slotterback 2008)	• Clarify legal requirements • Observe sunshine laws • Consider alternatives to traditional public notices and meetings—for example, use of social media and online comment boards may be effective and efficient ways to fulfill these requirements.	• Legal requirements for public noticing and comment met • Efficient cost of communication and outreach
Embody the ideals of democratic participation and inclusion—for example, to achieve or represent the public interest through diverse participation, provide an opportunity for participants to enhance their own capacities to engage in democratic citizenship, or produce lasting achievements of public value (Mansbridge 1999; Young 2000; Fung and Wright 2003; Nabatchi 2010)	• Perform stakeholder analysis and design the process to encourage active participation by those with interests at stake, making particular efforts to be inclusive • Act in response to participants' contributions, encouraging diverse views and reflecting them in outcomes • Deliberative approaches can help participants develop capacity and commitment for ongoing contributions	• Inclusiveness of composition of participants • Discernible, communicated impact of participation on outcomes • Positive effects on citizenship (e.g., participants' increased understanding of how to participate in democratic processes, greater commitment to do so, or elevated sense of efficacy in ability to affect decision making)
Advance social justice—for example, by improving equity in distributing public services or by increasing a marginalized group's influence over decisions (Abers 2000; Andrews, Cowell, and Downe 2010; Corburn 2003)	• Perform stakeholder analysis and recruit diverse stakeholders • Enable diverse participation (i.e., by enabling multiple ways to participate, providing language translation or child care, and selecting accessible meeting locations and times) • Consider the distribution of benefits and harms	• Adequacy and diversity of stakeholder representation • Improved distribution of benefits and harms ensuing from the decisions
Inform the public—for example, about decisions that have been made or about changes in policies, resources, or programs (Nabatchi 2012b)	• Informing the public and maintaining transparency about decisions may be sufficient	• Large number of people reached or the target population reached • Diversity of modes or venues used to inform public • Increased public awareness of targeted policy issues • Public satisfied they have been informed
Enhance understanding of public problems, and explore and generate potential solutions (Deyle and Slotterback 2009; Godschalk and Stiftel 1981; Webler et al. 1995)	• Deliberative approaches and small-group formats can help participants understand issues and contribute to problem solving • Design processes for sharing information and engaging and exchanging views among participants to promote understanding and discovery of new options; help participants learn about each other's perspectives, the broader context, and possibly change their views; present information in various formats and from a variety of sources (Daniels and Walker 1996; Webler et al. 1995) • Balance technical expertise and broader stakeholder representation (Innes and Booher 2010)	• Changes in individual or collective assumptions, frameworks, or preferences • Changes in participants' knowledge of issues, ability to articulate interests, and appreciation of other perspective • Generation of new problem definitions and potential solutions
Produce policies, plans, and projects of higher quality in terms of their content	• Use deliberative, collaborative approaches to promote learning (Forester 1999; Healey 1997; Innes and Booher 2010) • Shift decision making to an appropriate scale (e.g., regional, local) to take advantage of relevant knowledge and investment in outcomes (Koontz and Thomas 2006; Mandarano 2008; Margerum 2011) • If the problem is complex and technical quality is necessary, engage in boundary work among different ways of knowing (Feldman et al. 2006), or limit participation to content experts or give special emphasis to their role (Thomas 1995)	• Validation of the quality of decisions by informed content experts, using context-specific criteria related to, for example, economic efficiency, safety, reliability, feasibility, equity, environmental impact, etc.

