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Participatory Democratic Organizing: Building Capacity to Solve the Paradox of Participatory Democracy

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0 ABSTRACT

Recent experiments in participatory democracy, such as Iceland's 2013 Constitutional Reform process to Chicago's annual participatory budgeting process, have empowered members of the public to directly make policy decisions. These new participatory democratic institutions depend on citizens having capacity to organize new institutions and the capacity to participate in them. This makes the question how communities might build capacity to organize new participatory democratic institutions arguably the single greatest challenge to realizing an empowered vision of public life.

This dissertation examines what capacities are needed to organize new participatory democratic institutions and presents an organizing model that demonstrates how communities might leverage existing assets to design training processes, tools, and organizational structures towards building those capacities. Based on two case studies conducted over a 9-month campaign to build capacity for participatory budgeting in a new community, the Participatory Democratic Organizing Model argues that communities need technical, government, and grassroots capacity to organize new participatory democratic institutions, and that university assets can be leveraged to conduct pilot participatory democratic processes that build technical and grassroots capacity in the short term. By building on existing relationships with government officials and consistently communicating expertise gained from pilot work, the grassroots and technical capacities developed from pilot participatory democratic processes can be connected to government capacity to formally kickstart a new municipal participatory democratic institution.

Study 1 examines how grassroots organizers might leverage university assets to design training processes, tools, and organizational structures for a pilot participatory democratic process that begins building capacity for participatory budgeting. In this design research study, I found that a sociotechnical approach for supporting separate-but-bridged participation pathways for decision making and policy development both helped decrease time, knowledge, and

motivation barriers for community representatives engaged in agenda setting and decision making, and built capacity among organizers, students, and volunteers recruited and trained to support the more resource-intensive policy development "bridging" pathway to continue organizing to institutionalize participatory budgeting beyond the 3-month pilot campaign.

Study 2 examines what capacities are needed to formally organize a new participatory democratic institution, and how a participatory policy development pilot might be connected to building those capacities. Specifically, Study 2 presents the design of a grassroots campaign to build capacity for participatory budgeting (PB) in a new community. By building on the capacity developed over the policy development pilot, seeking policy feedback from experts in community groups, and consistently communicating interest and expertise to government officials, I found that grassroots organizers and pilot developers were able to build technical capacity to formally organize a new participatory democratic institution. In addition to this technical capacity, I also found that grassroots capacity—having a base of committed, trained volunteers to support outreach, facilitation, and policy development—and government capacity of a supportive city council, staff, and at least two staff dedicated to the new institution also need to be built to start new participatory democratic institutions.

This research advances theoretical knowledge in learning sciences, political science, organizational and institutional theory, and human-computer interaction. For learning scientists, the Participatory Democratic Organizing Model extends community-engaged learning models to teach learners how to impact local policy decisions. For political scientists, this research addresses a gap in the literature on building capacity to support participatory democracy and provides a concrete organizing model for community members to build capacity for empowered democratic participation. For institutional and organizational theorists, this model presents a core set of organizing principles by which future researchers and practitioners can compile an organization dedicated to participatory democracy from scratch. Finally, for sociotechnical designers and human-computer interaction researchers, this work contributes a methodological

approach that extends participatory design approaches for infrastructuring to community-based participatory researchers designing to organize new participatory democratic publics. Practically, this research provides concrete design principles that can guide future community organizers in identifying existing grassroots assets, bootstrapping to build additional capacity, and investing in training the people for whom that democracy was designed.

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"The paradox [of participatory democracy] is that although participation in democracies helps people increase their capacities, those who have not yet had the experience of participation will sometimes not have sufficient capacity to bring off a successful democracy. What they need is precisely what, because of their need, they cannot get."

- Jane Mansbridge, "Practice-Thought-Practice," from Deepening Democracy: Institutional Innovations in Empowered Participatory Governance (ed.s Fung & Wright, 2003, p.177)

1 INTRODUCTION & BACKGROUND

1.1 The need to empower democratic participation

Citizen participation is key to a functioning democracy. For democracy to deliver on its promise of being for the people, by the people (*demokratia*, or people's power), citizens need to participate in their governance. Citizen participation is often portrayed as crucial to efforts to strengthen the quality of democracy in an era of political polarization, decline in civic knowledge, and institutional distrust.

However, not all democratic participation empowers citizens in their governance.

Democratic institutions relying on electoral processes often restrict the power to make policy decisions to a small, select group of elites, leaving the power to influence policies for the vast majority of citizens relegated to their constitutional right to vote (Gilens & Page, 2014;

Landemore, 2020). From the relative infrequency of elections (Landemore, 2020) to widespread restrictions on voting rights (e.g., felon disenfranchisement, gerrymandering, voter identification laws; Phoenix et al., 2016; Fraga, 2018) to legitimate questions of whether elections truly represent public opinion or hold officials accountable (e.g., Mansbridge, 2010; Fearon, 1999; Landemore, 2020), ordinary citizens remain extremely limited in the political power they can exercise from their constitutional right to vote. At best, voting rights allow citizens to consent to the decisions made by those in power or protect them from misuses of power, but they do not ensure the access of ordinary citizens to agenda-setting power, nor the power to develop the policies they consent to being governed by (Landemore, 2020, p.136). This is, of course, to say nothing about all the members of the democratic public who do not even have the legal right to vote but who participate in public life and are affected by policy decisions nevertheless.

1.2 What makes participatory democracy empowered?

Political science scholars have focused on developing models and examining new institutions of participatory democracy that empower members of the public to go beyond voting in their democratic participation. These participatory democratic models expand public access to the power to deliberate, set policy agendas, and make binding policy decisions (Arnstein, 1969; Fung, 2006; Fung, 2015; Landemore, 2020). Citizen participation is empowered on three dimensions in these models: *inclusivity*, or who participates; *communication and decision making*, or how participants interact in making a democratic decision; and *authority*, *and extent of authority*, or how well decision-making power is redistributed to lay members of the public (Arnstein, 1969; Fung, 2006; Fung, 2015). Below, I briefly review these dimensions of empowerment and key ways in which political scientists have examined how *design* choices for public engagement opportunities can affect empowerment.

Dimension 1: Inclusivity (who participates)

Perhaps the single most defining aspect of participatory democracy is its aim of inclusivity: expanding the arena of governance to members of the broader public beyond an authorized set of decision makers (typically elected representatives or administrative officials).

However, designing participatory democratic institutions that aim to be inclusive is no straightforward task. First, maximizing mass participation is not always desirable. For example, scholars have pointed to shortcomings in models of participatory democracy premised on "mass participation at all times," rather than leav[ing] it up to citizens to determine how much and how often they are willing to participate in politics at any point in time" (Landemore, 2020, pg.14). Not all members of a polity might be willing or interested in participating, which leaves open the question of how participatory democratic processes can be designed to empower effective forms of citizen representation, rather than relying on direct or mass participation. A potential approach is "open mini-publics," or large, jury-like body of randomly selected citizens gathered

to define laws and policies in connection with the larger public," in which segments of the public are not intentionally *restricted* from participation, such as through the use of lottery-based recruitment methods (lottocratic representation; Landemore, 2020, p.90-92).

Moreover, inequities in democratic participation can often result from imbalances in education and reputation. When governance structures are premised on participation that is open to all, existing inequities in power and resources (such as status and knowledge) inevitably result in unintentional barriers to participation. Illustrations from Athenian examples of direct democracy, for example, have highlighted the irony that it was only highly skilled professional orators who proposed motions or participated in debates (Landemore, 2020, p.70). Similarly, in technological approaches like crowdsourcing, which theoretically opens participation to all, even fewer people tend to participate despite the illusion that participation is open to all (Ibid, p.95). More problematically, this illusion can endanger values of representativeness in making it even more difficult for minority and marginalized, under-resourced individuals to be heard.

Dimension 2: Communication and decision making (how do participants communicate and make decisions)

The majority of public forums are not designed to support empowered participation vis-a-vis *how* democratic decisions are made. For example, take public hearings and community meetings. The vast majority of participants in these ubiquitous democratic venues do not put forward their own views at all. Instead, "they participate as spectators who receive information about some policy or project, and they bear witness to struggles among politicians, activists, and interest groups" (Fung, 2006, p.68). As a "spectator" in these designs, participants may still passively participate in the sense that they will receive information upon which they may act later, but they are not actively participating in communication or decision making.

When it comes to communication and decision making methods that empower democratic participation, *deliberation*, a mode of decision making premised on the public

exchange of arguments and consideration of alternatives to figure out what participants want individually and as a group, is widely considered to be the ideal (Cohen, 1989; Fung, 2006; Habermas, 1998; Mansbridge et al., 2006). While deliberation is heavily favored by democratic scholars, even argued by some as a defining factor of democratic legitimacy (Cohen, 1989), deliberation is not always employed as the key decision-making method in forums of public engagement. Instead, in venues like public meetings and town halls, public officials commit to no more than receiving the testimonies of a limited number of participants, which they may or may not take into account in their own deliberations (Fung, 2006, p.68). The public version of deliberation favored by most scholars in support of participatory democracy, by contrast, argues that the "deliberative exchange of reasons and arguments among free and equals"—not only those of a certain status like public officials or skilled orators—must be present for a democratic decision or policy to be legitimate at all (Landemore, 2020, p.138).

While deliberation has an outsized influence in participatory democratic theory, it is important to note that deliberation as a method of decision making is costly and requires intentional design to ensure participants are prepared to make informed judgments and share them in exchange with others. To ensure participants have the background knowledge to make informed arguments, deliberation practitioners typically provide participants with background materials (Crosby & Hottinger, 2011; Dienel & Renn, 1995; Fishkin and Farrar, 2005; Kennedy, 1994; Lukensmeyer and Brigham, 2005; Warren & Pearse, 2008) and structure participant discussions in small groups (Burkhalter et al., 2002; Clark & Brennan, 1991; Diehl & Stroebe, 1991; Gastil, 1993; Johnson & Johnson, 2011) and trained facilitators (i.e., Fung & Wright, 2003). Common sources of participant inequities like status, power, knowledge, and skill can have an outsized influence in democratic deliberation. If a deliberative goal is to create diverse participant groups in which the opinions of participants from different backgrounds are shared and considered, participants with lower levels of education, literacy, or perceptions of self-efficacy may be apprehensive in contributing to the discussion, which could lead to biases

in deliberative decisions down the line. Training for deliberators and facilitators, as well as careful consideration of how participant and facilitation processes are designed, can potentially address these threats to equitable participation (Mansbridge, 2003). This does, however, speak to some of the high costs of deliberative decision making that ought to be accounted for in choosing this method in participatory governance.

Dimension 3: Citizen Authority (what they participate in doing)

Perhaps the most telling measure of empowered democratic participation is the scope of decision-making power redistributed to members of the public. Specifically, this dimension asks how citizen participation is linked to changing policy or public action (Fung, 2006). In many participatory venues, people do not expect to influence policy or action, but instead participate to derive personal benefits, such as fulfilling a sense of civic obligation or gaining important information (Fung, 2006, p.69).

In the literature on citizen participation, the scope of citizen authority is a question of power. Sherry Arnstein's seminal 1969 Ladder of Citizen Participation presented citizen *power* as the critical difference between empty ritual and real power to affect outcomes in the process: "the redistribution of power that enables the have-not citizens, presently excluded from the political and economic processes, to be deliberately included in the future" (Arnstein, 2019, p. 24). Arnstein lays out a typology of eight levels of participation to illustrate the complexities of this issue. From the bottom rungs of *manipulation* and *therapy* "contrived by some to substitute for genuine participation" (Arnstein, 2019, p.25), to the topmost rungs of *delegated power* and *citizen control*, in which citizens obtain the majority of decision-making seats or full managerial authority, Arnstein's seminal typology called attention to the deceptive ways in which public participation can be manipulated by the design choices of those in power.

These three dimensions of empowered democratic participation highlight opportunities identified by political science scholars for increasing the capacity of members of the public to change policy and political outcomes. However, even if empowered opportunities for democratic participation exist, people will not be able to effectively participate if they have not developed the capacity to participate—that is, learned the knowledge, skills, and dispositions required to participate in these unfamiliar democratic activities. This presents us with what political science scholars have deemed "the paradox of participatory democracy": while democratic participation helps people increase their capacities (such as empowering them to enact policy or political change), "Those who have not yet had the experience of participation will sometimes not have sufficient capacity to bring off a successful democracy" (Mansbridge, 2003, p.177). At its heart, this paradox is a *learning* problem: How can we expect members of the public to have the capacity to participate if they have not had authentic experiences of empowered participation in their democracy?

1.3 Building people's capacities for empowered democratic participation: Limitations of existing organizational approaches to authentic community engagement

Learning scientists and scholars of political science and civic education are increasingly interested in designing *authentic* learning environments that build learners' capacities for democratic participation by engaging students directly in their communities. This move towards community-engaged learning focuses on deepening students' civic engagement by taking their learning out of the classroom and working directly in partnership with community-based organizations (CBOs) (Allen & Reiter-Palmon, 2019). For example, service learning models engage students in their communities by connecting them with volunteering, service, and

community development experiences (Dierberger et al., 2019). Other consulting-based or community internship models (Willness, 2019) ask CBOs to scope research, writing, or design tasks for students to produce end-of-term reports, which the CBO may or may not implement following conclusion of the term. Similarly, policy educators have experimented with experiential learning models in which students are paired with local government agencies to conduct research and produce policy memos or reports (i.e., BU's Metrobridge Program; Harvard's Field Lab in Urban Politics; Hughes, 2022). Finally, political science educators have drawn from community organizing models to teach students political organizing in partnership with politically engaged CBOs (Josephson, 2018).

While these experiments in community-engaged learning provide students with authentic opportunities to work with their local communities and ensure that learning experiences are mutually beneficial for students and community partners, learners typically serve as external research consultants, volunteers providing community service, or, at best, volunteers on organized political campaigns, rather than authentically building their own capacities for empowered democratic participation. As reviewed above, participatory democracy should empower learners on three dimensions: (1) Inclusion, or being empowered to make policy, political, and governance decisions regardless of their prior background, knowledge, or political experiences; (2) Democratic communication and decision making, or being empowered to make policy decisions through democratic deliberation; and (3) Citizen Authority, or being empowered to ensure their participation directly results in policy or public action. Each of these dimensions requires learners to build, and authentically practice, different empowered democratic capacities. Dimensions 1 and 2 both require learners to build capacities to authentically engage in democratic practices beyond voting, like deliberation and policy development. The third dimension is much more complicated for learners, because opportunities in which citizen participation directly results in policy or public action—that is, the participatory democratic institutions themselves—often do not exist. Consequently, this dimension requires an extra step

of learners building the capacity to organize and demand formal opportunities from current authorities (e.g., elected officials) that give citizens direct decision-making Authority.

Unfortunately, existing CBO engagement approaches do not typically empower learners to participate on all (or sometimes any) of these dimensions. Next, I outline different CBO engagement approaches and their limitations vis-a-vis building learners' capacities for empowered democratic practice along these three dimensions:

Engagement Approach 1: Community service & nonprofit consulting

One engagement approach is to have learners work on service projects in their community (i.e., volunteering at a local homeless shelter), or on research, communication, or design tasks (i.e., producing community reports). The majority of community-engaged learning models, including service learning (Furco, 1996), engaged civic learning (Weaver, 2019), community internships and other experiential education approaches (Metrobridge, Urban Field Lab), fall under this CBO engagement approach. These opportunities, while authentically engaging learners with their local communities, do not build learners' capacities for building political power or taking policy or public action.

For example, CBOs that participate in engaged civic learning courses identify community development needs, to which students apply content knowledge and research skills they develop in the classroom to conduct research and write reports on behalf of community partners (Weaver, 2019, p.67). In one example undergraduate course, community activists aiming to restore a local park, work with teams of students to guide and mentor them on their projects, which included a report on a community survey, a report on water quality and soil analysis, a historical literature review, planning a community bird-watching event, and developing a social enterprise business plan. Similarly, in a practicum course focused on developing students' governance and leadership skills, community-based nonprofit boards of directors partner with undergraduate students for an academic year placement, and students participate as non-voting

members of these boards. Students in the course produce individual reflection assignments and applied deliverables that "contribute to the organization and its governance," such as developing board orientation manuals or a well-researched guidebook to assist the board in effective governance (Willness, 2019, p.291).

CBOs in these examples directly engage students in important aspects of community development and organizational governance, but they are ultimately not engaging learners in empowered democratic practices that directly impact policymaking. For example, while CBOs in these examples do sometimes make organizational use of some, if not all, of learners' research and reports, even towards political ends—such as using students' report of community surveys in meetings with government entities—the students themselves are not engaging in empowered democratic practices outlined by the dimensions above. While serving as research consultants, learners are not included in political or policy decisions, either in deciding what the policy issue(s) are, nor participating in strategic decision-making of how to politically achieve those goals. They are not in actuality deliberating with members of the CBOs; even in the governance practicum, where students do serve as non-voting members of nonprofit boards, their aim in this engagement is to learn and observe decision making practices such that they can produce a report after the fact on best practices, rather than deliberating because they have responsibility for implementing the decision. Most importantly, they are not practicing citizen authority or learning to build power through political action. Even when working with advocacy-oriented CBOs, learners producing research and reports are not part of analyzing existing power structures or pathways to policy implementation; rather, they are at best learning to help CBOs gather data to support their political argumentation—many steps removed from direct participation in power building activities.

Organizational Engagement Approach 2: Political and Policy Advocacy Groups

Political and policy advocacy groups, such as those that work on issue-based campaigns, do engage learners in power-building activities. Whether by mobilizing community members to work on existing campaigns, or giving them the opportunity to organize others, advocacy groups offer learners authentic opportunities to engage in policy and public action. However, these CBOs, on account of being either issue-based and/or politically partisan groups that primarily operate by building power to influence members of the public or public officials, present some limitations with regards to the *inclusivity* of their campaigns and *direct citizen authority* the CBO is training learners to engage in.

Communities often have a range of political or policy (issue-based) advocacy groups ranging from local chapters that campaign to elect representatives from the Democratic or Republican Party, to local environmental or housing advocacy groups. While less research has been dedicated towards investigating the learning and training processes employed in or with these political or policy CBOs, the studies that exist emphasize the role of community organizing techniques to engage learners in building political power (Josephson, 2019; Han, 2014). Community organizing teaches learners to engage in skills like relational organizing, leading issue meetings, preparing public narratives, building relationships, planning and carrying out public actions, mobilizing community members to support an action, and assessing the results of a campaign (Josephson, 2019; Ganz, 2009). For example, in a recent pedagogical experiment that aimed to teach students community organizing in partnership with a local affordable housing CBO, students directly contributed to door knocking campaigns; talked to and documented problems faced by tenants experiencing tenants' rights violations; and attended a public action attended by city officials, community members, and leaders of the organization to press city officials to follow up (Josephson, 2019). Eventually, the city issued more than 1,000 code violations, which students in the class followed up by requesting and successfully conducting a meeting with city officials to gather additional information.

While engagement with political and policy advocacy groups can provide learners with authentic experiences in community organizing and directly contributing to public and political action, these CBOs may still present limitations to inclusivity (who participates) and the kinds of direct authority participants can practice. For example, politically partisan CBOs, while they may not explicitly exclude individuals who do not share their political ideologies, may not be considered acceptable or legitimate to all learners such that they would likely at least implicitly create tighter self-selection criteria for participation. Moreover, while advocacy CBOs do present opportunities to authentically learn how to build political power to take public action or influence policy decisions, they still fall short on training learners with skills and opportunities to directly exercise citizen authority (Han, 2014). By virtue of focusing their efforts on campaigns that ultimately influence public opinion or officials to change their behavior ("Communicative influence," Fung, 2006, p.69), these CBOs are not focused on teaching learners both how to build political power and, more importantly, how to use that power towards shifting the agents of democratic authority to themselves—that is, how to both build and exercise direct citizen authority (Fung, 2004; Fung, 2006; Fung and Wright, 2003). For example, learners typically do not practice or build skills in democratic deliberation needed once they have the opportunity to exercise direct power. In this sense, advocacy organizations that organize campaigns to influence public officials to change the actions they take are not in actuality focused on shifting the locus of power, since the elected officials are still the ones who can make plans and policies on these issues. By contrast, participatory democracy, in its most empowered form, aims to empower citizens to directly exercise political authority, rather than relying on elected officials to bend to the public will.

To truly engage learners in learning and practicing skills of empowered democratic participation, we need CBOs that not only train learners with the skills and experiences to build political power (at least in the cases where no participatory democratic initiative already exists for them to 'plug into'), but also train them to (1) organize to *get* direct decision making authority,

then (2) practice communication and decision-making skills like policy deliberation towards exercising that authority once that authority is achieved. In other words, we need learning environments that train learners how to both organize opportunities for and to practice skills that empower authentic democratic participation.

1.4 Building capacity for new participatory democratic organizations:

The paradox within the paradox of participatory democracy

Unfortunately, it is not clear from the literature whether community-based organizations that empower authentic democratic participation—that empower any and all members of the community to organize and practice direct democratic authority—exist, and if they do, they remain rare. There is no established "census" of participatory democratic institutions (Fung, 2015, p.214), making it even more unlikely to find some mapping or quantification of CBOs that either organize or support participatory democratic institutions. Nonetheless, the pattern of "substantial growth in participatory innovation in recent years" (Fung, 2015, p.514), particularly vis-a-vis geographical expansion of initiatives like participatory budgeting, suggests an urgent and major gap in the literature as to *how* new CBOs are created and designed to build communities' capacities for participatory democracy. This problem presents a unique flavor of the paradox of participatory democracy: When few, if any, organizations exist to provide opportunities for participatory democracy, communities need to build capacity to create them from scratch. What capacities are needed to create new organizations that empower learners in authentic democratic practice, and how might a community build those capacities?

1.4.1 Institutional entrepreneurship & capacity building

"Creating a new organization requires not only resources, but also ideas or models on how to organize."

entrepreneurship—when "actors who have an interest in particular institutional arrangements [...] leverage resources to create new institutions or transform existing ones" (Maguire et. al., 2004, p.657, as quoted in Scott, 2014, p.117). When fields are in their early stages of development, researchers and practitioners must "compile" a new organizational model from scratch (Suchman et al., 2001, p.359). The organizational field for participatory democracy is in early stages of development because, as explained earlier, few, if any, key organizations that produce similar services and products yet exist towards engaging members of the public in empowered democratic practices (DiMaggio & Powell, 1983). Consequently, individuals who want to organize new organizations for authentically engaging community members in empowered democratic practice cannot simply copy routines, structures, and activities from other organizations that already exist. Instead, they have to "compile" a new organizational model from scratch, whereby technical consultants, such as researchers, might attempt to distill an organizational model by observing existing practices (Suchman et al., 2001, p.359).

The goal of this dissertation is to contribute a new organizing model for participatory democracy. Specifically, this dissertation aims to contribute new organizing models towards a particular subtype of institutional entrepreneurship known as "technical and organizational population-level institutional entrepreneurship" (Scott, 2014, p.117; Aldrich & Ruef, 2006): combining existing human and technical assets within a community in novel ways to create new forms of organizing and innovative organizations in the underdeveloped organizational field of participatory democracy. As such, this organizing model aims to contribute to ongoing examinations by institutional scholars and political scientists on the *bottom-up processes* of institutional construction and change, specifically by deepening understanding of political

processes actors on the ground take to change the rules and frameworks of existing democratic institutions (Holm, 1995; Scott, 2010, p.236-238).

I focus on *capacity building* as the core process that needs to be supported for this organizing model to function. Creating new community-based organizations dedicated to empowering democratic practice requires *capacity building*. While there is no hard and fast definition of capacity building (Chaskin, 2001; Cuthill & Fien, 2005), literature on community development (Eade, 2007) and collective action (Briggs, 2008; Stone, 2001) broadly defines it as the process by which people's capacities to enact collective change in their communities is strengthened.

By this definition, capacity building should be considered at multiple different levels—micro, or individual; meso, or organizational; and macro, or local, national, or international structures ("levels of social agency," Chaskin, 2001, p.297-298). At the micro-level, capacity building involves building the skills, knowledge, motivations, and dispositions necessary for individuals to be able to effectively enact change (Han, 2009; Schlozman et al., 2018). This includes both individual capabilities and motivation—both the resource dimension and the dimension of "effort, will and choice, or 'agency'" (Briggs, 2008, p.13)—which are needed for organizing contexts "where expectations of stakeholder participation are relatively high and the power to get things done is decentralized and fragmented" (Briggs, 2008). At the meso-level, capacity building involves what resources organizations need and how they ought to be deployed to enact change (Soule & King, 2008; Han, 2014; McCarthy and Zald, 1977, 2001). Finally, at the macro levels of local, national, or even international structures: capacity building involves the extent to which different sectors—business, educators, government officials, nonprofits, and others—act collectively around a matter of collective import (Cuthill & Fien, 2005; Eade, 1997; Briggs, 2008; Stone et al., 2001).

However, to achieve the goal of creating new participatory democratic organizations, we need to understand: (1) what existing assets in a community can be leveraged towards the

process of capacity building, (2) what training is needed, and how to design learning environments for building learners' capacities for empowered democratic practice, and finally, (3) how to methodologically approach the design of such novel learning environments from a sociotechnical perspective in the context of participatory democracy.

1.4.2 Leveraging existing assets to build capacity for participatory democracy

Building new capacity in a community requires leveraging assets—actors, resources,
socio-cultural factors, and relationships—already present within the community, yet it is not clear
what assets are important for a community to have for capacity building. High-level descriptive
frameworks have been developed based on examinations of previous community development
efforts that map, at a high level, key assets involved in capacity building (Eade, 1997; Chaskin,
2001; Cuthill & Fien, 2005). These frameworks typically outline key actors like government
partners, CBOs, and individual citizens; resources like human and social capital, physical
infrastructure, and financial resources; socio-cultural factors like a sense of community,
commitment, ability to solve problems, supportive organizational culture, and sound information;
and relationships like functional relationships (e.g., planning, production of goods, governance
and decision making) and strategic relationships (e.g., leadership, organizational development,
etc.) through which capacity is built within a community towards outcomes like the ability of
community stakeholders to implement activities.

However, these high-level frameworks do not provide detailed models of what existing assets of community members can be leveraged towards capacity building, particularly in the context of organizing new participatory democratic institutions, nor how to identify them. For example, identifying the need for government partners or CBOs for capacity building does not help someone on the ground identify which government officials and CBOs might be better suited for capacity building, especially in the context of organizing new participatory democratic institutions. At this high level of description of "government partners," it wouldn't for example be

clear whether a grassroots organizer ought to focus their efforts on partnering with the Mayor or city staff, just as it would not be clear which CBOs within the community might be more interested in the problems and goals associated with participatory democracy.

Moreover, while these frameworks may also provide some high-level insight into strategies for building capacity, again, these strategies are described at too high of a level for individuals to understand how to deploy them to leverage existing assets on the ground. Strategies for capacity building identified in previous frameworks have included "leadership development, organizational development, community organizing, and fostering collaborative relations among organizations" (Chaskin, 2001, p.299). Each of these high-level strategies might focus on "programmatic approaches (job training and placement, structuring access to financial opportunities) or more procedural ones (voter registration, block club organizing) [and] also operate through any of a number of means, including informal social processes, organized, community-based processes (e.g., work of CBOs and associations); and formal, targeted efforts." Strategies described at this level are not specific enough to apply to a specific context. Specifically, the framework's argument that "[capacity building efforts] may also operate through any of a number of means, including [...] organized, community-based processes (e.g., work of CBOs and associations)" essentially describes the entirety of the problem space tackled by this dissertation. In other words, this description is still far too high-level and descriptive to translate to strategies for identifying and leveraging existing organized, community-based assets to build capacity for participatory democracy from the ground up.

Finally, these frameworks do not distinguish between top-down (e.g., driven by elected officials already in power) versus bottom-up processes (Scott, 2010, p.236), which makes them particularly difficult to apply to participatory democracy contexts, which, by nature of being participatory, require special attention to bottom-up capacity building. Organizing new participatory democratic institutions requires capacity building from both top-down and bottom-up. Many of the institutional design choices outlined by the three dimensions of

empowered participatory democracy in Section 1.2 require government officials to make. In particular, design choices on the dimension of Citizen Authority require government officials to devolve power (Wampler, 2007) and, moreover, develop policies and processes that facilitate and support citizen participation in local governance (Cuthill & Fien, 2005). Some of these choices, therefore, cannot be made by citizen participants. From a participatory perspective, however, there are also plenty of *bottom-up* capacity building processes required for participatory democracy, by which community members have the agency to "coproduce" needed institutional change with governments (Briggs, 2008; Ostrom, 1996; Waddell and Brown, 1997)—community organizing processes, for example, that are key to ensuring those in the community who *should be allowed to* participate (inclusion) have the power (authority) and capacity to participate. Previous capacity building frameworks acknowledge the need for these different actors to be involved but do not make distinctions between capacity building *processes* that can, and many times should, be conducted by grassroots agents rather than by government officials already wielding power.

1.4.3 Designing learning environments for participatory democracy

Even after understanding what assets are needed and how to leverage them, researchers and practitioners still need to understand what specific training builds capacity for new participatory democratic organizations, and how to design learning environments that authentically provide that training.

Existing capacity building frameworks sometimes describe the need and role for training, but they do not go into detail about what that training is, let alone how to design it for outcomes of capacity building. These frameworks often mention "training," in broad strokes, as one of many key strategies for capacity building. For example, training programs are cited as "an entry-point for capacity building" when working in parallel between government and non-governmental structures, such as when CBOs and locally-based NGOs run education

programs to provide individuals with the capacities needed to support government-run programs (Eade, p.43-44). Job training is also referred to as a programmatic approach to capacity building, compared to more procedural ones like "block club organizing" (Chaskin, 2001). These frameworks do not go into detail about examples of these training programs, let alone what outcomes they aim to support towards capacity building. At such a high level, learning scientists and designers cannot draw concrete insights about learning outcomes related to capacity building—a particular challenge since building "capacity," broadly defined, is the goal of *all* education—what specific processes, tools, and organizations structures ought to be designed, and how to shape them for particular contexts like participatory democracy.

Recent scholarship on how civic organizations train activists might provide us with some insights into what training is needed to build capacity towards empowered democratic participation. However, these descriptions remain at too high a level (meso, or organizational level) for learning scientists and designers (who operate at the micro level of individual learners or groups of learners) to design training activities, tools, and structures. Literature on civic organizing begins to dive into the role of training resources for achieving political and power building outcomes (Han, 2014), which are critical to empowered democratic participation. For example, research into civic organizations that have effectively achieved political outcomes emphasizes the importance of creating leadership structures that help newcomers gain skills and responsibilities towards helping the organization take collective action (Han, 2014; McKenna & Han, 2008). This literature argues that organizing effective collective action that changes political and policy outcomes requires people to have their interests, skills, and motivations transformed for activism, empowering them to take on tasks of increasing complexity and responsibility (Han, 2015). As a result, organizers at the high end of engagement and leadership in these organizations commit not only to achieving outcomes (like shepherding a campaign), but more importantly also commit to taking responsibility for developing others in the organizations as activists and leaders, having personal accountability

for the long-term health of the organization by developing stable volunteers, activists, and leaders who continuing to move up the ladder (The Activist Engagement Ladder [Han, 2014, p. 34-35, Fig. 2-2]).

While this research provides insight into some of the key outcomes designers should train organizers to do towards effectively building political power, it is still unclear how learning environments can be designed towards supporting these outcomes, specifically in the context of training learners to build capacity and organize new participatory democratic institutions. For learning scientists to design learning environments towards supporting these outcomes, we need a micro-level understanding of processes, knowledge, skills, and dispositions required to support capacity building. Furthermore, it is not clear how to translate these insights about civic organizing into the context of organizing new participatory democratic institutions. As opposed to organizing campaigns that center around an issue or a candidate, "participatory democracy" is a much more abstract and arguably esoteric organizing goal. Prior research indicates that people are motivated to participate in civic efforts not out of an abstract desire to strengthen democracy but in being motivated by problem solving for results (Barber, 2003; Bolan, 1969; Briggs, 2008). Organizing to realize new participatory democratic institutions is not immediately tied to a single motivating, tangible issue or current event. Thus, it is unclear how organizers might build their volunteers' motivation or skills to organize a new participatory democratic institution.

1.4.4 Sociotechnical approaches to capacity building

Designing novel learning environments for supporting capacity building for participatory democracy necessitates a sociotechnical approach that integrates social, technical, organizational, and institutional design. As such, this dissertation also aims to contribute a detailed case study of a sociotechnical approach to designing across micro-, meso-, and macro-levels towards building capacities that enable "design-for-future-use" (Ehn, 2008;

Bjorgvinsson et al., 2010; LeDantec, 2016), specifically in the context of organizing new participatory democratic institutions.

In supporting the building of future capacities for institutionalizing participatory democracy, designers need to take a sociotechnical approach that goes beyond designing social and technical resources to also consider organizational and institutional dimensions of a community's ongoing capacities to participate in burgeoning, and future, democratic institutions. Scholars have called this sociotechnical approach one of infrastructuring, or the work of "building on the sociotechnical relations present in community settings and styl[ing] the design work to develop capacities to act through those relations" wherein the design goal "is the support of local infrastructures that are reconfigurable by the community so that [...] capacities are in place to manage [...] future conditions," even as issues and relationships in the community evolve (Ehn, 2008; LeDantec, 2016, p.85). Infrastructuring focuses on building the future capacities of publics that are bound by common cause in confronting shared issues (Dewey, 1991) and a shared set of commitments, relationships, and dependencies in doing so (Marres, 2007). A sociotechnical approach guided by infrastructuring is focused less on designing products, and instead shifts the focus towards "new sets of relations [...] and enabling new abilities to act" (LeDantec, 2016, p.86). This does not, however, mean that designed technologies and user interactions around those technologies are not important, but rather that in designing to support capacity building, the designer's focus is on developing persistent relationships and creating conditions in which solutions to *future* issues can be considered. Moreover, the shift in the goals of design towards capacity building across a community also translates to a shift in the nature of design work and the positionality of designers, such that stakeholders across the community who are engaged in the work of capacity building through social and technical relations are also engaged in the ongoing work of design, rather than only specially trained individuals called designers (Fischer & Scharff, 2000; LeDantec, 2016).

Building on the sociotechnical approach of infrastructuring, in asking how learning environments can be designed to support capacity building outcomes for new participatory democratic institutions, we also need to ask how, if at all, this sociotechnical approach to design shifts when a public bound by shared issues and attachments does not quite exist, requiring researchers first to focus their design activities on organizing. Previous scholarship has examined infrastructuring in the context of participatory design in partnership with existing publics bound by shared issues and attachments, including those of homeless single mothers and their children at a local shelter or social and housing justice activists (LeDantec, 2016). This work focuses on designing to support infrastructuring with existing publics by working alongside members of these publics to identify issues, attachments, and opportunities for technologies and services designed to build the public's future capacities to act. These contexts first assume designers are working in partnership with existing publics who already share at least a preliminary interest in similar issues. Moreover, these are not organizing contexts, in the sense that researchers' participation in studying and designing to support capacity building has not involved both designing and participating in the organizing activities necessary to shift existing structures of political power as is the case in organizing new participatory democratic institutions.

To understand how sociotechnical approaches to infrastructuring can apply to organizing new participatory democratic institutions, design and human-computer interaction researchers need to understand how to design sociotechnical systems to support contexts in which a public has not yet formed. Secondly, participatory researchers also need to understand whether and how they can employ design techniques like infrastructuring towards organizing contexts in which capacity building towards *becoming* a public needs to occur before we can build the public's future capacities to act on shared issues and attachments. With regards to the latter, a methodological question remains as to what a sociotechnical approach like infrastructuring that integrates social, technical, and institutional capacities in community-based design looks like

when applied to a setting in which the researchers are not just participating in, but in fact *leading*, an effort to organize new participatory institutions. For example, what role does the design of organizational and institutional structures play in a sociotechnical approach to design in the participatory democratic context? How does the role of the researcher shift when capacity does not yet exist for researchers to be co-researchers with an existing public—as typically the case in participatory design (LeDantec, 2016) and participatory action research (Lawson et al., 2015)—such that they are willing to participate directly as co-investigators, but rather the researcher needs to be involved in the organizing work to build capacity towards the community's interest to engage in more participatory methods of community-based research and design?

1.5 Overview of Studies

This dissertation asks, What capacities are needed for a community to organize a new participatory democratic institution, and how might a community leverage existing assets to design learning environments for building those capacities?

This dissertation presents an examination of a 9-month campaign to build capacity to organize a new participatory democratic institution by leveraging existing university assets and designing training processes, tools, and organizational structures for building further community capacity. In doing so, I examine capacity building from a first-person lens, in which my research team and I investigated these questions while building capacity to organize a new participatory budgeting process from the ground up. As such, my research team and I served as lead organizers of "The Open Democracy Project," a university-based organization that supported a number of civic organizing campaigns, one of which aimed to institutionalize participatory budgeting in our city. I discuss some of the benefits and limitations of this approach in Section 1.5.1.

In Chapter 2 of this dissertation, we focused on building capacity for running a pilot participatory democratic process by leveraging university assets to organize a pilot policy development process and organizational structure. This chapter asks, *How might we design training processes, tools, and organizational structures for a pilot participatory democratic process that builds technical capacity for participatory budgeting?* By technical capacity, I refer to building the technical knowledge, skills, organizational structures, and motivation for implementing key democratic practices like policy development, deliberation, agenda setting, and voting. This study is premised on the principles of *open democracy*, which applies principles of participatory democracy through the design of deliberative mini-publics that empower members of the public to deliberate over setting and ratifying a participatory policy agenda. Our design approach to capacity building in Chapter 2 assumes a fully grassroots approach to policy development—that is, leveraging university assets (to which we have immediate access; see Section 1.4.2) with the goal of producing policies without relying on governmental institutions to devolve power to begin practicing democratic processes like deliberation, policy development, or agenda setting.

Using design-based research methods (Easterday et al., 2018), I investigated how we might build capacity to support open democratic policy development by designing and deploying a set of deliberation activities, tools, and facilitation techniques (a sociotechnical system) that aim to lower the time, motivation, and knowledge barriers for members of the community to equitably participate in setting, developing, and ratifying a democratic policy agenda. To address this issue, my research team and I designed and deployed a pilot policy development process that featured two one-hour deliberative caucuses with members of the university community for agenda setting and ratifying policies. These caucuses were supported by a separate volunteer-driven policy development process, technology that captured caucus participants' deliberative reasoning and allowed policy developers to turn them into issues to incorporate, and training guides for policy developers.

This exploratory study presents early design principles for how a small group of motivated members of a university community can organize grassroots resources to carry out pilot deliberations for open democratic policy development. Findings from this study suggest that deliberation designers can significantly decrease the time and policy knowledge requirements for community members participating in deliberative discussions by providing deliberation participants with a list of potential policy seeds that they can modify and design new policies from, supporting moderated small group discussion focused on each community member's top policy idea, and taking a ranked choice vote of group opinion at the conclusion of the deliberation. Furthermore, findings also suggest that by supporting a *separate* pathway for policy development based on the policy agenda they develop and ratify in two successive deliberations, open democracy designers can help community members participate directly in the policy development process without committing more than two hours.

Most importantly, findings from this study suggest that recruiting, training, and building a student-based organization of volunteers committed to open democratic policy development (that is, developing policy memos based off of community members' deliberations) provides an effective motivational pathway for grassroots capacity building. Half of the policy developers who participated in developing policies did so through an undergraduate civic engagement course, while another half of the policy developers participated through a volunteer graduate student association focused on science policy outreach. In follow-up interviews with 4 of these graduate student volunteers, they expressed a personal interest in policy development as a skill and potential career path. All expressed value in having a real-world opportunity to apply their interests and gain experience. Additionally, all but one of the undergraduate students who participated in policy development for this study stayed on with the campaign (for Study 2), with two undergraduate members even recruiting friends to join the team. These findings suggest that policy development to support open democratic policymaking is, in and of itself, an educational opportunity that students with an interest in policy research, writing, and democratic

community engagement would be enthusiastic to support. Moreover, policy developers' interests in recruiting new members to join the grassroots effort suggests that the pilot policy development campaign holds promise as a mechanism for organizing.

In Chapter 3 of this dissertation, we built on the capacity developed in the pilot open democratic policymaking process to build additional capacity from other stakeholders in the community beyond the university to effectively organize participatory budgeting (PB), a participatory democratic institution that importantly includes binding mechanisms for implementing citizen-driven policies related to budgeting (Gilman, 2016; Shah, 2007; Wampler, 2007). This chapter asks, What capacities are needed to formally organize a new participatory democratic initiative, and how might we connect a participatory policy development pilot to building these capacities? Our design approach to capacity building in this chapter expands to include formal and community stakeholders (i.e., local government officials, community-based organizations) beyond our pilot grassroots organization of motivated student volunteers.

In this study, we initially designed an organizing campaign towards achieving the short-term goal of developing implementable community-driven PB policies. Across four months of community-based participatory research (Izumi et al., 2010; Lawson et al., 2015), my research team and I organized a grassroots campaign centered around our pilot policy development work, in which organizers and policy development volunteers developed implementable policy 1-pagers, sought policy feedback from community experts while also educating them about PB, and advocated for a formal leadership role in the PB process by consistently communicating our commitment and technical expertise to City Council members. Using sequential process tracing, I found that by building on the capacity developed over the policy development pilot, seeking policy feedback from experts in community groups, and consistently communicating interest and expertise to government officials, grassroots organizers and pilot developers were able to build *technical capacity* to formally start a new participatory democratic institution. In addition to this technical capacity, I also found that *grassroots*

capacity—having a base of committed, trained volunteers to support outreach, facilitation, and policy development—and government capacity of a supportive city council, staff, and at least two staff dedicated to the new institution also needed to be built in organizing new participatory democratic institutions. Ultimately, organizers' initial campaign to develop implementable community-driven PB policies led to the unexpected organizing outcome of serving as technical assistant leads in organizing a new participatory budgeting process in a legitimately recognized partnership with the city.

1.5.1 Community-Based Participatory Research & Research Positionality

This dissertation is the result of over 9 months of community-based participatory research (CBPR) (Duke, 2020; Izumi et al., 2010; Lawson et al., 2015), in which my research team—including the principal investigator and 1-2 colleagues—and myself served as lead organizers of the campaign. Community-based participatory research, as employed in this study, is a kind of participatory action research (Duke, 2020; Lawson et al., 2015). As such, CBPR can recast researchers' role by empowering them as social change agents, emphasizing goals of knowledge production in service of practical problem solving (Lawson et al., 2015, p.6). CBPR stresses the collaborative participation of community collaborators to yield robust, contextualized data for research, as well as practical outcomes like mutual capacity, skill building, and creation of initiatives to bring about sustainable change with, and in, the community. I discuss the specific ways in which these studies are based within different communities (e.g., university community, municipal community), and involve different kinds of collaborative participation of members of those communities, in the methods sections of each individual chapter. Each study also specifically outlines the intended community-based action, as well as how our understanding of what the goals of that action ought to be, that we as co-researchers with these communities aimed to collectively achieve through our research.

As with any participatory research method, this deeply embedded, first-person approach to studying the unique question of organizing new participatory democratic institutions presents unique benefits and limitations. With regards to the core university-based grassroots organization we built over the two studies, it is important to note that researchers had a special role in participating in and recruiting individuals to this organization through their positionality in the university. First, as university researchers with special access to grant funding and campus resources, we acknowledge that we were in a privileged position even at the outset of the campaign; I discuss the extent to which this positionality as university researchers presents a limitation to the model in Chapter 4. Additionally, as will be discussed in more detail in the methods section of each study, many, though certainly not all, members of the university-based organization participated through an undergraduate course taught by the principal investigator of the research team. While this does present limitations on the kinds of claims we can make about voluntary participation, several members of the organization, including those in leadership roles (like Policy Leads) did participate solely on a voluntary basis. This population allows us to draw preliminary conclusions about voluntary participation. More importantly, while a course-based participation pathway does present limitations as to the nature of their participation, students in the course were not required to choose to work on this particular campaign; in fact, only a small portion of the students in the course worked on this campaign, as others chose campaigns in partnership with local advocacy organizations. Secondly, these students were not required to stay engaged with the course or campaign beyond a quarter, and had the option of opting out of the campaign or class at any point.

Nonetheless, participants' positionality as members of the university community does require special consideration vis-a-vis practical applications of this model. I discuss the contribution of a university-based organization, with both curricular and extracurricular pathways of participation, for doing this work further in Chapter 4.

1.6 The Participatory Democratic Organizing Model

Based on the two studies across the dissertation, I present the Participatory Democratic Organizing Model (Figure 1.1). This model argues that communities need technical, government, and grassroots capacity to organize new participatory democratic institutions, and that university assets can be leveraged to conduct pilot participatory democratic processes that build technical and grassroots capacity in the short term. By building on existing relationships with government officials and consistently communicating expertise gained from pilot work in the absence of technical consultants with prior experience, the grassroots and technical capacities developed from pilot participatory democratic processes can be connected to government capacity to formally kickstart a new municipal participatory democratic institution.

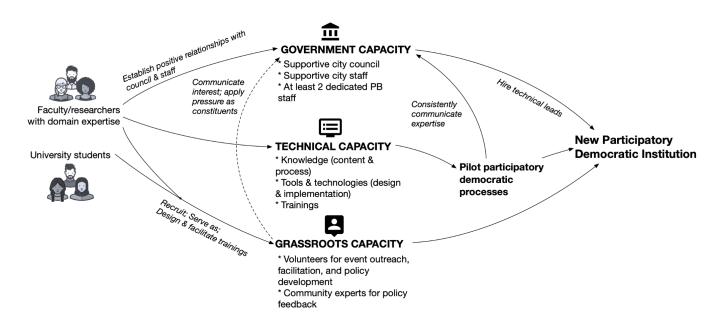


Fig. 1.1 The Participatory Democratic Organizing Model. To build capacity to organize new participatory democratic institutions, communities need to build technical, government, and grassroots capacity. University assets can be leveraged to conduct pilot participatory democratic processes to build initial technical and grassroots capacity in the short term, which can be bootstrapped to government capacity to formally kickstart a new participatory democratic institution.

This model is premised on a theoretical and practical gap in understanding how to support the "start up" phase of institutional entrepreneurship—when members of a community.

without the formal support of governments or the technical resources of experienced consultants, have to work together to build the resources, motivation and knowledge, and training and organizational structures for taking collective action to realize new participatory democratic institutions from the ground up. During the start-up phase, learning and organizing challenges are particularly acute because a core group of volunteers need to be trained, motivated, and organized to build capacity for realizing broader democratic goals of empowered participation. This organizing model argues that grassroots organizers can leverage university assets to design novel learning environments to address capacity building challenges in the organize-up phase by:

- Recruiting an initial base of policy students or individuals highly interested in learning about local policy implementation, to build an initial volunteer base for building a grassroots organization;
- Running pilot open democratic policy deliberations, to provide the organization with a
 concrete community-driven policy agenda upon which to build further commitment from
 the broader community towards implementing;
- Designing tools and training materials for deliberation facilitation, policy development,
 and volunteer recruitment, to provide volunteers with tools to record and track
 community needs and to develop their knowledge for carrying out open and empowered
 participatory democratic practices;
- Designing organizational structures focused on leadership, coaching, training, and mentorship, to provide volunteers with needed support and build social bonds for collective action; and
- Communicating expertise and interest, and applying pressure as constituents to
 policymakers, to connect technical and grassroots capacity built from pilot efforts to
 formal policy implementation pathways via elected officials.