Table 2 Continued

Purposes	Design Considerations	Proposed Outcome Evaluation Criteria
Generate support for decisions and their implementation—for example, by producing decisions that address the public's needs and concerns; resolving disputes; creating alliances for advocacy and implementation; and generating resources for implementation (Brody, Godschalk, and Burby 2003; Godschalk and Stiftel 1981; Laurian and Shaw 2009; Moynihan 2003;Wondolleck and Yaffee 2000)	• Avoid making decisions so that stakeholders feel left out, for example, by making them narrowly or hastily or by delegating decision making to small, elite, or exclusive groups (Feldman and Quick 2009; Nutt 2002; Thomas 1995) • Emphasize procedural fairness to enhance acceptance of decisions even among those with a different preferred outcome (Schively 2007); encourage broad participation, especially of key stakeholders; engage in shared knowledge generation and relational work to foster joint ownership of the problem analysis and outcomes (Innes and Booher 2010; Wondolleck and Yaffee 2000) • Utilize conflict management and negotiation techniques (Fisher, Ury, and Patton 2011), including consensus-oriented approaches that aim for win–win solutions (Forester 1999; Innes and Booher 1999; Margerum 2002)	• Participants satisfied with the process • High level of agreement with fairness of decision process • High level of agreement with decision outcomes, possibly consensus • Minimal lawsuits, conflicts, delays, mistakes, or other obstacles to implementing decisions • Resources available for implementation
Manage uncertainty—for example, to build trust, increase the quality of information informing decisions, stabilize relationships, and minimize risk from unanticipated changes in the external environment (Friend and Hickling 2005; Rowe and Frewer 2004; Wondolleck and Yaffee 2000)	• Acknowledge where uncertainty exists • Maximize participation and encourage information sharing to provide clarity about the external environment and values • Build relationships to reduce uncertainty in them and provide a holding frame for negotiating over differences and resources	• Persistence of a structure or relationships for ongoing learning and negotiation • Limited number of problems caused by misinterpretation of or unanticipated changes in values, relationships, or information • Reduced conflict among stakeholders • Trust in decision makers or decision-making process
Create and sustain adaptive capacity for ongoing problem solving and resilience—for example, by emphasizing social and transformative learning; relationships, social capital, and trust; and sustained engagement (Forester 1999; Goldstein 2012; Innes and Booher 1999, 2010; Jordan, Bawden, and Bergmann 2008; Webler et al. 1995)	• Deliberative, consensus-based, or collaborative approaches frequently facilitate transformative learning; include diverse perspectives to optimize learning and involve key stakeholders; support developing shared meaning via interacting and learning about each other's interests, preferences, values, and worldviews through "collaborative science" (Mandarano 2008) • Build social capital among participants for ongoing work by building connections, enhancing relationships, and fostering trust that can carry on beyond a single decision-making process into future collaboration and communication (Innes and Booher 1999; Quick and Feldman 2011)	• Creation of new structures (relationships, partnerships, and resources) to support broad participation in ongoing planning, implementation, and evaluation • Sustained, diverse participation in management that adapts to changed circumstances • Use of collaboratively agreed criteria for decision making or performance management • Sustained collective ability to address new problems and support ongoing management (e.g., of program, resources, problem) • Improved alignment of participants' expectations and actions with collective understandings and goals

Note: See also design guideline 2 on designing for purpose and guideline 11 on evaluating participation.

stakeholders may need to be involved in coming up with effective responses to such problems (Heifetz, Grashow, and Linsky 2009; Hill and Hupe 2009; Nutt 2002; Thomas 2012).

First, however, it is important to look at the larger picture of whether participation is needed or possible. Sometimes it is mandated (Brody, Godschalk, and Burby 2003; Slotterback 2008); sometimes it is not mandated and is more bottom-up in nature (Boyte 2005); sometimes it is a combination of the two. In general, participation should be sought when it is required or when it is the only or most efficacious way of gaining one or more of the following: needed information, political support, legitimacy, or citizenship development (Thomas 2012). In more ambiguous settings, Stone and Sandfort's (2009) policy field mapping approach is a good starting point for identifying key features relating to authority, stakeholder relationships, and resource flows that must be taken into account when deciding whether a participation process is merited.

Identify Purposes and Design to Achieve Them

Design guideline 2. Clarify and regularly revisit the purposes and desired outcomes of the participation process and design and redesign it accordingly.

Fitting the participation process to its context and attaining desired outcomes involve gaining as much clarity as possible about the purposes to be served by the process. Trite though it may sound, asking "What are the purposes of this participation process?" is a step that is overlooked remarkably often in practice—frequently with unfortunate results (Janis 1989; Nutt 2002). Multiple purposes may be served by a single process, and purposes may change as the public participation process unfolds. The literature identifies multiple possible purposes of participation. These are summarized in table 2, along with associated considerations when designing processes to achieve these purposes and suggested outcome evaluation criteria. Particular participation processes are likely to pursue some subset of these purposes. Evaluation criteria are discussed further under design guideline 11 but are previewed here because articulating purposes and evaluation criteria simultaneously can assist public managers when making design choices with their desired ends in mind.