This organizing model emerged from the findings across 9 months of this grassroots campaign. As such, my primary aim in this dissertation is theoretical hypothesis development (Beach & Pedersen, 2013; George & Bennett, 2005). Rather than conclusively stating a normative answer to the question of how new communities ought to build capacity to organize new participatory democratic institutions, this dissertation seeks to (a) highlight a gap in literature in learning sciences, political science, and institutional and organizational scholarship towards attending to issues and processes of capacity building, and (b) provide a model for scholars and practitioners alike to build on and further experiment with. With the concrete design principles presented in this emergent model, my hope is that future researchers and organizers can continue refining this hypothesis while simultaneously scaling grassroots efforts to construct new people-powered structures of democracy.

1.6.1 Theoretical Contributions

Towards the theoretical goal (a), this model aims to address theoretical gaps in learning and political sciences, as well as in institutional and organizational scholarship, towards the role of capacity building in creating new participatory democratic institutions and the need for new, interdisciplinary methodological approaches that cut across micro-, meso-, and macro-levels of analysis to build capacity to organize new participatory democratic institutions.

For political scientists, this model builds on increasing interest in studying experiments in participatory democracy, from Iceland's 2013 Constitutional Reform process (Landemore, 2020) to new participatory budgeting processes around the world (i.e., Does & Bos, 2021), to contribute new theoretical understanding of how citizens can organize new participatory democratic institutions from the ground up. Researchers have frequently cited growing interest by governments around the globe for adopting participatory democratic processes like participatory budgeting (Fung, 2016; Gilman, 2016; Wampler & Hartz-Karp, 2012), mirrored by growing academic interest towards studying these experiments as demonstrated by a 2012

special issue of the *Journal of Deliberative Democracy* dedicated to participatory budgeting (Wampler & Hartz-Karp, 2012). However, existing political science research into participatory democratic institutions largely examine these efforts, and their associated participation outcomes, *after* implementation. By contrast, this dissertation contributes a detailed empirical investigation of the "start-up" phase for new participatory democratic institutions: when members of a community, without the institutional support of governments or the technical resources of experienced consultants, have to work together to build the resources, motivation and knowledge, and training and organizational structures for taking collective action to realize new participatory democratic structures from the ground up. During the start-up phase, learning and organizing challenges for citizen community members are particularly acute, as individuals are required to build new capacities, individually and collectively, to organize for the political changes that are necessary for them to participate in empowered democratic ways (that is, opportunities that are Inclusive; that allow them to make deliberative decisions; and give them direct authority over policy outcomes).

For learning scientists, this model extends existing models of community-engaged learning to present a model of learning-through-organizing that provides learners with authentic opportunities for empowered democratic practice when no existing organizations can provide those opportunities for them. Existing models of community-engaged learning, including service learning and experiential learning, have presented approaches to providing learners with authentic experiences in partnership with existing community-based organizations (CBOs). These models, however, are limited in providing learners with authentic engagement in learning and practicing skills of empowered democratic participation, which require CBOs to train learners to organize (that is, in many cases to themselves create *new* organizations) to build political pressure for new participatory democratic institutions, but moreover that train them to practice the democratic skills like policy deliberation and development such that they can make democratic policy decisions once those participatory democratic institutions are created. The

Participatory Democratic Organizing Model presents a model for learning scientists to design novel learning environments that provide authentic opportunities to engage in learning through organizing, by which learners are simultaneously practicing democratic skills and applying them towards organizing to build political power for new participatory democratic institutions.

For design and human-computer interaction researchers, this dissertation aims to contribute a detailed case study of a sociotechnical approach that integrates social, technical, organizational, and institutional design towards organizing to build future capacity for participatory democracy. This dissertation builds on the sociotechnical approach of infrastructuring, in which design interventions are deployed in community settings to build communities' capacities for *future* collective practices and action (e.g., Ehn, 2008; LeDantec, 2016). The organizing model contributed by the two studies in this dissertation similarly presents components of technical capacity, which includes sociotechnical dimensions of designed tools (e.g., the online platform *DeliberationWorks*) and processes to support participatory democratic practices like policy development and deliberation, integrated with grassroots and government capacities that need to be built in conjunction with community members to develop their future capacities for using sociotechnical tools. In particular, the methodological approach to sociotechnical design demonstrated in this dissertation contributes an approach to organizing for capacity building—when communities with and for whom designers intend designs to be used do not yet have the capacities to use them (capacities here including abilities and motivation). The organizing model presented by this dissertation contributes a methodological approach to sociotechnical design that advocates for designers to attend closely to institutional and organizational dimensions of capacity building—such as designing organizational structures or institutional pathways for building capacity among government and grassroots stakeholders—even before attending to social and technical dimensions of designing traditional products, services, and systems for use and practice.

Finally, for institutional and organizational scholars, this model presents a new organizational model for constructing new participatory democratic institutions from scratch. In doing so, this research also contributes a new methodological approach to institutional entrepreneurship that truly considers and analyzes capacity building across micro-, meso-, and macro-levels of institutional construction. Institutional and organizational scholars have developed high-level frameworks for institutional construction and theorized about bottom-up. entrepreneurial processes for actors on the ground like grassroots organizers in negotiating and inventing new organizations that then support the construction of new institutions like participatory budgeting (i.e., Scott, 2014). While these frameworks point to the need for analyzing processes across micro-, meso-, and macro-levels for institutional construction, including the need to separate top-down and bottom-up processes within those levels, these frameworks remain far too abstract to apply to a new context or translate into principles for design or practice. The Participatory Democratic Organizing Model both presents a new organizational model with concrete design principles for designing organizing strategies and learning environments towards capacity building outcomes and contributes a concrete example of micro-, meso-, and macro-levels of institutional construction. At the micro-level of individual capacity building, the Participatory Democratic Organizing Model draws on principles and techniques from learning sciences to present strategies for training learners the skills required for empowered democratic participation, such as organizing, deliberation, and policy development. At the meso-level of organizational capacity building, the Participatory Democratic Organizing Model presents principles by which grassroots organizers can build new CBOs dedicated to empowered democratic practices. Finally, at the macro-level of institutional capacity building, the Participatory Democratic Organizing Model presents three different macro-level capacities that communities need to build—technical, grassroots, and government capacity—to construct new participatory democratic institutions, and concrete strategies for building those capacities.

1.7 Research Context: Bringing Participatory Budgeting to a New Community

This dissertation presents an organizing model that emerged across 9 months of community-based participatory research in the context of organizing participatory budgeting in a midwestern US city, which I call Anderstown, with a large research university and a total population of approximately 77,500 residents. Anderstown's population is approximately 65% White (approximately 17% Black and approximately 12% Hispanic/Latino) and highly educated (67% with a Bachelor's Degree or higher). The median household income in Anderstown is \$82,335 (US Census, 2021). Anderstown is widely considered to be a politically progressive community, with a history and reputation of experimenting with progressive economic and social policies.

Having received \$43 million in federal American Rescue Plan Act (ARPA) funds to address the impacts of COVID-19 on the community, Anderstown City Council members announced in Fall 2021 the allocation of approximately \$3.5 million of those funds towards implementing a Participatory Budgeting process for the first time. Participatory Budgeting, an empowered participatory democratic reform started in Porto Allegro, Brazil, in 1989, and adopted in local and regional governments across the globe since, is a process by which members of a community are given authority over how they would like to spend a set amount of municipal or regional funds (Fung, 2006; Fung & Wright, 2003; Gilman, 2016; Wampler, 2007; Lerner & Secondo, 2012; Shah, 2007).

Participatory Budgeting offers a unique context for studying empowered participatory democratic governance as a municipal-level institutional reform that:

 Opens participation to nearly all members of the community (defined more specifically by community members leading the "rulebook" design of each PB process, but typically with very few restrictions);

- Promotes some degree of community deliberation over what projects ought to be funded by having budget delegates choose and develop projects and presenting developed projects to community members;
- Gives community members authority over nearly every part of the process, from designing the rules for the process to developing proposals to voting on projects to implement in the final ballot; and
- Includes a binding mechanism by which government officials are held accountable to implementing the decisions made by community members through this participatory democratic process.

In contrast to the majority of existing PB efforts (Hagelskamp et al., 2016), Anderstown's use of ARPA funds presented a unique opportunity and a unique challenge as a PB funding source did not limit the community to implementing only capital expenditure projects. This presented the possibility of funding programs, services, and any kind of project that fits within the US Treasury Department's guidelines for COVID-19 relief funds (that is, broadly addressing the impacts of COVID-19, particularly on populations and services disproportionately impacted by the effects of the pandemic). The funding source also had a unique timeline; all funds from the City's ARPA-allocated funds were required to be allocated by December 2024 and all funds required to be spent by the end of 2026.

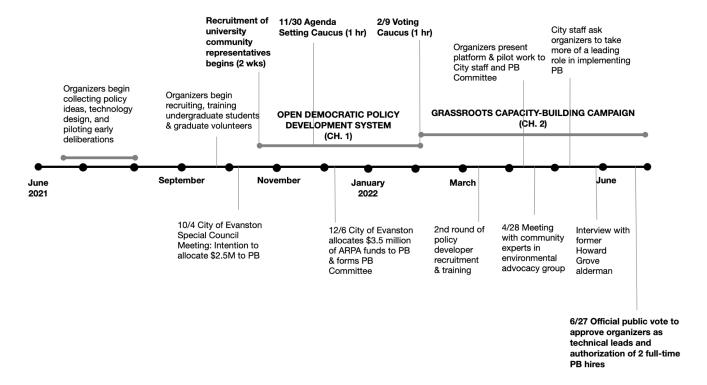


Fig. 1.2 Timeline of grassroots campaign and two studies. The two studies of this dissertation take place in the 9 months between when the Anderstown City Council officially announced their intention to adopt a new participatory budgeting process (October 2021) and when the Council voted to allocate funds to hiring a "Technical Lead" for PB (June 2022).

The two studies of this dissertation take place in the 9 months between when the Anderstown City Council officially announced their intention to adopt a new participatory budgeting process and when the Council voted to allocate funds to hiring a "technical lead" for PB in early June 2022 (Figure 1.2), marking the official start of the design and implementation of participatory budgeting in Anderstown. This period of time, which I call the "startup phase," was effectively a liminal space. Officially, this period of time was dedicated to the City Council's search for and hiring of a technical assistant, an external consultant who would partner with the City to guide further implementation of the PB process. Functionally, for other members of the community with an active interest in starting PB, it was unclear what, if anything, advocates could do to support this participatory process. The two studies of this dissertation were

motivated by our firsthand experience of this uncertainty, and effectively serve as our answer to this theoretically and practically unexamined question.

2 Designing An Open Democratic System for Participatory

Policy Development

Abstract

Open democracy is a branch of participatory democracy that applies its institutional principles to the design of deliberative mini-publics that empower members of the public to deliberate over setting and ratifying a participatory policy agenda. Open democracy ideally supports equitable participation—that is, provides equal opportunities for members of the public to serve as representatives, regardless of their existing resources for participation. However, existing open democratic models may not fully foster equitable participation because of tradeoffs between representation and participation—those with less time, existing knowledge, and motivation, who are typically less represented in civic activities more broadly, are often precluded from participating in time-, knowledge- and commitment-heavy deliberations to shape policy agendas. This design research study presents the design of a sociotechnical system that aims to increase equitable participation in open democratic policy development by inviting community representatives to set and ratify a policy agenda over two one-hour deliberative caucuses, while shifting the resource-intensive work of policy development to policy students and volunteers using an community representatives' policy priorities from the deliberative caucuses. Our design aimed to decrease time, knowledge, and motivation barriers for community representatives by prioritizing their participation in crucial decision making processes, while an organizational structure, an online platform for scribing and policy development, and training materials supported a more resource-intensive participation pathway for students and volunteers interested in practicing policy development skills. Over a 3-month design research case study of policy development for participatory budgeting, we found that a sociotechnical system designed

to support (a) separating agenda setting and voting deliberations from the policy research and writing process, and (b) "bridging" work of policy developers to develop policies based on community representatives' deliberation, helped community representatives set and ratify a policy agenda in a total of 2 hours' time, without prerequisite knowledge about policy areas or high motivation to commit to policy research and development. For students and volunteers supporting policy development, our design also unexpectedly built grassroots capacity to continue working towards formally implementing policies after deliberations concluded. This study contributes early design principles for supporting equitable participation in open democratic policy development, specifically by designing sociotechnical systems that support "separate but bridged" processes of agenda setting deliberation and policy development, and separate participation pathways depending on individuals' time, knowledge, and motivation for policy development.

2.1 Introduction

Open democratic models allow members of the public to deliberate on a policy agenda, rather than only consenting to ones made by elected representatives. A key distinguishing feature of open democracy is "the possibility to shape, and deliberate about, the political agenda [...] having the first say, and indeed a say anytime we want. Democracy [...] must begin at the start and never cease. It must be open" (Landemore, 2020, p.14). In this definition of democratic governance being "open" to members of the public, open democratic models present a new approach to public *participation* in democratic *representation*. That is, ordinary members of the public are empowered to participate in setting and shaping policy agendas, rather than consent to those developed by elected officials. Moreover, barriers for serving as decision-making representatives are removed such that access to power is open, equitable, and inclusive to all, rather than only to the select few who win election to public office.

In practice, it is challenging to balance participation and representation to foster equitable participation. Prior democratic scholars have argued that there is always a "forced choice" between "political equality, deliberation, and mass participation" in participatory democratic reforms such that designing to support any two of these ideals will routinely undermine the third (Fishkin, 2011; Fishkin, 2020). In recognition that a perfect balance between participation and representation may remain an unachievable ideal, this study focuses on addressing two limitations to equitable participation in existing deliberative designs. First, efforts to engage members of the public are not often designed to empower them to do more than discuss developed policy options. Second, participants are often required to commit large amounts of time (a full to many days, sometimes offset by stipends), learn a large amount of information, and be highly motivated in order to deliberate across setting, developing, and ratifying a policy agenda. Together, these limitations pose challenges to equitable participation in deliberation for open democratic policy development because members of the public are often precluded from exercising power in deliberations and, when they are included, must overcome limits of time, knowledge, and motivation that disproportionately impact members from marginalized and low-income populations (who typically lack the free time and resources to dedicate to participation) (Schlozman et al., 2012).

To support equitable participation in open democratic policy development, we developed a process that featured two one-hour deliberative caucuses with representatives from a university community, held one month apart, for setting a policy agenda and ratifying policies developed based on that agenda. The policy writing and research process was conducted by a separate group of policy students and volunteers, who were recruited and trained to develop comprehensible 1-page policy briefs that represented community representatives' policy priorities as captured on *DeliberationWorks*, an online platform designed to bridge the output of the deliberations with the policy writing process.

This design sought to support equitable participation in open democratic policy development in two ways:

- First, to empower community representatives to equitably participate in setting and ratifying policies while lowering time and knowledge barriers, our system featured two one-hour deliberative caucuses with community representatives, in which representatives were supported with policy seed ideas collected from the community and facilitated discussion to ensure all representatives, regardless of prior policy knowledge, could advocate for their policy priorities in setting the group's policy agenda.
- Second, to empower community representatives to equitably participate in policy development while lowering time and motivation barriers to the research and writing process, we shifted the resource-intensive work of policy writing and research to a group of students and volunteers recruited and trained to collect policy ideas and write briefs that represented community representatives' policy agenda. These policy developers used the *DeliberationWorks* online platform to develop comprehensible 1-page policy briefs that represented community representatives' policy priorities and key questions. Community representatives checked whether the developed briefs fairly represented their deliberation in a second Voting Caucus.

Findings from a 3-month deployment of the system provide early evidence suggesting that a design that separates deliberative caucuses for agenda setting and ratifying of policies from policy writing and research processes not only allows members of the university community to participate in an open democratic process with limited time commitments and knowledge prerequisites, but moreover supports unexpected capacity-building benefits for individuals specifically motivated by an interest in policy research and writing. The 3-month Open Democratic Policy Development process resulted in 8 developed 1-page policy briefs based on community representatives' policy agenda, and high levels of agreement on the top policies to recommend to city staff for implementation.

2.2 Background

2.2.1 Balancing empowered participation and democratic representation: Equitable participation challenges in open democratic policy development

Open democratic models empower public participation in setting, developing, and ratifying agenda, and democratic representation in deliberating to develop policies. In open democratic models, the power to set, develop, and ratify a policy agenda is open to all, "ensur[ing] access of ordinary citizens to agenda-setting power rather than just allow[ing] citizens to consent to power" (Landemore, 2020, p.136). Open democratic models aim to open representation to all citizens, by removing barriers, like those created by elections, to serving as a representative—"a "kind of 'standing for' that is an activity open to all on an egalitarian and inclusive basis" (Landemore, 2020, p.86). This definition of democratic representation offers a contrast to democratic models premised on mass participation, because it allows for citizens to be authorized to act in a way that promotes the interests of those represented and holds representatives accountable to those represented, rather than requiring everyone having to participate all the time. Inclusivity here is key; this conceptualization of democratic representation is premised on the act of exercising power, particularly as a representative, being open to all—which is to say that efforts should be made to remove any barriers to becoming a representative, and in the ideal sense of the concept, representation should be an act of will (or interest) in serving as a representative.

Compared to other participatory democratic models premised on mass participation, open democratic models aim to open public access to political power by giving everyone equal opportunities to serve as representatives, without requiring them to do so. By opening access to activities like serving in deliberative mini-publics, and complementing them with less resource-intensive participatory avenues like voting or crowdsourced policy feedback, open

democracy "considers citizens' time and attention as scarce resources that must be used wisely" (Landemore, 2020, p.206). That is, open democratic models focus on allowing citizens to *choose* to participate in affecting policy outcomes through different empowered avenues depending on their level of interest, time, and motivation, rather than a presumption of "frequent, mass, and direct participation of the public as a whole" (Landemore, 2020, p.206). While increasing access to representation does not address the "forced choice" tradeoffs highlighted by previous democratic scholars between mass participation, political equality and deliberation (The "Trilemma" of democratic reform; Fishkin, 2011; Fishkin, 2020), it still addresses limitations to participatory democratic models premised on mass participation. Specifically, this approach presents members of the public with different opportunities to participate in setting policy agendas without requiring the same resources from everyone—but importantly does not limit the opportunity for anyone to practice power as a representative should they choose to serve in that capacity.

Despite the promise of open democratic models for empowering community participation in setting and ratifying a policy agenda, previous deliberation efforts have not been designed to foster *equitable participation* in policy development. This is often because they encounter limitations to empowered participation and democratic representation, including:

- Limitations in scope of citizen participation: First, community members are often limited
 in the scope of the decision they are empowered to make through deliberations, thus
 restricting their participation in agenda setting.
- Limitations to democratic representation in agenda setting: Second, representation in
 policy development activities is often restricted to individuals who are willing and able to
 commit one to several days of their time, learn a large amount of information, and be
 highly motivated in order to deliberate across setting, developing, and ratifying a policy
 agenda. This limits democratic representation by placing time, knowledge, and
 motivation barriers to inclusive participation in serving as a representative.

2.2.2 Limitations in scope of citizen participation in deliberative decision making

Existing deliberation efforts limit the *scope* of the decision that participants are able to make. They often do not empower community members to participate in setting a policy agenda, or to connect agenda setting to the iterative process of policy development. The root of this limitation in the scope of deliberative decision making may be traced to the history of scholarship on democratic deliberation. Since the outset of scholarship on deliberation, democratic deliberation has often been studied as an idealized form of public discourse, with democratic benefits like increasing consensus and supporting a more engaged and informed electorate (i.e., Habermas, 1998; Mansbridge, 1983). But open democracy seeks to promote these deliberative ideals among an empowered public, in which citizens are not just deliberating to consent to policy decisions made by elected officials, but whose agenda-setting power allows them to shape and change policies through deliberation (Landemore, 2020). In practice, it is difficult to ensure that the output of public deliberation is incorporated into the development of implementable policies, because it is unlikely that citizen deliberators have the requisite level of knowledge, expertise, and commitment to develop implementable policies. Yet it is also not clear what information from citizen deliberators would be useful to actually incorporate policies, particularly when the deliberative effort was not initially requested or sanctioned by government actors to begin with.

Deliberations often circumvent citizen participation in agenda setting by presenting deliberating citizens with fully developed ballot measures (Kriplean et al., 2011), rather than empowering citizens to determine what ballot measures ought to be developed in the first place. Notable examples include Oregon's Citizens' Initiative Review (CIR) panels prior to general elections (Gastil et al., 2018) and the Australian Citizens' Parliament (Carson et al., 2015), Canadian Citizens' Assemblies (Warren & Pearse, 2008), and Deliberative Polls in China (Fishkin et al., 2010; He & Warren, 2017; Leib & He, 2006). In most of these cases, a state or national government determines the need for public deliberation on specific issues or ballot

measures. Subsequently, they authorize efforts to bring random, representative samples of citizens in to deliberate on policies that were developed prior to an election. For example, in the 2010 Oregon CIR, citizen panels were assembled to write pro-con rationales for supporting or opposing two statewide ballot measures, one on an initiative to set a 25-year minimum sentence for multiple counts of felony sex crimes and toughened penalties for repeat DUIs, the other on a measure establishing medical marijuana dispensaries (Gastil et al., 2018). In other cases, as in Deliberative Polling, scoped policy options are developed by outside experts before being presented to random samples of deliberating citizens (i.e., Fishkin, 2011, p.162).

Alternatively, some deliberation efforts forego empower citizens on having any impact on policy at all, focusing instead on having citizens produce "statements," policy recommendations, or on capturing the group's ideal policy, rather than producing implementable policies (NextGenIL, American Democracy Project, 2014; Minnesota Community Assembly Project, n.d.). Many deliberative efforts result in group "statements" of opinion, which may then be shared with lawmakers or other citizens prior to a broader public vote. For example, deliberation participants in Oregon's Citizen Initiative Review Panels produce "Official Statements" for Voters' Pamphlets that are distributed to all voters before general elections, rather than developing policies (Gastil et al., 2018). Other Citizens' Juries, like Minnesota's 2017 Willmar Community Assembly, may have citizens deliberate on earlier stage policy ideas, such as proposals to use ranked choice voting in elections or a public electoral funding model, and produce a final report and group statement (Center for New Democratic Processes, n.d.). However, political pathways for implementing these early stage proposals are unclear, such that these policy ideas often only remain ideas, stagnating after democratic deliberation.

Some ambitious efforts have aimed to expand the scope of citizen decision making in deliberation, such as Iceland's Constitutional redrafting (Landemore, 2020), California's Citizen Redistricting Commission (Sonenshein, 2013), Canadian Citizens' Assemblies (Warren & Pearse, 2008), and Deliberative Polls in China (He & Warren, 2012; Leib & He, 2006). For

example, the British Columbia Citizens' Assembly in 2004 involved an assembly of 160 near-randomly selected citizens who were tasked with assessing and redesigning the province's electoral system (Warren & Pearse, 2008). These efforts are impressive in scope but come at a much greater cost; Iceland and California's processes both took several years to complete and multiple referendums and electoral processes to approve authority for citizen commissions, choose citizen commissioners, and ultimately approve final decisions (Landemore, 2020; Sonenshein, 2013). Such costly and extensive processes are only achievable with the backing and legitimacy of state or national governments who sanction participatory efforts.

Despite these costly and high-profile examples, however, few deliberation efforts have resulted in citizens actually exercising any legal authority (Barrett, Wyman, & Coelho, 2012), indicating that there remains a wide gap in understanding how deliberation efforts can be designed to empower citizen participation in setting a policy agenda, especially if those deliberations have not been formally sanctioned by governmental institutions. Researchers have noted that in large part this disconnect between deliberation and empowering citizen participation in shaping a policy agenda is because "the connection between deliberative civic engagement and the policy-making process remains, to date, quite informal and dependent on the disposition of public officials and politicians to hear (and act upon) the recommendations that emerge in such forums" (Barrett, Wyman, & Coelho, 2012, p.201). This suggests a different but related challenge to designing deliberations to empower agenda setting: persuading public officials to devolve agenda setting power to citizen deliberators. Because the few examples of deliberation resulting in policy change (and even some that do not) are all lengthy, expensive, state-sanctioned efforts, it remains unclear whether and how deliberative processes can be designed to help citizens participate in shaping an open democratic policy agenda prior to the backing and resources of formal government institutions. Without examining the possibility of designing grassroots deliberation efforts that result in feasible policies without institutional support, we run the risk of open democratic innovations only being possible as expensive efforts

formally sanctioned by government actors, without investigating the possibility of deliberation designed as a grassroots approach to bringing open democratic innovations to communities at the local level.

2.2.3 Limitations to democratic representation in agenda setting

The high resource demands on citizens to participate in the challenging work of policy development presents a different set of limitations to *democratic representation*. Existing approaches to empowering citizens in policy development typically require individuals to be willing and interested in committing large amounts of time, have pre-existing knowledge, and importantly be highly motivated to do this work, thus posing a risk to the kinds of policy priorities represented during the development process. Moreover, accountability mechanisms are not usually in place for ensuring that those who *can* participate take responsibility for representing the interests of those who may not have the time, knowledge, or motivation to participate, creating a gap in understanding how to incorporate principles of democratic representation into open democratic policy development.

Existing approaches to participatory budgeting (Public Agenda, 2016) and crowdsourced policymaking experiments in Finland (Aitamurto & Landemore, 2015) have been designed to bring ordinary citizens into the policy development process. However, these approaches often accept trade-offs in *who* participates in developing policies, because the prolonged work and responsibility of synthesizing, researching, and writing policies requires time and expertise. As a result, the actual responsibilities of writing and developing policies ultimately either rests with government actors (in the case of crowdsourced policymaking), or citizens with vested personal interest, knowledge, and resources to develop the specific ideas they are interested in championing (in the case of participatory budgeting). In either case, *no* participation pathways effectively exist for individuals who may not have the time, knowledge, or motivation to work on policy writing, thereby inequitably limiting access to representation. This trade-off between open

participation and effectiveness is common in open democracy. Features of open democratic governance that increase citizen participation often accept trade-offs in the feasibility or effectiveness of resulting policies, recognizing that participatory citizen processes aimed at effective decision making largely rely on extensive involvement from a relatively small number of citizens willing to invest many hours and to acquire substantial expertise in specific policy areas (Fung, 2006, p.73).

Crowdsourced policymaking technologies aim to increase participation pathways for citizens to participate in earlier parts of policy development, including proposing, voting, and commenting on policy ideas (Aitamurto & Landemore, 2015; Aitamurto & Saldivar, 2014). These technologies offer a powerful means of opening policy development to public participation, including submission of ideas, evaluating, and in some cases even informing the drafting of policies (Landemore, 2020). Crowdsourcing approaches offer the potential of developing better proposals with the "wisdom of the crowd" (Benkler, 2015). They have even been demonstrated to afford opportunities for large group deliberation as online users read and respond to each other's comments (Aitamurto & Saldivar, 2014; Aitamurto & Landemore, 2015).

Yet even in crowdsourced policymaking, democratic *representation* in agenda setting remains limited. The citizens whose ideas are crowdsourced in the process are not ultimately the ones responsible for developing their ideas into fully written proposals, and there are no mechanisms in place to "check" that their priorities were properly represented in the policy agenda (Aitamurto & Landemore, 2015; Landemore, 2020). In some cases, crowdsourced ideas are evaluated by the crowd and checked by experts but ultimately turned into a report for government actors with recommended next steps (Aitamurto & Landemore, 2015). In others, ideas generated from the crowd are passed onto another group of citizens who have higher levels of responsibility (endowed by a governing body) to draft the policies (Landemore, 2020). It is not clear that crowdsourced policymaking would empower people with less knowledge, motivation, and time to have their priorities represented, because there are no clear

accountability mechanisms to check against misrepresentation of their ideas by other expert or government policy developers.

Existing models of participatory budgeting (PB) offer another alternative for representation in policy development, in which citizens are responsible for developing budgeting proposals from idea to an implementable ballot initiative. In most models of PB, citizen delegates develop proposals (Gilman, 2016; Public Agenda, 2016). Since these citizen delegates are self-selected, only those who are highly motivated and have the time and financial resources to volunteer 2-3 hours/week for about half a year can set the policy agenda. This typically results in a much smaller, dedicated group of volunteers, known as "budget delegates," who are committed to drafting and redrafting policy proposals; on average, a group of approximately 30-40 volunteers, often divided into smaller topical committees of 5-10 each, are responsible for the work of proposal development (Public Agenda, 2016). These volunteers may deliberate in their smaller committees to develop proposals, but since proposal developers are usually recruited from initial community assemblies for idea solicitation (Public Agenda, 2016). ideas solicited from members of the public who do not have the resources, knowledge, or motivation to commit to the prolonged time commitment of serving as a budget delegate have a higher likelihood of not being prioritized or equitably considered during the policy development process. Furthermore, public transparency into the proposal development process of PB is low, as communication and feedback with members of the public who are not serving as budget delegates and not members of city staff typically occurs only after proposals are chosen, fully fleshed out, researched, and developed to be presented on the public ballot. This means that participation in decisions made by budget delegates during the development of proposals is typically restricted to the highly committed volunteers and city staff with the expertise, resources, and motivation to participate in the prolonged process.

While these approaches make significant headway in increasing citizen participation in policy development, they still encounter significant tradeoffs with regards to which policies are

developed and who sets the policy agenda, as only citizens with high knowledge, motivation, and ample free time to spend on volunteering to improve policy ideas get to champion policy ideas they are personally invested in and passionate about. It is unclear whether the design of these approaches can address time, motivation, and knowledge barriers to equitable participation in policy development.

2.2.4 Design Approach: Separating agenda setting deliberation from policy development

One approach that might support equitable participation (to balance public participation and democratic representation) in agenda setting involves separating processes for setting and ratifying policy agendas and processes for developing policies. This approach could facilitate democratic representation by having a random selection of community members participate in deliberation for agenda setting, while a different group of community members who may have more time, motivation, and expertise are tasked with developing policies based on the agenda earlier set by community members.

This design was employed in Iceland between 2010-2013, during which randomly selected citizens participated in a National Forum in Summer 2010 to set values for reforming the Icelandic Constitution. This National Forum was followed by a constitutional assembly of "ordinary citizens without prior experience in politics" (Landemore, 2020, p.160), who was responsible for writing the Constitutional draft. A popular referendum on the draft Constitution proposal was then held in October 2012. While Iceland's Constitutional Reform process suggests that separating agenda-setting deliberation and policy development processes could be a promising approach to balancing equitable participation and democratic representation, questions still remain with regards to what mechanisms, if any, were in place to ensure

participants in agenda-setting deliberations had their priorities represented by the second group of individuals responsible for policy development.

This approach offers multiple pathways for participation, which were each deliberative in different ways. The largest and perhaps most familiar deliberative setting was the National Forum, a one-day event held on November 6, 2010, in which 950 randomly selected Icelandic citizens were invited to deliberate on set values to incorporate into the Constitution. Participants were divided into 8-person moderated small groups. They spent the first half of the event brainstorming potential constitutional values that were aggregated into eight different themes. They spent the afternoon in different small groups having concrete discussions between the themes. Finally, participants returned to their initial table to share their experience and draft up to five recommendations, from which each table selected three through voting. Organizers asked each table to summarize their recommendations, advice, and requests to those who will continue to finish work towards a new constitution. Organizers also asked participants and facilitators for their individual recommendations. The output of the National Forum was synthesized in a 200-page report, along with expert recommendations and two blueprints for constitutional proposals, and presented to the 25 members of the Constitutional Council.

Separately, a 25-member constitutional "assembly of amateurs" was in charge of writing the draft Constitution, drafts of which were regularly posted online for public feedback and accountability. The 25-member Constitutional Assembly was comprised of "ordinary citizens without prior experience with politics. In fact [...] incumbent professional politicians were excluded by law" (Landemore, 2020, p.160), selected through an election process. Deliberation was central to the Council members' work. Council members were separated into smaller committees tasked with writing different parts of the Constitution, then reconvening to intensely debate proposals from other committees. In the process of drafting the Constitution, the 25 council members also regularly posted online the version of the draft they were working on. Anyone interested in the process could post feedback on social media platforms, posting on the

Council's webpage, or using e-mail or postal mail. While again, the Council could choose what feedback to attend and respond to such that it is not clear how much the information from crowdsourcing informed the Council's work, further research does suggest that about 10 percent of public suggestions had a causal impact on the content of the draft (Hudson, 2018).

Iceland's 2010-2013 experiment in Constitutional Reform is considered one of the first and most ambitious experiments in wide scale open democratic governance and most innovative in creating multiple participation pathways, of varying commitment levels, that allow citizens to impact policy outcomes (Landemore, 2020). From posting online feedback to draft constitutions, to getting selected to participate in the one-day agenda-setting National Forum, to getting elected to serve as a representative in the multi-month work of drafting the Constitution, Icelandic citizens could directly participate in policy development and potentially act as democratic representatives to a degree of political empowerment scarcely seen before. To be sure, many of the most directly impactful deliberation pathways did require other selection mechanisms like random or electoral selection, though the online crowdsourcing phase opened low-commitment participation opportunities to nearly anyone with interest. The online crowdsourcing phase also provided a low-bar mechanism for transparency and accountability in the policy development process, as Constitutional Assembly members were subject to at least posting drafts of their proposal iterations and receiving public feedback.

While Iceland's Constitutional Reform process suggests that separating agenda-setting deliberation and policy development processes could be a promising design approach to creating different participation pathways to balance equitable participation and democratic representation, the process did not clearly put ratification mechanisms in place for representatives to "check" that information produced in deliberative agenda setting actually shaped constitutional development. While the crowdsourcing phase arguably created some feedback loops for checking the work of Constitutional Assembly members, the feedback at that stage would not inform agenda setting, thus leaving researchers with a gap in understanding

what design mechanisms, if any, were in place to help citizens check that their agenda-setting deliberation did shape policy development in a representative manner. Moreover, questions remain about what, if any, mechanisms were in place to translate the results of the agenda setting deliberative process into informative output for policy development, as well as how the process supported equitable participation in ratifying the policy agenda. For example, it remains unclear how the 200-page report from the National Forum was used by the Constitutional Assembly, nor whether and how Constitutional Assembly Council members were required to incorporate public feedback into their iterative development of the Constitution draft.

Additionally, this process was highly resource- and time-intensive. In addition to being sanctioned by Iceland's government, the process took three years to carry out, required an enormous amount of financial resources, and ultimately resulted in a (referendum-approved) bill that was stalled in implementation due to turnover in the elected parliament. A practical question remains in whether the design approach of separating agenda-setting deliberation from policy development could be replicated into a different context in which no government resources are allocated towards the effort and citizens are not incentivized to participate, or to represent the policy priorities of a different group of citizen representatives in policy development.

2.3 Research Question

The purpose of this study is to understand how to design an open democratic deliberative system (that is, a process, tools and technology, and organizational structure) that lowers time, motivation, and knowledge barriers to allow citizens to equitably participate in developing a policy agenda they set and in ratifying developed policies.

To achieve this goal, my research team and I designed and deployed a process that featured two one-hour deliberative caucuses with representatives from the community for setting and ratifying a participatory budgeting policy agenda. These caucuses were supported

by a policy research and writing process conducted by a separate group of policy students and volunteers, technology that "bridged" deliberation to policy development by capturing caucus participants' deliberative reasoning and allowing policy developers to turn them into issues to incorporate, and training guides for policy developers on how to do so. By having short caucuses for supporting community representatives' deliberation and "separate but bridged" processes for the more resource-intensive tasks of policy research and writing, our design aimed to empower community representatives to deliberate to set and ratify policy agendas in a short period of time and without prerequisite knowledge about policy areas or the high motivation needed to research and write policy briefs. Our design also aimed to build capacity among a small group of policy developers to develop succinct, comprehensible policy briefs that represented community representatives' policy agenda within a 1-month period between the two caucuses.

2.3.1 Intervention

More precisely, the research question in this study was a set of hypotheses called a design argument, which presents causal hypotheses articulating how predicted features of a designed environment are mechanistically linked to specific desired outcomes (van den Akker et al., 2006). Below, I describe the specific design arguments we employed across the sociotechnical system for open democratic policy development to achieve equitable participation outcomes.

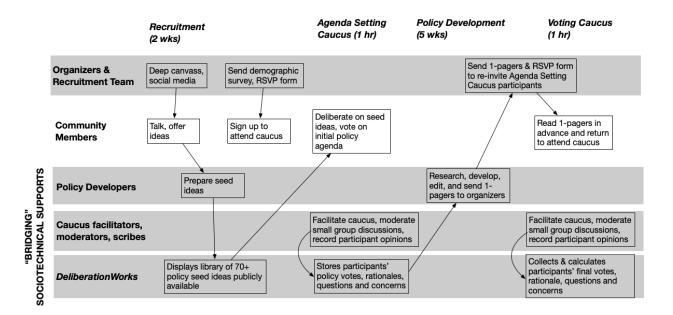


Fig. 2.1 Open Democratic Policy Development Process. The design of our open democratic sociotechnical system involved two one-hour caucuses separated from but bridged to a period of policy development. This process was carried out by a grassroots organization of approximately 20 student volunteers and supported by DeliberationWorks, an online platform for recording policy rankings and questions from community representatives' deliberations.

Recruitment: To recruit a diverse sample of 10-20 community members to serve as community representatives in both the Agenda Setting and Voting Caucuses, organizers and a student outreach team solicited ideas; conducted outreach through a variety of avenues, including in-person canvassing and on social media; and sent multiple follow-up requests for additional information like demographics and RSVP information to remind community members and more accurately gauge likely attendance at both events.

Table 2.1. Open Democratic Policy Development recruitment design arguments.

Recruitment Design feature	Mechanism	Hypothesized Outcome (confirming evidence)	Hypothesized Challenges (disconfirming evidence)
Prepared script for idea solicitation to conduct deep canvassing	Community members have a personal interaction with organizers that engages and	Community members sign up to attend a caucus	Deep canvassing interaction takes more volunteer time and training but may not result in more

	persuades community members to attend a deliberative caucus		recruited participants
Social media, digital and physical posters	Community members quickly learn about the event and core reasons for participating	Community members sign up to attend a caucus	High potential reach but few of those reached ultimately attend caucus
Sending follow-up requests as structure tests (follow-up interest form, demographics survey, RSVP form)	Community members answer multiple increasingly large "asks" throughout the recruitment process, which (a) reminds them about the caucus to keep it top of mind; (b) checks likelihood of showing up; (c) generates needed info for organizers; (d) keeps communication channel open between participants and organizers	Organizers can gauge likely attendees and plan according to "organizer math" (Indivisible Guide, 2020)	Organizer math is wrong (too many people respond relative to showing up or too many show up relative to organizer math estimates); organizers not able to send all follow-up structure tests; people don't respond to any structure tests
Invitations sent by Outreach Team to the same community members who attended Agenda Setting Caucus, inviting them back to read and ratify policies developed based on their specifications	Community members motivated to attend another caucus to evaluate more developed policies	Community members who attended first caucus will come back to vote on policies in Voting Caucus	Community members don't come back, community members express disinterest/do not value coming back, invitations not sent out or subject to coordination mishaps

Agenda Setting Caucus: To empower community representatives in setting a policy agenda, outreach volunteers invited a sample of community members to attend a one-hour "Agenda Setting Caucus" to deliberate over a large pool of draft policy seed ideas collected from canvassing conversations and policy developers' research on existing policies. Trained moderators facilitated small group discussions in which community representatives were asked

to select one policy idea to advocate for and prepare their reasoning to share with other representatives. Participants discuss tradeoffs and concerns about each other's ideas before ranking all presented ideas for policy development.

Description of service design

Our Agenda Setting Caucus was held on the evening of November 30, 2021. A few days before the Caucus, all community members who responded to the RSVP form were e-mailed a list of over 70 policy seed ideas, spanning 10 policy areas. Each policy seed contained a one-phrase summary of the policy idea (i.e., "Explore Renewable Energy Options") and a 1-2 sentence explanation of what the idea would entail (i.e., "Increase renewable energy supply options for city customers not eligible for Aggregation, such as Community Solar Subscriptions, development of a municipal alternative retail electric supplier (ARES), Power Purchase Agreements, etc."). Organizers designed a facilitation and small group moderation guide (Appendix 2), which we also used to provide light training. Two organizers served as facilitators for the event, and we additionally recruited another volunteer graduate student to help with moderation.

When they arrived at the caucus, community representatives were first given 10 minutes to review the packet of 73 policy ideas. To make it easier for them to choose where to begin in the large packet of ideas, facilitators encouraged them to first choose a policy area of interest and then choose one policy idea in that area for which to advocate to the group.

In small groups, community representatives then participated in a moderated deliberation about which of the existing 73 policies they want to advocate for. Community representatives could also propose a new policy idea. During the moderated small group discussion, community representatives were divided into two small groups of 4 community representatives in one group and 6 in the other, each with a moderator and two scribes. Based on prior literature, we expected that these smaller discussion groups would help ensure that all

members of the group would have ample time to speak, discuss ideas with one another, ask questions, and clarify confusions (Burkhalter et al., 2002; Clark & Brennan, 1991; Diehl & Stroebe, 1991; Gastil, 1993; Johnson & Johnson, 2011). Moderators were trained to ensure that all community representatives spoke, that no one dominated the conversation, and that discussion was focused and relevant. Scribes were trained to capture which community representatives supported what policies, and community representatives' questions, concerns, and suggestions for improving policies. Moderators asked community representatives to share their reasons for choosing their policy and what suggestions they had for making the policy more concrete. community representatives were encouraged to respond to each other's reasons.

After small group discussions, community representatives were brought back together in the full group to share and listen to all policies for which the small groups advocated. All community representatives then completed a ranked choice vote of all policies they supported implementing. This policy agenda was shared with the policy developers to further build into 1-page policy briefs.

Table 2.2. Open Democratic Policy Development Agenda Setting Caucus design arguments.

Agenda Setting Design feature	Mechanism	Hypothesized Outcome (confirming evidence)	Hypothesized Challenges (disconfirming evidence)
Large pool of seed ideas (shared with participants before Caucus)	Participants can browse through many ideas and policy areas; each individual can pick one to advocate for	Can settle on a list of preliminary policy ideas to develop within 1 hour	People don't understand policy ideas; people not satisfied and don't agree with policy areas; people can't choose policies to get behind
Small group discussions	Everyone gets to share at least one policy idea; everyone	Relative consensus on list of prelim policy idea	Not everyone gets to speak; not everyone gets to forward an

	can comment on each other's; major concerns can be raised; trade-offs can be discussed		idea; major concerns are not raised; no discussion occurs; participants don't react to each other's ideas at all
Ranked Choice Vote at End of Caucus	Participants can prioritize ideas, organizers can gauge ideas with highest consensus	Prioritized list of policy ideas to move forward for development	People don't vote; little consensus results of RCV; people don't understand ideas well enough to vote (especially for ideas advocated by groups they didn't discuss in)
Scribing technology (DeliberationWorks)	Captures questions & concerns from participants so policy developers have list of questions and concerns to develop policies from	Policies developed that incorporate participant comments/concerns	People's questions not captured; questions don't make sense (policy developers confused); policy developers don't look at/use questions; policies don't incorporate participant ideas in development

Policy Development: To develop policies representative of community representatives' priorities, organizers recruited a team of students and volunteers interested in policy research and provided them with training, structured check-ins, editors and a group structure to help them take the list of chosen policies from the agenda setting caucus and develop 1-page policy briefs over a one-month period. To make sure policies were developed to represent community representatives' priorities, volunteers used the *DeliberationWorks* platform to identify and incorporate participants' questions, concerns, and suggested edits as recorded by scribes during the Agenda Setting Caucus.

Table 2.3. Open Democratic Policy Development design arguments.

Policy Development Design feature	Mechanism	Desired Outcome (confirming evidence)	Potential Challenges (disconfirming evidence)
Weekly or bi-monthly meetings with policy developers recruited based on interest in policy writing + undergrads in civic engagement class, directed by 2 policy leads that assign volunteers to policies to develop, provide training and feedback	Volunteers have structure, support, information they need to develop policies	8 policy memos developed within 1 month	Volunteers do not have skills, interest, or knowledge to develop policies in assigned areas; volunteer efforts not coordinated; communication among policy volunteers disorganized; information not shared team; volunteers not committed; design will only work with class involvement
Ranked list of policy ideas from community members in Agenda Setting Caucus	Community members and policy developers have public record of policies, votes, questions, and reasons	Policies developed by policy developers in accordance with community members' priorities	Policy developers won't want, or be able, to develop policies outside of their area of expertise, may not be interested in developing policies they didn't choose (seems random), not enough time/resources to develop policies on voluntary basis within 1 month, policy 1-pagers may not be comprehensible or comprehensive for community members, policy 1-pagers may not have useful information for voting
Community members' recorded questions and suggested edits	Policy developers will create issues based on comments and questions in Issue	Issues will be incorporated in updated versions of policies (policy	Policy developers will not reference community members' comments and edits;

captured in DeliberationWorks	Tracker tools	1-pagers)	policy devs won't use the information
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Voting Caucus: To empower community representatives to check whether the developed policy briefs accurately represented their priorities, outreach team members invited the same community members back to deliberate and vote on developed policy briefs. At the Voting Caucus, community representatives first completed an initial ranked choice vote to identify areas of high agreement and disagreement among the group. Moderators used individual differences identified in the initial vote to facilitate policy discussion, before asking community representatives to rank their supported policies one more time. The goal of the Voting Caucus was to determine which policy proposals are both feasible for implementation and receive the highest support from community representatives to pass onto City Council.

Description of service design

All community representatives who attended the Agenda Setting Caucus were invited again to the Voting Caucus, another one-hour deliberation during which representatives were asked to vote on the final policies to recommend for implementation by the City Council. Representatives were sent a PDF of all eight 1-page policy briefs two days before the Caucus and asked, if possible, to review the policies before attending the Caucus.

The Voting Caucus was held on the evening of February 9, 2022. Community representatives were asked to arrive ten minutes prior to the starting time. Upon arrival, a facilitator (first author) directed community representatives to a table with other community members, a volunteer scribe, and a discussion moderator. After a brief reintroduction to the task and individual re-introductions in their group, community representatives were given 15 minutes to review the 1-page policy briefs and input their initial ranked choice vote. Community representatives were instructed to individually input their vote on the *DeliberationWorks* online

platform or ask the scribe to input their votes for them, and to only vote for policies they would be in support of implementing as described in the policy briefs as is.

Following the initial vote, the moderator reviewed the ranked list of initial votes with the group. The group proceeded to moderated deliberation on their rankings, with the moderator specifically calling on individuals with "dealbreaker" (anyone who ranked the top 3 group policies low in their individual rankings), "middle" (anyone who voted policies ranked in the middle of the group vote highly in their individual rankings), and "outlier" (anyone who voted for the bottom 3 group policies highly in their individual rankings) votes, to direct the group to deliberate over potential differences and potentially increase consensus building. The moderator was trained to call on these individuals and ask them to share why they ranked policies out of line with the group's rankings the way they did. They were also asked to share anything they think would convince others to change their rankings.

Following approximately 15 minutes of deliberative discussion, representatives were asked to take a final vote on the *DeliberationWorks* platform, which included ranked choice voting features to quickly present community representatives' rankings. The moderator then announced the group's final ranked list of policies, which the facilitator explained would be presented in a final report, along with their remaining questions and concerns, to the City Council to help them start their Participatory Budgeting process. Community members were then directed to complete a post-survey and the event concluded.

In addition to the caucus of community representatives invited back from the Agenda Setting Caucus, another "mock" caucus group of policy developers, scribes, and community members also discussed the final proposed policies and held a separate final vote. The purpose of this secondary group was (1) to invite policy developers to experience the deliberation process for themselves and potentially increase their motivation to continue volunteering with the campaign, (2) to have "backup" deliberation participants in the event that not enough community members from the Agenda Setting Caucus returned, and (3) to "stress test"

DeliberationWorks scribing and voting technologies. Data from this mock group is not included in this study but is included in a forthcoming study focused on scribing technology (Umbelino et al., forthcoming).

Table 2.4. Open Democratic Policy Development Voting Caucus design arguments.

Voting Caucus Design feature	Mechanism	Desired Outcome (confirming evidence)	Potential Challenges (disconfirming evidence)
Packet of developed 1-page policy memos sent before caucus and time to briefly read before discussion	Caucus participants provided with info and time to evaluate updated policies	Informed discussion about policies; participants able to take RCV before discussing with understanding of all policies in PDF	People don't read or understand policies, can't or don't want to do initial RCV, people don't feel policies represent the policy ideas they advocated for
Initial Ranked Choice Vote (RCV) of policies presented in DeliberationWorks	Moderators quickly view this info on DW	Moderators call on participants based on RCV Info	RCV info not captured or understandable in DW; info not used by moderators to direct discussion
Moderation rules: Moderators focus discussion on dealbreakers: anyone who ranked the top 3 policies low; Middle: anyone who voted middle policies very high (within their top 3); and Outlier: anyone who voted for bottom 3 policies very high	Surfaces relevant disagreements for discussion	Changes group opinion closer to consensus; disagreements productively surfaced, expression of potential changes to individual opinion	Moderation rules not followed for directing discussion, discussion naturally veers in different direction, moderator cannot direct discussion on these rules
Final RCV (in DeliberationWorks)	Community members reaffirm or adjust their opinions about final policy recommendations based on discussion	Community members reach consensus about policies that receive highest support and are feasible to	Final policies chosen are not feasible; community members can't agree on final policies; major disagreements in

2.3.2 Technical & organizational support

To facilitate the "separate but bridged" design approach, the broader open democratic sociotechnical system also featured an online platform, *DeliberationWorks*, designed to support policy developers' activities in capturing and incorporating community representatives' policy priorities; and an organizational model for policy development and outreach volunteers that included four leadership tiers to facilitate coordination across organizing, training, editing, and writing tasks.

DeliberationWorks: To record community representatives' deliberative reasoning for policy developers to incorporate and to increase transparency into the development process, we designed and deployed *DeliberationWorks*, an online platform with features for recording and tracking deliberative discussion, policy editing, and amount of support for policies (Fig. 2.3, 2.5, 2.6). The platform captured and displayed (a) all policy ideas, who proposed them, and community representatives' reasons for supporting them; (b) results of all votes taken during both caucuses; and (c) a public library of all policy ideas in development. Capturing and displaying this information on an online platform that anyone can view and comment on provides transparency into the policy development process, and also provides an accountability mechanism for policy developers to ensure they are representing community representatives' policy priorities.

While *DeliberationWorks* as a technology served a core role in facilitating the "separate but bridged" sociotechnical approach contributed by this paper, the role of the platform in this paper is primarily in supporting the broader design approach rather than to be a core technical contribution in itself, which is the focus of other papers (i.e., Lu et al., in progress; Umbelino et al., submitted). Consequently, the design features in the platform will be discussed to the extent

that they are supporting the broader systems design, as demonstrated in the design argument tables above.

Grassroots organizational model (organizers, outreach team, policy developers): To carry out the open democratic policy development process as a grassroots effort, we developed a leadership structure that included three organizers and an outreach team of 3 undergraduate students, in addition to the team of 15 policy developers (See Fig. 2.2). All members of the grassroots organization were faculty, graduate, or undergraduate members of the university, with approximately half of them (all the graduate students) participating in the organization as volunteers and the other half through an undergraduate civic engagement course.

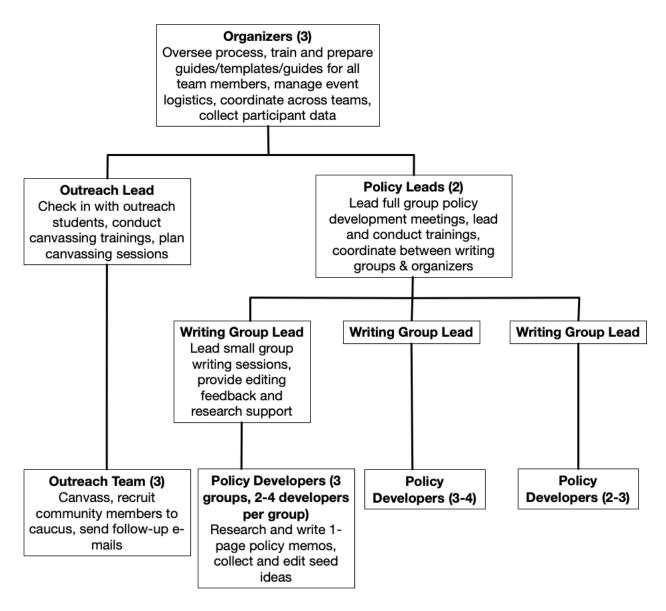


Fig. 2.2. Open Democratic Policy Development Grassroots Organizational Structure. The Open Democratic Policy Development process was carried out by a team of approximately 20 individuals, all faculty, undergraduate or graduate students at our university. These 20 individuals were distributed across organizing, policy lead, writing group lead, policy development team, and outreach team roles. Note that individuals sometimes served multiple organizational roles (i.e., the Policy Leads also served as Policy Developers).

The distributed leadership structure with team leads coordinating between organizers and students and volunteers offered multiple pathways for participating in the organization. Two other members of my research team, including the principal investigator also teaching the civic

engagement course, and I served as the lead organizers in the campaign. At the second leadership level were Policy Leads and the Outreach Lead, who were both responsible for coordinating with other members in their task-specific teams. The Outreach Lead was a graduate student member of our research team, while the two Policy Leads were graduate students recruited through our climate action work prior to this study. At a mid-tier of leadership between policy developers and Leads were "Writing Group Leads," who served as the primary point of contact between 2-4 person policy developer groups and the Policy Leads, often provided informal training and research help given their previous experiences in policy research, and were also responsible for editing completed policies. Finally, new organization members and undergraduates from the civic engagement course participated at the level of task-specific Outreach Team or Policy Development Team levels, in which they were responsible for recruitment or policy development goals aligned with the overall campaign.

Each campaign group met regularly each week to check in on campaign goals, share best practices, and/or conduct light trainings. To ensure policies were developed with the right kinds of information and Writing Group Leads and Policy Leads had a standardized template for checking their quality and consistency, we also developed a guide for checking DeliberationWorks for feedback on policies, and provided a template for policy briefs modified from existing PB efforts.

Overall, these processes, tools, and structures aimed to support separate but bridged processes for deliberative agenda setting and policy development, so that community representatives could participate in short, low-commitment deliberations that allow them to both set, inform the development of, and ratify a participatory policy agenda, and policy developers could practice policy research and writing while developing briefs that represented community members' policy priorities.

2.4 Methods

I conducted a design-based research study (Easterday et al., 2018), powered by process tracing analyses to evaluate causal explanations for events observed in a case study (see Analysis section for details; Collier, 2011; Beach & Pedersen, 2013) to develop both an effective intervention and empirically grounded design model that can help guide the design of future deliberative processes and tools to support open democratic policy development. In line with calls for design research to actively intervene in addressing social problems (Bilandzic and Venable, 2011; Cole et al., 2005), I took an action research approach to investigate authentic challenges in supporting equitable participation in open democratic policy development. While serving as Lead Organizer throughout this process along with the other members of my research team, I recruited, trained, and coordinated among policy students and volunteers to build capacity for policy development to support participatory budgeting in a new community. Our organizing goal, like our research goal, was to develop implementable participatory budgeting policies through a community-driven process. We ultimately aimed to get these policies on the participatory budgeting ballot.

Design-based research studies can take different forms depending on the goals and stage of the research, ranging from relatively open-ended development studies to controlled experiments (Easterday et al., 2018). As this is an exploratory study, in which design challenges and opportunities for supporting equitable participation in open democratic policy development are unknown, the primary goal of this development study is for hypothesis generation, rather than validation of proposed design features. In development studies, researchers design and implement a complex learning environment based on predictions drawn from prior research and refine these predictions based on empirical evidence gathered during implementation to produce a design model grounded in empirical data (Plomp, 2013; Sandoval, 2014).

This paper aims to present exploratory conclusions from a 3-month single case study detailing the field deployment of the Open Democratic Policy Development system (Eisenhardt, 1989; George & Bennett, 2005). Case study methods are particularly valuable for fostering new hypotheses and theory building, especially given a concept like "equitable participation" that requires detailed consideration of contextual factors (George & Bennett, 2005). Close analysis of observable patterns from this case study effectively allowed me to generate new hypotheses and emergent theories closely tied to empirical evidence (Eisenhardt, 1989; George & Bennett, 2005). For example, my observations of within-case participation patterns, triangulated with interview data, allowed me to discover new hypotheses regarding policy developers' motivations for participating in a supportive writing and research role, compared to community representatives' motivations participating in the caucuses. I discussed these emergent theories and alternative explanations with the other members of my research team and other members of the organizing team (e.g., Recruitment Team members and policy developers), while also conducting retrospective interviews with policy development volunteers to triangulate my own understanding of the design hypotheses.

Case study methodologies rely on thick analysis, in the sense that inferences rely on detailed knowledge of cases to carefully rule out alternative explanations until one stands up to scrutiny (Collier et al., 2011; Coppedge, 1999). My knowledge of details in this case was strengthened by my role as an organizer in the process, as facilitator at the two deliberative caucuses, and as a member of the teaching team for undergraduates who participated in the project as part of their civic engagement course (see Participants and Policy Development Findings for more details). To counter some of the bias that may have resulted from my role in these capacities, I additionally conducted formal and informal interviews with Policy Leads and Writing Group Leads throughout the process, which provided me with additional perspectives on the experience in the process.

2.4.1 Research Context

I designed and implemented the process, tools, and technologies for supporting open democratic policy development in the context of bringing participatory budgeting to a midwestern US city with a large research university and a total population of approximately 75,000 residents, which I call Anderstown (See more information about the research context in Section 1.7).

As Anderstown did not have prior experience implementing PB and my research team and I have had experience designing and researching deliberative technologies and processes, we were motivated in designing and testing a pilot process for addressing limitations to equitable participation in open democratic policy development, as reviewed in the Background section. Specifically, we aimed to develop a process, tools, and technologies to address barriers in time, knowledge, and motivation for community representatives' participation in developing an implementable policy agenda. We intended to continue gathering additional feedback and political support on this policy agenda from other community members and city staff as the official PB process started.

As the efforts described in this study were not formally designated by city officials, we treated this as a formative, exploratory study publicly conducted as a grassroots effort to start the City's PB process with the university population. In light of the fact that PB had been officially announced by the City Council and efforts to start the process in early stages as this research was conducted, we treated the design of the process and results of the study as both formative and authentic to the PB process. We treated the university population in this study as a convenient mini-public of relevant individuals for this problem context. We e-mailed information collected throughout this process, including the resulting developed policies, to student community members recruited by the Outreach Team, including those who expressed interest but could not attend a caucus; organizing, recruitment, and policy development team

members; as well as to city officials and city staff. Our grassroots pilot held with individuals across a large university aimed to demonstrate to City officials the importance of accounting for some of the design challenges and features for bridging deliberation with policy development as demonstrated in this study, as well as to demonstrate what could and could not be done without the resources or formal support of government institutions.

2.4.2 Data Collection

Video and audio data

To understand the 8-10 community representatives' deliberation activities during the Agenda Setting and Voting Caucuses, I collected video and audio data of both caucuses, a total of 6 hours of video and audio data. Video cameras and audio recorders were placed on separate tables next to community representatives during their discussions, to limit interference with their deliberations.

As research questions focused on understanding the quality of community members' deliberative dialogues during small group discussions, specifically the policies advocated for by each community member and other caucus participants' arguments for and against those policies, analysis focused on transcripts of video and audio data. These transcripts were divided into segments based on policy discussed and community representative speaking, to examine equity of community member participation in discussion and frequency of different policies discussed. Within these segments, I analyzed community representatives' discussion using *in vivo* coding to understand their rationale for selecting policies and their arguments in response to others' chosen policies.

Survey data

To collect additional information about each community representative's demographic factors, collect data on how they learned about the caucus, and gain insights into their perceptions of

their deliberation experiences and developed policies, I administered two surveys to all recruited community members (N=63), including those who did not ultimately attend as representatives, one to collect demographic information before the Agenda Setting Caucus, the second to collect participant feedback and perceptions after the Voting Caucus. The first survey, for collecting demographic information, was administered prior to the Agenda Setting Caucus. This survey asked participants to provide their basic demographic information, such as their race, age, and household income. We initially collected this demographic information with aims of recruiting representative samples of Anderstown to participate in the deliberative mini-publics at the Agenda and Voting Caucuses. Ultimately, we found our goal of doing so countered by the difficulty of getting any sample of community members to participate, given logistical and scheduling challenges of participants as reviewed further in the Findings Section.

The second survey, administered following the Voting Caucus, asked community members a short series of questions about the final policy briefs, such as whether or not they thought the developed policy brief represented their opinions, how comprehensible the briefs were, and how confident they were in the implementability of the final developed policies. These survey questions provided insight into community members' backgrounds and individual perceptions, particularly to understand how effectively the design hypothesis of a separate and bridged policy development process still resulted in policy briefs aligned with community representatives' policy agenda.

Log data (DeliberationWorks & Google prototypes)

To understand policy developers' use of community representatives' deliberation comments, my research team and I collected data on developers' use of *DeliberationWorks* tools, as well as scribes' recordings of community representatives' deliberation comments. To provide a complete record of the deliberation and facilitate development of ideas discussed in the deliberation to policy memos, scribes recorded the policies community representatives advocated for, which

developers could turn into "issues" to assign and incorporate into policy briefs. By examining scribes' record of comments made by community representatives in deliberation and policy developers' identification, tracking, and assigning of issues on the Issue Tracker, I gained a better sense of how technology aided in bridging policy development work across deliberative caucuses.

Interviews

To understand policy developers' motivations and process for writing, researching, and coordinating the policy development process, I conducted one hour-long semi-structured, retrospective group interview with four policy development volunteers—two policy leads (who managed all policy developers) and two policy area writing group leads (who managed teams of 2-4 policy developers each). I specifically chose to interview the graduate volunteers about their process and motivations, as they were participating on a solely volunteer basis, whereas undergraduate developers were participating in policy development through their class. The group interview was conducted as a group interview and process check-in following the Voting Caucus as an exploratory examination into the development process. The interview provided early insights into key motivating factors for policy developers to work on policies they had not chosen themselves. I analyzed the interview transcript using an open coding process that allowed me to identify key patterns across the four developers' process and motivations in their involvement with the project.

2.4.3 Analysis

Consistent with early-stage design research methods, my aim in this study was early-stage *theory building* rather than conclusive validation (e.g., Bielaczyc & Collins, 1999; Easterday et al., 2018; George & Bennett, 2005; Sandoval, 2014). Consequently, I employ analytical techniques of theory-building process tracing, which involves building a theory about a causal

mechanism, starting from a situation in which the causal connection is relatively unknown, using case-centric methods that employ a form of instrumentalism aimed at accounting for outcomes in particular cases (Beach & Pedersen, 2013, p.11-12).

Process tracing involves making descriptive and causal inferences based on diagnostic evidence. Researchers assess the relative strength of these inferences by looking for supporting evidence and disconfirming evidence. Researchers report process tracing studies by explaining the alternative explanations they considered and the evidence that ultimately led them to their conclusions.

In this study, I employed process tracing as follows. At a high level, the causal model underlying the overall design of the sociotechnical system for open democratic policy development can be stated as: If a separate policy research and writing process can develop policies based on an agenda set by deliberating community representatives, then community representatives can equitably participate in developing a policy agenda they set and ratify. This causal model is specified more precisely by design arguments, which are also presented along with examples of confirming and disconfirming evidence at the start of each corresponding section of the paper's findings.

To increase confidence in my understanding of the data, I triangulated my data analysis by collecting observations from different sources (e.g., different participants), across different types of sources (e.g., video, log, survey, and interview data), as well as different types of evidence (Beach & Pedersen, 2005, p.127). Specifically, I evaluated confirming and disconfirming sequence (the temporal and spatial chronology of events predicted by a hypothesized causal mechanism), trace (evidence whose mere existence provides proof), and account evidence (content of empirical material), to evaluate causal claims in our design arguments. For example, disconfirming account evidence of our policy development design argument would have been found if any policy developers at any point expressed disinterest or unwillingness to work on policies they did not choose for themselves, such as in their interviews,

my observations of policy development meetings, or reports from Writing Group Leads or Policy Leads.

The analysis consisted of weighing these design hypotheses against the full corpus of data to identify supporting and falsifying evidence. When falsifying evidence was identified (such as policy developers not using issue tracking features to identify and assign community members comments for policy development). I revised our design model to be consistent with the data. Process tracing is an ideal analytic method in early-stage design research studies such as this one, which aims to develop an initial causal theory of how an open democratic policy development system can work based on a single case study.

2.5 Overview of Findings

The Open Democratic Policy Development process resulted in 8 1-page policy briefs developed by a group of 15 policy developers. At the end of the process, the top three policies chosen by community representatives for implementation were, in order of preference: Vouchers to prevent eviction and foreclosures, Alternatives to mental health emergency response, and Expanding healthcare for the uninsured, underinsured, and undocumented. These top three policies were also ranked as the top three policies from the first Agenda Setting Caucus, indicating that community representatives' policy priorities remained fairly consistent across the two caucuses.

Table 2.5. Summary table of final policies chosen by community members across the two caucuses, in

order of ranked preference.

Policy name	Agenda Setting Caucus Rank	Voting Caucus Rank
Vouchers to Prevent Eviction and Foreclosures / Housing Vouchers for the Homeless	3	1
Alternatives to Mental Health Emergency Response	2	2
Expand Healthcare for the Uninsured, Underinsured, and Undocumented	1	3

Rebuild School in 5th Ward to promote equitable education	4	4
Increase Funding for Mental Health Programs in Schools	5	5
Provide Microloans to Small Businesses	7	6
Renewable Energy Options for Anderstown	6	7
Clean Fuel Fleet (formerly Incentivize electric vehicle (EV) infrastructure)	8	8

8 community members, joined by two members of the Outreach Team, participated in the Agenda Setting Caucus, with seven returning for the Voting Caucus. The group of 10 community representatives was racially diverse, mostly undergraduate students, mostly male, and mostly between the ages of 19-20. These 10 individuals represented a small fraction of all university community members who initially expressed interest in attending a deliberation (N=63). This turnout rate is consistent with prior research on voter turnout, which has long demonstrated the difficulty of increasing participation across different techniques (Green & Gerber, 2020; Matthews, 2020). I discuss implications of recruitment challenges, including the need to dedicate more resources to outreach, in future work.

Overall, the findings suggest that the open democratic policy development process did empower the community representatives who participated in the study to equitably participate in setting and ratifying the policy agenda. During the Agenda Setting Caucus, 10 community representatives considered 72 different seed proposals and came to high agreement on 8 policy ideas on housing, economic development, mental health, policing, environment, and education to advance to the voting phase. These 8 policy seed ideas were handed off to policy developers, who conducted additional research to develop each of the 1-paragraph seed ideas into 1-page policy briefs over the course of 4-5 weeks. At the 1-hour Voting Caucus held approximately one month after the Agenda Setting Caucus, the seven returning community representatives

discussed and ranked the proposals developed based on the policy agenda they agreed upon in their first deliberation. These ratified policy proposals received high consensus for implementation from the final ranked choice vote in the Voting Caucus, with all seven returning community representatives ranking the group's most highly ranked policy proposal within their top three and five selecting it as their top policy.

I will now discuss the design features, findings, and key design implications from each phase of the 3-month open democratic policy development process.

2.5.1 Recruitment

To support the open democratic goal of empowering community members in setting and ratifying a policy agenda, members of the community should be recruited to serve as representatives in deliberating to shape a policy agenda that represents their priorities. A diverse sample¹ of 10-20 community representatives recruited to both caucuses helps to ensure deliberation among diverse viewpoints occurs and that the group is not uninhibitedly large such as to prevent ideas to be shared across all participants. The same community representatives should also be recruited to participate in a subsequent Voting Caucus, to "check" that policy briefs written by policy developers appropriately represented priorities identified from the community representatives' Agenda Setting Caucus.

However, recruiting a sample of 10-20 community representatives to attend both caucuses can be challenging. Both conducting outreach and motivating community members to participate in attending deliberative caucuses can be challenging for public deliberation and participatory budgeting events. They could have many different reasons for feeling this way; for example, they may lack faith in government or not believe their participation efforts can make an

¹ Our design prioritized openness in recruiting community representatives by focusing on testing different outreach avenues to educate and seek interest from as many members of the university community as our grassroots resources permitted. Achieving a representative sample of caucus participants was beyond the scope of this study, though this design approach could support this goal. I discuss different potential approaches to extend the design for aims of demographic representativeness in Future Work.

impact, common reasons people give for civic disengagement more broadly (Amandi et al., 2016; Schlozman et al., 2018). Logistical challenges may also impact community members' motivation to participate, as they may not be available at the time of the caucus, or may not be able to physically access a caucus location. Past research into existing PB efforts has pointed to the dedication of significant resources towards outreach efforts to turn out the vote at the end of the PB process, often including hiring dedicated canvassers or specialized organizations to carry out this work (Gilman, 2016). Deliberative polling initiatives similarly encounter outreach challenges, exacerbated by a need to recruit a representative sample of participants, which typically requires the use of a small stipend or financial incentives (Gastil & Levine, 2005; Landemore, 2020). Finally, attrition is a major challenge to confront, as with any repeated recruitment effort.

For our goal in this study of recruiting a diverse sample of 10-20 community representatives to voluntarily attend both caucuses, we organized and trained a team of student canvassers to use a persuasive "deep canvassing" script to conduct in-person, on-the-street outreach; post digital and physical mass media (e.g., social media, posters) to spread awareness; conduct relational organizing to invite participants through interested organizations; and plan outreach goals that accounted for the sharp drop-off predicted by "organizer math" (organizers should plan to contact double the number of community members they aim to recruit at each stage of recruitment [Indivisible, 2020]).

2.5.1a Recruitment Findings

Table 2.6. Overview of recruitment evidence. Our team of 3 Outreach students collected contact information from 63 interested university community members. Ultimately, 8 were able to attend the Agenda Setting Caucus, and 7 returned to the Voting Caucus.

Recruitment Design feature	Mechanism	Supporting evidence of outcomes	Challenges
		Catoonico	

Prepared script for idea solicitation to conduct deep canvassing	Community members have a personal interaction with organizers that engages and persuades community members to attend a deliberative caucus	At least one participant recruited through a deep canvassing conversation	Not clear how effective deep canvassing was for recruitment outcomes
Social media, digital and physical posters	Community members quickly learn about the event and core reasons for participating	At least 2 caucus participants said they learned of event through social media	Unclear how many participants heard of event through direct messaging techniques
Sending follow-up requests as structure tests (follow-up interest form, demographics survey, RSVP form)	Community members answer multiple increasingly large "asks" throughout the recruitment process, which (a) reminds them about the caucus to keep it top of mind; (b) checks likelihood of showing up; (c) generates needed info for organizers; (d) keeps communication channel open between participants and organizers	Organizers were able to gauge likely attendees and plan according to "organizer math" (Indivisible Guide, 2020)	N/A
Invitations sent by Outreach Team to the same community members who attended Agenda Setting Caucus, inviting them back to read and ratify policies developed based on their specifications	Community members motivated to attend another caucus to evaluate more developed policies	All but 2 of the community members who attended first caucus returned to attend Voting Caucus	Organizers had to re-adjust timing of Voting Caucus to increase return attendance

8 community members, joined by 2 members of the Outreach Team, ultimately served as community representatives in the Agenda Setting Caucus.

Of the 63 community members who initially expressed interest in attending across all outreach avenues (canvassing, social media, and posters), 8 ultimately attended the Agenda Setting Caucus. These community members were joined by 2 members of the Outreach Team, such that a total of 10 individuals participated in deliberation at the Agenda Setting Caucus. The 10 Agenda Setting Caucus participants were racially diverse, mostly undergraduate students, mostly male, and mostly between the ages of 19-20. 3 caucus participants identified as White and not of Hispanic or Latinx origin, 2 identified as White and of Hispanic or Latinx origin, 3 identified as Asian, and 2 identified as Black/African-American. 9 participants were undergraduate students, while 1 identified was a PhD/JD student. 8 participants identified as male, while 2 identified as female. Half of the participants were 19, two were 20, and one was 25 years of age. All but 1 participant was a US citizen. Of the 9 US citizens, 1 was born in Puerto Rico. Nearly all participants identified as Democratic or left of Democratic.

Initially, approximately 63 members of the university responded to express interest in attending a deliberation. Upon being sent a follow-up e-mail asking for demographic information, 28 community members provided their demographic information to the recruiting team. Of the 28 who provided demographic information, 8 indicated they were available and would attend the Agenda Setting Caucus. Of those 8, 7 actually attended the Agenda Setting Caucus. Another community member who had responded to the Demographic e-mail but not RSVP'd ultimately also showed up to the caucus, resulting in a total of 8 community members who participated in the Agenda Setting Caucus. This also suggests the need for organizers to account for unpredictability in caucus turnout and to be flexible in planning logistics to account for that unpredictability. For example, though organizers had expected 8 RSVP form respondents to attend the caucus, only 7 of those who RSVP'd ultimately did, while another individual who had not initially RSVP'd joined last minute, which also changed organizers' expectations of the demographic make-up of caucus participants.

The Outreach Team's multiple structure test follow-up e-mails (i.e., follow-up interest form, demographics survey, RSVP form) helped organizers gauge which community members were likely to actually attend the Caucus. While representing a small portion of all community members who expressed interest in attending the caucus, the 8 community members who ultimately attended still represents an approximately 13% turnout rate, which is higher than those yielded by other advertising methods used in participatory democratic efforts. For example, flyering and postcarding are frequently used in voter outreach efforts, though some evidence suggests that response rates using these techniques for participant recruitment to local deliberative polls can be extremely low; in a recent Citizen's Jury conducted by the Jefferson Center in Canada in which citizens were paid to participate, over 11,000 postcards were sent, yielding 200 initial interested applicants (1.8%), and ultimately resulting in 42 participants (0.4%) after stratified sampling (Center for New Democratic Processes, n.d.)

Seven of the eight community members who attended the Agenda Setting Caucus returned to participate in the Voting Caucus.

All 10 community representatives who attended the Agenda Setting Caucus were contacted multiple times by the outreach team in the weeks prior to the Voting Caucus (held approximately 1 month afterwards) and invited to return to ratify the developed policies they advocated for in the Agenda Setting Caucus. Several community representatives expressed that they were not able to make the initial scheduled Voting Caucus date. As a result, organizers contacted all community representatives again to seek their scheduling availability to reschedule the Voting Caucus in the week after the originally scheduled date. Seven of the 10 community representatives responded to the scheduling e-mail, five of whom ultimately attended the Voting Caucus despite that all expressed availability for the rescheduled date. Two additional community representatives from the Agenda Setting Caucus who did not respond to the rescheduling e-mail also ultimately attended.

All participants who returned to attend the Voting Caucus were undergraduate students born in the United States. As a smaller group, the demographic composition of Voting Caucus participants was slightly more diverse with regard to race and gender relative to the Agenda Setting Caucus participants, but less diverse with regards to age.

These recruitment and scheduling challenges suggest that attrition is a challenge for recruitment in our design, and more broadly for open democratic approaches that aim to facilitate repeated community member interactions. They also suggest that timing flexibility is an important design consideration for caucus-based models.

Relational organizing was key to recruitment, but efficacy of other techniques like deep canvassing remain unclear.

Of the 8 community members (non-Outreach Team participants) who attended the Agenda Setting Caucus, at least half of the participants had prior connections to members of the organizing team. This suggests that relational organizing, or drawing on social relationships as a means of civic organizing (Han, 2014; Han, 2016), is key to recruitment in open democratic contexts.

In our study, students in the Outreach Team employed a variety of techniques to seek interest from participants across the university campus, including deep canvassing in person using a prepared script, social media, and physical posters linked to a sign-up form. Prior literature on get-out-the-vote campaigns suggests that face-to-face canvassing yields the largest effect size, compared to phone calls, text banking, flyers, and robocalls and emails (Matthews, 2020). Recent work examining the effects of "deep canvassing," a canvassing technique that encourages canvassers to engage community members by sharing personal stories in a conversational manner, has been shown to have a positive effect on opinion change on issues (Kalla & Broockman, 2020) compared to traditional canvassing has shown little impact on candidate preferences (Kalla & Broockman, 2018). As a result, we designed a script

specifically to help volunteers employ deep canvassing techniques aimed to increase community members' interest in attending a deliberative caucus (Appendix 1).

It is not clear from our data that the deep canvassing technique was the most effective of all deployed outreach techniques. The data the outreach team was able to collect on the effectiveness of different attempted outreach techniques suggest that the two techniques participants most frequently used to find out about the caucuses were social media and referral by a friend. This was true both of participants who indicated general interest in attending a caucus, as well as the individuals who ultimately attended the Agenda Setting Caucus. Even for those who cited learning about the opportunity through social media, it is likely that these participants may have learned about the opportunity due to their existing social connections, since social media platforms are designed to take these factors into account in displaying information to users and, moreover, Outreach Team members took full advantage of direct messaging and other targeted features, like Instagram stories, to recruit participants. From the data organizers were able to collect from post-deliberation surveys, four stated that they had been referred to the event by a friend, two came said they found out about the event through social media, one was referred by one of the volunteer organizations supporting policy development, and one was recruited through a deep canvassing conversation. These findings suggest that social relationships, whether pre-existing or an interest in developing them, play a strong role in affecting the efficacy of outreach techniques, a finding reinforced by research examining motivating citizens to participate in civic organizing campaigns (Han, 2014; Han, 2016).

Ultimately, several of the caucus participants also worked to support the organizing side of the effort in some way. In addition to the 8 community members, 2 undergraduate students on the Outreach Team participated. One of the 8 community members recruited to the caucus was recruited through the volunteer graduate student organization who supported policy development for the process (though he ultimately only participated in the caucus and did not

participate in the policy development process). This suggests that recruitment for supporting the volunteer effort building grassroots capacity for PB is likely a good recruitment technique for caucus participation as well, which makes sense as these individuals are likely to be the ones interested enough in PB to begin with that they would attend a caucus. Nonetheless, while all caucus participants were offered the opportunity to continue working on their policies with policy developers following the conclusion of the caucus, none of them ultimately did, suggesting that the lower effort opportunity of serving as a community representative was ultimately the "right fit" participation opportunity for these recruited participants. This nuance will be discussed in more detail in Section IV.

2.5.1b Recruitment Key Implications

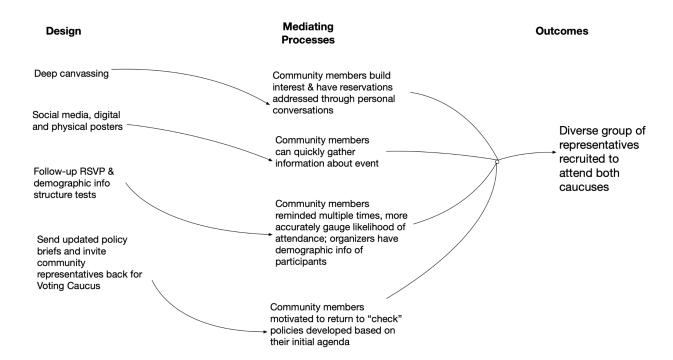


Fig. 2.3 Open Democratic Policy Development Recruitment Design. Organizers and students used a combination of deep canvassing, digital and physical mass media, collection of demographic information, and follow-up structure tests to recruit a diverse sample of community members to serve as representatives in attending both the Agenda Setting and Voting Caucuses.

By recruiting and lightly training (approximately 4 hours, informal coaching) a team of 3 students to conduct outreach to the university community across a variety of avenues, including deep canvassing and social media posts; sending follow-up requests for information as structure tests; and adjusting scheduling of the Voting Caucus to increase likelihood of re-attendance, we recruited eight community representatives to attend the Agenda Setting Caucus, joined by two Outreach Team members. Five of the eight community representatives returned a month later to attend the Voting Caucus, again joined by both Outreach Team members. Our pilot recruitment efforts surfaced the importance of leveraging social bonds in recruitment, suggesting the importance of relational organizing techniques. Additionally, our findings were consistent with evidence from practitioners using "organizer math," suggesting that, due to expected steep drop-offs in participation at every recruitment stage, significant resources in future open democratic efforts should be directed towards recruitment efforts in order to capitalize on its participatory promise. Future work should further examine the efficacy of different outreach techniques, including deep canvassing, and other mechanisms for relational organizing, like organizational outreach.

2.5.2 Agenda Setting Caucus

Review of design

A distinguishing priority of open democracy is ensuring ordinary citizens, not just elected officials, are empowered to shape and set a policy agenda that represents their priorities. Access to the power to serve as a representative in deliberating with others to set a policy agenda should be open to all.

However, community members selected to serve as representatives in deliberation may encounter a variety of time and knowledge barriers that hinder equitable participation in deliberation for agenda setting. First, community representatives may not have policy ideas or

feel they know policy areas well enough to propose policy solutions. Alternatively, community representatives may have too many policy ideas and not be able to narrow them down, have policy ideas that are not feasible, or not be able to communicate their policy ideas to others. Once ideas are presented, representatives may not have the background knowledge to evaluate presented ideas. They may not have enough time to deliberate effectively on policy ideas, or may not be able to come to consensus on policy ideas they would like to advance to further development. Policy developers also may not get information that they need from community members' discussion to develop their policies, such that a community's policy agenda is never advanced to implementation.

Overall, we aimed to design a deliberative "Agenda Setting Caucus" that allowed community representatives to set the policy agenda in one hour's time. To address potential knowledge barriers, we provided them with approximately 70 policy seed ideas researched and developed by policy developers (see Policy Development section), while also allowing them to propose their own policy ideas so as to not constrain the development of new ideas. We designed a moderated discussion structure that allowed community representatives to quickly narrow down policy ideas and build consensus on an agenda to move forward to policy development.

2.5.2a Agenda Setting Caucus Findings

Table 2.7. Overview of Agenda Setting Caucus Findings. 8 community members, joined by 2 members of the Outreach Team, ultimately served as community representatives in the Agenda Setting Caucus. These community representatives reviewed approximately 73 policy seed ideas and came to consensus on 8 policies to develop into briefs within one hours' time.

Agenda Setting Design feature	Mechanism	Confirming evidence of outcomes	Challenges
Large pool of seed ideas (shared with	Participants can browse through many ideas and policy	All participants were able to choose at least one top policy	

participants before Caucus)	areas; each individual can pick one to advocate for	idea to advocate for within 5-10 mins.	
Small group discussions	Everyone gets to share at least one policy idea; everyone can comment on each other's; major concerns can be raised; trade-offs can be discussed	All participants contributed to discussion and to policy agenda. Evidence of deliberation occurring and new policy ideas co-constructed	
Ranked Choice Vote at End of Caucus	Participants can prioritize ideas, organizers can gauge ideas with highest consensus	High agreement on prioritized list of policy ideas to move forward for development	
Scribing technology (DeliberationWorks)	Captures questions & concerns from participants so policy developers have list of questions and concerns to develop policies from	Scribes successfully captured participant comments	Organizers directed policy developers to scribe comments but unclear whether they were used during policy development (See Policy Development Section)

In the span of a one-hour deliberation, community members set a policy agenda comprising eight policies they wanted to move forward.

During the Agenda Setting Caucus, 10 community representatives chose eight policy ideas to advance, all in one hour's time. These eight ideas were chosen from an initial policy library of over 70 seed ideas divided into 10 policy areas, which community representatives were provided to spark ideas, as a basis for initial deliberation, and could modify as desired. One of the policies in representatives' policy agenda was newly designed through community members' deliberation during the Caucus. In order of highest to lowest support from the community members at the caucus based on ranked choice votings, these policy ideas were:

- Expand Healthcare for the Uninsured, Underinsured, and Undocumented
- Alternatives to Mental Health Emergency Response
- Vouchers to Prevent Eviction and Foreclosures
- Rebuild School in 5th Ward to promote equitable education
- Increase Funding for Mental Health Programs in Schools
- Renewable Energy Options for Anderstown
- Provide Microloans to Small Businesses
- Incentivize Electric Vehicle (EV) Infrastructure

This policy agenda featured at least one policy advocated for by each community representative, suggesting their equitable participation in the final agenda. In addition to the 8 policy ideas they advocated for, community representatives also discussed ideas they wanted to consider combining with their top policy idea and designed one new policy idea they hadn't been offered in their initial set of seed ideas. The structured discussion with seed policy ideas thus facilitated focused, yet wide-ranging, deliberation within the 1-hour caucus. Analysis of transcripts collected from the caucus indicated that all community members contributed to the discussion, often building on each other's ideas to suggest improvements or design new policies, though contributions were not equally distributed among all small group discussants (notably, transcript data suggests that the two Outreach team members and the PhD student participated in discussion less relative to others in their small group).

By seeding the discussion with pre-identified policy ideas, community representatives could quickly dive into deliberation on specific policies and policy areas, facilitating deliberation almost immediately, regardless of preexisting knowledge with specific policies or policy areas.

After an initial 10 minutes to review the library of seed ideas organized by policy area, both small groups jumped immediately into discussion on individual policies. In each small group

discussion, moderators began deliberation by asking each community representative to advocate for one policy idea they wanted to advance and share their reasoning for doing so. Community representatives brought in their pre-existing knowledge and experiences to inform their reasoning, even when they did not have a high degree of knowledge about the specific policy areas. Dean, for example, advocated for a healthcare policy to provide insurance for the uninsured, underinsured, and undocumented, yet immediately prefaced his reason for doing so by saying:

So the reason why I chose that was like, I don't know how they [do it in other cities like] Chicago, and I'm not really sure about how health insurance works in general. I really shouldn't...like I should have more knowledge about that [but] in general [...] I know some people, they go to hospitals and stuff, they come out with huge medical bills they have to pay, after experiencing something horrible. I think that that's a fact[.] This should just be an easier process for them. Like, if you're unhealthy, you shouldn't have to worry about paying for your body. You know what I mean? You shouldn't pay to live. So I think that's why this is so important to me like uninsured underinsured and undocumented people who just can't have access to this kind of stuff. I look at the other [policies] too and I think it's all crazy important, but I just think that this one was just the one that stuck out to me the most.

In this rationale, Dean acknowledges feeling that he lacks knowledge about healthcare policy more broadly, yet demonstrates that he was still easily able to choose a policy for providing insurance to the uninsured, underinsured, and undocumented based on the knowledge he did have and his own lived experiences with the healthcare system. This evidence suggests that providing caucus participants with pre-identified policy seed ideas could allow them to advocate for policies in areas they may not have perceived having enough knowledge in to propose their own ideas. Having a pre-identified list of ideas could increase the likelihood that they might come across an idea they feel passionate about connecting their experiences to and want to advocate for as a result.

After hearing each individual's top policy and rationale for choosing that policy, other participants in their small group responded with their own opinions about that policy. This often allowed participants to raise different individual opinions about policy priorities, to build group

understanding, potentially change opinions, or even surface new policy ideas. For example, when community member Zayn advocated for P21, a policy to Incentivize Electric Vehicle Infrastructure (P21), others in his small group began deliberating over the pros and cons of advancing this policy versus another Transportation area policy (P15), on Providing Free Public Transportation.

Zayn: I think 21 [Incentivizing EV Infrastructure] is a good idea. Although I think number 15 [Providing Free Public Transportation] would probably be more helpful just in general [...] because I feel like this is incentivizing vehicles, right[, which is just] one thing more for people [who already] have money to afford vehicles. So I think [...] electric vehicles [are one thing] good for the environment. Another thing that's gonna [help the] environment is less cars in general. So free public transportation would help in that aspect and also help people who are poor who can't afford to like go to work in cars and such. So I think 15's a good one.

Louis: Yeah, I agree. I feel like I worry that electric vehicles are not accessible in some communities.

Moderator: Dean, what do you think?

Dean: I think what they're saying makes sense on 15. I was trying to, like, think about how expensive electric electric vehicle infrastructure would be [to] fund that and everything, but I definitely think in the future, like making electric vehicles more affordable. So if we can integrate that somehow I think that that is a good [idea.] Public transportation, I mean, that is already a great initiative, so number 15 isn't as groundbreaking, I think as number 21 would be.

Zayn: Free electric public transit, that would be the policy that I would promote. But that wasn't an option in a way, and I was like, How would...in terms of just economics, how easy or difficult would that be?

Moderator: So your ideal policy would be...

Zayn: Free electric public transit.

Arturo: A mix of both.

Dean: I think, like, each one is the step to get to the next one. Like, 15 is good if you make it free? Like it's already much more affordable than having your own car. 21 would even... like the next step to take.

This episode demonstrates that community representatives' deliberation often surfaced differences in opinion about which policies to pursue, especially when policies may have been addressing similar issues about which community representatives value. Here, Zayn raises the

environmental impact of different transportation options as the issue motivating his initial decision to support P21, Incentivizing EV Infrastructure. As he discusses his reasoning, he also raises the option of P15, Providing Free Public Transportation, in similarly addressing the issue of reducing environmental impacts of transportation. His groupmates Louis and Dean add reasons and complications for supporting the two policies, which eventually leads Zayn to the conclusion that his ideal policy would in fact be a different policy idea altogether combining P21 and P15, while Dean expresses that he sees the two policies more as progressively supporting one another, with P21 being more "groundbreaking" than P15. Following this deliberative episode, Zayn and his other group members came to an agreement to support P21 in advancing to the development phase.

Sometimes, a deliberative episode like this would lead representatives to design new policy ideas that took into account new ideas raised during their deliberation.

Community representatives designed new policy ideas based off of seed ideas, but sometimes preferred to advocate for a seed idea rather than design their own.

Community representatives were not constrained to advancing the seed ideas presented to them as initial options. They used these seed ideas as starting points for their deliberation and sometimes built upon these initial ideas to present new policies to advance.

In one instance, after expressing dissatisfaction with the policy options presented in the education policy area, three community representatives in a discussion group deliberated together to design a new policy idea. Carlos initially indicated that he was interested in advocating for an education policy but couldn't find one among the seed ideas that directly addressed "what I believe to be like the biggest need in [the education policy area:] equitable education across all [...] high schools for all the districts within Anderstown. So for me, sort of my priority was looking at no matter where in Anderstown you live, not just the access to education, but like the standards of education and the quality of that education is the same, it's

equitable throughout." Since he didn't see a policy targeting that goal, he proposed making "[a] policy where we can just target that specifically."

To this, his groupmate Chris responded, "2.5 million [dollars] probably [doesn't] scratch the surface on how much it costs to build [a] school. But rebuilding the school in the Fifth Ward, which is like the most underserved Ward [in the city] is a concrete thing." Two other members of their small group, Nora and Heidi, also verbally affirmed their support for this idea. Heidi added that she thought this idea would be popular among Anderstown residents and that there might already be some efforts related to this that are starting up.

This incident demonstrates that the seed ideas can provide a valuable starting point for discussion and could also provide fodder for new policy ideas. In this incident, Chris also expressed a reservation that the available PB funds probably could not cover the costs of the idea he was proposing. While this reservation about policy feasibility was captured by scribes, it notably did not prevent this idea from advancing onto the final policy agenda, nor from getting developed by policy developers. Ultimately, concerns about policy feasibility and implementation do require feedback from individuals with access to information and knowledge to establish realistic budgets for policies, pointing to the need to involve city staff in vetting policy ideas (an issue I will address further in Study 2 of this dissertation).

By contrast, community representatives sometimes opted instead to advance a provided seed idea rather than fully develop one of their own. While Carlos and Chris's new policy idea was supported by enough caucus participants to advance to development, other representatives ultimately opted not to develop their ideas into new proposals. Arturo, for example, raised interest in adjusting the policy seed idea to Provide Environmental Education in Anderstown Schools to be focused instead on "Environmental Education for Critical Race Theory" but recognized that doing so would be designing their own idea. When the moderator reminded them that designing their own policy was allowed, Arturo responded, "That's a lot of deliberation. That's a lot to think about," and chose instead to advocate for a different mental health policy

seed idea that was already in the list. Arturo's decision to forego designing a new policy idea and deliberate instead on one of the offered existing policy seeds demonstrates that the task of coming up with a brand new policy idea to propose can be a formidable one ("That's a lot to think about"), and sometimes representatives would prefer to deliberate over ideas that have already been even initially developed and scoped.

The policy seeds thus provided a flexible design to start community members' deliberation immediately on policy ideas, particularly if they may not already have had an idea to propose, while not limiting community members from proposing new ideas or changing the seed ideas to more accurately reflect their priorities.

During deliberation, representatives proposed updates they wanted to see in advancing seed policies.

Since each was no more than three sentences describing a potential policy solution, the seed ideas were by no means comprehensive enough to be implemented as presented but were designed to have just the right amount of information to seed deliberation. Given the incomplete nature of the policy seed ideas, the goal of providing them to community members at the Agenda Setting Caucus was to help caucus participants quickly prioritize a smaller set of policies in which to invest additional research and development resources.

Community representatives' deliberative dialogue suggests that the policy seeds were concise enough to both contain the main proposed policy idea and prompt proposed changes, questions and concerns about going forward with ideas within the 20 minutes allotted for deliberation. As seen in Chris and Carlos's earlier interaction, community members often asked how to make a policy idea feasible. For example, Foster said he had "very important questions" about the feasibility of pursuing Renewable Energy Options in Anderstown and what existing alternative energy sources already exist.