Clarity about the purpose of the participation process can help avoid unnecessary or unwise expenditures of effort and resources, problems measuring the outcomes of the effort, or challenges to the legitimacy of a participation process because conflicting ideas about its purpose have not been resolved. For example, sometimes a public participation process is legally required, even though legislative, budgetary, scheduling, or technical parameters of the decision sharply confine the range of choices that are available to be made in conjunction with the public. Under these circumstances, if the

organizers of public participation were to proceed as if they were welcoming all suggestions because they believe that government should be responsive to the public, they could overpromise in terms of how much of the input they receive they can actually use. In this case, a deliberative design in which various options are developed and evaluated would be frustrating for both those providing input and the practitioners who are charged with accounting for the public's input. In this setting, a narrowly targeted consultation process around specific options or an information transmission meeting would be far more efficient and effective.

Considering the purpose(s) to be served by a design is important, but settling on the purpose at the outset may not always be possible or desirable, for several reasons. First, articulating purpose is not a one-shot exercise because the context may change, as described earlier. Second, it may be desirable to coproduce the purposes in conjunction with participants, through the participation process itself, as discussed in design guideline 9. Third, Nutt's (2002) extensive research on strategic decision making highlights the need to consult with key stakeholders before finalizing purposes and desired outcomes; otherwise, the chances of what he calls a decision-making "blunder" increase dramatically.

Analyze and Appropriately Involve Stakeholders

Design guideline 3. Ensure that the design and implementation of public participation processes are informed by stakeholder analysis and involve, at a minimum, key stakeholders in appropriate ways across the steps or phases of a participation process. Note that specific stakeholders may be involved in different ways at different steps or phases of the process.

Attention to stakeholders is a crucial part of the response to the context. The literature is quite clear that the appropriate stakeholders should be involved in appropriate ways in a participation process based on the context, overall task or project purpose, and goals of the participation process (Friend and Hickling 2005). Of course, who the appropriate stakeholders are and how to involve them are questions that process designers must answer. Including a wide range of participants in planning processes can promote the sharing of perspectives among different participants and help gather information from all participants regarding their goals and objectives in the process (Enserink and Monnikhof 2003). The literature on collaboration indicates that when durable solutions are sought and consensus is the prime decision-making method, it is important to include the full range of stakeholders (Margerum 2002, 2011). When it comes to participation processes more generally, however, it is less clear how to decide who the appropriate stakeholders are and what the corresponding engagement approaches should be. Stakeholder analyses provide a set of techniques that can be used to address both concerns (Ackermann and Eden 2011; Bryson 2004).

We suggest that clarifying the purpose of participation (design guideline 2) should precede deciding on a basic strategy for engagement—for example, to inform, to collaborate, or to empower. In other words, the purposes of the participation effort should be a key determinant of which stakeholders should be engaged in which ways. Second, we suggest that approaches to involving and communicating with stakeholders should be differentiated throughout a process. For example, experts or people who are directly affected by a problem may have a particularly important contribution to make to learning about the problem, whereas legislators or potential opponents are particularly important to involve if the purpose is to secure broad buy-in to a proposed solution. Similarly, the same stakeholder might be engaged in different ways over the course of a participation process as it unfolds. The stakeholder may only wish to be informed when a policy problem is first being identified, be a collaborator in selecting among policy options, and return to simply being informed about the policy implementation. Therefore, we suggest that practitioners utilize a tool such as table 2 to iteratively articulate purposes and consider how to fulfill them over the course of the decision-making process.

Establish the Legitimacy of the Process

Design guideline 4. Establish with both internal and external stakeholders the legitimacy of the process as a form of engagement and a source of trusted interaction among participants.