Community representatives were in high agreement about the policies in the final agenda the group chose to advance, as indicated in the final ranked choice vote.

After small group discussions, all representatives proposed one policy idea they wanted to advocate to the full group. This resulted in a list of 8 proposals. Almost all policies received unanimous support from community members even if it was raised by a different small group, indicating that there was significant support for all the policies in the agenda. The policy ranked highest by the group, "Expanding insurance for the uninsured, underinsured, and undocumented" was ranked by 8 of the 10 community members within their top 3 policies. The second-highest ranked policy, "Alternatives to Mental Health Emergency Response," was ranked within the top 3 by 6 of the 10 community members. The third-highest ranked policy, "Vouchers to Prevent Eviction and Foreclosures," was ranked within the top 3 by 3 of 10 community members. Similarly, two community members in different small group discussions ended up advocating for the same policy from the list of over 70 seed ideas, "Expanding insurance for the uninsured, underinsured, and undocumented," which ended up being the most highly ranked policy by all members of the Agenda Setting Caucus overall.

This evidence suggests that the Agenda Setting Deliberation was able to surface a high degree of consensus in a one-hour time window. The group of 10 representatives started with a set of over 70 policy seed ideas and were able not only to come to high agreement on 8 to advance within the span of one hour, but were moreover able to achieve high agreement on several policies ranked highly by multiple representatives on their individual ballots.

Comments, suggested edits, questions, and support information captured by scribes on DeliberationWorks helped representatives' deliberations inform policy development.

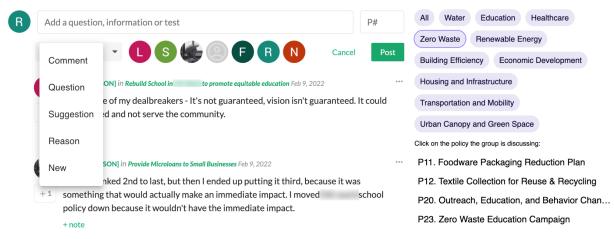


Fig. 2.4 DeliberationWorks scribing interface. Each small group was assigned a Scribe along with a Moderator. Scribes were responsible for making sure all participant votes, arguments, and questions and concerns were captured in the *DeliberationWorks* platform. Students were recruited and trained to be scribes.

At the conclusion of the 1-hour Agenda Setting Caucus, the 10 community representatives came to an agreement about their recommended policy agenda, which was captured and recorded in the *DeliberationWorks* platform. During the Caucus, trained scribes in each small group, recruited from the policy development team, also recorded all participants' questions, concerns, reasons for support, and support information on the platform (see Fig. 2.3). This recorded information allowed policy developers to later access participant discussion points during the policy development process. They also served as a public record of the discussion for anyone interested, including those who were not at the caucus, to reference at a later time.

2.5.2b Agenda Setting Caucus: Key implications

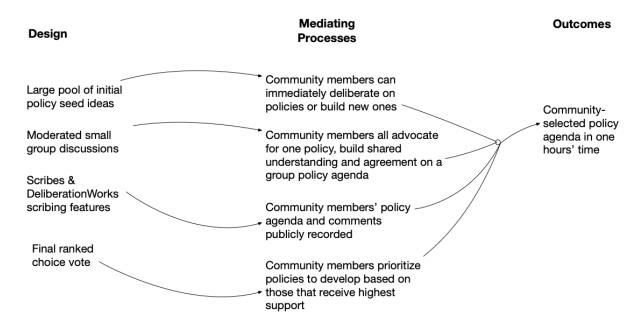


Fig. 2.5 Agenda Setting Caucus Design. In our design of a 1-hour Agenda Setting Caucus, a group of community members invited to serve as caucus representatives were presented with a large pool of initial policy seed ideas and led through moderated small-group discussions. During these discussions, they individually advocated for one policy idea and deliberated with others before the group as a whole took a ranked choice vote and to set a policy agenda for development.

These findings suggest that a one-hour deliberation for agenda setting, in which community representatives are supported with a library of seed policy ideas and moderated small group discussions, helped community representatives equitably participate in setting a deliberative policy agenda. Evidence collected from video and audio transcripts of the 10 community members in the Agenda Setting Caucus indicated that the seed policy ideas were short and informative enough to allow community members to dive immediately into deliberation on policy ideas, regardless of their prior knowledge. The seed ideas were helpful in providing community members with ideas if they did not have ideas of their own to advance, or did not want to advance new ideas, but also allowed community members to build off the seed ideas to design new policies. The Ranked Choice Vote on all representatives' preferred policy ideas helped prioritize policies based on highest agreement in the group, which both allowed organizers to

gauge the group's level of consensus, and could narrow down policies to fund depending on funding or feasibility information not available at the time (such as whether there was a maximum dollar amount for each proposal). Consequently, the Agenda Setting Deliberation resulted in a policy agenda of eight policy ideas that generated consensus among the group, with scribing features on the *DeliberationWorks* platform allowing representatives' deliberative output to be effectively recorded and transferred to policy development volunteers to incorporate into their research and writing.

2.5.3 Policy Development

Apart from outreach, policy research and writing is arguably the most resource-intensive aspect of the PB process; prior efforts, like the standard PB process in Chicago's 49th Ward, allocate up to half a year of volunteer time dedicated to developing PB proposals (Great Cities Institute, 2020). Because these prior models require volunteers who propose or collect ideas to also research and develop them into policies, required community member commitment to drive the PB agenda is extremely high (approximately 2-3 hours/week for 26+ weeks; approximately 52-78 hours or more). By having a separate group of policy students and volunteers conduct resource-intensive writing and research tasks in developing representatives' policy agenda, our design aims to empower community representatives in having their policy priorities developed into briefs without requiring them to commit extra time, nor have the expertise or motivation to do complex policy research and writing work.

However, bridging a separate policy development process to community representatives' policy agenda requires recruiting and training a separate group of policy developers who are motivated to develop policies they did not choose themselves. First, organizers need to recruit individuals who are motivated and committed to developing policy briefs based on community representatives' agenda. This requires individuals to have an interest in the process of policy

research and writing, especially in developing policies without prior knowledge or experience in particular policy areas. A major unknown for the design of this process is whether policy developers would be willing or interested in writing policies in areas in which they may have no prior interest or expertise. Commitment of policy developers is another major unknown, as policy research and writing, especially on unknown topic areas, is not a quick or simple task.

Once recruited, the volunteers need to be organized and coordinated to complete the complex task of collaborating on policy research, writing, and development. This requires an organizational structure and logistical coordination to figure out how a group of novice policy developers, distributed across geographic space, prior experience/knowledge in policy research and writing, and area expertise can complete this task within a one-month period of time that coincidentally co-occurred with the winter holidays and university holiday break.

Additionally, policies will not be able to be developed based on representatives' policy agenda if developers are not trained or motivated to develop policies assigned to them. ARPA sets very few constraints on proposals compared to the capital funds typically used for PB, which are specifically earmarked for projects to improve physical infrastructure (Gilman, 2016; Hagelskamp et al., 2016). Thus, another research and writing challenge is the complexity of policy development in this context and lack of pre-existing examples of acceptable policies. In the development process, policies may not be developed in a manner that prioritizes the needs and concerns of community members as expressed in deliberation. Finally, policies may not be feasible or implementable, or be comprehensible to community members who may have varying degrees of prior knowledge about policy issues.

To address these challenges, we recruited a team of 15 students and student volunteers interested in building their policy research skills and experience. Approximately half of these individuals were recruited as volunteers from a graduate student science policy organization, while the other half were undergraduates recruited from a civic engagement course, in which the policy development project was one of several campaign options offered to students. We

designed a training, co-writing, and feedback process to help them develop comprehensible 1-page memos from community members' chosen seed policies within a one-month period of research and writing time. Using scribes' recordings and issue tracking features in *DeliberationWorks*, these policy developers could incorporate community members' interests and concerns in their policy development process.

2.5.3a Policy Development Findings

Table 2.8. Overview of Open Democratic Policy Development process. A team of 15 policy developers, a combination of graduate student volunteers and undergraduates who chose to participate in the project through their civic engagement course, meet weekly or bi-monthly to develop 8 1-page policy briefs over the course of 5 weeks.

Policy Development Design feature	Mechanism	Confirming evidence of outcomes	Challenges
Weekly or bi-monthly meetings with policy developers recruited based on interest in policy writing + undergrads in civic engagement class, directed by 2 policy leads that assign volunteers to policies to develop, provide training and feedback	Volunteers have structure, support, information they need to develop policies	8 policy memos developed within 1 month	Unclear how much training was needed or provided; unclear how to evaluate quality of developed briefs
Ranked list of policy ideas from community members in Agenda Setting Caucus	Community members and policy developers have public record of policies, votes, questions, and reasons	Policies developed by policy developers in accordance with community members' priorities	
Community members' recorded questions and suggested edits captured in DeliberationWorks	Policy developers will create issues based on comments and questions in Issue Tracker tools		Unclear whether community members' discussion comments were viewed or incorporated by policy developers.

A team of 15 policy development volunteers were recruited, trained, and organized to develop local policy briefs in areas in which they often had no prior interest or expertise.

Following the Agenda Setting Caucus, a team of approximately 15 policy developers began developing the 8 policy ideas chosen by community members. The ideas were each developed into 1-page policy memorandums that included greater specificity on costs, background information, and implementation details. By having a clear and reasonable set of 8 ideas, rather than the 70-plus set of policy seed ideas, policy developers had a much more reasonable research and writing task. Policy Leads were able to assign available developers to write the 8 policies within one month.

The policy development team consisted of a group of approximately 15 graduate and undergraduate students interested in policy research. All policy developers were recruited based on their interest in the PB campaign, science policy, community engagement, and/or local policy writing and advocacy. 10 developers were graduate students who participated entirely on a voluntary basis, including the two Policy Leads. These developers were Masters, Law, and/or PhD students from fields like Environmental Engineering, Mechanical Engineering, Materials Science, and Public Policy. These graduate student volunteers were recruited through an established graduate student science policy advocacy club on campus on which the two Policy Leads served on the leadership board. 5 policy developers were undergraduate students in the Civic Engagement Certificate. These undergraduate policy developers were recruited by organizers as one of five civic organizing campaigns (others included voter turnout and food sustainability campaigns) they could participate in as part of their course. While there were no prerequisites for joining the team, interviews revealed that nearly all graduate students who volunteered as Policy or Writing Group Leads had previously taken policy courses, while many undergraduate policy developers had taken a policy course and/or participated in policy-related high school extracurriculars.

2 PhD students served as Policy Leads and were responsible for coordinating and leading policy writing volunteers. These individuals liaised between the organizing team, planned and led training workshops on policy writing, and assigned individual policy writers to their policy writing tasks. The full group of policy developers, Policy Leads, and two organizers met twice before the Agenda Setting Caucus and 2-3 times during the Policy Development phase between the Agenda Setting and Voting Caucuses. Smaller groups of policy developers also met asynchronously as needed to complete their policy assignments during the 4-week writing period (the fifth week before the Voting Caucus was primarily dedicated to editing).

Prior to the Agenda Setting Caucus, policy developers were responsible for writing and updating the 70-plus Policy Seed Idea descriptions that were provided to community members for the Agenda Setting Caucus. The seed ideas had been gathered prior to recruitment of policy developers by Policy Leads and organizers from running pilot caucuses, conducting on-the-street deep canvassing, and researching policies from other cities. All graduate student developers were assigned to policy areas based on their initial area of interest and expertise (i.e., Zero Waste, Renewable Energy, and Healthcare/Urban Green Spaces), with one graduate student developer serving as Writing Group Lead in each policy area. Undergraduate students on the Policy Development Team trained to serve as scribes during the Agenda Setting Caucus.

After the Agenda Setting Caucus, all developers were re-assigned to work on the eight policies prioritized by community representatives during the Agenda Setting Caucus. Policy Leads assigned undergraduate and graduate students into groups of 5-6 developers per group and assigned each group to 2-3 policies from representatives' policy agenda. In each group, one graduate student volunteer served as Writing Group Lead (See Fig. 2.2), who was responsible for coordinating and managing all policy developers within a group. Approximately 2-3 policy writers were responsible for researching and writing each policy, with 2-3 policies assigned to each Writing Group. The two Policy Leads served as editors and coordinated across the 3 Writing Groups. They reviewed all policies for consistency, grammar, and logical

coherence; helped research and write some of the policies; and provided a cursory introduction to key principles of policy writing.

Results of the Agenda Setting Caucus's ranked choice vote allowed Policy Leads to prioritize the policies for development. Having a prioritized list of policies was especially important due to the short time for policy development between the two caucuses and the disruption of the holiday break, as well as the unknowns about volunteers' commitment and interest in developing policies. Policy Leads specified for each group to prioritize two policies, leaving the last two policies in the ranked order list as policies to be developed if time permits. Fortunately, policy developers were able to develop all eight policy ideas into 1-page memos by the time of the Voting Caucus one month afterwards.

Policy developers engaged in deliberative activities to come up with evidence-based policy solutions.

Policy developers took varied approaches to writing and collaboration based on their individual and writing group availability. Interviews with the Policy Leads and Writing Group Leads indicated that they mostly conducted internet searches to find information and used local news sources and scientific research articles to support their research. In cases in which policy developers were assigned policies in their area of interest and expertise, they could also rely on their personal background or knowledge sources. For example, Kyle, a Writing Group Lead who was a Mechanical Engineering Masters student in the Energy Sustainability Program, stated that in the process of developing out his policy on Alternative Sources for Renewable Energy, he relied on material he had already collected and even asked for policy ideas from faculty members he had already established relationships with.

Interviews with Writing Group and Policy Leads suggested that deliberation did occur among the developers in discussing research, information, and other cities' policy examples that individuals came across, and in discussing the overall narrative of policy memos. Deliberation

mainly occurred in the form of considering different approaches to designing a policy solution to the ideas chosen by community members, which were often unfamiliar to them. For the two Writing Group Leads, primary sources and prior examples of policies were key deliberation starters among their groups, and especially productive in centering group deliberation around the specific policy initiatives, structure, and proposals for these complex topic areas. For example, Alice, one of the Policy Writing Group leads, shared that in her group meetings, "We had folks bring reports—I think someone brought a report that came from Denver, or maybe it was Boulder, Colorado, and we all spent time on Zoom screen sharing and just kind of looking through the report together and then talking about, 'Oh, what are some key pieces of information, we can pull from this.' We actually did the same thing for the Electric Vehicle policy memo, where we just looked at a report that someone found on their own, and that was that was really great just because I think it was a conversation starter, and it was also nice to see how other similar initiatives had structured, the way that their information was going to be presented."

Kyle shared a similar process of seeding discussion in his group on a Public Health topic unfamiliar to the members of his group with research he had collected and organized into shared group folders based on different themes he had found in his initial research. As Kyle explained, "That was just a way of keeping thoughts organized; it wasn't a rigid structure, if we ended up going a different route that was cool [too]. But for something like this, [...] it's just a really great baseline to start off of and just get some direction going. So it's something where especially no one had a lot of experience, and I think that was really good to get us going because I did try to start the meeting without something like that, but there was just a lot of like you know spinning wheels, no one really knew where to start."

According to these reflections from both Writing Group Leads, developers deliberated over how their memos should be developed, relying heavily on collected primary information, research, and examples, especially for policy areas in which developers had little to no prior

knowledge. With the logistical constraints of developing these policies within a short time frame, over the holiday break, and with geographically distributed and asynchronously working volunteers, deliberation during the policy development process may have been limited, but this evidence suggests that some preliminary deliberation did occur and was even a vital part of policy developers' process when confronted with unfamiliar policy topics.

Policy developers remained motivated and committed to develop the policy memos on policy topics unfamiliar to them.

Of the 15 who signed up to work on policies before the Agenda Setting Caucus, a core group of 11 policy developers—5 undergraduate students and 6 graduate volunteers—remained highly committed throughout the entire 3-month Open Democratic Policy Development process. These developers checked in with their Writing Group Leads, Policy Leads, and organizers on a weekly or biweekly basis. These 11 developers served as the core team behind policy development. At various times throughout the 3-month process, other volunteers beyond this core group of 11 (a total of anywhere from 15 to 18 volunteers) also signed up to learn about the policy development process. However, we do not have evidence that these volunteers contributed to policy research and writing in a substantive or sustained way. For example, at the conclusion of the Agenda Setting Caucus, organizers asked caucus participants if they were interested in joining the policy development effort during which organizers asked caucus participants if they were interested in joining the policy development effort. Three community representatives expressed interest in doing so, but none of these representatives ultimately showed up to a Policy Development meeting. This evidence suggests that there is value in separating participation pathways for policy development from those for caucus participation, as policy development remains a task that requires a high level of time commitment, motivation, and knowledge. Even if representatives developed an initial interest in continuing to work on developing their policy ideas during the Agenda Setting Caucus, this interest may not be

enough to motivate them to participate in a regular weekly commitment to policy research and writing.

Policy developers worked on a range of policy topics beyond their initial expertise, indicating that domain-specific expertise was not a limitation for the design. Policy developers came from a variety of disciplines, with nearly all graduate-level volunteers completing Masters or Doctoral degrees in the natural sciences or engineering, and all undergraduate volunteers majoring in social policy or political science. Community representatives selected policies, however, like housing vouchers and rebuilding a local school. These were not topics with which policy developers had prior knowledge or familiarity, as policy developers indicated in follow-up interviews. Nevertheless, policy developers researched and developed policies based on representatives' agenda, even if they were in unfamiliar topic areas. This was not, however, true for all recruited policy developers; at least one graduate-level policy development volunteer with a background in the medical sciences expressed interest only in developing policies in the healthcare domain and did not stay engaged as a result.

This evidence suggests that developers were largely willing and motivated to develop policies outside their areas of experience and expertise, a key prerequisite for our design.

Policy developer engagement came from interests in local policy, policy research and writing, and community engagement.

The commitment of 11 core policy developers over the entire process, over half of whom did so solely on a voluntary basis, suggests that having an organization dedicated to researching and writing policy briefs based on community members' policy agenda is an effective approach to supporting community representatives' equitable participation in open democratic policy development. Motivation for policy developers in doing this work often came from a broader interest in policy development and a passion for real-world application of science policy.

Interviews with 4 of the 6 graduate-level volunteer policy developers revealed that all expressed a personal interest in policy development as a skill and potential career path.

All graduate-level volunteers had prior experience with policy writing-related extracurricular activities or coursework, and 3 of the 4 interviewed developers explicitly expressed a passion for community engagement, particularly as it related to their future career goals and interests. For example, Willow, one of the Policy Leads, expressed "an interest in policy and interest in the greater questions around how scientists engage with the public, which I feel like is pretty important to me. I just really want to do a career that is more public facing." Alice, a Masters student in Public Policy, echoed, "I find it really interesting to see how we can bridge the gap between all of the different organizations and pieces of the social puzzle and then actually working with just individual people and residents, because I think there's so much idealistic, like, 'This is how things can be done,' but then, when it comes to actually communicating them, it's so challenging, it's so difficult. So this was really intriguing to me to just see this really cool opportunity to engage people directly [through] a participatory budgeting process."

As prior literature has established, many who volunteer their time with civic associations do so to develop skills or further professional interests (Han, 2009). Policy developers' expressed motivations demonstrate that the opportunity to practice policy research and writing, and perhaps community engagement more broadly, can be powerfully motivating reasons to contribute to this higher commitment participation pathway. This suggests that a higher commitment avenue for participation can be a productive capacity building pathway for the interests of individuals who may want to support PB in the long term. Furthermore, this evidence supports our design hypothesis that participation in policy development can be separated from participation towards setting and ratifying the policy agenda. Interview data, combined with policy volunteers' commitment to these complex, ill-defined policy research and writing tasks,

suggest that people's motivations for participating in these different aspects of the PB process can be different.

All eight policy ideas selected in community members' policy agenda were developed into policy briefs.

Table 2.9 Summary of eight developed policies, proposed cost, first steps to implementation.

Rank *	Policy name	Proposed Cost	First steps to implementation
1	Expand Healthcare for the Uninsured, Underinsured, and Undocumented	\$2.5 million	Funding of outreach efforts of \$250,000 to increase knowledge among Anderstown residents of health insurance options
2	Alternatives to Mental Health Emergency Response	\$900K	Additional funding towards a pilot program that had received initial funding
3	Housing Vouchers for the Homeless (developed as Vouchers to Prevent Eviction and Foreclosures)	\$500K	Outreach efforts to increase knowledge about alternative insurance options
4	Rebuild School in 5th Ward to promote equitable education	\$25 million	Funding contributed towards feasibility studies, contractors, early designs
5	Increase Funding for Mental Health Programs in Schools	Over \$4 million	Begin the recruitment process for mental health professionals, focusing on finding a diverse range of applicants. Increasing funding and evaluation of mental health programs; identifying the strengths and weaknesses in the existing high school program for implementation throughout the entire school district
6	Renewable Energy Options for	\$100K	Extend the length of

	Anderstown		time for the energy program agreement
7	Provide Microloans to Small Businesses	\$2.5 million	Ten to twenty \$5,000-\$10,000 loans to save struggling businesses
8	Incentivize electric vehicle (EV) infrastructure (developed as Clean Fuel Fleet)	\$2,700-\$75 million depending on chosen policy option**	Restart its battery recycling program by partnering with organizations as they have in their previous program, begin funding per unit installation of EV charging equipment

^{*} As determined at the end of the Agenda Setting Caucus

Representatives' policy agenda, as chosen during the Agenda Setting Caucus, was developed into 1-page policy briefs within the 1-month Policy Development phase. The 1-page briefs all followed a similar structure, based on proposal templates from previous PB efforts (See Appendix 3). Based on this template, each policy brief included project name; location of the proposed project; a brief 1-2 sentence description of the project; a full description that explains in a few paragraphs why the project is necessary, local problems or needs it addresses, communities that will benefit, and project feasibility; potential challenges; estimated cost; and city department responsible for implementation. All policies also included citations to research evidence policy developers referenced in writing the policy.

An eighth policy was developed as a slightly different policy solution from the initial idea chosen during the Agenda Setting Caucus yet was ultimately ranked most highly during the Voting Caucus, suggesting that policy developers' research could potentially have resulted in opinion change. While community representatives had initially advocated to advance a policy to provide Housing Vouchers for the Homeless, a similar but slightly different version of the policy was developed: Providing housing vouchers to prevent eviction and foreclosures. While this

^{**} This wide range in cost in the Clean Fuel Fleet policy reflects a limitation in the development of this policy, which presented different renewable energy options rather than proposing one fundable solution. This limitation is further discussed in the Feasibility Challenges section below.

final developed policy did address a slightly different problem from the one originally advocated for by community members in the Agenda Setting Caucus, the updated policy to Provide Vouchers for Preventing Eviction and Foreclosures ultimately was ranked highest by community members during the Voting Caucus. When asked about this slight adjustment in the focus of the policy, policy developers expressed that the shift was not intentional but likely was the result of coordinating 20 policy developers across over 70 policy seed ideas, many of which, as in this case, were similar within the same policy area. No community members noted the shift in policy focus or raised concerns that the developed policy did not represent their original interests. It should be noted that vouchers for preventing eviction and foreclosures may also have been more feasible or less costly than providing housing vouchers for the homeless. This suggests that the policy development process could potentially affect community members' perceptions of the policies they initially advocated for. Community representatives may have chosen policy ideas to advance in Agenda Setting, but as these ideas were under-developed, lacking specificity and the background information to help community members evaluate key information about each policy, inclusion of this additional information from the policy writing process could understandably shift community members' perceptions of the specific policy ideas they are interested in advancing.

Economic Development Proposal by SPOT, INU / seeking feedback

P3. Provide Microloans to Small Businesses

Dedication of \$100,000 to a microloans program for businesses at risk of closing will 1) maintain existing jobs 2) create new jobs and 3) address inequities faced by minority-owned businesses



A survey from the Evanston Chamber of Commerce found that as a direct result of COVID-19, 480 employees have lost their jobs and dozens of businesses have permanently closed their doors (Smith, 2020). Many Evanstonians have expressed how this has taken a toll on the local economy and have watched beloved businesses close due to financial strain (McKadden and Spoto, 2021).

To address this problem, this policy proposes that the City of Evanston launch a microloans pilot program that can provide small amounts of money to vulnerable businesses unable to access traditional capital loans, which includes many minority-owned businesses. This aligns with ARPA's eligibility criteria of loans to mitigate financial hardship faced by small businesses, and specifically will serve low-income communities. The impact of this infusion of capital will be seen through the number of businesses that are able to remain open, jobs maintained, and even new job growth made possible through investment.

Cities such as Chicago, Wichita, and Baltimore have instituted microloans programs to support the economic success of local businesses (Mayor's Press Office, 2013; Kelly, 2021; Baltimore Community Lending, 2021). In Chicago, 80 small businesses have benefited from the program and created 340 jobs with just \$650,000 of investment. At \$2000 of investment per job, a \$100,000 infusion into such a program in Evanston could create up to 50 new jobs in the City. At an interest rate of 10%, these loans will pay back on themselves thus creating a sustainable program that can last beyond the current crisis. Private-led microloans programs in Evanston have been incredibly popular and successful, especially for women and minority entrepreneurs (Wright, 2010, Holland, 2017).

This program should begin with an investment of \$100,000 which would support 10-20 \$5,000-\$10,000 loans. The City Office of Economic Development should recruit 10 businesses who lack access to traditional capital with the greatest need and at risk of closing, provide them the loan, then track the businesses over a 2 year period with current staff handling regular repayments. At the end of the trial, the City should then report out the number of businesses that remained open and the jobs created over time.

As a direct result of this policy, we expect to see local Evanston businesses remain open as well as maintain their current employees, and in the best case scenario grow their businesses and create jobs that are needed to revive the economy as the City recovers from COVID-19. As a sustainable program, this loan-program acts as a revolving fund, as businesses' repayments help to maintain and grow the fund to continue to support entrepreneurs at risk.

This policy idea was proposed by the ARPA policy team and is feasible within an initial scope of \$100,000.

Fig. 2.6: Example 1-page policy memo on Providing Microloans to Anderstown Small Businesses.

Challenge: Feasibility of policies

A major challenge in the policy development process was scoping policy proposals to be within reasonable costs. At the time of running this study, the City Council had not yet determined funding criteria for PB proposals aside from the \$2.5 million total sum the City had committed to allocating to the entire process. To mitigate the risk of proposing policies that would require too large a portion of this total PB sum (which would increase feasibility risk), organizers set an initial constraint of requiring all policies proposed to be an initial sum of \$280,000 or less. This amount was determined by equally dividing the full \$2.5 million among the City's 9 wards²; as community representatives from the university, caucus participants would effectively be

² Decisions of how to allocate a PB budget has been recognized as a key institutional design choice vis-a-vis equity outcomes; for example, the first example of PB importantly allocated more of the full PB budget to under-resourced geographical neighborhoods to decide (Fung, 2015). This allocation decision was beyond the scope of this study, as it is typically a decision made by PB "Steering Committees" who design criteria for running a PB process, such as rules for voting or proposal criteria.

deliberating to choose which project(s) they would like to fund within the university ward's allocated \$250,000. As organizers, we were transparent that this constraint was an artificial best guess and possibly conservative. The rationale behind this decision, as explained to policy developers, was to mitigate the risk of proposing policies that would be immediately determined unfeasible to implement through PB due to cost.

All eight developed policies presented highly ambitious initiatives, like "Expanding healthcare for the uninsured, underinsured, and undocumented," or "Vouchers to prevent eviction and foreclosures." Some of the proposed policy ideas required funding amounts that would clearly exceed \$280,000. For example, policy developers developed a new idea proposed by the caucus participants to rebuild a school—a multi-million dollar endeavor. This proposal would likely cost too much for much progress to be made under the allocated PB budget.

One proposal was also modified to extend an existing program. In the course of developing the "Alternatives to Police for Mental Health Emergencies" policy, developers discovered that a similar pilot program to provide a mobile response team for mental health crises was underway in the City. Policy developers proposed approaches to further develop and expand the pilot program, including through comprehensive program evaluation and the building of a brick-and-mortar location to provide the same mental health services for residents.

During the editing process in the last week of policy development, organizers and Policy Leads raised concerns about the scope and potential costs of such ambitious policies. To address this concern, policy developers were asked to identify "first steps to implementation" for each policy, which presented short-term options for implementing the policy within \$280,000 or less (See Table 2.5). All 8 policy briefs included this first step to implementation, which presented options like restarting a battery recycling program, funding single-unit installations of EV charging equipment (for the "Clean Fuel Fleet" policy), or contributing funding towards feasibility studies or outreach efforts (for the policy to "Rebuild School in 5th Ward"). These "first

steps" to implementation allowed proposed policies to remain ambitious while also providing community members with tangible ideas about what progress could be made with the available ARPA funds.

While policy developers did their best to scope ideas to be feasible within the limited PB budget, it was not clear whether these ideas were reasonably scoped, whether it was clear what program the policy proposed to fund, or whether the proposed policy was, in fact, feasible for the City to implement. For example, the policy titled "Clean Fuel Fleet" proposed a number of different potential solutions at a high level, including funding more charging stations, identifying more locations on which charging stations can be built, establishing or re-establishing a battery recycling program, and subsidizing installation of chargers. Each of these proposed solutions could be determined to be a separate proposed policy. Another solution that was not proposed in the 1-pager but was also implied by the policy title involved switching city-owned vehicles, or those owned by the city to support public transportation, from gas- to electric-powered automobiles.

While policy developers were encouraged to try to find costs of similar programs from other cities, ultimately, the only way to check the feasibility of a policy is to seek feedback from members of the city staff. Unfortunately, city staff were not available or responsive to requests to seek information or feedback at the time of this study; additionally, the 1-month turnaround for completed policies would have made the feasibility of incorporating feedback difficult without careful preparation and establishment of feedback processes and routines prior to the start of initial policy development. This limitation serves as the basis for the second study of this dissertation.

Challenge: Incorporating community member feedback in policy development The goal of this design approach was to facilitate deliberation between community members and policy developers across the policy development process as a whole, specifically by

empowering community representatives' deliberation to connect to agenda setting—what policies are developed, and how those policies are developed to represent community members' opinions and needs.

In the development of the policies themselves, it was also not clear whether or to what extent representatives' suggestions were incorporated into policy development. As discussed, scribes in the Agenda Setting Caucus used *DeliberationWorks* to capture representatives' questions, concerns, and suggested edits on policy ideas from their deliberation. To provide policy developers with a way to keep track of these issues and how each issue was addressed during the policy development process, we provided policy developers with a "Policy Development Issue Tracker": a low-fidelity Google Sheets prototype that kept track of policies with unresolved community member comments, the policy developer(s) responsible for researching and updating policies directly in response to each comment, the change made to the original policy, reason for the change, and date the change was made. Organizers and policy leads also developed and provided policy developers with a Policy Development Guide that laid out specific steps for updating policies, along with links to corresponding *DeliberationWorks* public pages, the Issue-Tracking prototype, and the policy writing template.

While organizers encouraged policy developers to incorporate community members' ideas and concerns and provided them with *DeliberationWorks* tools to facilitate doing so, it is unclear whether policy developers made use of the additional tools for bridging the agenda setting and the policy development phases. Though policy developers were encouraged to use and incorporate comments and questions captured by scribes from representatives' deliberation during their development process, there are many reasons policy developers may have not done so. For example, policy developers may not have been motivated to browse through and incorporate community members' comments, may have found the platform difficult to use, and may especially have found these extra steps burdensome given the quick turnaround for policy development and disruptions due to the holiday break.

The evidence I collected for this study did not confirm that policy developers systematically incorporated community members' deliberation comments and suggested edits into their development process, but some evidence suggested that policy developers did reference community members' comments in DeliberationWorks. For example, log data indicated that at least one of the Policy Leads did read and synthesize community members' comments from *DeliberationWorks* immediately after the Agenda Setting Caucus. Willow, one of the two Policy Leads, attended a de-briefing meeting with organizers the week after the Caucus, during which they read, synthesized, and categorized community members' comments specific to each policy. This summary was provided to all policy developers at the top of their shared Google document for updating their policies.

Annie, the other Policy Lead, explained during a check-in that she did begin using the Issue Tracker to separate general community representative feedback into issues to address in iterating on the policy idea, per organizers' directions. She did not continue to track her specific changes in response to the comments in the Issue Tracker tool, however. When asked about her use of the Issue Tracker tool, Annie explained that she found the use of the prototype burdensome, as it required her to copy and paste comments across platforms. This suggests the need for a more streamlined, easier to use tool for converting comments to research and writing to-dos.

Additionally, some of Annie's interpretations of participant feedback also suggested that scribes' captured comments may not have been immediately actionable, which would have made it especially difficult for policy developers to address and incorporate community members' comments. For example, 3 of the eleven community representative comments Annie added to the Issue Tracker included "Add more specificity to this policy," "Provide more details on this policy," or "No specific comments - just support for rebuilding school overall." These comments offer general suggestions but are not detailed enough to suggest a particular change or opinion about the policy. Other comments captured by Annie in the Issue Tracker were more

actionable. This included "address whether [the policy for supporting alternatives to police for mental health emergencies] would include a physical in-person team or provide support remotely" and "Could combine business training and micro-loaning." The qualitative difference in community representatives' comments captured in *DeliberationWorks* suggests the potential need for more detailed post-processing of comments after the Caucus.

Though it was not clear whether or not policy developers examined community representatives' comments, many of their comments and suggested edits were still incorporated into the final developed policies. This was especially true of questions they raised indicating a need for more information about the feasibility of certain policy ideas, such as questions about whether renewable energy options are feasible given current funding caps, or what renewable energy sources currently exist in the City. Unaddressed comments were largely ones that required significantly expanding the original policy, often by merging with another policy. For example, Louis's suggestion to combine small business training with the microloans policy idea was not incorporated into the final policy, despite being captured by scribes and identified as a comment in both Willow and Annie's Issue Tracking documents. This similarly occurred with the policy for Incentivizing Electric Vehicle Infrastructure, which Zayn had initially advocated for combining with a policy for free electric public transit.

While it is unclear why policy developers did not consider updating these policy ideas by merging them with others, combining policy seeds would likely increase associated costs for implementing the policy, a key concern developers wrestled with. Community representatives' suggestions to expand and merge policies without considering how much more these changes would cost suggest that they may also have been making these suggestions without knowledge or awareness of cost. Some community representatives specifically requested more information about the costs of implementing certain policy ideas, indicating that this was information they were lacking when making their decision. Nevertheless, this does suggest the need for channels of providing feedback on community members' actionable suggestions that may be beyond the

scope of current funding limits. Zayn, for example, indicated that he felt strongly enough about his suggestion to merge the EV Infrastructure and free electric public transport policy ideas to present this updated proposal to the full group. Even if this suggested edit is not feasible to incorporate, reasoning for not doing so could have been publicly provided to community representatives to demonstrate that their ideas were considered by policy developers. This limitation offers additional avenues for technological support, as discussed in the second chapter.

2.5.3b Policy Development Key Implications

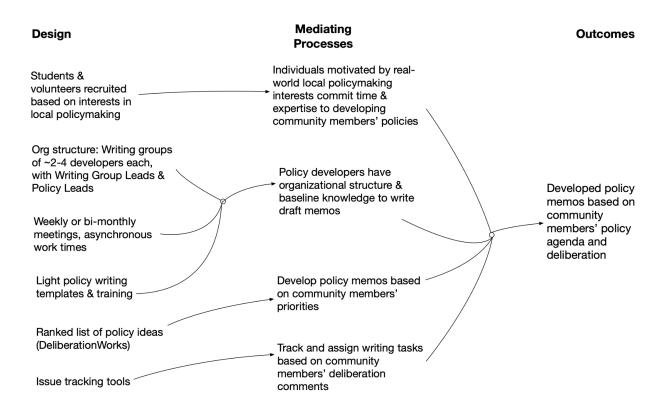


Fig. 2.7 Open Democratic Policy Development Design. In our design to support a separate policy development process to supplement community representatives' deliberations, policy students and volunteers were recruited to research and write policies based on community representatives' policy agenda, questions, and concerns. Policy developers developed 8 1-page policy briefs based on community members' policy agenda in approximately 5 weeks.

Our findings suggest that designing a separate but bridged policy development process can result in policy briefs that represent community representatives' priorities by recruiting and

training a group of policy students and volunteers committed to policy research and writing and providing them with tools, templates, an organizational structure, and light training to develop briefs based on information collected from representatives' deliberation. These findings suggest that this "separate but bridged" design approach is promising for supporting equitable participation in open democratic policy development, as it empowers community members to shape development of a policy agenda without committing the time, having expertise, or being motivated to do the complex work of policy development. We also found that there are unexpected capacity-building benefits in offering policy students the opportunity to support policy development. Evidence from interviews with policy developers demonstrate that students are motivated by a broader interest in local policy development, community engagement, gaining authentic applied policy experience, which is consistent with prior examinations of community-engaged learning models (e.g., , and even ideals of democratic and participatory governance. These motivations kept them engaged and investing their time towards policy research and development, even if they did not have prior knowledge, experience, or even interest in the policy they were assigned. Supporting a separate pathway for policy development thus facilitates civic participation from members of the broader community with different goals and outcomes for participation beyond setting a policy agenda.

2.5.4 Voting Caucus

To ensure that the "separate but bridged" policy development process results in policies that represent community representatives' priorities even when they did not write them, representatives should be invited to deliberate over the developed policies, update their rankings if desired, and identify any additional questions and concerns. To support equitable participation, they should again be able to do so without needing to commit a large amount of

time, nor needing high amounts of knowledge or expertise to read and evaluate the final developed policies.

However, once policies are developed, community representatives may no longer be interested or available to revisit a policy agenda they set many weeks ago. They may not remember what policies they sought to develop, or they may find that the policies developed by a separate group of policy developers may not represent their priorities. They may find the developed policies difficult to comprehend or too long, or alternatively find that the developed policies are incomplete with the information necessary for them to evaluate the policies for implementation. If asked to deliberate, they may find they do not understand or have the information needed to present their opinions to other community representatives. They may find discussion with others about policies to be challenging or intimidating. In a short amount of time, they may spend all their time discussing one policy and not others, and thus not have the opportunity to form different opinions about all the policies to rank them one final time after hearing others' ideas. Finally, community representatives may not be able to reach a consensus about the policies they would like the City to implement.

Our design of the Voting Caucus, a one-hour deliberation held after approximately one month of policy development, empowers community members to deliberate on and ratify the final policies based on their initial policy agenda. At the Voting Caucus, community representatives first completed an initial ranked choice vote to identify areas of high agreement and disagreement among the group. Moderators used individual differences identified in the initial vote to facilitate policy discussion, before asking community representatives to rank their supported policies one more time. The goal of the Voting Caucus was to determine which policy proposals are both feasible for implementation and receive the highest support from community representatives to pass onto City Council.

2.5.4a Voting Caucus Findings

Table 2.10. Overview of Open Democratic Policy Development Voting Caucus findings. 7 of the 8 community members returned to participate in the Voting Caucus, joined again by 2 members of the Outreach Team. Community representatives discussed policy briefs with the help of moderators, who prompted discussion based on differences identified from their initial votes. The group came to high consensus on top 3 policies to recommend for implementation within one hour.

Voting Caucus Design feature	Mechanism	Confirming evidence of outcome	Challenges/Disconfi rming evidence
Packet of developed 1-page policy memos sent before caucus and time to briefly read before discussion	Caucus participants provided with info and time to evaluate updated policies	Participants did not express surprise over the 8 policy ideas they were limited to deliberating over.	
Initial Ranked Choice Vote (RCV) of policies presented in DeliberationWorks	Moderators quickly view this info on DW	Moderators called on participants based on RCV.	Unclear how easy interface was to use without high degree of familiarity with platform.
Moderation rules: Moderators focus discussion on dealbreakers: anyone who ranked the top 3 policies low; Middle: anyone who voted middle policies very high (within their top 3); and Outlier: anyone who voted for bottom 3 policies very high	Surfaces relevant disagreements for discussion	Disagreements immediately surfaced; individual opinion change occurred and evidenced during discussion.	
Final RCV	Community members gauge group agreement on final policy recommendations	Community members reached high degree of consensus about policies that receive highest support. Evidence of individual rankings suggest individual opinion change had occurred. Nearly all indicated in post-survey that	Top policy in ranked vote different from Agenda Setting results

recommend for implementation

Final Ranked Choice Vote indicated a high amount of consensus among representatives for top three policies.

The Voting Caucus resulted in a final ranked list of policies similar to the order of the list of policies at the end of the Agenda Setting Caucus, but importantly with a different top policy. At the end of the Voting Caucus, representatives chose Vouchers to Prevent Eviction and Foreclosures as their top policy, followed by Alternatives to Mental Health Emergency Response and Expanding Healthcare for the Uninsured, Underinsured, and Undocumented. While the list of top 3 policies stayed consistent across the two caucuses, the most highly ranked policy at the conclusion of the Agenda Setting Caucus had been Expanding Healthcare for the Uninsured, Underinsured, and Undocumented, which dropped to third most highly ranked policy at the end of the Voting Caucus.

Representatives' final votes at the conclusion of the Voting Caucus indicated a high degree of consensus. The top policy of Vouchers to Prevent Eviction and Foreclosures was ranked most highly by five of the seven representatives present at the Caucus, with the remaining two representatives ranking it second. The second most highly ranked policy, Alternatives to Mental Health Emergency Response, was ranked top policy by one representative and ranked second top policy by three representatives. The third top policy, Expanding Healthcare for the Uninsured, Underinsured, and Undocumented, was ranked top policy by 1 representative and ranked #3 by three representatives.

Results of the initial ranked choice vote, captured and displayed in the

DeliberationWorks platform, helped the moderator guide group deliberation towards

major areas of disagreement. Evidence from the discussions suggest that individual opinion changes occurred.

Prior to starting small group discussion, community representatives completed an initial ranked choice vote in the *DeliberationWorks* platform. This initial vote resulted in the following ranked list of policies:

- 1. Vouchers to Prevent Eviction and Foreclosures
- 2. Alternatives to Mental Health Emergency Response
- 3. Expand Healthcare for the Uninsured, Underinsured, and Undocumented
- 4. Rebuild School in 5th Ward to promote equitable education
- 5. Increase Funding for Mental Health Programs in Schools
- 6. Provide Microloans to Small Businesses
- 7. Renewable Energy Options for Anderstown
- 8. Clean Fuel Fleet

These rankings were nearly identical to Agenda Setting Caucus rankings, indicating that despite the intervening month between caucuses, representatives mostly maintained the same opinions about the prioritization of policies.

In the initial group rankings, individual representatives shared several similarities in their top rankings but were more divided over which specific policies they individually ranked highest. P8, Vouchers to Prevent Eviction and Foreclosures, was ranked the group's top policy in the initial vote, though only two representatives ranked this policy as their top policy in the initial vote, with most (4 of the 7 representatives) ranking the policy second in their list. Other policies individual representatives ranked highest during the initial vote included P7, Alternatives to Mental Health Emergency Response (ranked second-highest overall by the group and ranked top policy by 2 representatives); P1, Expand Healthcare for the Uninsured, Underinsured, and Undocumented (ranked third-highest overall by the group and ranked top policy by 2 representatives), and P9, Rebuild School in 5th Ward to promote equitable education (ranked

fourth-highest overall and ranked top policy by 1 representative). All of these top policy contenders ranked at the top of the group's overall list, suggesting that the group was in high agreement about overall policy priorities. Of these top ranked policies, P9, Rebuild School in 5th Ward to promote equitable education, was notably ranked lowest for 2 of the 7 representatives, suggesting at least some disagreement on how highly to prioritize this policy. Information about individual policy rankings was captured in *DeliberationWorks* and displayed to the group and moderator in a list of policy numbers ranked by individual votes (i.e., Foster's response: P7, P8, P1, P4, P5, P2, P3, P9; Arturo's response: P8. P5, P7, P1, P9, P4, P3) [see Figure 2.5].

Using the displayed list of initial rankings on *DeliberationWorks*, the moderator directed the group discussion.³ The moderator, who was also one of the campaign organizers, ensured that all community representatives were invited to share their rationale for rankings with other members of their voting group. The moderator guide directed the moderator to focus group discussion on disagreements, which the moderator was able to do by calling on individual differences in rankings as displayed in the list. This allowed representatives to share their individual reasoning and potentially change other representatives' rankings. For example, upon seeing that Zayn ranked P9, Rebuilding a School in the 5th Ward, as his top policy while Foster ranked it last, the moderator raised P9 for discussion:

Moderator: Let's move on to policy nine, policy 9 is interesting. So there's a few people who rated that pretty high up. I think Zayn, you put that [as] your first? Can you say a bit about why? So Foster put that in the last spot [laughter from Foster]. So maybe you can convince Foster [laughter] that it should be higher up?

Zayn: Yeah, the reason why I did is because it specifically says [...] 44% of people in Anderstown's 5th ward are people of color, [and I] specifically thought that a school that approaches this community, and gives them a new opportunity early, more opportunity for like education, along with mental health, and everything else that comes with school can be incredibly important to this. And then it says in the description that there used to be a school here that closed down. So I think having a school there to serve this community would just be key for both growth, and in terms of like [...] just quality of life and everything else.

³ It should be noted that the moderator was intimately familiar with the visual interface for vote rankings, as he was the lead platform designer. The visual display of the ranked lists may not have been as easy to quickly synthesize for novice moderators, a limitation to be addressed in future work.

Moderator: And then I think, Louis and Foster had that policy quite low. So how do you [Louis and Foster] feel about that? Are you convinced?

Louis: I mean, I think it's really important that there's education in this Ward, [but] I do think with the nature of the pandemic, [there are] some more pressing issues. Not only that, but the fact that it's \$25 million to build a school, I think, like, it wouldn't put a meaningful dent in the construction. And [...] with this budget in mind there's a lot more impactful things that would occur in the short term, I think, in terms of budget and priorities.

This episode demonstrates the utility of the initial ranked choice vote results for guiding the discussion. The moderator was able to use the initial ranked choice vote results to determine that community members' votes differed drastically on Policy 9, Rebuilding a School in the 5th Ward. He first called on Zayn to share reasoning for choosing this as his top policy, specifically prompting Zayn to "convince Foster that [Policy 9] should be higher up." Once Zayn shared his reasoning, the moderator followed up with all community members who ranked the policy lower in their rankings to ask, "Are you convinced?" to prompt additional reasoning for opinion change. In this exchange, Louis's response to the moderator's prompt indicates that he was not convinced. By justifying his response by sharing his reasoning for keeping his ranking of this policy low, Louis could potentially also convince Zayn to lower his ranking of the policy.

Ultimately, the two representatives who had P9 in their top 3 policies both lowered their rankings of P9 in the final vote, suggesting that the deliberation may have influenced individuals' opinions. Zayn, for example, who had ranked P9 as his top policy in the initial vote, ranked it 3rd in the final vote.

The final ranked choice vote ultimately resulted in the same ranked list as the initial vote taken at the beginning of the Voting Caucus. However, *DeliberationWorks*'s record of individual final rankings suggested that individual opinion change had occurred and deliberation during the Caucus had brought the group closer to consensus.