An organization that seeks to acquire the support necessary for survival and mission accomplishment must build legitimacy by making use of structures, processes, and strategies that are appropriate for its institutional environment (Suchman 1995). A participation process is not automatically regarded by others—insiders or outsiders—as legitimate. Human and Provan's (2000) work on collaboration indicates that, by extension, different types of legitimacy may be involved. The first is whether the *form* that participation takes is seen as legitimate by key stakeholders and can attract internal and external support and resources. The second is whether the participation network produces interactions that *build trust and legitimacy* among participants and promotes necessary communication.

Part of establishing the legitimacy of the process is letting potential participants know the purpose of the process (or perhaps coproducing the purpose, as noted earlier) and how their participation will influence outcomes. Different purposes for public participation require appropriately matched strategies for communicating with and engaging (or not) various stakeholder groups (Cooper, Bryer, and Meek 2006). For example, drawing on the International Association for Public Participation's widely used spectrum of participation, levels of participation can range from ignoring, to engaging as a data source, to informing, consulting, involving, collaborating, and finally to empowering stakeholders to make all decisions themselves (see http://www.iap2.0rg/associations/4748/files/spectrum.pdf). Each strategy involves a different kind of promise to stakeholders. Different kinds of engagement also imply the use of different kinds of tools and techniques (Creighton 2005; Nabatchi 2012b; Thomas 2012). For example, if the engagement approach is *informing,* then consensus-building methods are inappropriate; if the approach is *involving,* the appropriate techniques may include workshops and deliberative polling but not participatory decision making, and so on. Otherwise, participation processes can easily become mired in conflicts about their authenticity and legitimacy that may stem from different expectations rather than a willful attempt to make the participation process perfunctory or manipulative (Feldman and Quick 2009).

Foster Effective Leadership

Design guideline 5. Ensure that the participation process leadership roles of sponsoring, championing, and facilitating are adequately fulfilled.

Designing and implementing public participation clearly requires effective leadership—and increasingly so as the level of public participation increases (from ignoring, to informing, to consulting, to involving, to collaborating, to empowering) (Crosby and Bryson 2005; Morse 2010; Page 2010). Beyond that, as the problems or challenges to be addressed become more difficult, part of the leadership work becomes helping people who face problems with no easy answers take responsibility for those problems. A key practice of effective leadership in such circumstances is helping people stay in a productive zone between avoiding a problem without easy answers and being overwhelmed by the stress of tackling it (Heifetz, Grashow, and Linsky 2009).

Leadership can be exercised by one or many individuals associated with a public participation process, but the evidence indicates that three leadership roles are particularly important: sponsors, champions, and facilitators (Crosby and Bryson 2005; Morse 2010; Schwarz et al. 2005). *Sponsors* are people with formal authority that can be used to legitimize and underwrite participation efforts. The work of sponsoring includes establishing policies and providing funds and staff that enable participation, endorsing and raising the visibility of public participation efforts, and using the sponsor's power to protect the participation process and ensure that the results of these efforts have impact on policy making.

Champions, in contrast to sponsors, have positions with considerable responsibility for managing the day-to-day work of the participation effort. Unlike sponsors, however, they typically cannot supply the resources and legitimacy needed to bring diverse groups into the participation process. Instead, they must rely heavily on informal authority accrued through their demonstrated competence over time, through trusting relationships, and through seniority. The work of championing thus requires generating enthusiasm for the effort, building the support of sponsors, and sustaining the effort through setbacks. *Facilitators* structure participation processes, maintain neutrality toward outcomes, and help groups work together productively. Facilitators help manage conflict, coaxing participants to air their views and listen to each other's views. As Schwarz et al. note, skilled facilitators are process experts who "know what kinds of behavior, process, and underlying structure are likely to contribute to high-quality problem solving and decision making" (2005, 29).

Seek Resources for and through Participation

Design guideline 6. Secure adequate resources—and design and manage participation processes so that they generate additional resources—in order to produce a favorable benefit–cost ratio (broadly construed) for the participation process.

Those designing participation processes should identify resources needed to support participation, but they can also design and manage participation to generate resources in such a way that participation process benefits exceed process costs. There are *production costs* incurred by organizations in developing and implementing a participation process; there are also *participation costs* incurred by citizens as part of their participation (Cooper 1979). There may be trade-offs between the two kinds of costs, in that higher production costs may lower participation costs. It is also possible that in some situations, production costs may be so high that participation is not feasible.