Comparison of representatives' final votes suggested that slight individual opinion change did occur, even though the final list of ranked policies remained the same as that from the initial vote. About half (4 of 7) of the representatives adjusted their ranked choice votes after the deliberation. By the end of the caucus, 5 of the 7 participants ranked P8 (vouchers to prevent evictions and foreclosures) as their top policy, and the remaining two participants ranked it their second-highest policy. This is compared to only 2 of the 7 ranking P8 as their top policy in the initial vote. This indicates that the discussion did prompt changes in the group's opinion towards increased consensus towards the highest ranked policy.

Interestingly, while P8 was the policy that garnered the greatest shift in rankings across the initial and final votes, P8 was notably not discussed at length during the discussion, as a result of the moderation strategy focused on targeting initial differences. While P8 was not explicitly discussed by representatives, the other policies ranked by representatives at the top of their list—P7, P1, and P9—were all discussed at some length during the deliberation. This suggests that discussion on these policies may have prompted some representatives to reconsider their support of them, resulting in a lower ranking of these policies relative to P8, which many more community members had ranked second-highest in their initial rankings.

For those who changed their rankings of the top 3 policies, the changes were all small, adjustments of one or two places in rankings, with the exception of a single participant who changed their ranking of P7 (Alternatives to Mental Health Emergency Response) from fifth to second in their rankings. This explains why the group's overall rankings were the same in the initial and final votes of the caucus, as individual opinion changes when they did happen were mostly insignificant.

DeliberationWorks captured remaining concerns and community representatives' opinions on community issues, to further inform policy implementation.

Prompting community members to share their reasoning about their rankings could also surface their concerns about the final developed policies, which scribes captured in the *DeliberationWorks* system. This information sometimes revealed important concerns about policy ideas that could be highly popular among the broader community.

During discussion about P3, a policy that advocated for providing Microloans to Small Businesses, community representatives Heidi and Nora brought up P9 (Rebuilding a School in the Fifth Ward) again to bring up additional concerns with P9 that affected their rankings. Heidi explained, "I originally ranked the Fifth Ward School [policy] first because that's the most important issue to me for sure. But then I ended up moving it down just because the funding was going to go towards research for the school and I didn't think that would have like a good like immediate impact and I was trying to go based off like well make I don't want to keep saying impact but [laugh]."

Nora agreed, adding, "Building off of what [Heidi] said about the Fifth Ward School, that kind of plays into my biggest deal breakers—the fact that it's not really guaranteed and the fact [that] the vision of the people who are going to go to the school are also not guaranteed. So I'd rather not put money into something where it could be possibly co-opted and not really succeed."

Heidi and Nora's additional concerns about P9 indicate that policy ideas that may be popular in theory may not be as popular once they are developed and details about implementing the policy fleshed out. Heidi here expresses that despite that the issue of schooling in the 5th Ward is "the most important issue to me for sure[,] I ended up moving it down just because the funding was going to go towards like research for the school." In this case, policy developers' research into what is feasible under funding constraints resulted in the development of "First Steps to Implementation" that were not satisfactory to the community representative, leading her to reconsider her vote. Nora raised issues with unforeseen consequences of the policy in the "vision of the people who are going to [the] school [...] could

possibly [be] co-opted and not really succeed." This suggests a similar concern to Heidi's, in that Nora points to consequences of implementing the policy as research may not guarantee "the vision of the people who are going to the school" and "could be possibly co-opted and not really succeed."

Scribes captured community members' remaining questions and concerns like these in the *DeliberationWorks* platform. By capturing these concerns in *DeliberationWorks*, scribes not only provided information for ways the policy could potentially be edited, but more importantly captured concerns that other community residents may share about popular policy issues. This information is important to capture for contexts in which, for example, a policy idea that is expected to be broadly popular is not ranked highly enough by caucus participants to be implemented as is. These concerns would help give community members and public officials context about how to respond to or edit popular policy ideas for potential future implementation. Reasons community members give for not supporting policies, especially ones like P9 that were proposed by community representatives in the Agenda Setting Caucus, is key information for helping decision makers respond to the public in the case that once popular ideas face future barriers to implementation. Legislators can better understand the priorities of a community and the challenges or limitations of addressing these needs, which could either prompt them to address the need through other funding avenues or could help them better respond to citizen concerns if the idea is not feasible.

Community representatives reported that they felt the policies developed by volunteers based on their initial policy agenda were aligned with their interests, easy to understand, and implementable.

In their responses to a post-deliberation survey, all community representatives agreed that the final policy briefs were aligned with the original policy ideas they advocated for at the Agenda Setting Caucus. This importantly suggests that representatives did not feel misrepresented by a

different set of community members developing their policy priorities. All representatives at the Voting Caucus additionally expressed that the policies were concise and easy to understand, and nearly all representatives expressed that the 1-page policy briefs provided them with enough information to make decisions. Only one community member said that some policies were unclear about how the policy would fully be implemented but were otherwise comprehensive enough.

In the same survey, community members expressed a range in levels of confidence in the implementation feasibility of the policies they discussed during the deliberation. Three of the seven community representatives expressed "fair" to "complete" confidence. On the other hand, one community member expressed they were only slightly confident because "Governmental action tends to not be as effective or efficient," suggesting lack of faith in broader institutional implementation, rather than in the policies themselves. Two community representatives responded that they were "somewhat confident" raised concerns about broader rules about the PB budget ("I would prefer for the budget to be decided as a whole [\$2.5 million,] not split up into pieces") and that there were "a lot of loose threads" about the budget and some details of the policies. These responses do suggest that the community representatives who participated in the Voting Caucus had a range of opinions about the feasibility of implementing the policies they discussed, though they also expressed a variety of reasons for these differences that were not about the policies themselves. Some of these reasons could be addressed in earlier aspects of PB design, such as rulemaking about the amount of money residents are allocating, or city officials making a public commitment to efficiently implement policies chosen during the PB process.

Proposals that received the highest amount of support in caucuses also received high support from other members of the broader university community who were interested in participating in the caucuses but could not participate as representatives. In a post-survey administered to all community members who expressed interest in participating in the caucuses

but were not selected or able to serve as caucus representatives (53 community members), all nine university community members who responded indicated that they supported the policy priorities chosen by the caucus representatives. When asked if they were opposed to implementing any of these policies, all survey respondents reported that they would not be opposed to implementing the policies representatives had selected on their behalf, though half of these respondents selected P1, Expanding healthcare for the uninsured, as their top policy, rather than representatives' choice of P8 as their top policy. While this remains a very small segment of the broader university population, nine additional respondents are still about double the number of caucus representatives. Their positive response to representatives' policy agenda at least begins to suggest that representatives' policy agenda resonated with the broader community population, even in spite of differences in rankings of the individual policies.

2.5.4b Voting Caucus Key Implications

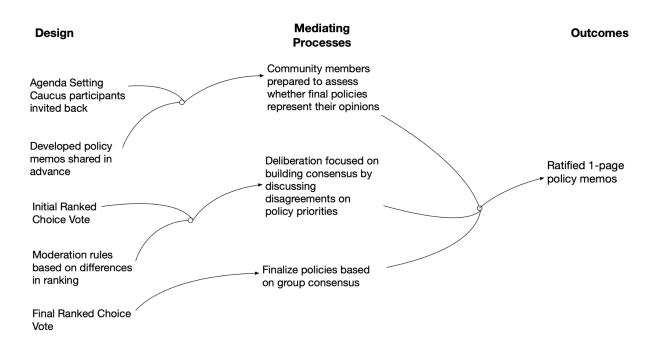


Fig. 2.8 Open Democratic Policy Development Voting Caucus Design. Our design of the final voting caucus involved inviting community representatives back to deliberate on policy 1-page briefs developed based on their initial policy agenda. The design of the Voting Caucus deliberation featured two ranked choice votes: An initial vote to guide moderation towards key areas of disagreement, and a final vote to get a list of ratified policy briefs to work towards implementing.

Findings from the Voting Caucus indicate that the group of community representatives was able to come to high consensus on a final policy agenda. In addition, they identified key implementation concerns with popular policies, which scribes captured in the *DeliberationWorks* platform and could serve as a basis for iterating towards more implementable versions of policy ideas, or as a foundation of questions on which to seek expert feedback. Post-caucus survey responses indicated that community representatives felt policies developed by development volunteers were aligned with their interests and opinions, suggesting that the separate policy development process effectively represented community members' policy priorities without requiring them to commit to developing the policies themselves.

2.6 Discussion

The purpose of this study was to understand how to design an open democratic deliberative system (that is, a process, tools and technology, and organizational structure) that lowers time, motivation, and knowledge barriers to allow a group of citizen representatives to equitably participate in developing a policy agenda they set and ratify. Despite increasing attention and interest in open democratic models of governance (Landemore, 2020), it is challenging to balance aims of representation and participation to foster equitable participation in open democratic policy development. First, citizens are not often empowered to do more than discuss developed policy options, rather than deliberate to set a policy agenda. Second, citizens are often required to commit large amounts of time, learn a large amount of information, and be highly motivated in order to deliberate across setting, developing, and ratifying a policy agenda.

Findings from this exploratory study suggest that designing to support a participation pathway for policy development separate from a pathway for deliberative agenda setting can address participation challenges of time commitment and knowledge prerequisites while also providing unexpected capacity-building benefits for individuals interested in building their skills

and interests in policy writing and community engagement. Remaining questions about the feasibility of these community-driven policies suggest that grassroots processes need to be linked to feedback and vetting processes from members of city staff and government for further policy implementability.

These findings have exciting implications on the design of open democratic models as well as on grassroots capacity building to carry out these open democratic efforts. In the following sections, I review the key design principles for equitable participation in open democratic policy development suggested by these findings and their implications for empowering future grassroots efforts for community-driven policymaking.

2.6.1 Design principles for equitable participation in open democratic policymaking. The primary contribution of this study is presenting early design principles for empowering community members to equitably participate in setting, developing, and ratifying a policy agenda, specifically by reducing time, knowledge, and motivation barriers to participation. I will now examine the design principles we developed and tested to support these open democratic outcomes in the context of the two primary design limitations outlined in the Background section, and evaluate strengths and limitations of this design approach.

2.6.1a Limitation 1: Empowering citizens to set and ratify a policy agenda with the design of deliberative agenda setting & voting caucuses

Previous deliberation efforts often forego citizen agenda setting and focus on promoting informed discussion, fostering opinion change, and collecting updated group opinions on existing ballot measures. This is especially the case when deliberations are formally sanctioned by government institutions; for example, Oregon Citizen Initiative Reviews held prior to state elections are sanctioned by state officials so that citizens can deliberate to write pros and cons for ballot measures that are predicted to be especially contentious, to be distributed statewide in

voter pamphlets (Gastil et al., 2018). Deliberation efforts that empower citizens to set, rather than consent to, a policy agenda requires political actors to trust citizens in having the knowledge and information to do so, which can be very difficult to do in a short period of time and community members who may vary widely in their availability and willingness to commit to voluntary civic activities.

Moreover, few deliberative efforts are designed to support agenda setting (Gastil et al., 2018, p. 536), and those that are do not have clear design mechanisms articulated to ensure that citizens' agenda setting clearly informs the policy development process. The Icelandic National Forum is a unique example of deliberative agenda setting, but even after a daylong process of facilitated idea generation and synthesis of group values to produce a 200-page report, it is not clear whether or how the report informed the later work of drafting the Constitution (Landemore, 2020).

Design contribution 1: Presenting community members with policy seed ideas solicited from community members and policies collected from other cities provides them with preliminary policy knowledge and ideas to support initial agenda setting without knowledge prerequisites in a short period of time.

Our design contributes an approach to designing a one-hour deliberation that can effectively help a group of community representatives come to high consensus on a policy agenda in a short period of time without requiring them to have prior policy knowledge. Prior deliberation designs have focused on providing participants with comprehensive background information. This process of learning from experts and reading and synthesizing background information about a policy topic can be extremely time-, energy- and resource-intensive, sometimes taking days before participants can move onto any discussion about policy solutions. For example, Deliberative Polls and Citizens' Juries typically feature long panel discussions with experts to

provide community members with detailed information about ballot measures on which community members are expected to deliberate (i.e., Gastil & Levine, 2005).

Providing community members with a list of potential policy seeds that they can modify and design new policies from, supporting moderated small group discussion focused on each representative's top policy idea, and taking a ranked choice vote of group opinion at the conclusion of the deliberation, a group of community representatives can quickly learn key policy information and arrive at consensus on a policy agenda within a short amount of time. This finding aligns with previous research suggesting that background information can provide discussion groups with a first step towards understanding the problem space, and help establish shared knowledge for group discussion (Crosby & Hottinger, 2011; Dienel & Renn, 1995; Fishkin and Farrar, 2005; Kennedy, 1994; Lukensmeyer and Brigham, 2005; Warren & Pearse, 2008), and previous work we have conducted that suggests that voting features deployed in the deliberation contexts can quickly help a group gauge level of agreement on preliminary solutions (Lu et al., in progress). These findings further suggest that all representatives equitably participated in decision making during the deliberative caucuses. All caucus participants actively engaged in the discussion and deliberation, and submitted ranked choice votes on proposals. Everyone who participated had an equal chance to vote on ideas and advance their ideas and all votes were considered equally.

Design Contribution 2: Inviting community members back to ratify policies developed based off of a policy agenda they set provides an accountability mechanism for checking that policies developed by a separate group are representative of community representatives' opinions. This design also contributes an approach to inviting citizens to participate in the iterative process of developing and improving policies for implementation. Even among the few existing instances of deliberation that allow citizens to set a policy agenda, it is not clear whether and how citizens participate throughout the policy development process, for example in checking

whether final developed policies are aligned with the initial agenda they set. In most cases, the extent to which citizens are empowered to check on whether policies are developed according to their policy agenda is limited to referendum vote, at which point the citizen decision is once again a binary one—either a final policy decision is passed or not passed for implementation. In bringing citizens back only to make this binary, final decision, they are precluded from opportunities to deliberate over the development of the policy itself.

By inviting community members back to deliberate on a short, early stage 1-page policy brief and capturing outstanding questions and concerns they have about the policy, this design presents an iterative approach that empowers citizens to participate in iterating on policies as they are getting developed. This iterative approach to deliberation offers a way for citizens to be actively involved in making the complex and nuanced decisions during the policy development process and providing feedback, rather than only allowing them to consent to policies that have been fully developed. This approach can complement a referendum process by providing citizens more avenues for empowered participation during the development process.

For public officials, this approach can surface key concerns about the implementation of a popular policy idea before too many resources are committed towards a fully fleshed out policy solution. Reasons recorded in *DeliberationWorks* from community representatives' deliberation over a popular policy idea to rebuild a school in the city's 5th Ward captured their concerns over the proposed short-term implementation of the policy idea. Community members who initially advocated for this policy as their top or one of their top policy ideas explained that they ultimately ranked the policy lower in their final votes due to concerns they had about the policy memo's suggestion that the limited amount of money would suggest first funding additional research before seeking construction funds elsewhere, which they worried would not be as impactful. This episode illustrates that opinion change and learning in deliberation, as well as unresolved questions in early stages of policy development, likely results in more specific questions upon which to seek additional information or check with city staff. Thus, by having

community members deliberate over an early stage draft of a policy memo based on an idea on their set policy agenda, the voting caucus design allowed community members to raise particular concerns about the design of a policy solution early in the process. This further illustrates how deliberation can effectively be linked to the process of policy development, and the valuable feedback community members' deliberation can result in for policymakers interested in "testing" new policy ideas.

2.6.1b. Limitation 2: Empowering citizens to equitably participate in driving policy development by designing a "separate but bridged" participation pathway for policy writing

Relative to the number of experiments in promoting democratic deliberation, even fewer have been designed to empower citizens to equitably participate in the work of researching, writing, and developing actual policies. This expertise-heavy work is typically conducted by individuals with experience and training, such as legislative staff, external consultants, or even political action committees or lobbyists. An assumption of this expert-driven approach to policymaking is that having full citizen control over a policy agenda would be inhibitively costly, since it would be challenging to predict what expert resources would be relevant to recruit and prepare in advance of citizen deliberation.

The few experiments in citizen policymaking that exist typically accept major trade-offs in equitable participation, as only citizens who are highly motivated and knowledgeable can deliberate on the details of policy development. For example, in Finland's crowdsourced policymaking experiment, online participants were solicited for ideas and even for deliberative arguments, but the writing and synthesis of crowd-generated input into policy recommendations was ultimately conducted by government officials and researchers (Aitamurto & Landemore, 2015). Similarly, in participatory budgeting, only committed volunteers with time, resources, and

motivation to dedicate multiple times a week to researching, deliberating, and working on policy proposals can have a direct hand in shaping the development of policy proposals (Public Agenda, 2016). As a consequence of this common trade-off, the effectiveness of participatory governance innovations often rests on a small, dedicated group of volunteers willing to invest time and resources into gaining knowledge and expertise (Fung, 2006).

Design Contribution 3: Open democratic models can support "separate but bridged" processes of policy development and agenda setting deliberation by recording community representatives' policy rankings, questions, and concerns and training a committed group of policy developers to research and write policy briefs based on community representatives' policy agenda.

In this study, I examined an approach that aimed to foster equitable participation in policy development by off-loading the resource-intensive work of policy research and writing to a different group of policy students and volunteers recruited and trained to develop policy briefs based on community representatives' deliberations. In this design, community members were not required to have pre-existing knowledge or to commit more than two hours to directly impact policy development. Policy developers similarly were not required to have any pre-existing training or knowledge about policy development or the policy context, so long as they were willing to commit at least 1-2 hours a week to the project.

Prior to the start of the Open Democratic Policy Development process, we recruited a team of approximately 15 policy developers, two of whom served as Policy Leads. These policy developers compiled, wrote, and edited the policy seed ideas presented to community representatives during the Agenda Setting Caucus. Following the Agenda Setting Caucus, these policy developers were re-assigned by Policy Leads into teams of 2-4 developers and each team assigned 2-3 of the 8 policy ideas to develop into 1-page briefs. Over the course of five weeks, policy developers met with their teams, Policy Leads, and organizers to write, receive feedback, and check in on progress (averaging a commitment of about 2 hours a week

for developers, and about 3 hours a week for Policy Leads). They were also provided a record of community representatives' policy deliberations through notes captured by caucus scribes on the *DeliberationWorks* platform. In the final week, Policy Leads compiled all developed 1-page briefs and completed a round of copy editing for consistency and comprehensibility. The 8 policy memos were then compiled into a background document and sent to organizers to distribute to community members prior to the Voting Caucus.

My findings support the design hypothesis that deliberative policy development can be separated from and bridged to community member deliberations for setting and ratifying policy proposals. Specifically, these findings confirm that committed policy development volunteers can be organized, trained, and provided with the structure to research and write policies chosen and ratified by community members in support of an open democratic effort.

As prior PB and other citizen policymaking efforts have relied on the same highly committed volunteers from the community to set a policy agenda that they want to champion, research, and develop into full proposals (Public Agenda, 2016), a major challenge for equitable participation in open democratic policy development is the high time commitment, access to resources, and knowledge community members need to have in order to participate in the development process (that is, beyond submitting and voting on ideas). By designing to support a "separate but bridged" process of policy development to result in policies representative of community members' priorities without requiring them to overcome time, knowledge, or motivation barriers to research or write the policies themselves, I aimed to test whether or not it would be possible to empower community members by opening and expanding participation directly in policy development while reducing potential barriers to participation. This approach furthermore empowers community representatives to "check" that policies were developed in accordance with their agenda setting priorities by inviting them back to deliberate on the developed policy briefs. Importantly, this design approach centers the decision making agency

of community representatives, whose deliberations result in the guidelines by which policy development volunteers work.

Findings support the design hypothesis that policy development can be separately supported from setting and ratifying a policy agenda while also being crucially informed by community members' deliberation. In the five weeks following the Agenda Setting Caucus, a team of 15 policy developers, over half of whom participated on a voluntary basis, researched and wrote a total of 8 1-page policy memos for each of the 8 policy seed ideas advanced by community members at the Agenda Setting Caucus. These policy memos were nearly all outside of policy developers' areas of prior experience and expertise. Community members who returned to ratify policies developed based on their chosen policy agenda all expressed that they did find that the developed policy memos represented their interests from the Agenda Setting Caucus.

These findings offer exciting design implications for supporting equitable participation in open democratic policy development, as they highlight the possibilities of decomposing the process in a way that increases participation without evidence that doing so would limit or hamper individual agency. The main risk of this design approach is that policy development volunteers would not be motivated by being tasked with developing a policy agenda they did not themselves determine. In the course of this work, I found that not only was this not the case, but moreover, policy development volunteers were motivated by educational benefits that are not currently captured in open democratic frameworks. Based on evidence from this study, these educational benefits were mostly derived from their participation in authentic empowered democratic activities, like developing PB policies in the context of a real campaign, rather than from formal learning and training resources for policy development, which were light during this pilot campaign given the short amount of time policy developers had to work and the logistical challenges of coordinating over student holidays.

Design Contribution 4: Recruiting and organizing policy students and volunteers motivated by policy experience and community engagement and training them to research and develop policy proposals based on community members' deliberative priorities provides volunteers with educational interests in supporting open democracy with a separate participation pathway. Prior research, while often hinting at the educational benefits of public deliberation, has not explicitly examined ways in which educational goals and pathways might be supported by features of the designed process. My findings suggest the clear educational benefits of offering separate pathways for policy development and the deliberative processes for setting and ratifying policies based on community member priorities.

Findings from this study suggest that policy developers participating on a voluntary basis gained unexpected educational benefits from supporting this process. Half of the policy developers (5 of 11) who participated in developing policies did so through an undergraduate civic engagement course, while another half of the policy developers (6 of 11) participated through a volunteer graduate student association focused on science policy outreach. In follow-up interviews with 4 of these graduate student volunteers, they expressed a personal interest in policy development as a skill and potential career path. All expressed value in having a real-world opportunity to apply their interests and gain experience. Additionally, all but one of the undergraduate students who participated in policy development for this study stayed on in the class, with two undergraduate members even recruiting friends to join the team.

These findings suggest that policy development to support open democratic governance is, in and of itself, an educational opportunity that students with an interest in policy research, writing, and democratic community engagement would be enthusiastic to support. This design principle offers the potential to explore a wealth of potential opportunities to support community-based educational partnerships to implement open democratic innovations. If a critical limiting resource in open democratic experimentation is having the commitment, knowledge, and research for community members to equitably participate in citizen-driven

policymaking, this finding illuminates the possibility of opening some of these pathways to educational partnerships, in the vein of Tocqueville's vision that local governments are authentic classrooms by which citizens learn to engage with civic processes.

2.7 Limitations & Future Work

As a formative study of a new design to participatory budgeting deployed within the large university population of a single US city, the aim of this paper was to conduct a close analysis of a case study to generate an empirically grounded design model (Easterday et al., 2017; Plomp, 2013; Sandoval, 2014). While useful for generating new models, this approach has limitations that can be mitigated by future research.

First, future research is needed to understand whether this model can generalize, and how broadly. As this is a single case study among a unique university population in a mid-sized US city with progressive political values, it is likely that the characteristics of our participants and context place limits on the generalizability of the design model contributed by this study. However, because this is a single case study, it is not clear which characteristics will be significant or how (Alexander & Bennett; Small, 2009). Future research can clarify whether the developed model will be useful in designing towards these outcomes in other contexts.

Second, while the participatory action research approach we took in this study allowed us to investigate authentic challenges in this context while also actively intervening in taking social action through our design research (Bilandzic and Venable, 2011; Cole et al., 2005), the direct involvement of my research team and me in the study does present a potential source of participant bias. In particular, the dual role that a member of the research and organizing team as instructor of the course through which undergraduates received course credit for their participation on the campaign may have affected participant behavior and places an important

limitation to the generalizability of our approach towards other contexts in which such a curricular-extracurricular partnership might be feasible.

My findings also point to the need for future work to focus on examining the design of recruitment techniques to open additional opportunities to serve as community representatives, and on improving the feasibility of developed policies for implementation.

2.7.1 Examining recruitment for open democratic policy development

In this study, we focused on recruiting a diverse sample of community members to serve as representatives at both caucuses. Towards this goal, our design tested different outreach avenues to educate and seek interest from as many members of the university community as our grassroots resources permitted. Our findings suggested that relational organizing techniques were particularly promising in getting interested participants to show up, and moreover that the "organizer math" positing the need to recruit approximately double or more expected number of participants (Indivisible Guide, 2020), aligned with our experience.

Our findings suggest that outreach and recruitment require a large amount of resources and dedicated trained staff. In this study, we relied on a small group of about 5 dedicated recruitment volunteers to examine a design space in which participants were offered no financial incentive, to see if it would be possible to recruit participants on interest and motivation alone. This was in part due to our resource limitations as a purely grassroots effort to bring PB to a new city without institutional backing or financial resources to dedicate to the effort. Yet these resource constraints also allowed us to test different approaches for recruiting community members based solely on their intrinsic motivation to improve the city.

I found that our early findings within these outreach resource constraints present an exploratory deep dive into the design space of PB recruitment based solely on intrinsic motivation. Importantly, these early findings towards testing recruitment strategies for PB confirm the need to conduct recruitment structure tests, particularly for gathering the information

needed to create a diverse, or potentially representative, sample and establishing commitment among potential participants. My findings also speak to the need to continue investigating the efficacy of outreach techniques like direct relational organizing and deep canvassing for the PB context. While prior work suggests the promise of deep canvassing techniques for facilitating opinion change and increasing efficacy (Kalla & Broockman, 2020), evidence collected of participant recruitment methods do not indicate a high recruitment return rate based on this outreach method relative to methods like direct personal contacts and outreach through previously interested organizations. Future work should investigate the possibility of targeting different populations with different outreach techniques, such as the efficacy of targeting a costly deep canvassing approach towards populations that traditionally are less civically engaged and less likely to participate in a PB effort.

2.7.2 Policy feasibility and institutionalization of pilot processes

Future work should continue investigating the linkage between pilot open democratic efforts and formal policy implementation pathways.

At the conclusion of the Voting Caucus, policy developers effectively produced 8 1-page policy briefs based on community members' deliberations. However, there was no way for policy developers to check just how feasible and implementable those policies would be without seeking additional feedback and information from individuals in the local government who would have access to this knowledge. Designing pathways to incorporate expert feedback loops into this open democratic policy development process is the next critical piece to investigate towards achieving actual implementation outcomes through public deliberation.

Aside from the feasibility of the policies themselves, the pilot open democratic process in this study was still a pilot process, held with members of the university community and without the institutional support of formal policymakers, or even knowledge of how to link pilot activities to an institutionalized participatory policymaking process like participatory budgeting. A major

question and natural extension of this work is towards the question of how to build further community capacity, including institutional support, for open democratic processes like the ones piloted in this chapter. This question forms the basis of Chapter 3 of this dissertation.

2.8 Conclusion

To truly advance a vision of democracy open to, for, and by the people, we need to understand how to design open democratic systems that empower citizens to equitably participate in setting, developing, and ratifying their own policy agendas. This exploratory study presents early design principles for how a small group of motivated community members can organize grassroots deliberations for open democratic policy development. By supporting agenda setting and voting deliberations with community representatives, separate from but bridged to policy development with a committed group of policy students and volunteers, we found that members of a university community were able to set and ratify a policy agenda in only two hours' time, without prerequisite knowledge about policy areas or high motivation to commit to policy research and development.

This approach demonstrated that separating decision-making and policy development processes could optimize community representatives' participation through a less resource-intensive pathway, while also creating another pathway for individuals interested in and motivated by the rare opportunity to dedicate more resources towards an authentic learning experience. For students and volunteers supporting policy development, our design also unexpectedly built their capacity to continue working towards implementing policies after deliberations concluded. This approach allowed our small grassroots organization of approximately 20 members to help a small group of representatives from the university community set, develop, and ratify an agenda of 8 policy briefs for participatory budgeting

across a 3-month period, which organization members were motivated to continue iterating on with city and additional community residents following the conclusion of the process.

This innovative approach to deliberation offers several design principles for equitable participation in open democratic policymaking that reduce time, knowledge, and motivational requirements for community members to set a policy agenda and guide policy development. First, this approach reduces knowledge barriers in agenda setting by presenting community representatives with existing policy seed ideas that they can deliberate over and design new policies from. Second, this approach empowers community members to participate directly in policy development while reducing time commitment and knowledge requirements by off-loading policy research and writing to a separate group of policy developers supported with an organizational structure, templates, training materials, and an online record of representatives' deliberations to develop representatives' priorities into 1-page briefs. Third, this approach offers a mechanism for community representatives to check that their agenda setting deliberations informs policy development and can raise their additional questions and concerns about implementation by inviting representatives back to deliberate over developed policy briefs. Finally, this approach provides community members with multiple different empowered participation pathways by allowing volunteers with educational interests (and higher time, knowledge, and motivational commitments) to support open democracy through policy research and writing, separate from and complementary to participation in setting and ratifying policy agendas.

The latter, more resource-intensive "learning" pathway additionally has crucial capacity building benefits and implications for bridging pilot technical designs, like the one presented in this study, to institutional pathways. By demonstrating a sociotechnical approach that integrates organizational design towards recruiting and sustaining the engagement of a dedicated group of student volunteers to do the difficult, open-ended work of participatory democracy, this study contributes a novel perspective to building capacity for institutional innovation, in which the

critical outcome is not just the technical output of the system (e.g., developed policies), but the learning, motivation, and commitment of this university-based grassroots organization towards achieving future institutional change.

In the next chapter, I examine this question of how to build on the technical and grassroots capacity generated from this pilot process to organize additional stakeholders within the broader Anderstown community towards institutionalizing a new participatory democratic process.

3 A Capacity-Building Model for Starting Participatory

Budgeting

Abstract

As a participatory process that empowers members of a community across the policymaking process, participatory budgeting (PB) holds great promise for deepening democratic engagement. Yet PB is also highly resource-intensive and requires communities to build a great deal of capacity to implement. However, we lack an empirical understanding of what capacity (that is, people, skills, knowledge, infrastructure, and resources) needs to be built for a new community to start participatory budgeting, and how to build it. This chapter presents the design of an organizing model for participatory budgeting. Across four months of community-based participatory research, this model emerged from a pilot grassroots campaign to develop implementable policies and start PB in a new community. Through a case study analysis using sequential process tracing, I present evidence from our campaign that suggests the need for new communities to build three primary kinds of capacity to start PB: technical capacity, or knowledge of the PB process and how to implement it; government capacity, or resources and political support from government institutions; and grassroots capacity, or the availability, capability, and motivation of members of the community to begin recruiting volunteers to implement PB processes. I conclude by presenting the final model for organizing to start participatory budgeting in a new community and discuss implications for future grassroots organizers interested in starting new participatory budgeting efforts, including running pilot PB processes to gain technical knowledge and begin training an early set of committed volunteers.

3.1 Introduction

Participatory budgeting (PB) has increasingly taken hold around the world as an institutional innovation that empowers community members across the policymaking process in deciding how government funds are spent. As opposed to many other forms of public engagement like Town Halls or giving public comments before council meetings, in which citizens serve in roles of public consultation (Fung, 2006; Gilman, 2016), PB empowers citizens to make binding decisions across the policymaking process, from rulemaking to policy development to voting (Gilman, 2016).

While participatory budgeting holds great promise for deepening empowered democratic engagement, it is also highly resource-intensive and requires building a great deal of capacity for a new community to implement for the first time. PB is a community-driven process. While the initial decision to do PB is one made by public officials (Wampler, 2007), as a participatory democratic experiment, PB requires the community more broadly to have capacity—people, infrastructure, political support, skills, ability, and resources—for both the process to be effective and for it to generate maximum civic rewards to community members (Gilman, 2016).

Yet we lack models of what capacities are needed and how to build capacity to start PB in a new community. Prior frameworks for capacity building, which have gestured broadly to components of capacity building like the need for "a sense of community" and strategies like "organizational development" (Chaskin, 2001), remain too high-level to apply to design, especially in participatory democratic contexts like PB, which requires specialized technical knowledge over democratic practices like policy development to which community members typically do not have access or exposure. PB is often brought to new communities through the support of experienced technical consultants like the Participatory Budgeting Project, an organization founded specifically to scale PB (Lerner & Secondo, 2012; Gilman, 2016). These experienced organizations may have some implicit model of what capacity building for PB looks

like and entails, but they have not made it public. Even their published examinations into capacity building for PB (Lerner & Secondo, 2012) attribute the technical capacity needed for starting PB to having the support of their contracted organization.

Moreover, just having technical knowledge of the PB process is not enough to have capacity to implement it. Dedicated and committed members of the community are absolutely critical for implementation, and the reason why technical consultants typically partner with community partners on the ground who are intimately familiar with the specific contexts of their given community (e.g., Community Voices Heard [CVH] in PBNYC; Gilman, 2016).

Capacity building for PB thus presents a unique flavor of the "paradox of participatory democracy" (Mansbridge, 2003; Kaufman, 2017)—that participatory democratic efforts require people having the capacity to participate, which is neither a given nor homogeneously available to the entire population of a community. If the only people who have a model of how to build capacity for PB (i.e., experienced technical consultants) identify themselves as a cornerstone for spreading PB, how can new communities build capacity to start PB without their help?

This study examines how a new community builds capacity to start participatory budgeting. Specifically, I ask, What are the components of a capacity-building model for participatory budgeting, and how might grassroots organizers begin to build capacity for PB without the support of experienced technical consultants?

I investigated this question in a detailed case study, in which my research team and I conducted community-based participatory research to begin building capacity for PB on a grassroots basis (that is, without the support of technical consultants or formal institutions). Over the course of four months, our team of organizers led a grassroots university-based organization of approximately 20 students and volunteers aimed to build capacity for PB by piloting a policy development process, supporting policy feedback from experts in community groups, and communicating with government officials to demonstrate technical expertise. While our initial campaign goal had been to simply develop implementable PB proposals and seek

political and community support for those developed proposals, our campaign activities led to the unexpected outcome of being asked to serve as technical consultants for leading the PB process. Consequently, this study has two primary aims. First, this study aims to build an emergent capacity building model for participatory budgeting. Second, this study aims to present a detailed case study analysis of how my research team and I, as grassroots organizers, built capacity to be asked to serve as technical assistant leads for PB.

My findings present an emergent model of capacity building to start PB in a new community. Using within-case sequential process tracing analysis, I present evidence for causal links between our campaign activities and the outcome of being asked to serve as technical leads for the PB process, in the course of which we developed an understanding of what capacity is necessary for implementing PB. This model suggests that new communities starting PB need to build three primary kinds of capacity: technical capacity, or knowledge of the PB process and how to implement it; government capacity, or resources and political support from government institutions; and grassroots capacity, or the support of motivated and trained members of the community to staff PB events. While previous examinations of PB have suggested that technical knowledge and government resources are necessary (i.e., Gilman, 2016), they have not systematically defined these as capacities, and have largely overlooked the question of what grassroots capacity is or how to build it. With regards to strategies for building these capacities, our findings also indicate that grassroots organizers can build technical capacity for PB by running pilot PB processes, interviewing experienced PB practitioners, and synthesizing publicly available PB materials. Building government capacity for PB requires working with elected officials who advocated for PB adoption to bring new and existing staff on to support the process, while building grassroots capacity requires training a core group of committed volunteers to conduct outreach towards recruiting community members to participate across the PB process.

This study contributes what is to our knowledge the first empirically grounded model of capacity building for PB. We also present concrete strategies for grassroots organizers to build technical capacity for PB by piloting PB processes like idea collection and policy development and recruiting, training, and motivating a small, committed group of early adopters to begin building further government and grassroots capacity for PB.

3.1.1 What is participatory budgeting (PB) and how is it started in new communities? Participatory budgeting is one of the most rapidly growing participatory democratic institutions around the world (Fung, 2015), yet as still a relatively new and experimental democratic innovation, Participatory Budgeting remains highly specialized and difficult to define (Bassoli, 2010), thus also making it challenging to know what capacity is needed to start it. PB traditionally involves a common sequence of phases (Gilman, 2016; PB Scoping Toolkit). First, an initial group of community leaders, called a Steering Committee, deliberates and designs the process parameters, also known as the "PB rulebook," to outline major guidelines like what kinds of projects can be funded and who is eligible to vote. This is followed by a series of Neighborhood Assemblies, during which community members are invited to facilitated meetings where they learn about PB, propose ideas, and sign up to be budget delegates. During the next and typically longest phase, these budget delegates are sorted into issue committees to go through ideas collected from the assemblies and begin the process of vetting, selecting, researching, and developing ideas into implementable proposals. Budget delegates typically present developed projects at "project expos," during which community members are invited to learn about projects before the public vote. Finally, community members vote on the shortlist of projects. Winning projects are implemented by the city and monitored by community members.

As is the case for most participatory democratic institutions, researchers and practitioners have described how to facilitate different participatory democratic processes within PB, but these guidelines and research fall short of addressing the question of how to build

capacity to start these processes in new communities. Existing models and descriptions of different participatory democratic institutions, like Iceland's open democratic Constitutional Reform process (Landemore, 2020) or Oregon's Citizens' Initiatives (Gastil, 2018) describe deliberative processes that occur in these institutions once already institutionally adopted and legitimately recognized (and often financially resourced) by government actors, even if for the first time. Similarly, practitioner guides and existing research on PB (i.e., Participatory Budgeting Project; Wampler, 2007) at best describe PB processes (as the ones described above) once they have already been adopted, rather than describing or attempting to build a model of the large amount of capacity building that needs to occur before a complex institution like PB can even be implemented in a new city. Consequently, there remains a gap in the literature as to modeling the capacities and processes for building those capacities prior to the institutional adoption of a participatory democratic process.

Typically, communities starting PB for the first time will contract "technical assistance partners" with experience leading PB. These technical assistance partners are typically responsible for providing education, technical assistance, research and evaluation, specifically to provide the support and expert technical knowledge needed to adapt the PB process to new communities (Gilman, 2016, p.39; Lerner & Secondo, p.2).

While many of these organizations have made some of their guides and reports publicly available online (such as general information describing the overall process and steps for PB), publicly available information remains high-level, without the level of detail necessary for practitioners to know how to replicate the process—particularly when resources do not already exist that can be deployed. Moreover, these are still organizations financially contracted by new governments seeking to try out PB. Consequently, they possess a great deal of proprietary information they do not share, typically around technical implementation and trainings to provide members of new communities with the expertise to run PB on their own.

But the requirement of contracting one of these external organizations, or paying large sums of money to obtain detailed practitioner guides, places unstated additional burdens and costs on new communities seeking to gain technical knowledge of an open democratic process like PB. Given the limited number of external organizations with technical experience running PB, there could be any number of reasons these organizations may decline to offer services to a new community, including lack of staffing capacity.

The effective monopoly on technical expertise held by this small number of existing PB organizations both runs counter to the participatory aims of PB and places new communities who for whatever reason are not able to contract one of these organizations in a difficult position. However, we lack models that can help a new community start PB without the support and expertise of an experienced technical assistant lead. This practical challenge is coupled by a theoretical gap: Researchers similarly lack theoretical models of what capacities are needed to start a participatory democratic institution like PB in a new community, with or without the support of experienced practitioners.

3.1.2 What we know about resources needed for PB

Prior research on PB has gestured, at a high level, to some of the resources a community needs for PB (Fig. 1). As a participatory democratic innovation, the support and even advocacy of public officials is essential, as they are the ones who ultimately must agree to devolve decision-making power (Wampler, 2007). In particular, having at least one elected official, like a mayor or alderperson, who is an advocate for PB is often cited as a key prerequisite to adoption; two of the highest profile PB processes in Chicago, IL and New York City, NY, were both started at the behest of passionate city council members inspired by researchers to adopt the process (Lerner & Secondo, 2012). Public officials in local governments furthermore often introduce PB as a political move, as part of their campaign promises to bring more, better public engagement to institutional decision making. For example, the decision to adopt PB often goes

hand in hand with elected officials campaigning on the promise of increasing public engagement (Gilman, 2016; Hagelskamp et al., 2016).

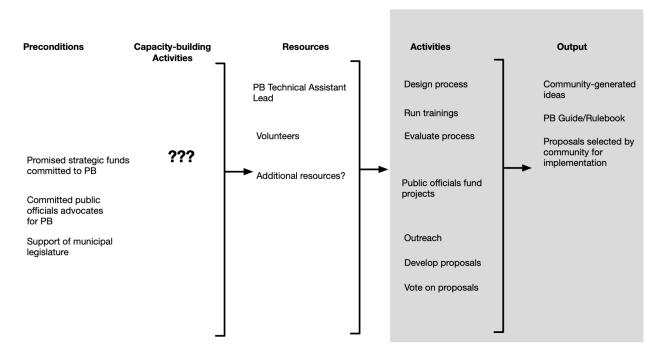


Fig. 3.1. PB Logic model based on existing literature. Prior literature establishes the need for key preconditions like committed strategic funds, as well as key activities and outputs of the formal PB process. Capacity-building activities for building a community's capacities to run PB remains a gap in the literature on participatory democracy in PB and beyond.

In addition to advocating for experimenting with this new process, public officials also need to have access to discretionary strategic funds and commit them to PB outcomes (Lerner & Secondo, 2012; Wampler, 2007). Strategic funds are those that are of more interest to low-income communities, like money for housing, jobs, and schools (more so than funds for street or park improvements) (Lerner & Secondo, 2012). This elected official-driven model of adoption is frequently how PB spreads to new communities because individual elected officials often have sub-municipal parts of their budgets that they have control over and can choose how to spend (Gilman, 2016; Lerner & Secondo, 2012).

The support and advocacy of only a vocal minority of a city council, or even the mayor, is not enough, however, to ensure that PB can be implemented. Other members of the municipal

legislature—for example, other members of the City Council—must also buy into the process (Wampler, 2007). Even if a mayor advocates for PB, members of the municipal legislature (i.e., the city council) also be fully supportive of PB. Otherwise, the mayor will be unable to delegate the necessary authority to implement proposals because they both need to work with legislative staff to be able to do so, and would likely expend enormous political energy and capital trying to convince legislators to sign on (and would likely still be unsuccessful).

Moreover, government institutions need to have the institutional capacity to effectively manage and engage citizens' participation in a resource-intensive process like PB (Gilman, 2016, p.154). Lack of resources and capacity for public institutions to engage with citizens is a major hindrance both to launching experimental innovations like PB, as well as a potential risk in trying to implement the process. If public officials and staff lack the capacity to properly engage with members of the public in a participatory process, this could result in further institutional disillusionment (Sirianni, 2009) and counter civic engagement goals.

Beyond these government resources that need to be in place before PB can even be adopted, prior work also emphasizes that PB is a community-driven process (i.e., Lerner & Secondo, 2012). As a result, communities need to have volunteer resources to do outreach, educate the broader members of the community about PB, and eventually support the process as budget delegates (Lerner & Secondo, 2012). In a typical PB process, community members drive forward every part of implementation, from deciding the rules of the process to conducting outreach to increase voter turnout (Lerner & Secondo, 2012). Some of the key PB tasks for community members include:

- Conducting outreach, to encourage other members of the community to show up to events and vote;
- Serving on a steering committee, a group of community representatives who design the PB process through facilitated workshops that help them map our the PB cycle, decide its rules, and agree on rules and responsibilities;

- Serving as budget delegates, committees of community members who are responsible for developing proposal ideas into feasible projects for community members to eventually vote on;
- Putting up flyers and other marketing materials;
- Organizing, facilitating, and staffing community events, like project expos or neighborhood assemblies, to gather ideas and share developed projects with community members.

Prior work has argued the need for grassroots leaders, especially the most marginalized, to design and lead PB (Lerner & Secondo, 2012). Practitioners and researchers have argued that these grassroots leaders can have even more ownership over PB, designing the PB cycle, deciding its rules, running neighborhood assemblies, and developing and implementing outreach plans (Lerner & Secondo, 2012). But where do these leaders come from? How are these leaders trained to do the time- and commitment-heavy work that is required of PB leaders (Gilman, 2016)? Moreover, in communities that have not done PB before, it is especially unclear how commitment is built among the early group of volunteers—"early adopters" who often have to carry the weight of figuring out unclear processes and trying things for the first time. This is all missing knowledge of how to pull off PB in a new community for which existing literature does not provide guidance.

3.1.3 What is capacity building?

Specifically, there is a gap in existing literature on what new communities ought to do to *build capacity* to start PB. Having capacity to participate, particularly in experimental and community-driven democratic innovations like PB, has been noted by democratic scholars as a key ingredient and frequent paradox to participatory democracy (Kaufman, 2017; Mansbridge, 2003). Without knowledge of how to build capacity to start a highly resource-intensive effort like PB, these participatory democratic efforts cannot be scaled.

A key concept from program and community development, capacity building involves strengthening a community's ability to do participatory budgeting by giving community members the skills and abilities to determine their values and priorities and act on them (Eade, 1997). Understanding the process of capacity building involves identifying existing assets and experiences to build on for empowering community members, particularly those from marginalized backgrounds whose "many capacities [...] may not be obvious to outsiders, and which even they themselves may not recognize" (Eade, 1997, p.23). In response to criticisms that capacity building can be an ambiguous concept (Eade, 1997), scholars have worked to define frameworks and models for capacity building (Cuthill & Fien, 2005; Honadle, 1981). These have included models for capacity building for facilitating citizen participation in local governance (Cuthill & Fien, 2005), towards participatory planning and collaborative local action outcomes like those required for PB. Yet without studying these processes and understanding what capacities are needed specifically in the context of PB, researchers cannot predict how, if at all, these frameworks are applicable, particularly because PB involves many outcomes and activities beyond program and community development such as training and motivating a community to care about democratic outcomes.

For efforts like PB that require collaborative problem solving between community members and local governments, these models argue that capacity needs to be built to ensure local governments can support community participation, *and* to ensure community members can effectively participate. Local governments play a role in supporting and facilitating citizen participation, including through collection & provision of relevant information; establishing equitable, accountable, and transparent participatory policy and processes, and development of a supportive organizational culture (Cuthill & Fien, 2005, p.64). Institutional capacity, or the development of local government policies and processes to facilitate and support citizen participation in local governance, also plays an important role (Cuthill & Fien, 2005, p.71).

Capacity also needs to be built among community members, including by enhancing citizen ability, enhancing community group ability, and establishing a cooperative community culture (Cuthill & Fien, 2005). Citizen ability involves the development of human capital, through the enhancement of citizens' skills and knowledge. Community group ability includes organizational management and development of a coherent and consensual view on why the group exists, what it's trying to achieve and how the group will go about doing it. Finally, a cooperative community culture should be fostered between community groups, and between those groups and various levels of government). Building capacity among the members of a local community depends upon social relationships, social bonding, and social capital. These are the crucial outputs of capacity-building developed through a cooperative culture, open dialogue, trusting and collaborative relationships.

Existing capacity-building frameworks offer a starting point for understanding what components might be relevant for participatory budgeting. But they remain too high-level to translate and operationalize in the context of starting new PB efforts. One particular challenge in PB is that it requires specialized technical knowledge over democratic practices like policy development that community members typically do not have access or exposure to most government-supported community engagement (or even collaborative problem solving) settings. Lack of understanding how a new community would actually implement the complex process of PB poses a major challenge to our ability to understand what is needed to build capacity for PB. Thus, a key challenge in understanding capacity building for PB and additional theoretical gap is also our understanding of how to build technical capacity for PB.

3.1.4 Research Question

To address these gaps in the literature, this study asks: What are the components of a capacity-building model for participatory budgeting, and how might grassroots

organizers begin to build capacity for PB without the support of experienced technical consultants?

This study contributes to the literature on participatory democracy what is to our knowledge the first empirically grounded model of capacity building for PB. While previous examinations of participatory democratic institutions have presented models of how to facilitate these processes once they have been institutionally adopted, we lack models for supporting the capacity building activities that are necessary for communities without prior experience, without the support of consultants with prior experience, and without the community structures and support in place for existing PB models to immediately be implemented. This model illustrates the kinds of capacities new communities need to build for participatory budgeting, as well as concrete strategies for grassroots organizers to build technical capacity for PB by piloting PB processes like idea collection and policy development and recruiting, training, and motivating a small, committed group of early adopters to begin building further capacity in the community.

3.2 Methods

As an investigation of a novel university-community partnership, this study takes a community-based participatory research approach by emphasizing shared decision making with the community, conducting research beneficial to the community by enhancing the capacity of all partners, and focusing on complex problem-solving for community development (Izumi et al., 2010; Lawson et al., 2015). Members of the broader Anderstown community, including city officials and community experts, as well as members of the university community who participated in our policy development campaign shaped and redefined researchers' understanding of capacity building in this context. In particular, the primary outcome measure for capacity building—the presence of a technical assistant lead and specifically campaign organizers being asked to serve in this role—was presented to researchers by city officials,

leading researchers to update the initial outcome measures they had developed for their policy development pilot campaign.

This study presents an in-depth case study of a grassroots campaign to start PB in a new community. By examining this single case study, we can provide thick, textured descriptions of how we carried out the design of our campaign (George & Bennett, 2005). While case studies are often strong in ways statistical methods are weak, including their potential for achieving high conceptual validity and value as a useful means to closely examine hypothesized role of causal mechanisms, it is also important to acknowledge the inherent tradeoffs and limits of this method, including the tension between achieving high internal validity versus making generalizations that apply to broad populations (George & Bennett, 2005). These limitations speak to the need for further research that examines these questions or applies the resulting model in other contexts. Anderstown's case is particularly useful to study because it presents a rare opportunity in a community needed to build the grassroots capacity to start PB implementation, having already achieved the support and commitment of the City Council to start a new PB effort while not having the support of an experienced technical consultant nor existing community groups ready to resource the effort.

3.2.1 Data Collection & Analysis

Across this case study, I use sequential process tracing to develop a new model about capacity building for starting PB. The goal of this case study is to present an inductively derived causal explanation of a key outcome—our grassroots campaign building sufficient capacity for organizers to be publicly announced as technical leaders of participatory budgeting in Anderstown. I use descriptive process tracing methods to describe changes to the capacity we built that affected this outcome over the course of our campaign. Process tracing is "an analytic tool for drawing descriptive and causal inferences from diagnostic pieces of evidence—often understood as part of a temporal sequence of events or phenomena" (Collier, 2011, p.824). By

closely engaging with fine-grained details of a specific case, process tracing is particularly well suited for helping analysts make within-case causal claims, whether for theory development or testing (Collier, 2011; Mahoney, 2010). In applications for theory development, process tracing allows analysts to identify and systematically describe novel political and social phenomena, particularly for discovering new hypotheses and gaining insight into causal mechanisms (Collier, 2011, p.824).

This study aims to serve as a within-case analysis of *descriptive inference*. In process tracing for descriptive inference, the analyst begins by taking "good snapshots at a series of specific moments. To characterize a process, we must be able to characterize key steps in the process, which in turn permits good analysis of change and sequence" (Collier, 2011, p.824). In this study, I rely on a diverse set of primary data sources to describe changes in the campaign over time that eventually led us to be hired as the technical assistant leads for the PB process. Over the 4-5 months of our grassroots campaign, I collected data across the following sources to identify diagnostic evidence for causal mechanisms:

Team memos & notes

To understand the sequence of campaign activities and their intended and actual outcomes vis-a-vis organizers' role in PB, I collected and analyzed notes, memos, and jottings of events collected by the organizing team, a total of approximately 120 pages. Throughout the campaign, organizers wrote shared memos and notes describing their campaign activities and design decisions. Jottings were taken during significant events, such as meetings with community advocacy groups and city council meetings. After each campaign-related activity, organizers reflected on their observations and discussed changes to their strategies and designs. These memos and notes enabled me to create a sequential account of design decisions, deployments, and changes in the context of the campaign.

Online team communications (Slack, e-mails)

To build a more complete understanding of the sequence of campaign activities and outcomes, I also collected campaign-related communications among organizers and policy developers, as well as between organizers and city stakeholders. This included e-mails to set up meetings between organizers and city staff; e-mails between organizers and representatives from community advocacy groups; and e-mails and slack messages between organizers, policy leads, and policy developers regarding updates to their policy development tasks. These online communications allowed me to establish a sequence of internal and external campaign communications preceding and succeeding the events captured in team notes and memos. This enabled me to conduct a richer sequential analysis to understand when and how organizers reached out to key community and city stakeholders, as well as how the policy development team coordinated and responded to shifts in campaign strategy. In particular, one of the policy leads consistently sent summary campaign updates and key actions and to-dos for policy developers following each campaign meeting. By collecting and analyzing these internal communications, I was better able to establish a sequence of policy work activities and changes relative to new information organizers gleaned from city and community stakeholders.

Interviews

I conducted semistructured interviews with all policy developers to understand their reasons for participating in the campaign, what they found valuable and challenging about their experience, how they worked together with other members of the team, and whether they intended to stay on with the official PB implementation effort. This enabled me to gain insights into the nature of the volunteer capacity we built by helping me learn about the motivation, backgrounds, and experience of all members of the policy development team.

Additionally, I conducted semi-structured interviews with two individuals with previous experience implementing participatory budgeting in a neighboring community (which we call

Howard's Grove): a former alderperson who started PB and a current staff member in the process of implementing PB in Howard's Grove. These interviews centered on interviewees' experience specifically building political capacity such that volunteers can get the necessary feedback from city staff to develop implementable policies.

Log data (DeliberationWorks, Google prototypes)

To understand policy developers' writing and editing processes, I examined draft policies and comments on policies in the *DeliberationWorks* platform, particularly to understand whether and how policy developers responded to feedback provided as comments on the platform by editors and community members. I additionally examined changes made to Google documents and spreadsheets that the policy leads and developers used to coordinate work tasks. For example, I closely examined edits chronologically made by organizers and policy leads on the Google Document used to capture work assignments and priorities throughout the campaign, which allowed me to construct a detailed sequence of changes in research, writing, and editing priorities as new information surfaced throughout the campaign. Data captured on these technological prototypes enabled me to gain a deeper understanding of the sequences of policy development activities and assigned tasks throughout the course of the campaign.

Online archival materials (PB Rulebooks, City meeting memos)

To understand the sequence of official city decisions and events, as well as different stakeholders and capacity built in other cities to support PB, our research team also collected online public primary sources like PB rulebooks and city meeting memos. The former includes rulebooks made available online of previous participatory budgeting efforts held in the following 12 cities in the U.S. and Canada:

- Cambridge, MA
- Cole/Denver, CO

- Chicago, IL
- Durham, NC
- Eau Claire, WI
- Louisville, KY
- New York, NY
- Philadelphia, PA
- Sacramento, CA
- Vallejo, CA
- Vancouver, Canada
- Victoria, Canada

Examination of the content in these public rulebooks, particularly sections shared across all of "roles and responsibilities," helped me establish an initial broadly applicable capacity-building model across these existing PB efforts, including the types and kinds of community organizations involved, and the particular roles and responsibilities of steering committee members or budget delegates. As the initial goal of the study had not been to develop a capacity building model for all of PB but rather to formalize our understanding of technical capacity required for policy development, our initial data collection plan focused on securing interviews with the staff and city officials who could provide us with detailed and concrete insight into one instantiation of this process (Howard's Grove) rather than designing a study to interview leaders across any or all cases of PB. Guidebooks from other PB efforts became relevant only when city officials updated our primary outcome mid-campaign. Interviews with leaders of other PB processes could be relevant future work.

In addition to the rulebooks, I also collected and analyzed public meeting minutes from all PB Committee meetings, as well as supplemental meeting memos from the June City Council meeting during which the council put to a vote the proposal for organizers to serve as the technical assistant lead for Anderstown's PB Process. Examination of these public

documents enabled me to understand the reasoning and sequence of public decisions made by city stakeholders in the context of our campaign.

I triangulated across all the sources of data presented in this chapter to identify causal explanations of how we built capacity to serve as technical leads across this case. To analyze interview transcripts, memos and notes, and public memos, I used a method of constant comparisons, in which I coded concepts and compared them to new data to determine new properties and dimensions to my list of codes (Corbin & Strauss, 2008). This method allowed me to develop a nuanced understanding of properties and dimensions in my codes and build a richer model based on the ways in which new interview evidence confirmed and disconfirmed our expectations. When disconfirming evidence was identified (such as when city staff asked organizers to serve as the technical lead rather than as members of the Steering Committee), I developed a new causal explanation to be consistent with the data, as illustrated throughout the findings and in the updated final organizing model.

3.2.2 Research context: Bringing participatory budgeting to a new city

This study examines organizers' campaign to develop implementable PB policies and Anderstown's planning decisions for implementing PB in the 4-month period between March and early June 2022. This study builds on the research context described in Chapter 1 (Fall 2021), at which point Anderstown's City Council had only just publicly announced their intention to experimentally adopt participatory budgeting. In this period between the City Council's official announcement of PB and the start of PB implementation, Anderstown public officials primarily sought to learn more about participatory budgeting and, importantly, to secure a technical consultant to oversee implementation of the process.

Although this study describes organizers' campaign design and activities beginning in March 2022, the point at which organizers deliberately shifted their campaign towards

understanding how to implement community-driven policies through PB, it is important to note that organizers had been closely following along, synthesizing materials, and conducting initial research into participatory budgeting and ARPA funds many months before the start of data collection for this study. In addition to the in-depth open democratic policymaking pilot process described in Chapter 1, organizers had also been actively reaching out to and conversing with different members of the Anderstown city government, including the Mayor and interim city managers, to develop their relationship and importantly to demonstrate their commitment and enthusiasm for supporting the PB process.

Additionally, we had conducted preliminary interviews with several staff and volunteer committee members of the annually running PB process in Howard Grove, a neighboring ward of the closest urban metropolis and the city with the first and longest running PB process in the United States. These interviews provided organizers with preliminary technical knowledge of running a PB process, including the general timeline and structure and work processes of volunteer committees for proposal development. Information learned from these interviews provided us with the technical basis for our designs, including policy development templates and hypotheses about seeking city staff feedback. As design documentation for these nuanced practical details for implementation is nonexistent in the PB literature and are typically known only by technical assistant leads, this initial research was critical for providing us with a foundation of technical knowledge to drive the campaign forward.

3.2.3 Participants

Our campaign to build capacity to start PB in a new community was carried out by a grassroots student organization, which featured:

Campaign organizers. 3 campaign organizers served as leaders of the campaign and primary designers of all tools and processes for supporting the campaign. In our case, two other

members of my research team, including the principal investigator, and I served as full-time campaign organizers, while also conducting participatory research with members of the community on the design of the grassroots organizing model.

Organizers each dedicated approximately 40 hours a week to campaign efforts. The third author was also the lead instructor of a yearlong civic engagement course for undergraduate students that aimed to teach students about civic organizing by having them participate in authentic organizing campaigns. This grassroots campaign to develop and implement PB policies was one campaign option offered to students in the course.

Policy Developers. A team of 13 policy developers researched, developed, edited, and incorporated community member feedback into 1-page policy memos. Nearly all of these policy developers were the same undergraduate or graduate students from Chapter 2, although three developers were newly recruited and one undergraduate from Chapter 2 did not continue with the project/campaign. 6 developers were undergraduate students in the aforementioned course; 7 were graduate students (PhD, Masters, and Law students) who were volunteering on the campaign in partnership with another graduate student science policy outreach group on campus.

The design of the campaign also involved the following Anderstown stakeholders:

Community members. Residents from the city were asked to read and react to policy proposals captured on the *DeliberationWorks* platform, an open online platform my research team and I developed to support community-driven and deliberative policy development (see Chapter 1). In the policy development campaign featured in this study, we primarily describe our interactions with a group of approximately 10 community members from a local community advocacy group focused on climate and specifically water issues, though organization members

also conducted outreach efforts with other community members and advocacy groups in the community in activities beyond policy development not described in this study.

City staff. Municipal staff from appropriate departments like the City Manager's Office or Budgeting who can provide feedback on the feasibility and eligibility of policy proposals. Specific individuals who would be appropriate, willing, and available to provide this information was to be determined.

City Council: Public officials publicly championing the participatory budgeting process and who can lend political legitimacy to policy proposals.

During this campaign, organizers primarily interacted with members of the "PB Committee," which included Anderstown's mayor, three aldermen, the interim city manager, and 1-2 members of the city staff. Organizers also reached out to members of the city staff and former members of the City Council from Howard Grove, the neighboring ward of the city south of Anderstown, to interview them about their experiences running PB processes.

3.2.4 Design of Grassroots Campaign to Develop Implementable Policies

To build capacity for PB, our initial aim was to apply our expertise as designers, instructors, and researchers of democratic deliberation and civic engagement (see Chapter 2) towards building our technical capacity to develop implementable, popularly supported policies that could potentially make it onto the official PB ballot. Given our uncertainty about how the City intended to proceed with PB and how to best be involved in the process at that point in time, we initially had two goals: (1) to be involved in the official planning and designing of the PB process, and (2) to develop policies that would be implementable through PB once the process was officially

underway. The lack of clarity about how to best support capacity building for PB at the time of the campaign's kickoff led us organizers to focus first on these short-term campaign goals as a step towards the long-term goal of helping lead PB. Though we were able to leverage university assets to conduct campaign activities, the campaign remained grassroots given the City's lack of interest in working with the university and lack of recognition of the university's expertise in supporting this work. This lack of interest and recognition was demonstrated by organizers' repeated, ignored attempts to communicate our interest and expertise in collaborating with city staff and PB committee members. Moreover, as we later learned from an interview participant and will review in Findings, the involvement and advocacy of researchers, students, and other individuals with ties to academic institutions were crucial to the original grassroots organizing approach to bring participatory budgeting to the United States for the first time. This historical evidence suggests that university-based advocacy has an important role in grassroots organizing for participatory democracy.

As campaign organizers, we focused on the short-term goal of *building capacity to develop implementable, popular policy ideas that we could get onto the PB ballot* for two reasons. First, our pilot work and initial research into the PB process suggested that, due to the open-ended nature of ARPA eligibility criteria, the policy development process for Anderstown would be significantly more challenging than most PB policy development processes, in which projects were constrained to capital expenditures. Consequently, we hypothesized that taking steps to understand and build capacity to support the policy development process for community-driven development of ARPA-eligible policies would allow us to build capacity to support a valuable, new aspect of the PB process, which would subsequently give us a leg up in getting asked to be involved once the City officially began the PB process. Second, we hypothesized that even if we were not offered the opportunity to be officially involved in planning and designing the PB process in Anderstown, focusing on building capacity to develop implementable PB policies would provide us with an alternative route towards implementing

community-driven policies *through* the PB process: We could propose implementable and popular PB policies as community residents. That is, since any resident can propose an idea, we hypothesized that focusing on developing feasible policies and building support from the community on those policies would allow us to develop eligible and potentially popular ideas for PB regardless of our role as designers in the process.

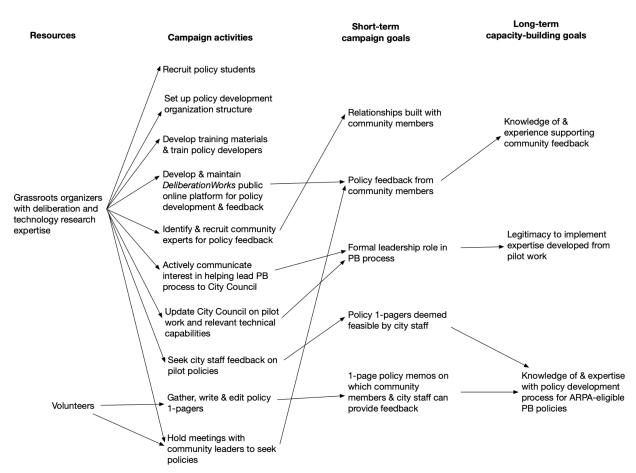


Fig. 3.2. Design of initial grassroots campaign. We designed a grassroots campaign with the short-term goal of developing implementable, popular PB policies. Our aim was to build capacity to support the challenging and new process of policy development under American Rescue Plan Act (ARPA) rules, specifically by building knowledge of and expertise in leading the policy development and feedback process.

3.2.5 Campaign Goals & Activities

Activity 1: Build capacity to support PB policy development by running a pilot process.

The primary focus of the campaign to build capacity for PB was developing PB proposals that

would be eligible under ARPA, a new funding source for PB. Campaign organizers organized, trained, and structured an organization of policy development students and volunteers to develop the first draft of policy memos for city staff and community feedback. Our design features included:

- Recruiting and sustaining the commitment of students and student volunteers to support policy development work, because this population is motivated by policy interests and often has previous relevant training and experience. Partnership with class structure increases commitment:
- Setting up an organizational structure and process for volunteers that involves
 mixed-group, two-person writing teams for each policy; policy editors to provide
 feedback and support, and to check consistency; and policy leads to coordinate all
 volunteers and interface with campaign organizers. Setting up weekly to bi-weekly
 check-ins to coordinate policy development with campaign updates;
- Providing volunteers with policy development templates and light training to
 ensure they have the background knowledge and support necessary to complete writing
 and research tasks;
- Centralizing policy development, editing, and feedback on *DeliberationWorks*, an
 open online platform, to mitigate coordination costs; provide a centralized and openly
 transparent knowledge resource; and allow developers to see and access feedback from
 editors, organizers, and community members in real time.

Desired campaign outcomes: Complete one-page policy memos that community members and city staff can read and provide feedback on.

Activity 2: Build capacity to support community policy feedback by identifying, recruiting, and seeking feedback from community policy area experts. In our campaign to develop both implementable and popular PB policies, we focused on soliciting community

feedback on developed policies. As a byproduct of this feedback, we also aimed to mobilize these community leaders to actively participate in the PB process once officially underway, for example by proposing policy ideas aligned with their interests and encouraging their organizational members to vote to support those ideas.

To build capacity among community members to support our policy development pilot and excite community members about policy development through PB, we

- Identified and recruited community members by first focusing on domain experts in the community to provide feedback on policy feasibility;
- Held 1-on-1 meetings with community leaders to educate them about PB and how their interests align with PB's goals, and to encourage them and their members to participate in the official PB process;
- Developed and supported use of *DeliberationWorks* so experts could easily access all policies and comment in real time; and
- Supported follow-up processes with policy leads and organizers to ensure community members are able to provide their feedback and reactions to policies.

Desired outcomes: Build new relationships with community members and excite them to support PB process and our policies; feedback from community members on policy proposals; policies prioritized for implementation based on community member feedback

Activity 3: Build capacity for implementing PB policies by communicating with government officials to seek policy information and advocating for a formal leadership role in the PB process.

 3a: Getting policy feedback from city staff. As PB policies would ultimately be implemented by already under-resourced city staff, we focused on designing a policy development process that would reduce costs and commitment for city staff to provide feedback. We hypothesized that since political support had already been established for community-driven policies to be implemented through PB (that is, city officials had already agreed to implementing PB), the primary hurdle for building the political infrastructure to PB policies would be getting the appropriate members of the city government to support a policy development process that would result in policies that would be eligible and implementable under the city's PB terms—a particular challenge in our case as ARPA, the funding source, was a new one with open-ended conditions, for which eligibility rules are drastically different than capital expenditures that are traditional to most PB efforts (Public Agenda Report).

Thus, campaign organizers focused on building capacity for the implementation of policies by (1) identifying and establishing relationships with relevant department staff, (2) seeking their expert feedback on whether volunteer-developed policies would be implementable through PB. To be clear, the intention of our campaign was not to implement specific policies, but rather to build capacity among city staff for implementing community-driven policies through PB. Given the early stage of the City's process in setting up participatory budgeting and uncertainty around political infrastructure, organizers' campaign goal was to design and politically implement a process for developing implementable community-driven PB policies within the city's constraints.

• 3b: Actively communicate with the City Council to advocate for a formal leadership role in PB process. Following developments about PB announced by the Council and meetings with city officials in Fall 2021, we also aimed to gain legitimacy for our role in the process by serving on the PB playbook development committee, also known as the Steering Committee. Following our pilot work and building on our research expertise, we believed the best way we could help to build the capacity needed to bridge our policy development work towards implementation through PB was to continue designing and testing processes and technologies for mitigating risks and challenges to

the PB process. Following initial work running a pilot open democratic process for setting and ratifying an initial community-driven policy agenda (see Chapter 1), we had identified community development of policies that would be feasible for implementation to be one of the highest priority design challenges that the PB process would eventually run into, given lack of existing documentation for open-ended policy development using a source of PB funding like ARPA. To gain the political legitimacy to formally implement learnings and the policies developed in this campaign, we sought a role in playbook development as members of the PB Steering Committee.

To build capacity to implement policies developed through our grassroots campaign, we

- Developed and sought feedback on feasible and comprehensible policy 1-pagers
 for which the campaign has evidence of popular support to city staff would reduce their
 time cost for providing feedback as to the political legitimacy and eligibility of
 community-developed policies for PB.
- Updated the PB Committee on our learnings and providing our expertise in supporting development of the City's PB Playbook would provide organizers with the political legitimacy needed to implement process design changes discovered from our policy development work.
- Communicated our interest and value in serving on the Steering Committee, so organizers could gain legitimacy in design recommendations for PB

Desired outcomes: City staff confirm developed policies are feasible and eligible under PB criteria; organizers eventually serving on the PB Steering Committee.

3.3 Findings

To implement and meet the goals of the three campaign activities, the campaign was divided into roughly three sequential phases (Fig. 3). I will now present sequential evidence of the capacity we built to start PB over the course of the grassroots campaign. Findings are presented as phases centered around three critical events over the course of the campaign. In process tracing, a critical event is "a contingent event that is causally important for an outcome in a specific case" (García-Montoya & Mahoney, 2020). My analyses suggest that each of these events was causally important in allowing us to analyze and explain our technical and grassroots capacity-building outcomes:

- Event 1 (policy development phase)—Policy development campaign starts:
 Organizers begin grassroots campaign to develop popular, implementable
 policies to get on the PB ballot.
- Event 2 (community feedback phase)—Organizers meet with community experts in Water Collective: Organizers seek feedback and support from community environmental advocates to test initial PB policies.
- Event 3 (political legitimacy phase)—City Council vote: City staff and council
 ask organizers to take leading technical role in designing PB process, marking
 shift away from policy development pilot and the official start to organizers' role in
 leading PB.

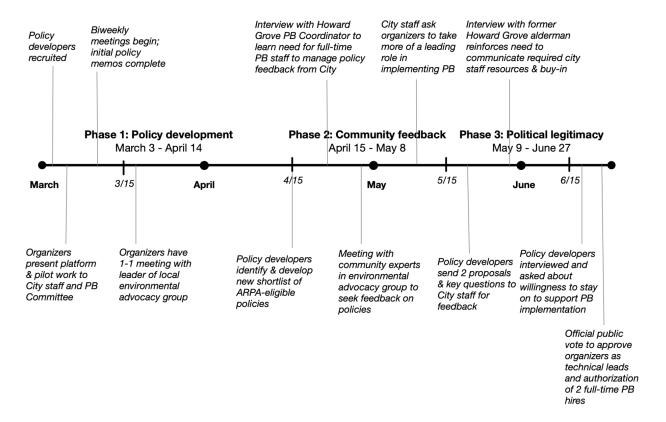


Fig. 3.3. Timeline of Grassroots Campaign. The grassroots campaign was divided into roughly three sequential phases, organized around critical events: a policy development phase, focused on the goal of completing 1-page policy memos; a community feedback phase, focused on seeking feedback from community members on developed policies; and a political legitimacy phase, during which organizers adjusted campaign activities upon being asked by the City to serve as technical assistant leads.

3.3.1 Phase 1: Set up & policy development (March 10 - April 14)

During Phase 1 of the campaign, we focused on setting up a grassroots organizational structure and technologies to build capacity for policy development. Organizers also presented their pilot work, initial learnings from their policy development organization, and online PB platform to PB Committee members and staff, explicitly communicating during this meeting their interest in serving on the Steering Committee. During this phase, one of the leaders of a local environmental advocacy group additionally reached out to and met with organizers and learned of the group's concerns and shared interest in PB as a means of funding their policy agenda. Phase 1 campaign goals were to recruit and train a group of policy developers to research and write one-page policy memos that community members and city staff can read and provide

feedback on, as well as to begin active communication with the City to make progress towards our campaign goal of serving on the PB Steering Committee. While not originally planned as a campaign outcome of this phase, organizers also began to make progress establishing relationships with community leaders, a sub-goal of Activity 2.

Organizers successfully recruited a group of 13 undergraduate and graduate students interested in policy writing to develop and edit policy memos.

A team of 14 policy developers began developing policies for implementation in mid-March, 2022, with 13 of them ultimately remaining committed to the project through the conclusion of the campaign (Phase 3, June 6). 10 of the 14 developers had already been actively participating in the grassroots campaign over the past 4 months, during which the group was focused on piloting an open democratic deliberative process for setting and ratifying a local policy agenda (see Chapter 2). Approximately half of the developers were recruited to join the campaign through a graduate-student organization focused on local science policy, the other a mixed undergraduate-graduate student organization campaigning to implement citizen-driven policies through participatory budgeting. Undergraduate students in the latter organization participated through the university's undergraduate certificate in civic engagement, which offered a yearlong experiential learning undergraduate course through which students could earn class credit while working on local civic organizing projects. This campaign was offered as one of four organizing projects undergraduate students could choose to participate in through the course. All graduate students in the campaign, a mix of Masters and PhD students, participated on a voluntary basis. All volunteer developers were expected to commit to developing at least one policy memo and meeting at least once a week with policy leads and organizers.

All but one of the initial 14 developers stayed active with the campaign through the end of the school year, each writing or co-writing at least one policy memo. According to Annie, the Policy Lead responsible for recruiting and tracking volunteers, the one graduate developer who

did not stay engaged with the campaign was specifically interested in policies in the medical and public health domains, a domain the campaign moved away from as developers focused on environment and sustainability policies aligned with the expertise of community experts.

Team members were organized and trained to take on three main tasks: Leading and coordinating (Policy Lead role), editing, and policy development. The majority of the group served as developers. Two PhD students served as "Policy Leads" and were responsible for coordinating across all policy developers and the organizing team (three members, paper authors). Policy Leads were also responsible for the bulk of providing feedback and editing support, though they also helped develop policies. Editors (mainly the two policy leads, with the help of another graduate developer and organizers throughout the campaign) were responsible for providing feedback on memos and were instructed by organizers of the goal to help policy writers identify two specific types of questions to ask others in the community: What question(s) and information do we want to ask for from City staff?

Developers met 1-2 times a week to receive updates and check in with Policy Leads and organizers but otherwise worked asynchronously to research and write policy memos.

Organizers and policy leads also provided updates via e-mail updates, which sometimes included recordings of portions of meetings for developers not able to make virtual meeting times, and through the collaboration software Slack.

Organizers effectively trained policy developers using a writing guide, template, and commenting features centralized on the *DeliberationWorks* platform.

Policy Leads introduced policy developers to *DeliberationWorks* tools like the Policy

Development Guide, which included guidance on how to write 250-500 word policy memos, as

well as a sentence-by-sentence policy writing template. The Policy Development Guide was

developed following consultation with the professor of a social policy course at the authors' university and included the four following primary components:

- Framing the problem (including impacted population, evidence that this population is affected by the problem);
- Proposing the solution and causal model (a policy solution specific enough to be fundable; estimated costs, the outcome; outcome measures, pros/cons on the policy idea from the community)
- Gathering data from other cities to provide evidence for the causal model (based on academic research and local journalism, references to local policies from other cities similar in size and demographics)
- Applying the model to Anderstown (local stakeholders, location, potential challenges for implementation, sources of previous funding, first steps to implementation, city departments responsible for implementation, use of local information sources such as 311)

Organizers also provided step-by-step instructions on how to navigate the *DeliberationWorks* platform.

Policy leads assigned each group of developers to 1-2 policy seed ideas to develop into a 250-500-word policy memo based on the DeliberationWorks policy template. Developers focused on prioritizing policies in the environmental policy area, as organizers already had immediate connections to community experts in this area from whom to seek feedback. The policy seed ideas were taken from the library of 72 policy seed ideas, ideas developers collected and wrote into 3-sentence summaries from a combination of residents' solicited policy ideas and other cities' existing proposals. These summaries were initially collected in a shared Google sheets document that all policy developers had access to. To centralize all policy seed ideas, developers were first asked to copy all ideas over to the *DeliberationWorks* platform

before beginning to develop the 3-sentence seed ideas into short policy memos using the template.

Within the first two weeks, 9 policy 1-page memos were developed and edited using DeliberationWorks templates and Google Sheets.

Within the first two weeks of the campaign, developers had developed 9 policy seed ideas into the 1-page policy memo template. These 9 policies were titled: Work with ride-sharing services; Free public transportation; Sustainable business practices; Prioritize and assist with tree planting; Invest in public green spaces; Fund rain garden installation for flood reduction; Reduce overnight energy use in commercial buildings; Outreach, Education, and Behavior Change about Climate Goals; and Community Gardening. Each of these policy memos was assigned to one of three editors (the two Policy Leads and one of the organizers) for an initial round of reading and feedback.

Editors used the policy template to guide their reading and feedback. Annie, one of the Policy Leads, used the policy template to create an "Editing Rubric," a shared Google sheet with each guiding question from the shared Policy Template as a new row in the spreadsheet. This shared document was used as a simple rubric to guide editors' identification of areas for improvement in the policy memos but was not shared with the policy developers. Many of the comments in the Rubric tracked editors' comprehension of what was written in the policy memo and to track their thought process on the feedback to share with developers. For example, all editors included comments about missing components of the policies they read, such as the lack of a clear proposed policy solution or lack of proposed measures for tracking policy outcomes. In many cases, editors would include comments about ways developers could build on existing information in their policies to improve specificity or quality of evidence. In evaluating the evidence for the causal impact of the intervention on the proposed policy outcome of a policy to reduce overnight energy use in commercial buildings, Willow wrote, "Points to a

program in France that instituted curfews and saw the outomces [sic] being promoted. I think there are cities in the US that are "dark sky friendly" that can be looked to as well." Other comments in the Rubric were direct summaries of information found in policy memos, such as Annie's comment that the proposed policy solution in P18, a policy to Provide Incentives for Residential Flood Reduction, was "Build 3-4 rain gardens in Anderstown." Information captured on the Editing Rubric provided editors a useful summary of their main questions and suggested edits on policy memo first drafts.

Challenge: Policy developers' confidence affected by lack of clarity around eligibility criteria and prioritization of policies.

Given the unfamiliarity of ARPA as a funding source and the early stage of the City's planning process for PB, the biggest challenge for policy development surfaced during this phase was uncertainty regarding eligibility criteria for fundable PB proposals. Policy developers and organizers did their best during this early period to seek publicly available information about eligibility criteria for ARPA as well as for PB. For example, in early March, Annie, one of the Policy Leads, shared information, recordings, slides, and resources from a public virtual event shared with her by a local environmental group. This event was hosted by municipal officials, nonprofit leaders and researchers in another state and focused on breaking down ways to leverage ARPA funds for climate resilience efforts. Annie informed organizers about a US Treasury Department document shared during this event that specifically outlined eligibility rules for ARPA spending for state and local governments. Based on developers' best understanding of this resource, Policy Leads and organizers updated the DeliberationWorks Policy Writing Guide to include information from the document on eligible funding categories, including replacing lost public sector revenue, responding to public health and economic impacts of COVID-19, premium pay to eligible workers, and water and sewer infrastructure.

Of course, as a public federal document, this resource provided useful guidance to policy developers but was not nuanced enough to always provide a black-and-white evaluation of which policy proposals would be eligible within stated categories. Even city staff members expressed uncertainty about interpreting eligibility criteria during public meetings and to community group leaders; given the uniqueness of ARPA funds, city staff had expressed that they could do their best due diligence to ensure funded projects aligned with the guidelines but ultimately there could always be a chance that a proposal does not meet the eligibility criteria but administrators would not be informed of this until after the funds for the project are spent, at which point the city could be fined. Nevertheless, we could have gained higher confidence by checking our understanding of eligibility criteria with government officials like the city budgeting manager, who ultimately would be responsible for distributing the \$3 million ARPA funds.

Campaign organizers effectively identified and established connections with community groups that have shared interests and began educating community leaders about PB process and outcomes through 1-1 meetings.

During this phase, campaign organizers also learned about key needs and policy interests of community groups and taught them about the goals, constraints, and potential avenues of advancing their policy interests through PB. In the middle of March, campaign organizers and policy leads met with Leslie, one of the leaders of a local environmental community group. Organizers and policy leads had met with Leslie several times in 2021 to establish a shared interest in local environmental priorities, including the City's ambitious climate initiatives to achieve carbon neutrality by 2035. In these previous meetings, campaign organizers had discussed their interest in campaigning to build capacity to start PB in their city.

Upon learning during a City Council meeting that the Council had decided to fold environmental justice initiatives under an increased budget for participatory budgeting, Leslie contacted campaign organizers. She communicated her group's interest in an environmental

justice initiative, for which she was seeking the City's support to implement. With the news that the City planned to increase the PB budget and fold environmental justice initiatives under that funding, Leslie expressed her concern that some of the proposals the environmental community group wants to push forward may not compete well. Leslie said that her group had already forwarded a number of proposals to city staff, who had expressed concerns about the eligibility of these proposals under ARPA funding guidelines. Consequently, Leslie contacted campaign organizers to ask questions about the PB process and organizers' role, including whether organizers knew the timeframe for launching PB, whether the City had established a formal relationship with campaign organizers, and whether there would be opportunities to strengthen their group's proposals to align with ARPA criteria. Campaign organizers and Leslie met to discuss these questions, for most of which campaign organizers did not have definite answers at the time, and ended the meeting with plans to continue the conversation as the campaign moved forward.

Leslie's interest in the PB process, heightened by her awareness that the City Council had decided to fold her group's environmental justice priorities under the umbrella of PB funding, suggests that a promising strategy for building capacity for PB among community groups is by increasing their knowledge about how their involvement in the PB process can crucially advance their policy priorities. This is particularly the case when city authorities explicitly announce or communicate with groups that their priorities would fall under the purview of PB.

This suggests that 1-1 conversations with community group leaders, in which organizers educate community leaders about the goals and mechanisms of PB and discuss the potential to advance their groups' policy priorities, can be a relational organizing technique for building capacity towards achieving a broad base of community supporters. This finding confirms the efficacy of 1-1s in relational organizing (e.g., McKenna & Han, 2014; Resistance School) and illustrates how educating community leaders about a new participatory democratic process in

the context of their issue priorities can be an effective way to approach the 1-1 conversation.

Leaders of community groups can in turn be encouraged to ask their members to support PB as well.

Challenge: Organizers were unsure what to ask community leaders to do, which limited their ability to ask for further PB-related commitments.

Since the participatory budgeting process at the time of organizers' meeting with Leslie was still not officially underway, a challenge for building capacity among community groups at this early "startup" phase is determining engagement opportunities that keep them interested in learning more and promoting PB. The Policy Development pilot campaign offered potential opportunities for doing so, yet we found that a challenge remains in identifying an appropriate ask for community groups to provide in supporting the policy development campaign. While effective in establishing a shared interest in implementing PB, it is unclear whether campaign organizers' conversation with Leslie concluded with a clear ask for her or her group to further their tangible support of PB. The conversation concluded with a shared interest in continuing the conversation, but no clearly scoped ask. This increases the chance of waning interest and no clear demonstration of capacity building for PB.

Given the campaign's strategy of developing feasible policies as a means to build capacity for PB implementation, a potentially effectively scoped ask would have been to seek support from community group members to provide feedback on developed policies. Building capacity to support these feedback loops would also require community leaders to recruit their members to provide this feedback and offer additional ideas for policy development. This step indicates that an appropriate scoped ask following an initial conversation with a community group leader would be asking them to share information about PB with their members and recruit interested individuals to provide this feedback.

Challenge: Community groups have specific issues and policy priorities that may be higher priority to them than supporting the broader democratic aims of the PB process.

Another potential challenge in building support with community groups, particularly with the goal of asking for their help in providing feedback in policy development, is in acknowledging that community groups have specific issues and policy priorities. As a participatory democratic practice, PB theoretically corrects for this challenge by ensuring that only policies highly supported by a large percentage of city residents are funded. However, to mitigate the chance that policies advanced for voting are misrepresentative of a community's views, this challenge calls for organizers to be intentional in reaching out to as many community groups as possible, at least to increase the chances that members of those community groups would be motivated to participate in the PB process and vote on final proposals.

This challenge brings up a more pressing challenge towards grassroots capacity building, because it suggests community groups may not be interested in committing their members' volunteer time towards supporting PB. It is not clear that their interest in supporting specific issues and policy priorities *through* PB translates to interest in volunteering their time, skills, and efforts towards running PB events, doing outreach, or helping develop policy proposals. This suggests a further challenge in that other community groups may only play a supporting role in building grassroots capacity for PB, rather than serving to support the main tasks involved in running PB.

Challenge: Community groups have specific issues and policy priorities that may be higher priority to them than supporting the broader democratic aims of the PB process.

Another potential challenge in building support with community groups, particularly with the goal of asking for their help in providing feedback in policy development, is in acknowledging that community groups have specific issues and policy priorities. As a participatory democratic practice, PB theoretically corrects for this challenge by ensuring that only policies highly

supported by a large percentage of city residents are funded. However, to mitigate the chance that policies advanced for voting are misrepresentative of a community's views, this challenge calls for organizers to be intentional in reaching out to as many community groups as possible.

Organizers are successfully recognized for expertise in PB Committee Meeting when sharing their learnings from pilot work and the *DeliberationWorks* platform.

While campaign organizers had previously communicated their interest and expertise in designing deliberative processes to support the PB process with city staff and council members several times, organizers' role in the PB process remained unclear at the start of the campaign's policy development work in March. Moreover, while the City had formally announced the formation of a PB Committee comprising the mayor, three council members, and city staff members from the City Manager's Office, it remained unclear what role interested residents like campaign organizers could play in taking leadership in the PB process, or what routes they could pursue to develop policies for PB.

Given uncertainty about how organizers could formally support PB playbook development, we e-mailed Phillip, a graduate fellow in the city manager's office supporting the PB effort with whom we had previously been introduced as a key staff member responsible for implementing PB, in the middle of February, before the start of policy development work. In this e-mail, organizers communicated learnings from our pilot work holding deliberation events for members of the university community to decide which ARPA policy proposals to move forward (see Chapter 1) and asked for updates regarding how to move forward in supporting playbook development. While organizers did not hear back in response to this message, two days later, one of the policy development team's undergraduate members learned that the PB Committee had met the next day and heard from an expert from another local nonprofit known for implementing PB in the next city over. During this meeting, the committee expressed interest in moving forward to formally hire an external consultant to take the lead on managing the PB

process, in particular moving forward with this nonprofit to serve this role. Upon reviewing the publicly available video recording of this meeting, organizers learned of the committee's interest in adopting a technology platform to support the PB process. With this in mind, organizers produced a 1-page summary of key features in their *DeliberationWorks* platform and shared this summary with council members on the PB Committee, expressing that organizers "would like to help build community capacity for PB by making our DeliberationWorks platform and volunteer training available to the city." Phillip responded the next day and invited organizers to present their work to the PB Committee at the next committee meeting on the following day (March 3).

On March 3, organizers presented a brief summary of the *DeliberationWorks* platform, their pilot work designing deliberative policy discussions, and the ongoing policy development work to develop proposals for PB. Following their brief presentation, council members asked questions about staff capacity to review policy proposals and funding parameters for submitted proposals, and clarified that these would be questions upon which the consultant would provide guidance. The committee chair clarified that organizers were offering their support and technological platform to the individuals who would ultimately be serving in the consultant role, rather than submitting an application to lead the overall process.

While no immediate decisions were made or information shared to help organizers determine next steps for either connecting with staff members to provide policy feedback nor applying to support playbook development, the presentation did allow organizers to introduce their work and expertise with councilmembers on the PB Committee, a crucial first step towards establishing political legitimacy. Moreover, one of the council members expressed particular concern about city staff capacity to vet a large number of proposals submitted by the public, confirming organizers' hypothesis that staff resource constraints for developing proposals was of particular concern to address in the design of the PB process.

Challenge: Design of processes for policy development not explicitly recognized as a major concern for council members, prompting potential need for shift in campaign strategy.

Less clear was whether organizers' strategy for gaining political legitimacy by improving designed processes for policy development would be effective. While one of the Committee's council members did express major concerns about staff capacity for vetting proposals and campaign organizers presented the policy development work and offered to help with providing training and volunteer time, there was no explicit evidence from this initial meeting that committee members were concerned about or interested in building community capacity for the work of policy development. Instead, conversation around policy development centered around council members' uncertainty around eligibility criteria, as well as around limiting staffing resources dedicated to this work.

Evidence from this early committee meeting indicated that Committee members intended to largely leave design decisions to the leadership of the hired consultant. As one Council members on the committee stated, "I just want to be clear here that all those are good questions, you have many good questions [but] again, I think we're going to lock down an organization that's going to do a lot of that heavy lifting thinking for us[.] I think we're still at an earlier stage than where you might be at this point."

It thus remained unclear at this point whether organizers' hypothesis to design a campaign around developing a policy development process would help us gain traction towards political legitimacy, by helping with playbook development or otherwise. Moreover, as the Committee was still focused on finding and setting up the administrative infrastructure to hire an external consultant to lead the design of components like Playbook development, it remained unclear to organizers what their appropriate next steps would be to serve a more formal role in the process.

3.3.2 Phase 2: Supporting community feedback loops & interviewing PB practitioners (April 15 - May 8)

In Phase 2, the campaign focused on testing our hypothesis for building capacity for PB by facilitating community feedback loops: getting feedback from community experts on policies, incorporating their feedback, and using this information to choose which policies to send to city staff for additional feedback. We aimed to test whether community members with expertise in specific policy areas could help policy developers prioritize policies to develop by helping the team assess which policies might be popular or well received. Additionally, we aimed to excite leaders of community groups to actively participate in the PB process once officially underway, through advancing policy ideas or through voting. We aimed to do so by presenting community leaders with concrete policies aligned with their goals that could be implemented through the PB process.

During this phase, organizers also interviewed a PB staff member from Howard Grove, a neighboring ward to a large city bordering Anderstown renowned for running the first, and also the longest, PB process in the United States, to learn about their experience building capacity for PB as a government official.

Goals of Phase 2 similarly aligned largely with those of Activity 2: To get feedback from community members on policy proposals and begin to prioritize policies for implementation based on this feedback.

Policy leads and organizers effectively identified and recruited experts from water and environmental group community groups through personal connections and specific asks to provide feedback on a subset of policies under development.

To recruit community experts to provide feedback before sending policies to city staff, organizers and policy leads drew on their personal relationships with local environmental advocacy groups

as an initial set of experts with which to test policies. In their previous experience in local climate policy, organizers and policy leads had developed relationships with experts in local environmental advocacy groups, as demonstrated by organizers' conversation with Leslie of the Anderstown Climate Action Committee during Phase 1. Policy Lead Annie was herself a regular attendee of Watershed Directive, the water subcommittee of the Climate Action Committee.

During a meeting with organizers for reviewing ARPA eligibility criteria, Annie mentioned that the Watershed Directive had their regular meeting at the end of the month. Organizers and policy leads recognized this to be a good opportunity to recruit community experts to build capacity for providing policy feedback on a subset of their developed policies. In early April, Annie proposed the project and requested help from John, the leader of the Watershed Directive, and secured time for the policy development team to present at the Directive's end-of-month meeting.

As soon as the meeting was confirmed, Annie, her co-Policy Lead Willow, and organizers worked to scope specific feedback asks for community experts, to develop a process for managing the feedback, and to preempt any potential barriers community members may have to completing the ask. Organizers determined that the goals of this meeting were to: (a) get the Watershed Directive's policy priorities, (b) show the group our policies and get them to prioritize them for development, (c) ask them to help us improve policies, and (d) get ideas on next steps for political implementation (i.e., other groups or individuals to reach out to develop popular support for policies).

The successful recruitment of water and environmental experts to provide community feedback on policies in development demonstrates that the work of building capacity with community members relies heavily on relational organizing built on existing connections and pre-existing social capital. Organizers had informally been in conversations with the Climate Action Committee for over a year, including PB-specific conversations with Leslie, a leader of the group, just a couple months before (See Phase 1). These conversations had not yet established a concrete method, or specific asks, for testing our design hypothesis—that is, up to

this point, we had not yet formally recruited community experts to provide feedback on policies, particularly as the team was focused in Phase 1 on the development of the policies themselves. Annie separately secured our formal request for community expert feedback based on her own personal involvement in the Watershed Directive. This provided the team with a more direct and possibly lower stakes opportunity to begin building community capacity to support policy feedback. Annie could leverage her membership in the Directive and the social bonds already established with this community group to seek formative, hopefully less inhibited feedback on her fellow Directive members' gut reactions to policies, whether reactions to the policies themselves or reactions to the likelihood of a particular policy idea to be popularly supported by the community once the PB process is officially underway. Community groups provide a vital litmus test for information especially about the latter, as these groups have coalitions of supporters they represent who are knowledgeable about and invested in particular policy areas. Therefore, community groups often have intimate understanding of what policy ideas would likely gain traction—or alternatively attract ire—months before the official process begins. This early information could both help policy developers improve their research and writing on policy areas with which they are unfamiliar, and help them gain critical political information about the local context in which they are working, to further help them prioritize development resources on the most promising policy ideas.

Starting with community groups with whom organizers have most familiarity and established connection does introduce the potential limitation of not necessarily starting with groups that are directly serving the most marginalized populations within a community, but we argue that this does not represent a fundamental limitation of the design approach for capacity building. Ultimately, to effectively implement this approach, particularly during the formal PB process, organizers should do this work with multiple community groups, hopefully prioritizing identifying leaders and groups working with marginalized populations for equity outcomes.

Given the early stage of testing this design hypothesis and organizers' lack of political legitimacy

to carry forward PB work, we balanced this trade-off by working first with a community group with whom the group already had established connections and could provide formative feedback on our early designs.