But there is also a benefit side to the cost calculus that participation process designers should consider and seek to amplify. Certainly when governments sponsor participation processes, they must allocate resources, such as funds, staff time, technical assistance, or information infrastructure. In an era of budget pressures, it may seem that those resources could be better used elsewhere, but a carefully managed participation process can contribute resources for public purposes as well (Delli Carpini, Cook, and Jacobs 2004; Koontz and Johnson 2004). Participants bring to public processes new information, self-interest, motivation to address problems, and new ways of understanding issues. These can be used to uncover new understandings, generate better projects and policies, secure buy-in for decisions, and limit delays, mistakes, and lawsuits (Burby 2003). The process of participation may also enhance government–community trust (Moynihan 2003), social capital (Lake and Huckfeldt 1998), and infrastructure for ongoing community action (Abers 2000; Fung and Wright 2003). By designing and implementing public participation to be inclusive, public managers can generate unexpected resources, such as knowledge, commitment to follow-through, and enthusiasm, for decision making and policy implementation (Feldman and Quick 2009).

Create Appropriate Rules and Structures to Guide the Process

Design guideline 7. Create an appropriate set of rules and a project management team structure to guide operational decision making, the overall work to be done, and who gets to be involved in decision making in what ways.

Rules about how the process will be managed and how decision making will take place provide a bridge between participation processes and organizational structures.

Rules about how the process will be managed and how decision making will take place provide a bridge between participation processes and organizational structures. For organizations, these rules are often embedded in legal mandates or commonly held beliefs regarding appropriate roles and responsibilities. In a participatory setting, rules may be formal, such as written ground rules for working together, or informal, arising from the actual "doing" of joint work. In doing joint work, participant interactions (i.e., processes) shape and are shaped by structures and rules about how participants will work together. When these experiences are positive, moral obligations and commitments increase and trust builds (Chen 2010; Jones, Hesterly, and Borgatti 1997). Conversely, if participants violate rules and norms, trust will be undermined and hard to rebuild. Together, recognition of rules, the substance of rules, and structures for enforcing rules of three types—operational rules, general policies about the work to be done, and constitutional rules regarding who gets to make what kinds of decisions—help allow process participants to self-monitor (reward and sanction behavior), build commitment among themselves, and make or contribute to important decisions (Ostrom 1990).

In narrow, short-term public participation processes involving few stakeholders, there may be no need for a project management team.

Broader scale, more time-consuming processes do require a project management team. The project management team may include sponsors, champions, and facilitators, as well as others, and should have adequate support staff and other resources necessary to function effectively. Depending on the scope and scale of the process, the team may be fairly large (Creighton 2005; Friend and Hickling 2005).

Use Inclusive Processes to Engage Diversity Productively

Design guideline 8. Employ inclusive processes that invite diverse participation and engage differences productively.

As the purpose of public participation moves away from simply complying with mandates to promoting participatory democracy and participant learning (Deyle and Slotterback 2009; Kirlin 1996), processes and structures are needed that are highly inclusive, engage diversity and seek advantages from it, and address issues of conflict and power differences. A key challenge in public participation is ensuring that the appropriate range of interests is engaged in the process, including those normally excluded from decision making by institutionalized inequities (Abers 2000; Parekh 2002; Schlozman, Verba, and Brady 2012; Young 2000). All too often, supposedly participatory processes end up including the "usual suspects," people who are easily recruited, vocal, and reasonably comfortable in public arenas. Stakeholder identification and analysis are critical tasks to undertake to ensure that marginalized groups are at least considered and may have a place at the table.

Practices for increasing participatory representativeness involve better outreach and optimizing accessibility of the process so that input can be more diverse. Advertising is an important but not the only way to ensure participants' awareness of opportunities to participate (Laurian 2004). Other practices include providing language translation, child care, or transportation assistance and choosing convenient meeting times and places for various constituencies. Having diverse voices at the table, however, may be insufficient or even counterproductive without also designing and managing the process to make use of that diversity, for example, by being open to changing topics and policy outcomes in order to make connections among diverse perspectives (Quick and Feldman 2011).