Meeting with community group experts provided policy developers with new information about policies to prioritize and new policies to add.

Organizers and policy leads met with members of the Watershed Directive at the end of April. During this meeting and in their responses to asks on e-mail and DeliberationWorks following the meeting, members of the Watershed Directive provided policy developers with their feedback about the policies with which they were presented. This feedback helped policy developers prioritize policies to move forward for city staff feedback.

During the meeting, the team presented the 6 community experts with high-level summaries of five policies (invest in Green Spaces, fund rain garden installation for flood reduction, provide Incentives for Residential Flood Reduction, provide Free Lead Testing, and provide Free Lead Filters to Low-Income Residents) and specific questions policy developers had for experts about each one. Policy developers primarily had specific questions for experts about the state of the local problem their policy solutions were aiming to address. For example, of the "Fund rain garden installation for flood reduction" policy, policy developers asked community experts: "What areas most frequently experience flooding and would be most in need of rain gardens (Wards 2, 5 and 9)? Can public funding go towards rain gardens on private land? Is there public support for this idea?"

Following organizers' half-hour presentation, the community experts provided their initial reactions to the presented policies. Each community expert had their own sub-area of expertise within the Water policy area and brought this perspective to their responses. In several cases, they shared knowledge about other similar policies from members of their group. For example, Winona, a member of the Climate Action board and volunteer steward at the arboretum, offered

insight about the green spaces policy, commenting that their Climate Action Group had previously proffered ARPA proposals related to trees but these had not gone anywhere. Similarly, Cindy, a water expert on the board working to design curriculum for schools, offered that there were additional water reduction memos that other group members had been working on.

Several community experts expressed skepticism about the lead policies presented during the meeting, arguing that the proposed policy solutions would not address the deeper root causes of lead in the city's drinking water system: the remaining presence of lead service lines. During the discussion, John expressed that addressing the lead issue would help restore trust in the city government and other authorities, but he and others did not think doing so would address the issue of individuals suffering from lead in their drinking water. Leslie also shared local news coverage of a new state law requiring that all lead service lines be replaced by 2060 and changes the city would soon have to make in order to comply with the state mandate. The article notably concludes with a discussion on water filters, stating that while such steps decrease the amount of lead that ends up in drinking water, the only long-term solution is to replace all lead service lines and plumbing. The community experts then discussed the additional costs that homeowners had to pay for replacing lead service pipes on their private properties, which would not be covered by the city's service line replacement project. Following this meeting and new information from community experts, organizers determined that the best next steps would be to drop the lead policies and to work with the Watershed Directive to develop policies they already have and add them to the policy library. These next steps indicate that community experts' insight had two important capacity-building outcomes: (a) helping policy developers prioritize promising policies to move forward (i.e., dropping the lead policies), and (b) supplementing the policy library with additional policy ideas on which their experts had already expended the resources to research and develop.

This evidence confirms a key element of our design argument: that the mechanism of getting community expert feedback helped the campaign move forward promising policies on which to seek city feedback. Specifically, with the support of community members interested in and supportive of implementing community-driven policies through PB, targeted help requests for these experts, and following up with them to get additional policies and feedback, the policy development team could move forward focusing resources on policies they felt confident would be ARPA-eligible *and* would likely be popularly supported by community members.

Challenge: Community experts did provide public feedback, but getting community expert feedback centralized on *DeliberationWorks* required policy developers to do additional work managing feedback assignments, soliciting feedback, and transferring information from e-mails to the public platform.

Our initial campaign strategy involved transparently centralizing community experts' feedback as comments on policies on the *DeliberationWorks* online platform, with the aim that doing so would provide transparency into our prioritization and development process and build capacity among community members to publicly offer feedback in shaping policies. While experts readily offered their insight and feedback, we found that centralizing this feedback on the *DeliberationWorks* platform was ultimately more of a challenge than we anticipated. Ultimately, centralizing community experts' feedback on *DeliberationWorks* required policy leads to do additional work coordinating feedback assignments with community experts, following up with them multiple times to solicit their feedback, and transferring their comments from e-mail threads to the public platform.

All community experts in the group did provide their comments on their assigned policies, but some took longer than others to do so. A few days after the meeting with the Watershed Directive, Annie e-mailed the group to solicit feedback on specific policies from specific community experts, specifically asking them to click on a link that would direct them to a

Featured section of the platform with the five policies to which they were assigned. Within a few hours, Ron, a stormwater and groundwater expert on the committee, had e-mailed his comments on his assigned policies, as well as ones he had not been individually assigned, back to Annie. The other experts responded to her e-mail thread with feedback on their assigned policies after Annie sent them a follow-up message a few days later reminding them of the request.

Only one of the experts posted their feedback directly onto the platform as comments. For all other experts, Annie e-mailed to make sure they were comfortable with her copying over their comments from their e-mail thread to the public platform, explaining again the campaign's reasoning for doing this to increase transparency into the policy development process.

While ultimately, policy developers were able to get the crucial feedback from community experts, these unexpected challenges with getting feedback centralized on the platform suggest complicating factors regarding the use of technology in helping community members build capacity in supporting policy feedback loops. First, this challenge operationally requires policy leads to expend additional effort in managing and transferring feedback from other sources. Second, this evidence indicates that a challenge faced by platforms for supporting transparency into the PB process, specifically in soliciting and centralizing feedback to inform policy development, is community members' comfort and willingness to use novel technologies. Prior to the Watershed Directive meeting, Annie had warned organizers that some of the community experts may not feel comfortable navigating the platform, which had led organizers to try to limit and be highly specific with expert asks, as well as to develop a Featured section of the platform to centralize all policies seeking feedback (See 2a.ii). Despite these adjustments and ready features in the platform for facilitating online discussion (i.e., commenting features, reply features, 'like' features common to other social media platforms), community experts still primarily responded to Annie's e-mail to provide their feedback, rather than posting comments on their own.

This evidence challenges the design argument for building community capacity through the platform because not having community experts take ownership over their comments directly on the platform decreases transparency into (and potentially legitimacy of) authorship of feedback, and decreases the likelihood that the platform can support an online community and crowdsourced feedback. Prior literature supports the many benefits of having an online community improving policies through crowdsourced, deliberative feedback (e.g., Kriplean, 2012; Does & Bos, 2021; Aitamurto & Saldivar, 2014; others). Without a better understanding of what barriers discouraged the community experts from inputting their feedback directly on *DeliberationWorks*, we have little insight into what redesigned features might address challenges, how to motivate participation of community experts, or what design adjustments might foster additional online deliberation among a broader sample of community members on policies beyond one-time assigned, requested feedback from specific community experts.

Unplanned campaign activity: Organizers interviewed individuals with pre-existing expertise running PB processes to gain understanding of political support and infrastructure needed.

In mid-April, organizers had a follow-up conversation with Jorge, the PB Coordinator for Howard Grove, the nearest ward of the neighboring city and the longest running PB process in the country. This conversation built on a previous informal informational interview we conducted with Jorge prior to the start of the campaign, during which we gained broad, initial technical knowledge about the PB process. The initial goal of this second conversation was to understand how Howard Grove, with their distinction of having the longest running PB process in the country, worked with volunteers and city staff to develop implementable PB proposals. While our initial goal was to gain additional information about Howard Grove's design of development and feedback processes to achieve the goal of quickly developing implementable policy proposals, the conversation ultimately helped organizers discover a wealth of new information about other

resources and relationships that need to be in place for the policy development process to run effectively. Jorge's interview was particularly important in helping us understand components of government capacity that needed to built to support the other parts of the process, but did not help us gain a detailed or close enough understanding of other aspects of running the process, such as the specific feedback processes to support in open-ended policy development, to immediately apply to capacity building activities.

New capacity building variables identified in government resources needed to build capacity among city and department staff to provide feedback on policies and keep them involved throughout the process.

Jorge confirmed the importance of having departmental staff provide information and feedback throughout the development process, particularly on eligibility, implementability, and potential risks of funding projects. In Howard Grove's process, Jorge was at the center of finding information and managing communication between city staff and the volunteer committees developing project proposals. As he explained, Jorge and occasionally Howard Grove's Chief of Staff and Director of Constituent Services were responsible for collecting relevant information and sharing this with volunteers. He emphasized that information about which proposal ideas should be pursued and which might not be feasible or should be saved for other sources of funding was especially important feedback these individuals provided to volunteers. He also added that the Director of Constituent Services was responsible for keeping track of menu funds from the city and monitoring implementation of the projects.

During the policy development process, staff members from relevant departments across the city (beyond the ward of Howard Grove) would also be involved, as well as staff members across different levels of the city. According to Jorge, this allowed the Howard Grove PB organizers to ensure all appropriate stakeholders were bought into projects and helped identify potential risks as volunteers moved ideas forward. For example, Jorge explained that for a park

project, they involved the City's Director of Budgeting, "If we have a project in a park, we check in with that park supervisor, you know, to make sure that they're on board as well. So we try to tackle each level of department that we have to deal with, instead of just dealing with [staff at the city level.] We try to check in along the way with everyone who should be involved."

While many stakeholders provided expert information to support the volunteers' development process, Jorge remained the primary communicator between volunteers and staff, and was also the individual most closely involved in providing feedback. His position was relatively new, however; Jorge had only been in the position for a few months. Jorge mentioned that in the previous cycle, Howard Grove's Director of Constituent Services was the PB Coordinator, and in previous years, volunteers likely had more direct communication with ward staff and city administrators. As his position is formally attached to supporting the PB process (as he explains, approximately 50% of his position is dedicated to PB) while others in the ward and departmental staff are not, it is unlikely that volunteers would have gotten close or frequent feedback on their proposals in development prior to the establishment of Jorge's position.

Jorge's reiteration of our design hypothesis that seeking feedback from departmental staff and city administrators was crucial for policy development confirmed the core assumption on which our hypotheses were based—that of seeking feedback from city staff to develop feasible policies. However, his descriptions of how many city and ward staff across multiple levels and departments, were involved in providing expertise and information, as well as the newness of his payrolled position heavily dedicated to supporting PB, did complicate our understanding of the government infrastructure needed to build capacity for implementing PB.

Confirmation of campaign's hypothesized Activity 3 goal: Feedback from city and ward staff is crucial for prioritizing policies for development and communication of rationale for decisions of policies to move forward.

Feedback from city departments and administrators was crucial for helping Jorge and volunteers prioritize policies for development, and to help volunteers develop feasible policies. Jorge explained, "We were involved in looking through the proposals and helping them identify which ones are feasible and which ones weren't. But then also, you know, based on the feedback that we got from departments, kind of like pivoting and being like, hey, like this idea, might be difficult to develop in the certain timeframe that we have." As Jorge's explanation makes clear, it was often in the process of seeking feedback on ideas from city and ward staff that critical information could be surfaced that impacts what projects would be considered more or less feasible or promising for implementation. For example, Jorge stressed the importance of knowing about technical information like timeframe or other non-PB sources of funding—information that only members of city staff, and sometimes only very specific individuals within the city staff, would have knowledge of.

Jorge's explanations about the role of feedback from city staff in helping volunteers prioritize policies for moving forward confirms our expected mechanism of prioritizing policies for implementation through involvement of city staff in the development process. Implementability based on expert knowledge only available to city staff members who would be responsible for implementing the project is the ultimate criteria for whether or not a project is feasible. The outsized impact of this involvement on which policies are selected to move forward and which require "pivoting" suggests the importance of involving these experts' feedback on projects early in the development process. This raises a few design implications: First, the importance of the a coordinator role like Jorge's in ensuring city staff feedback is surfaced and communicated at the most appropriate moments in the development process, and second, the need for city staff to be involved in a sustainable way that would not require time commitments beyond their existing capacities.

New government resources needed: Funding for at least one PB coordinator is important for establishing connections with and getting feedback from departmental staff in the policy development process.

Jorge's explanation of his role during our interview suggested that a critical change to our design argument was needed to build the political capacity for implementing community-driven policies: his role of PB Coordinator is one that new communities almost certainly need for the city to build the necessary administrative infrastructure to help volunteers develop implementable policies.

Evidence from his responses suggested that developing implementable community-driven policies almost certainly required the City to hire a coordinator like Jorge for managing the feedback process. Jorge's responses indicated that he was responsible for the majority of the close feedback to volunteers, for reaching out to others on city and ward staff, for gathering and synthesizing the appropriate information, for following up with stakeholders, and any other number of coordination and management tasks that are crucial for policies to be chosen and developed that could genuinely be implementable. For example, Jorge described his role coordinating among many stakeholders across the ward and city, and the expert knowledge about timing important for managing this coordination effectively: "For example, we [were] working with the park district for an idea. And then they had a group of consultants, but we also had to, like check in with. So it was, it was going into an idea and not knowing who exactly we were going to talk to, but then being open to interacting with anyone who should be attached to the process. And then somehow trying to mix that all together and make it understandable for the volunteers and volunteers who were involved along the way as well. So yeah, there's many layers to it, which will make it difficult. So then that's also like, where the timing is impeccable." The identification and coordination described by Jorge here among stakeholders as diverse as city departmental staff to ward-specific staff and non-governmental entities like consultants requires both expert knowledge about the appropriate individuals to ask

for feedback from as well as the time and resources to coordinate information sharing across these stakeholders and the volunteers. This expertise and required time and resources would likely take much longer without a dedicated, payrolled individual responsible for managing the process.

Moreover, Jorge's explanation of the process by which he coordinated with city and ward staff also indicated that political legitimacy, such as in the form of a payrolled staff employee introduced to them by existing higher-level staff, was an important factor to consider in successfully obtaining feedback from busy city staff. Jorge explained that starting out in the position this year, ward staff like Howard Grove's Director of Constituent Services "were checking in along the way, and [...] getting me connected to people, and making sure that, you know, things are being communicated." Having someone on the staff like Jorge who is both dedicated to interfacing with volunteers but also as a staff member can easily be connected to other staff members provides the coordinator the legitimacy and support to get the information and responses they need in order to effectively support the feedback cycle.

In confirming the role and need of city staff feedback, Jorge also complicated our design hypothesis by suggesting that his role was a key missing link for building the administrative infrastructure to support the city feedback needed for policy development. To be clear, Jorge did explain that his role was a new one started only this year in Howard Grove, meaning that previous years' volunteers interfaced more closely with elected officials and the ward staff directly. However, this also meant that elected officials and ward staff would have had to expend the additional time and resources beyond their official duties to do the complex and diverse coordination tasks Jorge was now responsible for—a pain that Anderstown officials had already expressed wanting to mitigate in setting up their PB process, given the overburdened state of the city's current city staff. Jorge explained that this year, with the establishment of a dedicated PB Coordinator, other city staff "weren't as involved, they were more involved near the end, with like, rounding up the proposals that were going to be submitted, with our Chief of Staff, like I

said, she wasn't like, they weren't too hands on." Such evidence indicates that creating a dedicated role on the staff for this position would limit the amount of staff time needed to provide the information and feedback needed to volunteers during policy development.

Discovery of government infrastructure challenges: Staffing turnover, communication between departments, and additional implementation challenges

Jorge additionally surfaced a number of challenges to confront in building capacity for city staff to provide feedback on policies in development: staffing turnover, slow or infrequent communication between departments, and challenges that arise during the implementation phase. First, in trying to get feedback on projects from departmental staff, Jorge mentioned the challenge of city departments experiencing staffing changes and turnover delaying their ability to provide information. Communication delays in waiting to hear back from departments or other stakeholders was another challenge Jorge mentioned. Challenges regarding the feasibility of a project to be implemented even after it was voted in by community members, as additional risks may sometimes only be discovered upon attempting to implement a proposal.

Many of these challenges are ones that simply should be accounted for as necessary risks to PB, as they are also common risks in implementation processes beyond PB. They are nonetheless challenges to be aware of and account for in the design of processes for supporting the political capacity needed for PB—for example, by being conscientious for coordinators to send follow-ups to communications, or sharing consistent communications with members of the public about implementation status of projects even after the end of a PB cycle.

Challenges in supporting volunteer policy developers and communicating with the public.

With regards to supporting the development of feasible policies, Jorge mentioned that having enough detail on proposals such that staff could evaluate the feasibility of implementing the

proposed project was a challenge, as was volunteer turnover. "One of the challenges we had was that people stopped coming to the meetings [...] due to many different reasons," Jorge explained of the latter. "So then some ideas were not developed, because some people weren't there. So that's one of the points that we were stressing in conversation, like, if people really want to stick with an idea, it'd be great to stick around throughout the process, and to see what can be developed."

Finally, another challenge Jorge confronted was misconceptions from the community about the rules for policy implementation. "I believe there was a misunderstanding," he said, "that people would just submit ideas and they would get done. But we have to, you know, check in with the departments and see what can be done and, and identify who we have to talk to. So then that can really complicate things sometimes. And that was something that I had to learn, you know, very head on having those conversations." As expressed here by Jorge, a major challenge around this misconception is having conversations with community members about the realities of the policy implementation process, misconceptions that may be particularly acute in a process like PB because community members are directly involved in monitoring implementation of proposals they developed. This challenge is one that Jorge repeatedly mentions and one that especially comes up in usage of the PB platform.

Using an online PB platform involves staffing resource trade-offs and considerations about accessibility issues.

While Howard Grove used an online platform developed by an external consultant during their latest PB process, Jorge explained that staffing trade-offs, such as the resources required to monitor and communicate with community members on the platform, prompted organizers to reconsider usage of an online platform in future cycles. Jorge stated that their PB process did not heavily involve the platform; they instead targeted staff resources towards finding information and giving feedback to volunteers during policy development. Given how difficult it

was for volunteers to develop new proposals, the policy development process without the platform was already resource-intensive enough. Moreover, Jorge mentioned that when ideas were submitted through the platform, they were often too vague or not applicable. This suggests that the platform was not highly beneficial for the purposes of choosing and developing feasible and promising proposals, perhaps due to the complex and resource-heavy nature of policy development work. These tradeoffs were enough that they prompted Howard Grove to reconsider whether or not to keep using the platform: "We're having discussions in general through the city about, you know, if we should keep the platform or not. It is a great level of transparency, yeah. But it does require staffing time and familiarity with the volunteers."

Moreover, the use of technology in the PB process also brings up issues of accessibility for a community population that may not all be digitally literate. Jorge mentioned that this issue came up with regards to the challenge of communicating updates about the PB process. "That was some feedback we got, if [we] could send out more updates more occasionally [when there is] news, since a lot of our work was done through email with the volunteers. But when it came to having community meetings and sharing our presentations, it was mostly through newsletters, and also social media [like] Facebook," Jorge said. "But so that's, you know, part of a bigger conversation of how we keep people engaged with our office. Some people have said the newsletter is very useful, but not enough [...] for some people who may not be tech friendly, or, you know, comfortable with using a computer and such. So I think for the next cycle, we're trying to see how we can make it more accessible."

Here, Jorge reiterates the challenge of updating community members about the PB process and Howard Grove's use of technology towards this aim. His assessment of the feedback their office received about community members who may not be as comfortable using digital technology suggests that digital accessibility issues exacerbate the challenge already faced by their office in finding easy and efficient ways of communicating information to community members. Additionally, Jorge expressed the challenge of communicating information

more broadly to members of the public and media for doing so, as "a lot of our work was done through email with the volunteers." As we similarly found with community experts' preference for e-mail rather than *DeliberationWorks* to communicate policy feedback, the transparency of information about in-progress policies remains a challenge even with technological options. Having available technology, even technology developed specifically to lower barriers to use and access for community members who are not heavy users of technology, does not guarantee that community members will want to use the technology.

Ultimately, Jorge expressed that while there were information organization and consolidation benefits to using the platform, lack of staffing resources for managing the platform did mean these benefits were minimal compared to other engagement efforts: "The one good thing that we really liked was that you could export a lot of the material and make it accessible for the volunteers, since before, you know, we had to do a lot of transferring from paper to a document to then printout or send out. So that was [nice] from the organizing side. And then for those users who would check the website here in there, they could see their ideas on there. Just that not a lot of updates were given throughout the process. From our end, yeah. And so a lot of the communication came when we started having meetings with the community. And that's where a lot of questions started getting asked. You know, and so we relied mostly on email, to send out information and things like that. But yeah, like I said, We're still discussing like the how that how useful the platform could be for future cycles." Jorge's assessment here suggests that the platform as an engagement tool was only useful in supplementing existing in-person engagement activities like community meetings. He explains that the community meetings generated many questions from the community, which then necessitated the use of technology for communicating updates. However, when it came to preferred technology for doing so, e-mail and traditional mass communication formats like newsletters took precedence over use of the platform.

These tradeoffs are extremely important for future PB organizers to consider, particularly the tradeoffs between staffing resources required and use of the platform in comparison to other existing digital and non-digital engagement methods. Ultimately, the challenges of limited staffing resources and unfamiliarity with usage of digital platforms for all community members—perhaps especially those from marginalized communities whom organizers are often targeting PB outreach—suggest that the benefits of using a digital platform for the PB process may not outweigh the infrastructure costs. From a standpoint of building the political capacity and administrative infrastructure to support a community-driven policy implementation process through PB, Jorge's assessments of Howard Grove's PB platform experience suggests that transparency and engagement outcomes for the community cannot be divorced from the operational costs for city staff and administrators.

3.3.3 Phase 3: Gaining political legitimacy and shift in campaign focus (May9 - June 27)

Phase 3 was marked by a single significant and unexpected shift in campaign outcomes: Rather than asking us to serve only on the Steering Committee, the City asked campaign organizers to serve as technical assistant leads for the entire PB process. Upon receiving this information, organizers shifted away from the policy development pilot work of the initial campaign and instead focused on a new campaign goal: Understanding the capacity that needed to be built for the Anderstown community to start implementing the full PB process, and how to build and sustain that capacity. In other words, the goal and focus for Phase 3 was towards leveraging the capacity built over the prior phases of our pilot to define the full grassroots model for building capacity for PB.

Major shift in campaign outcome: City asks campaign organizers to formally serve as technical assistant leads for Anderstown's participatory budgeting process.

About two months after campaign organizers' presentation of our work to the PB Committee, Phillip, the fellow in the City Manager's office who set up our initial presentation e-mailed organizers to discuss the potential for organizers to take a more leading role in Anderstown's PB process. In this conversation, Phillip reiterated that despite multiple attempts to reach out to the experienced technical consultant, they had either declined, citing lack of capacity, or did not submit an application to the city's call, or had not responded at all. As a result, Phillip asked organizers if they would be interested in serving as technical leads, rather than serving in a supporting role on the steering committee, explaining that the organizing team had demonstrated their interest and commitment in working diligently even before the official start of the process. In making this request, he specifically referenced the approximately group of 30 student volunteers working on our campaign, which he said was "plenty of people [to get the process started]." These cited reasons for asking organizers to take on this leading role indicate that between the demonstrated work and organizational support organizers had built over the past months in the policy development campaign, members of the city staff recognized campaign organizers as having successfully achieved key characteristics—specifically, sufficient understanding and expertise of the technical process and a sufficient base of initial volunteers—needed to demonstrate that they could effectively lead the process of bringing PB to the city of Anderstown.

With this shared understanding, Phillip proceeded to draft a formal scope of services and official contract to discuss in coming weeks with other city staff, the PB committee, and campaign organizers.

Challenges and remaining limitations: building government and grassroots capacity to carry out traditional PB design

In affirming our interest in taking on the role of technical lead, campaign organizers also clearly communicated caveats to their initial acceptance, including that organizers needed to make sure the City understood that even as technical leads, we cannot replace city staff and the crucial role they play in making the PB process work. Moreover, organizers communicated an interest, based on their pilot research and policy development work, in modifying some aspects of the PB design, such as the process by which budget delegates deliberate to choose ideas to move forward, and a more iterative process of idea selection and development. Phillip responded that the issue of staffing was one he would bring up at the next meeting, explaining that he had tried to be clear that this process would take two full-time staff members on payroll. Most of the design questions were ones Phillip either suggested the campaign brings forward during the Rulebook development process or changes he wasn't sure would be possible given the city's interest in strictly following the traditional PB process as implemented by cities like Howard Grove. His main concern was that Anderstown had not yet done PB before, and a city "remembers if things go wrong" such that it would be best to implement the PB design as has currently been evidenced to work.

These responses from Phillip indicated both that the City was aware of the required additional government infrastructure they would have to formally support, as well as the City's commitment to implement the traditional design of PB. Both of these acknowledgments had important consequences for the campaign moving forward. The former implied that while one key aspect of political legitimacy had been resolved by this request—that of being formally recognized to officially implement PB—the campaign still had remaining political capacity-building outcomes to achieve: funding and hiring two staff positions for the necessary administrative infrastructure. The latter implied that the campaign would have to reconsider the design of Strategy 1. Going forward with a traditional PB process meant that the policy development work would be carried out by budget delegates recruited from community members who attended neighborhood assemblies, rather than by student volunteers. Phillip

additionally mentioned that it was important to not give the impression that the process was university-led rather than community-led, which further emphasized the need for campaign organizers to reconsider the role of student volunteers in supporting the process. That is, while Phillip had recognized that the organizational capacity the campaign built was an important factor in getting the campaign this far such as to achieve official recognition and political legitimacy, he also implied the need to re-design and reconfigure the role of current student-based organizational support to fit into the traditional PB process. Phillip's reaction was not unexpected, given organizers' knowledge of the community's historically complicated relationship with the university.

Alderman responsible for bringing PB to the US for the first time reaffirms the need for additional hired staff to build the political infrastructure necessary for PB.

At the end of May, organizers met with Alan, former alderman of Howard Grove and the public official widely credited for introducing PB to the United States with his first implementation of PB in 2009. In this interview, Alan affirmed the importance of having members of the ward staff formally support volunteers in carrying out all components of the PB process. He explained that carrying out PB as a community-driven process required a delicate balance of volunteer and city staff support:

"Well, [to] make it work the way it's supposed to work, or at least [how it's] done in [our] ward, you've got to have community participation from the get-go—be viewed as a community-driven process where the city, and I suppose the university, provides backup support. [T]he backup support also ends up doing a lot of the work, but folks still have to feel ownership of it. So there's a lot of initial outreach[,] and that's where you really need the city to provide the resources."

In this statement, for example, Alan offers the important reminder that getting community supporters able and willing to do the work of PB requires first *recruiting* those supporters.

According to his statement here, the city has to provide the resources to do that, emphasizing a nuance of community-driven policy implementation processes with crucial consequences for

political capacity-building: The community should have ownership over the process, but members of the community who take on that responsibility still need to be organized before this can happen. In Alan's model, if the city wants to commit to PB, they should also provide the resources to organize the community to do the work of PB.

Alan's explanation of how Howard Grove built capacity to implement PB for the first time highlighted the role academic collaborators played in building the technical expertise of the process. He explained that two participatory budgeting researchers, at least one of whom was affiliated with a university, were working together at the time to introducing PB to the United States, "and I was their first guinea pig and so they offered up a lot of free time and advice to help guide our process, the first year we did it." He continues,

"It's very labor-intensive. In my first year, we were blessed with having one of [a university collaborator's] students get a lot of this [done] for us gratis. There was also a staff person in my office who did a lot of work, too. But [...] then she left to go to law school [...] and [...] in the next year, participation and voting went down considerably because, you know, we just didn't have the resources."

Here, Alan explains that much of the help he had in the first year came from volunteers with academic interests in PB. This mention of educational stakeholders accentuates his description of what "community-driven" looks like in practice as mentioned earlier, in which getting "community participation from the get-go" is non-negotiable, yet doing so also requires "the city, and I suppose the university, provides backup support [that] also ends up doing a lot of the work, but folks still have to feel ownership of it." Alan's explanation suggests that the high amount of labor required to start up a new PB process can be helped substantially with outside support, like that provided by academic stakeholders. Especially since a brand new PB effort may not have the required city staff support or buy-in, this suggest that having external supporters with technical knowledge of the process willing to do the work pro bono—much like we ourselves were in Anderstown—can be a boon for building the necessary technical capacity to start PB.

Nonetheless, Alan reiterated that building the political infrastructure to sustain PB—that is, having full-time staff dedicated to PB—is ultimately crucial for ensuring the necessary work is carried out while supporting a community-driven process. He explains how, in his experiences of implementing PB, carrying out the actual work of PB—conducting outreach, setting up project expos and voting stations across the ward—required backup from the city staff for whom this work was part of their official responsibilities:

"In a perfect world, if you're pure PB, this is all done by volunteers. And I think the first year we did it there was a lot of a lot of the work was done by volunteers, you know, in addition to our intern from [an academic researcher]. And, but as years went by A lot of just the grunt work was done by my staff: design of the ballots, the printing of the ballots, yeah notifying, notifications for the meetings, the setting up the polling places, because we know how we really boosted turn out and In subsequent years was, we just didn't have people come to the Ward office, ie City Hall, to vote we had to bring the voting out to the public, so we do [bus?] stations and and park districts and outside of schools—where the people were. And that requires staff.

[...]

Your volunteers will help someone and we did have some great volunteers, that really alleviated staff, but ultimately there needed to be someone responsible, for making sure that stuff got done yeah and if you're doing it well that's a first year and people are enthusiastic about it you're gonna get a lot of good volunteers, I know there's a lot of super talented people...[but] when push come to shove, especially when we did the voting time, when there needed to be people to make sure the stations were up and everything...because you need to make sure, [things] gets done and volunteers are well intentioned, but sometimes they go, 'Something came up, you know, I can't do it, sorry,' and then someone has to pick up the slack."

Alan's experience highlights the delicate balance to strike between the strategy for building political capacity and building volunteer capacity. On the one hand, PB is and should be designed to operate as a community-driven process. On the other hand, building political capacity to ensure that volunteers have necessary support from city staff will ensure that responsibilities do not fall through the cracks. Moreover, another implication of having city staff support is that they have access to resources that volunteers necessarily do not. For example, with many of the voting tasks Alan mentions here (i.e., setting up voting booths, printing ballots, etc.), these require coordination with budgeting, finances, and any other number of additional city support staff who may have access to physical materials like tables or voting booths. This

organizational knowledge and coordination ultimately requires city staff coordination and thus makes sense to be done by a member of the staff whose full-time commitment to PB would allow volunteers to have the necessary support from city government to drive forward a community-engaged process.

New government resources needed: Former alderman recommends two full-time city staff members dedicated to PB.

Even while advocating for building political infrastructure for PB, Alan acknowledged that gaining the political support to hire full-time staff may not be a straightforward or easy task, particularly at the start of a new PB process. Alan explains the success of PB in the first year was what led to his gaining the legitimacy and recognition that then allowed him to build the political infrastructure and community resources needed to sustain PB year over year:

The first year was all sexy [...] And then I started being named to be chairman of different City Council committees in that gave me additional staff resources so. And that's when our numbers really went up [with] different things that we did to help increase participation. So I got, I had a staff of six. One staff person was devoted almost entirely, 80% of her time to PB, year-round. And then everyone else in my staff of six, the other staff members—everyone pitched in. Everyone pitched in. So, yeah, I mean you definitely would need, ideally, two full time staff. One maybe, if you have really good volunteer energy but really two, and then we were also blessed by having a lot of community residents who are really into it, involved in the process, and devoted hours of volunteer efforts.

Here, Alan starkly outlines the high amount of city staff involvement in Howard Grove's implementation of PB, and explicitly recommends two full-time staff dedicated to PB. Alan further emphasizes that "everyone pitched in" in his ward staff, further emphasizing the need to get staff buy-in regardless of whether or not those staff members are dedicated full time to PB. In explaining the need for city staff buy-in, Alan also emphasizes the role he had, as an elected official and then "being named Chairman of different City Council committees [...] that gave me additional staff resources," in securing that buy-in. This evidence suggests that having political

support from elected official advocates also requires them to pitch in in building political capacity by leveraging their own social capital to get other city staff on board.

Organizers officially named technical assistant leads by City Council, who also commit government resources to hiring two dedicated PB staff.

In two public votes at a City Council meeting in the final days of June, the Anderstown City Council voted to approve organizers as the technical assistance leads for Anderstown's PB process and approved the hiring of two additional staff members dedicated solely to supporting the PB process. These two city council votes gave organizers full legitimacy in their leadership role in Anderstown's PB process moving forward. As part of the approved contract, organizers would be receiving \$100,000 for their services, providing organizers with financial resources to dedicate towards the effort. It is important to note that given our dual role as organizers and as researchers, faculty members, graduate students, these financial resources, while helpful, did not account for the fact that all organizers (one faculty member and three graduate students) were both also subsidized by university resources and needed to shift their responsibilities to work on this effort close to full time over the next 6-12 months of the PB process.

While the official approval of organizers as technical assistant leads did secure legitimacy, it is important to note that official communications regarding this decision did indicate that organizers had not initially been considered for the role and had instead secured the city's interest by demonstrating the grassroots capacity they had built over the course of their campaign. In the official memorandums distributed at the time of the vote, staff members also indicated that the original request for proposals (RFP) for a technical assistant lead was sent out to three well known participatory budgeting organizations and that they had also publicly advertised the open call. However, the memorandum explained that they received no proposals from these organizations, receiving only the explanation of limited capacity from the two former organizations and hearing nothing back from the third, which was possibly defunct. As noted in

the released memorandum, organizers had "throughout the process [...] shown an interest in supporting [the City's] work on Participatory Budgeting" and "in conversations [...] said they would be able to complete nearly all of the scope of service outlined in the original RFP. The proposed work plan includes managing the design phase, training outreach workers and facilitators for idea collection, and building an idea collection website. In the later stages of the project, the consultant will develop the voting guide and then evaluate the voting results and community feedback."

Evidence from these published memos suggest that the city had initially sought the technical expertise of organizations known for their experience in bringing PB to new communities; moreover, organizers had not themselves applied to the City's initial RFP for similar reasons, knowing the PB Committee had been transparent in past committee meetings in their interest in having an experienced organization lead the effort. The memorandum's explanation of their reasoning to proceed with organizers, from their demonstrated commitment to supporting the process to their stated ability to carry out the scope of work (and the city's implied confirmation of it) suggest that the decision to proceed with organizers came as a consequence of the grassroots capacity they demonstrated building, as well as their demonstrated commitment to continue building capacity, in light of the non-response and lack of capacity cited by the experienced consultants.

The City's granting of legitimacy to organizers as technical assistant leads with no prior experience in PB is significant on account of how rare it is for a non-seasoned technical consultant to assume this role. Later analyses of public guidebooks from existing PB efforts across the US indicate that nearly all contracted with one of the three organizations Anderstown officials had initially reached out to. Thus, documentation of how technical capacity to design and guide the PB process from a grassroots standpoint—that is, led and determined by members of the community passionate about bringing PB to a new city—does not publicly exist, leading to a dearth of knowledge regarding the participatory or democratic nature of this

particular outcome. In other words, because existing documentation of technical capacity has always indicated that technical knowledge of PB is spread by contracting the same three experienced organizations, new communities lack knowledge of how technical capacity can be built as a grassroots effort, or if technical knowledge for leading PB will always remain in the dominion of experienced PB organizations that do not have infinite capacity to undertake PB projects in new communities.

Policy developers successfully send two developed policy memos sent to City Staff for feedback, but do not receive a response, leaving remaining questions about pilot policy development unanswered until months after conclusion of campaign.

In the middle of May, organizers sent two final developed policy memos to city staff for feedback. One was a proposal to provide microloans to small businesses, and the other a proposal to fund rain garden installations for flood reduction. Both proposals were sent first to Philip as public proposals on the *DeliberationWorks* platform. Each proposed policy included the public link, as well as 3-4 key questions policy developers had for city staff regarding each one. Organizers asked Phillip to send the proposals to city staff to evaluate and complete, with the request phrased as part of the pilot process for understanding policy development ("We were hoping that we could test how long it would take you to solicit input from staff so that we can estimate how much staff time would be required for a full PB implementation").

While organizers did hear from Philip that he had sent the proposals to city staff for feedback, staff were not able to give feedback at the time. Months later, following the conclusion of this campaign and well into the public start of PB, organizers and Phillip were ultimately able to test one of these pilot proposals with a member of the city staff. At that point, the pilot proposal still provided invaluable information in helping organizers come up with a new iteration of training materials for budget delegates.

Unexpected outcome: Organizers develop a new grassroots PB Guide by synthesizing existing PB Rulebooks, which helps them build additional knowledge about technical knowledge for PB.

Organizers' new role as technical leads of PB marked the conclusion of the campaign phase and shift towards capacity building for implementing PB. Consequently, to expand organizers' technical knowledge of the full PB process, the lead organizer (third author) also began developing an open "PB Guide," a detailed manual for all parts of the PB process, based on a synthesis of all publicly available PB guidebooks. While the initial goal of the PB Guide was to clearly document and centralize all expert technical knowledge related to designing and implementing a new PB process, the ultimate goal is to make the guide publicly available to support grassroots technical capacity building for any new community. While the guide does not replace the role of a technical lead because it still requires individuals who build procedural knowledge and experience with implementing the knowledge in the guide, organizers' hope in aiming to share the full guide was to more concretely and comprehensively detail the minute knowledge and decisions communities need to make in order to successfully carry out a PB process from scratch.

A primary goal of the PB Guide was to develop a better understanding of the community capacity-specific inputs for implementing PB—that is, the particular outcomes community members should seek to achieve in order to implement the many parts of the PB process beyond policy development. While our pilot work in policy development throughout the campaign had given organizers a good initial understanding of how we might build capacity for supporting the policy development phase of PB, we now needed to broaden our understanding of how to build capacity among broader members of the community to support the full PB process.

Our initial review of 10 existing PB guides from across the US and two from Canada suggested three primary roles for community member participation that remain constant across PB processes:

- Community PB participants: All guides highlighted the role of community members in proposing ideas, voting on the final ballot, and encouraging others in their community to participate.
- Steering Committee: All guides stressed the importance of having a dedicated group of approximately 10-15 leaders in overseeing and helping to design the process, participating in and helping do outreach for meetings, and monitoring and evaluating the process. Many explicitly outlined commitments required of Steering Committee members, like providing translations of materials at events.
- Budget Delegates: All guides centered project proposal work as the responsibility of budget delegates, members of the community who served as representatives in discussing and prioritizing project ideas and doing the research and development, in coordination with city staff, to turn these into full proposals. Delegates are also responsible for presenting projects in community expos.

In addition to these roles mentioned across all guides, many also mentioned additional roles for facilitating community meetings and/or supporting event logistics and outreach. Yet it is not clear whether these roles are staffed solely by volunteers from the community, or might be done by city staff or contracted organizations. Other organizations in the community with established connections and demonstrated expertise, especially towards reaching particular populations, are often tasked with outreach or training, mitigating the pressure of these tasks for individual volunteers, steering committee members, and/or city staff.

 Facilitators: Many guides expressly called for facilitators, often defined as "neutral parties" who support meeting facilitation at neighborhood assemblies and budget delegate meetings. Facilitators are often also tasked with liaising between delegates and city staff members, or taking care of event logistics like reserving and setting up meeting spaces.

- Community organizational partners: Some PB groups partnered with other nonprofit
 organizations with existing connections in their communities to help with tasks like
 targeted outreach or volunteer training. In Sacramento, additional partners were also
 contracted for evaluation of the process(Sacramento).
- Support Committees (i.e., Executive or Leadership Committee): In addition to the Steering Committee, some guidebooks laid out for additional committees that support the Steering Committee's work. For example, PBNYC has a citywide committee for supporting processes across participating districts. The Victoria (Canada) guidebook identified the role of Support Committees for helping the Steering Committee with outreach, events, and evaluation. It should also be noted that some PB processes rely more heavily than others on city staff to provide this kind of additional support. For example, the PBNYC guide specifically outlines the need for each participating council member to designate a staff person in their office, as well as establishes the role of "NYC Council Central Staff" for supporting the district staff, designing and providing materials, providing an online platform, and managing relationships across staff, agencies, and partners.
- Poll workers: The Eau Claire, WI guidebook also called for volunteer poll workers to work with City staff to maintain the integrity of the voting process.

These community stakeholders are in turn guided by technical assistant leads and supported by city, departmental, and agency staff.

While analysis of existing rulebooks provided us with some insight into models of community support for existing PB processes, it is not always clear how members of the

community are recruited for these roles. While outreach and recruitment was a major focus across the roles, without the support of an existing community organizational partner with experience and expertise in outreach, new communities still have to recruit volunteers to recruit more volunteers to conduct outreach. Strategies for conducting outreach to build capacity for these roles remained unclear or unknown from existing guidebooks.

Unexpected outcome: Organizers successfully build capacity among an initial group of volunteers committed to supporting PB activities.

Having successfully built grassroots capacity to carry out a policy development pilot, a key concern for organizers moving forward was whether the students supporting policy development would be motivated and committed to supporting the next task of conducting outreach in the community, to recruit community members to serve on the steering committee, as participants in idea collection events, or as budget delegates. It was especially challenging for organizers to evaluate whether or not the capacity they built for supporting policy development would translate to capacity built for organizing other aspects of PB as the conclusion of the pilot campaign corresponded with the conclusion of the academic year. Nevertheless, interviews with policy developers at the conclusion of the campaign did suggest at least initial commitment and interest in continuing to support the PB process upon their return to Anderstown in the Fall.

The members of the policy development team who remained in the area following the conclusion of the academic year immediately committed to supporting outreach for PB and other tasks beyond policy development, suggesting at least a partial confirmation that the capacity built through the policy development pilot translated to capacity for supporting PB processes more broadly. All of the graduate student volunteers who remained in Anderstown for the summer remained engaged as outreach volunteers following the shift in capacity building focus. This included both Policy Leads, as well as three additional graduate students who had been engaged with the campaign since its beginning in Fall 2021. In addition to the two Policy

Leads, two of the three additional graduate students had been involved in higher commitment leadership roles at various points throughout the campaign (e.g., Writing Leads, Policy Editors), suggesting that heightened leadership responsibilities in the grassroots student organization for the pilot may have sustained motivation for the project even past the policy development pilot.

End-of-quarter interviews with all Policy Leads, editors, and developers indicated that all 13 active members of the policy development team were interested in continuing to work on the project in the coming school year, with several members interested in taking on additional leadership, training, and community engagement roles. Many policy developers expressed an interest in engaging more directly with community members in the next phase of the PB process, indicating that the volunteer capacity we had built for supporting policy development could likely be translated to supporting community outreach. One potential challenge for the volunteer capacity we built was that these individuals worked specifically on policy development, whereas volunteer capacity in PB is often needed for tasks beyond policy development, especially for supporting community outreach. Thus, in addition to the concern of whether policy developers want to stay involved in the project, a major concern was whether the volunteer capacity we had built was specific to the task of policy development. This concern was heightened by the fact that most policy developers, especially the volunteer graduate students, joined the project specifically out of an interest in local science policy.

approach to building grassroots startup capacity through academic partnerships.

The pilot campaign's successes would not have been possible without building the initial capacity of a committed group of policy developers to support the campaign. Most policy developers expressed that their motivation to participate in and stay on the project came from an interest in applying their interest in policy research and policymaking more broadly, often seeded in academic contexts, towards their local context, with the potential of making real-world

impact. For example, Amber, an undergraduate student working on the project, expressed that "the progress that we've been making has seen tangible effects. Even though there was like maybe a period of time [when] we weren't sure whether or not the PB project would be taken [up] by the city of Anderstown, it's still felt like it was valuable experience through the researching process and also like interacting with organizations in Anderstown." Amber expresses a sentiment echoed by several other policy developers—that while they did hope ultimately that the project would gain political legitimacy from the City, the pilot and interim period of uncertainty still provided a great deal of value, as it provided them with an opportunity to directly engage with local issues and organizations.

Alice, a policy development volunteer and university employee working towards a Masters in Public Policy, further expressed the unique benefits of participating on the project, relative to other policy coursework and professional experiences she has had:

"I've grown up [around here] and I live in [Howard Grove], and I know that the participatory budgeting model sort of developed [there], so that's something that I am really interested in—how it works, you know, because I feel like I've spent so much time in classes just thinking about the theory of civic engagement and the theory of like asking people how their lives are going, but no, we can actually put this into practice, and this is how. [...] I think it's so specific to a small community that's the main difference that I've noticed [from other policy classes and experiences I've had]. So, I really enjoy that because it feels a lot more real. Oh yeah, that's the Fifth Ward, I've driven past there, I've been through there, I've talked to somebody who lives there—So it feels a lot more important in that way too, because I've written like a generic policy memo about something that the EPA is doing and that just feels like such a distant entity that I will never be able to access, whereas this just feels a lot more real."

Like Alice, many policy developers remarked upon the motivational value of participating on a project that allowed them to have real-world impact. One of the Policy Leads, Willow, echoed their appreciation of the project not being an academic exercise, specifically expressing an appreciation for the project's outcomes as a grassroots campaign:

"It's not like an academic exercise—it's not like, oh, I did this thing and here's this product they may [or may not use], but no, it's like legitimately like a campaign, and we also have like an agenda, we're not just like, yeah, we're going to write policies, there's like an agenda there [...] We want to actually influence what Anderstown is doing."

Willow here forefronts the particular value of participating in policy development not solely for the purpose of producing policies, but moreover doing so to have an influence on local government decision making. Towards these ends, Willow elaborates to say they wish there was some way to get trained on municipal government structure, political power, and influence at the municipal level:

"Of course we're doing a new process or participatory budgeting, but I think it's important to think about like how city budgets work[.] Like, here's who has power in the city [...] helping [team members] to think about the folks that we're sort of trying to influence in a way. We think a lot about like you know, on the federal side, it's like, call your representatives[.] Well, what does, what do I do [to make change at the level of] the city of Anderstown? And that's been separate from the policy writers, but I still think it's good to orient them to [what]the city knows and does and, like all of that [.] Like I said, [it's not just] about the writing, it's also about, well who [you're writing for and] the context."

As a Policy Lead with many leadership responsibilities who also worked closely with organizers to strategize and plan policy development work as new information in the campaign surfaced, Willow likely gained a deeper appreciation for this strategic aspect of the organizing work, compared to other policy developers.

It is also important to note that the uncertainty of working on policy development in the context of a campaign that had not yet gained political legitimacy was a frequently cited challenge, especially among undergraduate policy developers. Many of these policy developers expressed similar experiences of challenges in the process, including shifts in goals, uncertainty of policy outcomes, and lack of access to local information, especially cost information so critical to their ability to evaluate the feasibility of particular proposals. Monica summarized the challenge of this lack of clarity in expressing her team's fear that their hard work may not "amount to anything":

"I think this is what a lot of the other group members will say it, but there were a lot of times when the goals or like the next steps weren't super clear, so it gave us a lot of worries and kind of concerns about where to go with the projects because our biggest fear was that we're putting in a lot of this work we're trying our best to get this off the ground, but if it doesn't really amount to anything that was something that we were most concerned about, or like me, in particular, too."

"We're not just a team—we're a group of friends."

Despite the expected frustrations of navigating campaign uncertainties, the real-world campaigning aspect of the project did prove to be a major motivating factor and frequently cited reason for developers' commitment to continuing with the project. Many developers expressed their excitement in experiencing and contributing to the real campaign wins of the group's authentic campaign.