Increased diversity can be expected to lead to increased conflict, at least initially. Designing inclusive participation processes requires explicit attention to managing conflict (Forester 2009). Establishing clear ground rules and agendas for how to work together and a common problem definition create a structure for working through differences (Margerum 2002). Clarifying the source of the conflict—over data, relationships, values, or the decision-making structure—is a good first step (Crosby and Bryson 2005). When conflicting facts arise, group learning through interaction among participants can be further enhanced by taking claims seriously and developing processes that allow for resolution (Innes and Booher 2010; Lowry, Adler, and Milner 1997).

Facilitators can help participants examine underlying assumptions, shift from firm positions about particular outcomes to a more open-ended identification of the interests that parties wish to address, and openly explore multiple options for action (Fisher, Ury, and Patton 2011). These processes should allow for discussion of contingencies and options for resolving conflict (Lowry, Adler, and Milner 1997). While consensus building is time-consuming and requires specialized facilitation skills as well as political and logistical commitment (Brownhill 2009; Margerum 2011; Whitmarsh, Swartling and Jäger 2009), it works well in situations of uncertainty and controversy when all stakeholders have incentives to come to the table and mutual reciprocity is in their interests; and it offers numerous potential desirable outcomes, including surfacing assumptions and enabling mutual learning among participants (Innes 2004; Jordan, Bawden, and Bergmann 2008).

Manage Power Dynamics

Design guideline 9. Manage power dynamics to provide opportunities for meaningful participation, exchange, and influence on decision outcomes.

Public managers should actively consider power dynamics in participation. To the extent that a participation effort simply rationalizes and reproduces the power of a particular stakeholder (Flyvbjerg 1998) or neuters difference by assimilating people into the process and pacifying them (Arnstein 1969; Cooke and Kothari 2001), it cannot be considered authentically participatory. Subtle power codes—such as the kinds of information and styles of expression that are considered relevant and appropriate—shape who participates in the process and how their input is received (Briggs 1998; Polletta and Lee 2006). For example, shifting from formal public hearings, which tend to be dominated by a small number of individuals comfortable with that format, to one-on-one interactions between public managers and residents, is an example of making design choices to reduce domination and marginalization (Takahashi and Smutny 1998). Managers deciding what is on the table for discussion is also an inherently powerful move that frequently places citizen groups at a disadvantage, as they are more likely to be reactive rather than proactive relative to the agenda for the participation process (Cooper and Nownes 2003). One way to share power more evenly among participants is to engage them in coproducing the agenda and process for decision making as well as weighing in on the policy decisions (Bovaird 2007; Quick and Feldman 2011; Roberts 2004).

Another source of power disparities in participation processes is privileging expert over "local" knowledge. Ozawa and Susskind (1985) characterize this problem in the context of science-intensive policy disputes, noting that experts might even disagree among themselves. Crewe (2001) describes a disconnect between local residents' views and those of design experts in efforts to plan transit corridors in Boston and finds that residents' knowledge about the local context ultimately improved the design. Van Herzele (2004) offers a case description indicating that local knowledge can be effectively integrated with professional knowledge; in this case, local knowledge helped extend professionals' contextual frame and, ultimately, produced a refined outcome that was different from the initial concept developed before the public participation process began.

Trusting relationships are one of the desirable means and ends of managing diversity, conflict, and power dynamics successfully. Paradoxically, trust is both a lubricant and a glue—that is, trust helps facilitate the work of participation and helps hold the effort together (Bryson, Crosby, and Stone 2006). Trust can comprise

interpersonal behavior, confidence in organizational competence and expected performance, and a common bond and sense of goodwill (Chen 2010). At the same time, trust is problematic in any process involving people with diverse interests and levels of power (Huxham and Vangen 2005). Trust can be built by sharing information and knowledge and demonstrating competency, good intentions, and follow-through; conversely, failure to follow through and unilateral action undermine trust (Arinoa and De la Torre 1998). For example, Huxham and Vangen (2005) emphasize the effectiveness of achieving "small wins" together for building trust.

Effective conflict management also can enhance trusting relationships by ensuring that disagreements are problem centered, not person centered. Effective management of power differences can help less powerful stakeholders trust the process and other participants more. Conversely, some powerful stakeholders might become more wary of the process if they feel that their power is being diminished. In cyclical fashion, as trust grows, it may substitute for formal structure in the ways in which it can control and standardize behavior because trust facilitates the sharing and diffusion of values and norms about standards of behavior (Moynihan 2009).

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Use Information, Communication, and Other Technologies to Achieve the Purposes of Engagement

Design guideline 10. Participation processes should be designed to make use of information, communication, and other technologies that fit with the context and the purposes of the process.

Participation processes that engage the public can be significantly enhanced by the use of information, communication, and other technologies (Wang and Bryer 2012). These technologies include public participation geographic information systems, computer-generated visualizations, interactive Web sites, keypad voting, and strategy mapping tools (Conroy and Evans-Cowley 2006; Howard and Gaborit 2007). Technology can be particularly effective in providing technical information and enhancing understanding of context (Appleton and Lovett 2005; Haklay and Tobón 2003), providing public access to information typically available only to experts (Al-Kodmany 2000; Elwood 2002), and gathering real-time feedback from participants (Han and Peng 2003). Visualization and other technologies can also help build shared understanding and facilitate interaction among users, as well as with the information provided (Bryson et al. 2004; Balram, Dragicevic, and Feick 2009). At the same time, it is important to acknowledge the limits of access to technology among public participants (Mossberger, Tolbert, and Gilbert 2006; Pew Foundation 2011) and limitations in resources available to planners and managers to deploy technology (Slotterback 2011).

Develop Participation Evaluation Measures and an Evaluation Process That Supports the Desired Outcomes

Design guideline 11. Develop participation evaluation measures and an evaluation process that supports producing the desired outcomes.

Another key question for managers to consider from the outset is how to evaluate the public participation effort. Defining evaluation measures in conjunction with deciding the purposes of engagement will help managers decide whether to engage in public participation, anticipate what kinds of results participation will produce, articulate participation process goals, and align their design and management strategies accordingly (Nabatchi 2012a). Organizers of participation efforts often do not do formal evaluations, but they should consider doing both formative and summative evaluations (Patton 2010). Effective and operable measures of participation can help policy makers learn from implementation so that they can enhance the effectiveness of the remainder of the participation effort they are currently working on and build long-term institutional capacity for future participation (Rowe and Frewer 2004; Laurian and Shaw 2009). Evaluation may use a combination of process criteria to determine how well an organization is implementing its proposed participation program and impact criteria to measure the consequences of participation for decision outcomes (Nabatchi 2012a).

Given the varied and divergent purposes for public participation described earlier, there is no single set of evaluation metrics for participation. Instead, process designers should consider which possible outcomes of the process are most desirable and design measures accordingly (Rowe and Frewer 2004). Table 2 proposes outcome measures that are aligned with the various purposes of participation. Existing research and models support measuring a combination of different types of outcomes, such as the following (Deyle and Slotterback 2009; Innes and Booher 1999; Laurian and Shaw 2009; Mandarano 2008; Margerum 2002; Milward and Provan 2000; Schively 2007):

- *Individual-level outcomes* (e.g., individuals' increased knowledge of a policy issue, effects on citizenship behavior), *group-level outcomes* (e.g., mutual learning within the group about others' perspectives), and *community-level outcomes* (e.g., the development of new options not previously considered, overall measures of community betterment)
- *Process-oriented outcomes* (e.g., building trust among participants, incorporating a diverse group of stakeholders)
- *Content-oriented outcomes* (e.g., improving safety or environmental quality)
- *User-oriented outcomes* (e.g., participants' satisfaction with the process, recognizing that different stakeholders have different criteria for success)
- *First-, second-, and third-order outcomes,* which are, respectively, the immediately discernible effects of the process (e.g., the quality of initial agreements), impacts that unfold once the process is under way (e.g., the formation of new partnerships), and long-term impacts (e.g., less conflict among stakeholders in the future)

It may not be possible to measure the impact of policy choices made as a result of the participation process within the timeframe of the participation process itself. In that case, practitioners can draw on expert opinion to evaluate the outcomes of the process or to evaluate key technical aspects of the policy, such as its economic

efficiency, impacts on safety or environmental quality, or aesthetic value (Margerum 2002). Even if the purposes of the participation process seem too intangible to measure, explicitly stating these purposes helps administrators to focus the design and management of participation toward the desired outcomes.

Align Participation Goals, Purposes, Approaches, Promises, Methods, Techniques, Technologies, Steps, and Resources
Design guideline 12. Align participation goals; participation purposes; types of engagement; promises made to participants; engagement methods, technologies, and techniques; steps; and resources in the process.

Participation processes should seek alignment across the elements of the process. Otherwise, the chances of miscommunication, misunderstanding, and serious conflict increase, along with concomitant declines in public trust and increases in public cynicism regarding participation (Creighton 2005). The change management literature indicates that having a plan is one of the keys to success (Fernandez and Rainey 2006). Two different approaches to planning (designing) are evident in the literature. One approach emphasizes deliberate, formal planning as a precursor to success. Careful articulation of mission, goals, and objectives; roles and responsibilities; and phases or steps, including implementation and evaluation, are often cited as an important key to success. This approach—what Mintzberg, Ahlstrand, and Lampel (2009) call "deliberate"—appears to be most likely when a participation process is mandated. The second approach argues that a clear understanding of mission, goals, roles, and action steps is more likely to emerge over time as conversations involving individuals, groups, and organizations grow to encompass a broader network of involved or affected parties (Huxham and Vangen 2005; Innes and Booher 2010). This approach—what Mintzberg, Ahlstrand, and Lampel (2009) call "emergent"—seems most likely when participation is not mandated. Clearly, careful attention to stakeholders is crucial for successful planning regardless of approach (Bryson 2004).

Changes in the context for decision making (e.g., a reduced budget for implementing the decisions reached, increased or decreased political support for public participation, or new developments in the policy problem the process is addressing) may demand a concurrent change in the scope or timeline for the participation process. In addition, if previous design decisions have been made to share authority for the participation process, its outcomes, and ongoing follow-up, then participants may coproduce the design of the process as it unfolds (Bovaird 2007). Especially if stakeholders have to continue to collaborate to manage ongoing implementation, building capacities for shared leadership of the process may enhance the group's capacity for ongoing adaptive management and implementation of the decisions they make (Bryson, Crosby, and Stone 2006; Goldstein 2012; Quick and Feldman 2011).

Conclusions

The design guidelines outlined here are intended to integrate evidence from across a wide range of disciplines and contexts. They are intended as practical guidance for practitioners to use as they make decisions about the design of participation processes. The guidelines are necessarily general, but they do offer some important evidence-based insights into how to approach issues of context, purpose, stakeholder involvement, leadership, process management, and evaluation. Practitioners are encouraged to draw on what the literature has to offer and to integrate it with their own insights about what would work best given their specific circumstances as they formulate a *specific design* for participation (while recognizing that the design may well need to change as the situation changes).

Overall, a number of conclusions flow from our literature review and analysis. The first is simply that the design of public participation processes can be a very complex endeavor, particularly as the scope and scale of the envisioned processes increase. Process designers can face a substantial challenge in making use of the interrelated design guidelines to produce a specific design that is likely to be effective for fulfilling purposes and achieving goals within the context at hand and within applicable constraints, satisfying any other requirements, engaging the appropriate stakeholders in appropriate ways, and making good use of various activities, methods, tools, and techniques. Rather than minimizing the complexity of designing participation processes, the design guidelines are intended to acknowledge that complexity, draw attention to important process design issues, and then offer practical ways to respond.

The guidelines are based on the extant literature, but additional work needs to be done to strengthen the foundations on which our design propositions are based and to more fully specify them. Nonetheless, the field has advanced enough that the design guidelines can be offered with some reasonable faith in their soundness. The purposes to be served by participation processes are important. We hope readers will find this literature review and set of design guidelines useful as they seek to pursue the purposes—and promises—of public participation.

The guidelines are based on the extant literature, but additional work needs to be done to strengthen the foundations on which our design propositions are based and to more fully specify them.

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