As Eric, an undergraduate student policy developer, explained, "I think like there's a lot of hope right now, especially given the recent confirmation and on our current trajectory. It's not like we're stalling at all, or even just going on the same route, where I think we're all thinking about ways to evolve this even more. Get more people engaged and just finish off strong or just keep going even more strongly. Yeah, I think I'm not alone in this, but I'm definitely hopeful. I like how this campaign is looking."

When asked about what he found valuable in his experience, Eric shared three particular motivating moments in the campaign that stood out to him:

"Number one is most recently the confirmation of [the start of] Participatory Budgeting by City Council, and the fact that, if we as a group hadn't worked on that, that announcement wouldn't have existed, you know, like participatory budgeting would have been a distant dream, rather than something that's really making concrete steps to fruition. And also the fact that we are working on participatory budgeting itself, which is such an important process, you know for citizens and just get away from them to really actually engage in what goes on in a bottom up way rather than from like a top down.

And I think one of the second moments, the second moment was seeing [the lead organizer's] face on the local newspaper is just something that was so cool to me, you know, because I wouldn't have imagined seeing [...] our professor in class actually show up in the newspaper because of something we all collectively worked on. My undergrad team members were all just like, 'Whoa,' you know—as soon as we saw that we were all just celebrating inside.

Yeah, and actually, I'll add in a third one, because I've only really thought about it through like a impact lens, but on a more personal lens, I think just our gathering as a team together, you know just enjoying our time, not as teammates but also just as friends. Because we're not just a team—we're a group of friends and that's what makes it especially special to work on this project."

Eric's responses highlight the different ways in which policy developers experienced the positive outcomes of the capacity they built in the campaign. His first moment, referencing the City Council's recent public approval of organizers as the technical leads for participatory budgeting that also signaled the kick-off of the community-led process, demonstrated the importance and intrinsic value of bringing participatory budgeting as an innovative participatory democratic process to a new community. His second moment highlights the motivating value of real-world campaign wins, like getting recognized in a local newspaper, and the excitement it generated for both him and his other teammates.

Eric's final moment, referencing a social gathering he and his undergraduate team organized for the policy development organization a few weeks before the interview, is perhaps the most striking and indicative of the organizing power the grassroots campaign had built among its members. As Eric explains, "We're not just a team—we're a group of friends"—a clear statement of the social bonds built among the policy developers and testament to the relationships developed over the course of their participation on this campaign. Eric further explains that these social bonds were an important part of what sustains his engagement with the project:

"I knew that I would stay on this project because it was like I said before, policymaking, but with the focus of a real world impact. Especially with something so you know trailblazing as participatory budgeting in Anderstown. I want to have an opportunity to be able to just make an impactful difference, it doesn't matter to how many people. And I think something that has also kept me going is the people I've come across here. You know, in the [undergraduate course], but also on the whole participatory budgeting team—it's an awesome group of people."

Eric's reiteration of the social connections he forged across members of the organization suggest that the group effectively built the deep relationships scholars have pointed to as being critical to building effective civic organizations (Han, 2014). Without a shared sense of responsibility in the collective goal and, moreover, positive feelings of relational support, mutual care and investment across the members of a civic organization, the challenges and uncertainty

of this voluntary grassroots work would be impossible to sustain. Eric did continue with the project and in fact went on to take higher leadership responsibilities in the organization as the campaign turned towards PB implementation.

3.4 Discussion

This study had two primary aims. First, the study aimed to build an emergent understanding of what capacities are needed to start participatory budgeting in a new community. Second, this study aimed to build a model for how a community could build those capacities without the support of experienced technical consultants.

I now present our final capacity building model based on this case study (Fig. 2). This model argues there are three primary kinds of capacity to build to start PB in a new community: technical capacity, or knowledge of the PB process and how to implement it; government capacity, or resources and political support from government institutions; and grassroots capacity, or the resources and ability of members of the community to begin recruiting volunteers to implement PB processes.

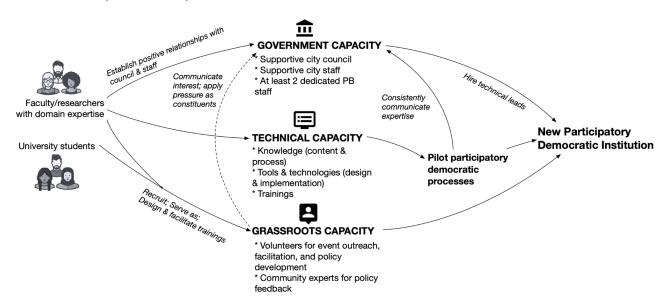


Fig. 3.4. Final capacity building model for PB. Our grassroots campaign built three primary kinds of capacity to start PB in a new community: technical capacity, or knowledge of the PB process and how to implement it; grassroots capacity, or the resources and ability of members of the community to begin recruiting volunteers to implement PB processes; and government capacity, or resources and political support from government institutions.

4.1 Technical, Grassroots, and Government Capacity to start PB in new communities

First, our findings suggest that new communities should build three primary kinds of capacity to start PB in a new community: technical capacity, or knowledge of the PB process and how to implement it; grassroots capacity, or the resources and ability of members of the community to begin recruiting volunteers to implement PB processes; and government capacity, or resources and political support from government institutions. Prior capacity-building frameworks from literature on program and community development (i.e., Chaskin, 2001; Eade, 2007) have primarily described capacity building at a high level, often focusing on top-down capacity building processes like the role and relationship between local governments and the community towards collaborative planning and action (i.e., Cuthill & Fien, 2005). These models have not studied, nor been applied to, organizing contexts in which commitment towards dedicating resources towards implementing a participatory process have not yet been built from the ground up. Moreover, since these frameworks describe capacities at such a high level, it is not clear how, if at all, these frameworks translate to the context of participatory budgeting, which requires specific technical knowledge and also relies largely on grassroots, voluntary support to be fully implemented (as opposed to a community development process that may be driven largely by government actors or NGOs).

While previous practitioner guides and research on PB has indicated that certain government, technical, and community resources that need to be in place to drive the PB process forward, this work does not make distinctions about the kinds of capacities that need to be built by different stakeholders, nor how to define those stakeholder-specific capacities. Previous research has highlighted the need for government resources like the support of public officials and access to discretionary strategic funds (Wampler, 2007), the technical knowledge required to run a process like PB (Gilman, 2016; Lerner & Secondo, 2016) and to the need for

volunteer resources to do outreach and serve as budget delegates (Lerner & Secondo, 2012). First, this research does not make a distinction between resources required to *implement* PB, as opposed to the capacities that need to be built before implementation activities can begin—that is, for example, the distinction between volunteers running outreach events and having those volunteers in place, ready and trained to go, to begin with. Secondly, this research does not distinguish among the different kinds of capacities that need to be built, and which stakeholders within a community can build those capacities.

The organizing model that emerged from this study suggests that the three primary kinds of capacity that new communities ought to build to start participatory budgeting include:

- **Government capacity**, or resources and political support from government institutions;
- Technical capacity, or knowledge of the PB process and how to implement it;
- Grassroots capacity, or the availability, capability, and motivation of members of the community to begin recruiting volunteers to implement PB processes.

I will now discuss each of these capacities in turn, including different stakeholders in the community who can build them and concrete strategies to do so prior to institutional support.

4.2 Building Technical Capacity

To build capacity to start PB in a new community, *technical capacity* needs to be built such that communities have technical leads who have the expertise to oversee the PB process, knowledge of its necessary components and how to implement it. Our findings suggest that passionate community advocates like ourselves can build the technical capacity to be hired as technical leads by actively communicating our commitment and our growing PB expertise from running pilot processes to government officials overseeing PB implementation.

To have the knowledge and expertise to implement a PB process, local governments typically hire technical assistant leads to guide, design materials, and train new communities in implementing PB. Prior research indicates that these technical assistant leads are typically

contracted by governments interested in trying PB in their communities, and often come from one of a very small number of established organizations with prior experience bringing PB to new communities (Gilman, 2016).

In this study, we explored the question of how advocates within the community might build technical capacity for PB from a grassroots level, without the support of external organizations. To be clear, this had not been an intended outcome of the campaign or the broader PB effort in Anderstown; City Council members and staff had previously sought to contract an established PB organization to serve as the technical assistant leads. Consequently, we had not initially designed the campaign with the goal of becoming technical leads for the entire PB process, but rather had only sought to build technical capacity for policy development with hopes that this would allow us to provide value, potentially as members of the Steering Committee, in having insight into a technical aspect of Anderstown's PB process that even consultants with experience running proposal development in other cities would not have. That is, because Anderstown's PB funds did not restrict proposals to capital expenditures, we knew policy development under ARPA restrictions would almost certainly be a technical challenge regardless of who ultimately led the technical implementation of the process. With the unexpected development of Anderstown having their repeated requests for proposals declined by established PB organizations, our campaign resulted in the unexpected outcome of being asked to serve as the technical assistant leads of the PB process. This unexpected outcome suggests that our organizing activities had demonstrated technical capacity of the PB process even beyond the initial aims of our pilot work.

Based on evidence from our campaign, to build technical capacity to implement PB from a grassroots level, grassroots organizers can:

1a. Run PB pilots to build technical knowledge

This study largely describes the design and results of the initial pilot study organizers ran to build their technical knowledge of the PB policy development process. Our evidence indicates that the technical capacity organizers demonstrated from running this pilot, in addition to their commitment to the City and the process, led the Council to ask organizers to take on a leading role in guiding Anderstown's PB process.

Building technical capacity for PB in a new community is particularly difficult because new communities likely lack the deep technical knowledge of how PB works. Unsurprisingly, then, Anderstown City Council members initially sought to contract one of three technical assistance partners with demonstrated prior experience serving this role in previous PB processes, indicating the value of prior technical expertise with PB. Unfortunately, none of the City Council's top choices of technical partner organizations with prior PB experience accepted Anderstown's bid. As a result, members of the Anderstown city staff reached out to campaign organizers to ask for their help in leading the PB process, citing organizers' demonstrated commitment and familiarity with the PB process.

This formal request from institutional actors came as a result of the grassroots technical capacity organizers had demonstrated by designing and implementing pilots of the PB process over the course of the previous year and communicating the findings of these pilots with Anderstown council members. While organizers did not have prior experience serving as the technical lead of a PB process, their PB policy development pilot work had resulted in the development of 9 ARPA-eligible 1-page policy memos, two of which had been sent to city staff for feedback; developed policy development training materials and templates; and a working computational system for policy development and deliberation. In repeated presentations to the PB Committee, organizers had additionally demonstrated deep knowledge of PB processes and existing examples, which had also allowed them to answer council members' PB questions in committee meetings. This collection had demonstrated organizers' expertise of PB to the

Committee such that they felt confident enough in organizers' technical knowledge of the PB process to invite them to take a leading role in technical direction.

Gaining legitimacy as the technical leads from key city staff members, the PB committee, and finally by all members of the Anderstown City Council in a full vote was a crucial turning point in the campaign. Once all members of the City Council officially voted to publicly approve organizers' contract, this recognition from the City Council as technical leads in the PB process allowed organizers to go beyond pilot work and begin running different parts of PB.

Furthermore, the legitimacy organizers gained from the Council's official recognition boosted motivation and morale for volunteer policy developers, many of whom were motivated by the real-world impact of their work. Finally, contract negotiations as approved by the City Council provided organizers with capital funds for extending and scaling their designs.

1b. Present findings and demonstrate evidence of technical expertise to elected officials and staff

In their memo describing their rationale for hiring organizers as technical leads, City Council members and staff expressly described organizers' consistency and commitment to supporting Anderstown's PB process as a reason for wanting to hire them. Organizers consistently sought out opportunities to share their pilot work and findings with elected officials. Initially, we did so with the aim of gaining insight into the Council's proposed process design and timeline for PB, and to build their relationship with Council members such that organizers would have a better chance of getting onto the Steering Committee and more effective in their communications with Council members once accepted. Early in the campaign, organizers sent Phillip, a city staff member, and the alderman heading the PB Committee multiple briefs detailing their pilot work and online PB platform. This eventually led to the Committee's invitation for organizers to present their platform and work to the other members of the PB Committee, ultimately a critical milestone in the campaign timeline, as this marked organizers' first instance of recognized

technical expertise from the City. Ultimately, it was not clear how excited committee members were by the platform, however.

Additional considerations: Consider resource tradeoffs in use of online platform for idea collection and voting

Organizers' technical expertise designing open online platforms for deliberation initially piqued council members' interests. After organizers sent a summary highlighting the features of their tool early in the campaign, PB staff and Committee members invited us to share a demo and findings from our pilot work, suggesting their interest in using an online platform. For the goals of our campaign, the *DeliberationWorks* online platform was crucial in supporting policy development, as it provided a centralized place for sharing policy development resources and drafts. Nevertheless, use of the online platform for soliciting community feedback did also raise challenges vis-a-vis how to ensure this feedback is incorporated. Moreover, as the campaign continued, the PB Committee seemed to focus more of their attention on building capacity to ensure the PB process could simply be implemented for the first time in Anderstown, consequently shifting organizers' attention away from building a usable online system.

As a result, it is not entirely clear what role online technology has to play in this early stage of starting the PB process. While we found it to be crucial for supporting the pilot policy development work, it is also important to recognize that we also learned from Jorge that use of an online platform for PB (such as for idea collection or voting) does also require organizers to account for staffing resources needed to oversee, respond to, and maintain the platform. For communities that opt into using an online platform, then, our findings suggest organizers should also build technical capacity to monitor, maintain, and respond to activity on the system, to prevent use of technological tools from backfiring and leading to negative community reactions.

4.2.1 Theoretical & Design Implications of Building Technical Capacity

Our findings for building technical capacity to implement PB from the ground up importantly suggest that there remain high barriers to accessing the technical knowledge and resources required to implement this innovative democratic practice. While resources and experts do exist for advocates and interested practitioners of PB, including many led by leaders in organizations with recognized expertise in PB, our findings and strategies suggest that much of the technical knowledge for implementing PB in a new community still remains behind closed doors. That is, technical knowledge—and moreover, the labor required to implement that knowledge in a new community—is inaccessible to communities unless they are willing and able to successfully contract existing PB organizations with proprietary access to these resources.

By contrast, the strategies by our findings presented above suggest that community advocates without access to existing expertise and proprietary PB resources *can* build technical capacity to start PB with extraordinary commitment and dedication to gaining that expertise—though it is likely that these advocates will already need to have had a strong foundation of expertise about PB and, at least in our case, democratic processes embedded in PB like policy development and deliberation. While this in and of itself still suggests high barriers to access, these strategies at least outline pathways by which community members without existing ties to PB organizations can gain this specialized knowledge, especially if they have access to university resources and experts who are willing to engage their expertise in this effort. For example, running pilots of different parts of the PB process that community members may find particularly of interest or challenging—such as the ARPA policy development process, in our case—helps organizers build invaluable experience with implementing designs to support this highly technical process. This strategy is especially important if organizers are implementing aspects of the process without the guidance of someone with experience running PB.

One important implication of these strategies is that they still rely on knowledge and existing resources from prior PB efforts. In other words, they do not suggest replacing or the need to completely redesign PB processes or materials (though we also do not have evidence suggesting a complete design overhaul cannot be done). In fact, we as organizers dedicated a large amount of time, effort, and resources to gathering, reviewing, and synthesizing knowledge from existing PB processes, including reviewing publicly available rulebooks and speaking directly to individuals who *did* have technical experience implementing PB. This suggests the importance of relying on previous troves of experience and knowledge developed, as well as the invaluable resources and support that the growing network of PB practitioners and organizers can provide for new communities.

Nonetheless, these strategies point to the large amount of work left to be done in understanding how to *open* participatory budgeting as an innovation designed to be implemented by any and all communities. Identifying key strategies for building technical capacity from a grassroots level and illustrating designs for facilitating those activities represents an important first step in researchers' ability to examine participatory budgeting as a fully grassroots, community-driven open democratic innovation.

4.3 Building Grassroots Capacity

Participatory budgeting is first and foremost a community-driven process. Successful implementation of PB relies on the active, engaged participation of community members throughout the entire process. But fostering that active, engaged community participation requires grassroots capacity to be built such that community members have the resources and ability to recruit additional volunteers and bootstrap the work of implementing complex processes like conducting outreach, facilitating events, or researching and developing policies.

Our findings demonstrate that this early grassroots capacity can be built by recruiting, training, and supporting an organization of "early adopters" in the community—committed and

motivated community advocates eager to carry out pilot PB processes and begin reaching out to other members of the community to build momentum for PB.

2a. Recruit students interested in policy implementation, develop training materials, and create a leadership structure that allows multiple participation pathways, to build an initial base of committed volunteers to recruit additional community member volunteers, and to support technical capacity building.

At the heart of PB is committed volunteers from the community who are enthusiastic about educating others and getting them out to PB events. However, building a base of committed PB volunteers from the community takes time, intentional planning, and recruitment. Organizers may encounter a catch-22 in this bootstrapping challenge: building sufficient volunteer capacity relies on having volunteers recruit additional volunteers.

Our findings present an unusual approach to building an initial base of committed volunteers by leveraging university resources to build an initial base of committed members, including recruiting graduate student volunteers and offering students enrolled in a civic engagement course the option to participate in the campaign. To build an initial base of committed volunteers, we first recruited potentially interested students and onboarded them onto the campaign through the pilot open democratic process they supported with the university community in Chapter 1. In this capacity building phase of the campaign, we asked individuals engaged in the pilot to stay on the campaign and found that not only did the vast majority of them stay, but moreover that a couple members recruited their friends to join the effort to build community capacity. This allowed us to build enough grassroots capacity to run our pilot policy development process and to build connections and excitement for PB among the students that we later found translated towards implementing PB tasks beyond policy development. By recruiting undergraduate and graduate students with dedicated interests in social and science policy and with whom we had established previous connections and shared interests in

participatory budgeting, we were able to build the needed volunteer capacity for implementing our PB pilots and campaign. We developed training materials to provide policy developers with a baseline understanding of participatory budgeting, rules and development criteria for ARPA eligibility, and templates and materials for writing one-page policy memos. An organizational structure and weekly/bi-weekly check-ins also ensured each undergraduate developer was paired with another graduate student developer for writing and research tasks, policy leads to provide editing support and feedback, organizers to provide higher-level campaign direction, and an organization of other students with whom to share experiences and build social bonds. This organizational structure, training templates, and recruitment strategy resulted in the development of complete policy memos on which organizers could seek feedback from community members and city staff, evidence both of the campaign's technical capacity and evidence of volunteers' commitment to the campaign.

As we know from prior research on organizing activities, the motivation and commitment of volunteers are perhaps the two most crucial factors in building capacity for their work (Han, 2009). Our findings suggest that building a base of motivated and committed volunteers requires thoughtful organization, training, structure of collaboration, and check-ins to ensure that volunteer work is aligned with both individual and organizational goals. A flexible organizational structure with four roles (policy developer, editor, policy lead, and organizing lead), each of increasing responsibility, time commitment, and complexity, allowed volunteers in our campaign to take on a variety of tasks depending on their interests and availability, and also ensured that each developer had access to the training and support of leaders responsible for different kinds of campaign tasks. Weekly to bi-weekly informational check-ins with organizing and policy leads, supplemented with a writing pair structure, ensured that policy developers received updated information about higher levels of strategy in the campaign and allowed leads to gauge challenges and measure progress among the diverse group of developers. While our volunteers during the campaign phase of data collection discussed in this chapter were all affiliated with the

local university, their commitment to PB and its ongoing work was often an individual choice, particularly in the decision to continue working on PB after the conclusion of the campaign/school year. By the conclusion of the campaign, our data indicated that all policy developers were interested in staying involved in the project, with several of the graduate student volunteers interested in PB activities beyond policy development, like outreach and meeting facilitation. One graduate volunteer, Alice, who was also connected with an external university-based civic organization, even applied and was accepted to the Steering Committee.

2b. Begin outreach efforts to community members by educating them about PB through 1-on-1s

Although our findings suggest that the core grassroots capacity was built through the support of motivated student volunteers, a municipal PB process will eventually require the support and volunteer commitment of community members beyond those based in the university. While our capacity building process did not conclusively demonstrate substantive community member commitment to grassroots activities like outreach, organizers did find that 1-on-1s to be a potentially fruitful approach to building capacity towards more community member engagement on grassroots activities.

Our 1-on-1 meetings with environmental group community leader Leslie demonstrated the efficacy of relational organizing in getting community leaders interested in PB and educating them about ways in which their group's goals can align with PB's. Later, Leslie provided important feedback on environmental policies that we sent to Anderstown city staff, including feedback that helped policy leads determine that Lead policies would not be popular or effective, indicating the role of community leaders' expertise in supporting policy development. Leslie ultimately applied, and was accepted, to serve as a member of Anderstown's official PB Steering Committee. Interviews with Alderman Alan about his experience starting PB in nearby Howard's Grove also revealed the role 1-on-1 relational organizing with leaders of CBOs had on

building the community's capacity for PB. Alan shared that a key turning point in that first year of PB, before the ward had attained the financial resources to fully staff ward office members dedicated to implementing PB, was when he reached out to leaders of community groups across the ward and eventually organized a meeting with a group of about 70 community leaders, who went on to be a core recruiting pool for Howard Grove's first steering committee.

2c. Seek policy ideas and feedback from policy area experts in the community, to build capacity for generating expert feedback on policy ideas.

Similar to 2b, our findings did not present conclusive evidence for the sufficiency or necessity of the policy feedback activities we sought with community members for building additional grassroots capacity. However, we did find community experts' feedback on in-progress policies to be critical in helping policy developers get important expert information for prioritizing policies, in the absence of the support of city staff. By gathering a set of initial policy ideas, presenting them to members of community groups with domain expertise in that policy area, and soliciting their feedback, organizers were able to narrow down an initial set of two policy briefs and key questions to send to city staff. Community experts' help was critical to the campaign's ability to prioritize ideas to develop from an initial set of over 70 seed ideas, indicating that our pilot did offer positive evidence of a path for building capacity to support the complex policy development process.

More immediately, seeking feedback from community groups on policy ideas presented organizers with a concrete, scoped, and approachable "ask" to introduce these community members to the PB process and excite them about submitting and developing policy solutions through PB. In seeking feedback from the Watershed Directive, organizers were introduced to several new community members with specific interests and expertise in policy areas in which developers were proposing solutions. This not only allowed developers to gain access to policy expertise and new PB proposals from community groups, but also gave community members an

opportunity to engage with specific solutions the PB process could fund. Moreover, asking community members to provide their ideas and opinions in support of or opposition to specific policy ideas is lower stakes and easier to engage with than spending several hours with strangers at a neighborhood assembly or even having to learn about an entire slate of ballot initiatives prior to the final vote.

These findings suggest that creating a pathway for community members to offer feedback on policy ideas can still be a productive community participation pathway for supporting the core volunteers in their policy development, albeit not as pivotal or helpful of a grassroots capacity building strategy as we had hoped.

4.3.1 Theoretical & Design Implications for Building Grassroots Capacity
These strategies for building grassroots capacity developed through our pilot work offer
researchers and future community organizers a close look into techniques for building a base of
volunteers, creating an organizational structure to support their work, and helping them reach
out to additional members of the community to build momentum for the PB process. Prior work
has highlighted the need for community members in implementing PB processes (i.e., Lerner &
Secondo, 2012; Wampler, 2007), but literature falls short of providing community organizers with
strategies to start recruiting, building interest, and sustaining motivation among volunteers,
especially to confront the bootstrapping challenge of starting new grassroots efforts. These
strategies, and the detailed evidence of how we implemented them through our pilot policy
development work, aim to be a model of how volunteer capacity for a community-driven process
like PB can be built entirely from the ground up.

In addition to the specific strategies, our pilot work, as well as our review of existing PB guides and rulebooks, present important implications about *which* stakeholders in the community can carry out different aspects of grassroots capacity building to achieve the volunteer base to start a new PB process:

Implication 1: Volunteer base can be built by a combination of city staff and nonprofit community partners responsible for outreach, volunteer training, organization, and coordination.

As technical assistant leads are responsible for leading the design and guiding implementation of a PB process, support for recruiting and organizing PB volunteers is typically provided by another source. Based on our interviews with experienced Howard Grove PB volunteers and analysis of previous PB guides and materials, outreach, volunteer training, and support are often provided by dedicated PB staff in the city, a nonprofit community partner, or a combination of both.

New PB staff positions are especially important to secure because a large part of these positions involve coordinating with and training volunteers to ensure they have the information and skills to carry out complex PB tasks like facilitating neighborhood assemblies or developing budget proposals. Interviews with Howard Grove's Outreach Coordinator Jorge revealed a large part of the responsibilities of his newly established position comprised coordinating and providing crucial information to volunteers. Howard Grove presents a special case as the oldest and longest running PB process in the country; as interviews with Howard Grove PB Leadership Committee volunteers indicated, a large amount of pre-existing organizational knowledge and routines had been built up just from having conducted PB over so many years. Especially with the establishment of the Leadership Committee, many volunteers carried over knowledge of implementation practices and took on additional responsibilities onboarding new volunteers who joined the committee. Thus, Howard Grove may have been particularly well positioned to have city staff responsible for coordinating and structuring volunteers, as these volunteers had built up additional capacity to organize, train, and support themselves and may thus have relied less on city staff compared to a new PB effort.

Guides from more recent adoptions of PB suggest that partnership with local nonprofit community partners, who are deeply familiar with the specific local context and have likely built capacity on their own, provide on-the-ground support for implementation. This on-the-ground contextual expertise is typically not provided by technical assistant leads, who are typically national organizations based remotely and therefore have little familiarity, connections, or existing capacity for implementation built with communities they are contracted to support. These nonprofit community partners are thus particularly important in building capacity for outreach, including targeting populations in the community that may be challenging to reach using mass media. For example, Denver's PB effort discussed their partnership with a local civic health group specializing in outreach with target populations in the community like residents, artists, and other community organizations (The City of Denver, 2021); PB New York City similarly mentions community-based outreach providers in their guidebook (PBNYC, 2019; Gilman, 2016). Denver also offers grants to community groups willing to hold events. New York's PB effort partnered with a community group specializing in the technique of deep canvassing, which held trainings for community members to learn face-to-face strategies for more effective outreach (PBP Vimeo).

Implication 2: Volunteer base can be built by working with local academic institutions.

Our findings offered an alternative grassroots approach to building capacity for supporting key tasks like outreach, training, volunteer organization, and coordination with the support of local academic institutions. Documentation from Howard Grove's PB effort has occasionally cited faculty/research experts and students from local academic institutions in helping build the volunteer base to implement PB (UIC report), and echoed by Alderman Alan in his interview responses. Other PB efforts, like the one in New York, have similarly mentioned the help of "PB Fellows." The exact nature, structure, and role of the support from academic stakeholders have not been well documented; where available, evidence suggests that academic support from

local institutions have been on a pro bono and ad hoc basis, with faculty or research experts and their affiliated students serving consultant or temporary contractual roles in guiding or supporting different parts of the process (i.e., Crum et al., 2013, p.10).

Even so, the support and expertise of academic consultants has proven to be extremely useful and arguably a crucial component of the history of PB in Howard Grove in building capacity for starting PB, prior to the establishment of institutional resources. Alan explained that two experts with academic interests in PB helped guide him in initially getting PB set up: "I was their first guinea pig and so they offered up a lot of free time and advice to help guide our process, the first year we did it." He goes on to describe that this support also came from students associated with these academic experts, ensuring PB implementation occurred before he could hire dedicated PB staff: "It has to work and it requires it's very labor intensive. In my first year, I had, we were blessed with having one of [an academic expert's] fellow students get a lot of this [done] for us gratis [in addition to a] staff person in my office, who did a lot of work too. But it's because of that, and then she left to go to law school[.] And then we tried them in the next year participation and voting went down considerably because, you know, we just didn't have the resources." Alan's insight into the large role academic experts played in providing staffing support in the first years of Howard Grove's PB process demonstrates the significance of looking to educational stakeholders (beyond community groups) for building additional capacity to support PB. Alan's experience also suggests this is especially the case for new communities starting PB, since they often lack the resources to hire staff to implement parts of the process, or to coordinate and train volunteers to carry out this work.

While Howard Grove's experience with pro bono academic support highlights the potential value of academic institutions in building early capacity to start PB, the ad hoc nature of this support, as highlighted in his above explanation of its temporary status, leaves much to be desired vis-a-vis our knowledge of how a new community might capitalize upon this potential source of support in a sustained way. Our experience over the five months of the campaign

provides preliminary insight into how partnerships with local academic institutions can be institutionalized by building academic-based partner organizations (i.e., an organization supported by curricular and extracurricular pathways like the one organizers led) for supporting the work of community members in PB tasks. In building a policy development organization comprising graduate and undergraduate students who met and worked on a weekly basis to develop ARPA-eligible PB policies, we present an example of an academic-based organization for supporting PB. These students demonstrated particular interest in applying their interests in policy research and development to real-world contexts, but they also expressed a commitment to supporting PB as an effort and members of the Anderstown community in adopting this experiment. These interests and commitment suggest that these students may serve a supporting role in community members' voluntary PB work, whether policy research and development or potentially outreach, facilitation, or event management and marketing. With an organizational structure constituting a small set of highly committed and knowledgeable leaders, supplemented with regular meetings and structures for collaboration and socialization, our evidence suggests that this preliminary model of a student-driven partnership organization presents a promising approach to sustained partnerships with local academic institutions for building the needed community capacity to implement PB in a new community.

4.4 Building Government Capacity

Prior literature has identified the crucial role played by a strong advocate for PB who holds public office, as they are in a position to delegate decision making authority to community members (Lerner, 2012; Wampler, 2007). Political support for PB also needs to come from other government officials, to ensure that advocates do not face resistance or powerful actors who undermine the process or project implementation (Wampler, 2007). Individual government officials may have different reasons for supporting PB, from gaining political goodwill from their constituents to achieving a more equitable distribution of resources. Community advocates may

or may not need to actively organize to get PB adopted, depending on how much political support is already in place.

Separate from government resources needed to adopt PB is the challenge of organizing government resources to support the full PB process. Existing literature is much less clear about what resources, particularly from members of the city staff, are needed to support the complex processes of PB—everything from vetting policies to distributing resources to volunteers. Our campaign helped us discover some of the local government resources and infrastructure that need to be built for PB to work:

3a) At least 2 dedicated staff are hired to support PB.

From talking to political officials and city staff involved in implementing existing PB efforts, our findings indicate that having staff members dedicated to PB on payroll is just as important as having dedicated volunteers in the community who commit to implementing the different aspects of PB. Interviews with Alderman Alan indicated that these staff members on payroll dedicated to PB importantly pick up slack when volunteers do not or cannot show up to events. Alan reiterated that building the government infrastructure to sustain PB—that is, having full-time staff dedicated to PB—is ultimately crucial for ensuring the necessary work is carried out while supporting a community-driven process. He explains how, in his experiences of implementing PB, carrying out the actual work of PB—conducting outreach, setting up project expos and voting stations across the ward—required backup from the city staff for whom this work was part of their official responsibilities. In outlining the high amount of city staff involvement in Howard Grove's implementation of PB, Alan explicitly recommended hiring at least two full-time staff dedicated to PB. He further explained that having these PB staff is also important for managing unexpected political infrastructure challenges: Staffing turnover, communication between departments and volunteers, and additional implementation challenges that may come up after the completion of voting. Finally, in describing his many complex communication tasks to ensure

transparency into the process, Jorge also noted the need for PB staff dedicated to managing communications with members of the public who may require different forms of communication or translations of materials.

3b) City staff are committed to supporting the PB process.

Our findings indicate that buy-in to the PB process from city and departmental staff is critical, as these individuals are often the ones with the concrete expertise to evaluate proposals, can provide relevant knowledge about implementation, and also have connections to other department staff that might be relevant to loop in at different points in the process. Interviews with Howard Grove PB coordinator Jorge revealed that city and departmental staff are critical for getting feedback on policies, especially in prioritizing policies for development and rationale for decisions of policies to move forward. Similarly, former alderman Alan's interview responses emphasized that regardless of whether or not those staff members are dedicated full time to PB, "everyone [on his ward staff] pitched in" to making PB work, emphasizing the need to get staff buy-in regardless of whether or not those staff members are dedicated full time to PB. The success of PB depends on keeping city staff involved throughout the process, beginning with getting their buy-in to voluntarily provide expertise and resources.

Our findings indicate that to build the government capacity needed to start PB, elected officials can persuade members of the city staff and associated departments to buy into supporting PB. Our conversation with former alderman Alan revealed that he was able to use his initial success in the first year of PB in Howard Grove to convince other members of the city administration to buy into the process, both in committing time within their own non-PB roles to support the PB process, and in allowing his staff to hire for positions specifically dedicated to supporting PB. "It's easy when people work for you," Alan explained. "It's easy to get them motivated—'this is what we're doing, okay guys, let's go!' Well, I think they quickly bought into it, when [they] saw what we were doing." While circumstances are different when a city has not yet

built a foundation of success through prior PB experience, Alan's explanation still suggests that elected officials have both formal and informal authority to build the necessary political support from other members of the city staff. Moreover, elected officials have the means and power to advocate for the hiring of new staff members dedicated to supporting PB.

Apart from having public officials persuade other members of the city staff to supporting PB, it isn't entirely clear from this study how the design of the process can be adjusted to make this commitment easier for staff. The design of our campaign was premised on the hypothesis that focusing on simplifying the policy feedback and vetting process, such as by creating easy-to-understand templates and seeking feedback from other expert sources prior to city staff, might decrease the time and work required for city staff. Because this study concluded before staff were able to give feedback on the campaign's pilot policies, we were not able to evaluate the city staff side of our hypothesis. Nevertheless, our evidence did confirm that seeking feedback from community experts provided organizers with concrete opportunities to begin outreach.

4.4.1 Theoretical Implications for Building Government Capacity

Towards understanding how a new community can build capacity to start PB, our findings suggest that elected officials play a larger role in themselves carrying out organizing activities than acknowledged in extant literature. Prior literature has either accepted that one or several elected official "champions" are necessary before democratic experiments like PB can be adopted (Fung, 2015), or, to the extent that insights are available into grassroots advocacy for adopting PB, have largely treated elected officials have largely been treated as targets of organizing strategies (i.e., community organizers need to design campaigns to convince elected officials to adopt PB) (Hagelskamp et al., 2016).

Extending organizing goals beyond adoption and into implementation, however, clarifies the role that supportive elected officials have in building additional government capacity among

other members of the city staff. To effectively build government capacity to implement PB, elected officials who already champion PB need to continue advocating on behalf of community organizers, as they possess the legitimacy and relationships with members of the city staff that community members do not have.

The additional government resources and infrastructure indicated by our findings require government officials to advocate on community members' behalf to build the necessary government capacity for PB to succeed. This requires organizers to have clear and compelling reasons for persuading elected officials to do this advocacy, as well as clear asks for them to advocate for, like hiring at least 2 dedicated staff. It also requires organizers to build and sustain relationships with elected officials such that they can work together in persuading other members of city staff and administration.

3.5 Limitations & Future Work

As an in-depth analysis of a single case for the primary goal of theory development, the emergent capacity building model contributed by this study is methodologically limited in potentially depending on features that may be exceptional to this context, such as the uniquely politically progressive orientation of Anderstown community members and city officials. Future research is needed to understand whether this model can generalize, and how broadly.

Moreover, as a model that emerged from our community-based participatory research, our capacity-building designs were bolstered by and limited to the resources that we ourselves had access to in our context. In our case, as researchers and civic educators, we were supported by external sources of research funding (i.e., a considerable National Science Foundation grant) and many years of research and professional experience running, designing technologies and training tools for, and studying democratic deliberation. As graduate students and civic educators, including the lead member of our research team leading a civic

engagement course, we had special access to graduate student organizations with policy interests and experience, as well as access to students in a course in which they could choose to work on a campaign like PB for course credit, both of which were student populations critical to our ability to carry out this grassroots campaign. Additionally, organizers were fortunate in already having a supportive relationship with the city mayor, despite not having this relationship with other members of the PB Committee or city staff. Aside from support for our involvement, however, we were fortunate in already having a supportive contingent of the City Council committed to implementing PB, thus preempting our need to design the campaign towards institutional PB Adoption. Access to different levels of technical, political, and community capacity resources will likely influence strategies communities choose to employ for building grassroots capacity to start PB implementation and should be explored in future work examining startup efforts in other contexts.

Finally, even within our context, a key focus of future work should be examining whether and how the technical capacity built to become technical assistant leads and the grassroots capacity built to run pilot processes can be sustained and furthered into the community implementation phase. This study presents a model for building enough capacity to start PB—a key unexamined phase of the implementation process. Future work should examine how organizers link the early capacity built in this start-up phase to the capacity needed to carry out the various processes of participatory budgeting, from community outreach to recruitment of budget delegates to turning out members of the community to participate in the final vote for community-driven policies.

3.6 Conclusion

As a community-driven democratic process, participatory budgeting requires communities to build capacity to implement the complex processes to collect, develop, and decide how to implement community-driven policies. For new communities implementing PB for the first time, members of those communities have to confront the additional challenges of understanding what capacity needs to be built, who can support them in building that capacity, and what strategies to employ in doing this work.

This study presents an emergent model for organizing grassroots capacity to start PB in a new community. Over four months of community-based participatory research, we designed and deployed a grassroots organizing campaign to develop implementable policies for PB. An in-depth case study analysis presents an emergent model that indicates that new communities need to build three primary kinds of capacity to start new PB efforts: technical capacity, such that new communities have the knowledge and expert personnel to carry out the complex processes of PB; government capacity, so that communities have the formal resources and support to develop and implement policies; and grassroots capacity, so that new communities can bootstrap volunteer support needed to carry out PB. Our findings also indicate that grassroots organizers can build technical capacity for PB by running pilot PB processes, interviewing experienced PB practitioners, and synthesizing publicly available PB materials. Building political capacity for PB implementation requires working with elected officials who advocated for PB adoption to bring new and existing staff on to support the process, while building community capacity requires training a core group of committed volunteers to conduct outreach towards recruiting community members to participate across the PB process.

To the best of our knowledge, this study presents the first empirically grounded model of capacity building to start PB in a new community. The concrete strategies suggested by this emergent model demonstrate that capacity building to start new PB efforts require collaboration

among community stakeholders from government officials to community advocates, and, if possible, should leverage opportunities to partner with academic institutions that can provide training and student support.

This study contributes a detailed examination and design model for supporting a crucial unexamined aspect of participatory budgeting: the highly complex, challenging, and often hidden voluntary work of starting this participatory democratic innovation in a new community. While prior literature has highlighted the many beneficial outcomes of adopting a PB process on a community's civic engagement or inclusive government decision making (i.e., Fung & Wright, 2003; Wampler, 2007; Lerner & Secondo, 2012; Shah, 2007), this scholarship leaves the question of how communities actually go about carrying out the work to start PB largely unaddressed. Moreover, many communities start implementing PB processes with the support of experienced hired consultants, leaving the question of how new communities can build grassroots capacity for implementing this participatory democratic innovation a mystery. Our findings demonstrate that this start-up work to build a new community's capacity from a grassroots level is substantial, requiring the design of organizing strategies that help community advocates build power for starting PB implementation. More importantly, this study demonstrates the complex learning challenges in starting new PB processes, illustrating both the need for investment in training and organizational structures to support motivated early volunteers and the exciting unexamined educational benefits of grassroots campaigns to build democratic power for participatory policymaking.

4 DISCUSSION

In this chapter, I will discuss the broader significance of this research by showing how it contributes to our understanding of how communities can build capacity to organize new participatory democratic institutions from the ground up.

Building capacity to organize new participatory democratic institutions is particularly challenging due to the paradox of participatory democracy: Members of the public will not have the capacity to participate in their democracy when they have not had authentic experiences of empowered participation in their democracy. First, with participatory democracy a nascent if growing area of interest, very few individuals have immediate access to participatory democratic institutions in their communities. This means members of the public often have to organize to construct new participatory democratic institutions. Second, existing community-based organizations do not provide the engagement experiences that build community members' capacities to organize for new participatory democratic institutions, nor that build their capacities to participate in empowered democratic practices like agenda setting or democratic deliberation. This means that new communities need to both understand what capacities are needed to organize new participatory democratic institutions and how communities can leverage existing assets to design community-based learning environments that build those capacities. The previous two chapters present a detailed firsthand account of investigating these challenges in the context of organizing participatory budgeting for the first time in a new community. Across two case studies, I present findings demonstrating the need for new communities to build technical, grassroots, and government capacity; early design principles for novel learning environments to support capacity building towards technical and grassroots capacity; and theoretical implications for extending existing models of empowered participatory democracy and community-engaged learning to account for capacity building challenges.

To synthesize these insights and challenges raised about capacity building in organizing participatory democratic institutions, I propose *The Participatory Democratic Organizing Model*. This model argues that to organize new participatory democratic institutions, communities need to build *technical*, *grassroots*, and *government capacity* to organize new participatory democratic initiatives, and that university assets can be leveraged to conduct pilot participatory democratic processes that build technical and grassroots capacity in the short term. By building on existing relationships with government officials and consistently communicating expertise gained from pilot work, the grassroots and technical capacities developed from pilot participatory democratic processes can be connected to government capacity to formally kickstart a new participatory democratic institution.

The Participatory Democratic Organizing model is tailored towards addressing the unique challenges of capacity building during what I call the "start-up phase" of institutional entrepreneurship: when top-down processes, formal resources, or legitimacy have yet to be dedicated towards a new participatory democratic institution. Training community members to first participate in and facilitate low-cost pilots of empowered democratic practices like deliberation and policy development can provide them with skills and experience practicing democratic processes that seem abstract and idealized. Having them campaign to achieve formal support for their pilot policies can further build interest and motivation to take collective action to find formal implementation pathways for the policies they have invested in developing. Finally, teaching them organizing practices for getting other stakeholders within the community builds additional capacity for policy implementation, whether through institutionalized pathways like participatory budgeting or to continue organizing to build incremental political support towards future participatory democratic institutions.

I begin this chapter first by explaining the significance of this start-up phase, as illustrated by insights from my research. I outline and discuss the key capacity building challenges that characterize this start-up phase. Next, I present The Participatory Democratic

Organizing Model developed across these two studies, which provides concrete design principles to address each of these challenges, and discuss its practical and theoretical implications for future efforts to organize new participatory democratic institutions.

4.1 Participatory Democratic "Start-ups": Building Capacity for Participatory Democracy from the Ground Up

My studies contribute a detailed look at what I have identified as a "start-up" phase of capacity building in institutional entrepreneurship. In institutional entrepreneurship, motivated and committed actors (i.e., grassroots organizers) leverage existing assets to create new institutions (Maguire et al., 2004; Scott, 2014, p.117). During this start-up phase of capacity building, a core group of community members organizes to bootstrap necessary capacity to do the work entailed in institutional entrepreneurship—that is, they build capacity to identify and leverage existing assets for creating new participatory democratic institutions.

Organizing new participatory democratic institutions requires communities to build capacity from the ground up. Participatory democracy, by its participatory nature, requires members of the public to work together, with each other and with government institutions, to "coproduce" effective public action (Briggs, 2008). While scholars have established the importance of building capacity among different community stakeholders in this process (Cuthill & Fien, 2012) and identified key processes and frameworks for capacity-building at the community level (Honadle, 1981), these frameworks remain too high level to translate towards grassroots efforts to organize new participatory democratic institutions. Moreover, these frameworks do not clearly distinguish between top-down capacity building processes, driven by government officials or those already in positions of authority, and bottom-up processes conducted by community members. Participatory democracy requires communities to build capacity from the ground up in order to fulfill their participatory promise. That is, participatory

democracy is premised on the idea that democracy works best from the ground up: Those with living expertise of their communities make the best experts about how those communities ought to be governed, where resources are needed, and ways participatory institutions ought to be implemented to best serve the communities' needs. Understanding *how* members of the public can build initial capacity for these grassroots efforts is thus especially critical, yet remains undocumented in the literature.

Chapters 2 and 3 delineate key capacity building activities and outcomes of this start up phase for building capacity to organize participatory democratic institutions, a phase defined by the following characteristics:

- Lack of institutional (government-sanctioned) resources or legitimacy
- Carried out by a small, committed group of early volunteers
- A focus on recruiting, training, retaining, and growing volunteer base
- Focusing on pilot activities that help volunteers build knowledge and skills
- Goals of attaining institutional legitimacy to exercise direct citizen power

 In the research context of Chapters 2 and 3, this start-up phase was necessitated by the

 community-driven aspect of participatory budgeting, lack of experienced PB consultant to guide
 the community, and the large length of time (approximately 9 months) between the time the City
 Council officially announced the city's plan to adopt PB for the allocation of ARPA funds and
 when the community-facing process to execute that plan began (the latter exacerbated by the
 time limits for spending the ARPA funds from which Anderstown's PB budget derived). A
 combination of these contextual factors heightened the stakes in this context for building the
 Anderstown community's capacity to take advantage of this unique participatory democratic
 opportunity. As researchers and community advocates for open democratic innovation who had
 followed the City's interest in PB from the start, my research team and I comprised the core
 group of leaders during this start-up phase (limitations and implications of this are discussed in

the Limitations section). Between Fall 2021 to Spring 2022, we organized a university-based

grassroots organization to implement different pieces of the participatory budgeting process out of recognition of these particular contextual constraints.

The designs presented in Chapters 2 and 3 (of a pilot open democratic policy development process and grassroots organizing campaign, respectively) illustrate the breadth of our activities as organizers and the capacity-building outcomes from this phase. Chapter 2 illustrates how pilot policy deliberations can simultaneously be an educational and organizing opportunity that recruits, teaches, and motivates early volunteers to get involved in empowered participatory democratic processes. Chapter 3 illustrates how a small and motivated group of volunteers, excited by the opportunity to implement the policies they researched and developed in Chapter 2, can organize to build formal (that is, institutional) legitimacy and citizen power. Taken together, the design principles from these two studies provide both practical and theoretical insight into how members of the public can go in nine months from ground zero—i.e., three passionate researchers with a passion for deliberative democracy—to a fully established and legitimately recognized "start up" organization of 15 volunteers, working with 2 full-time city staff and a City Council committed to a new participatory democratic institution.

Using the characteristics of the start-up phase listed above as a guide, I will now present the Participatory Democratic Organizing Model, which provides concrete design principles for building capacity from the ground up to address each of these start up challenges.

4.4 The Participatory Democratic Organizing Model

To address the capacity building challenges of the start up phase, I present *The Participatory Democratic Organizing Model* (Fig. 4.1), a new organizing model that emerged from my findings. This model advocates for building a community's capacity to organize new participatory democratic institutions by leveraging university assets to recruit an early base of committed individuals motivated by educational and professional benefits of participating in and facilitating

pilot participatory democratic processes. The initial grassroots and technical capacity built from running these pilot processes with university faculty and students provides a base upon which additional capacity can be built, including by connecting to government capacity and recruiting additional community members beyond the university to join the organization, to organize a new municipal participatory democratic institution.

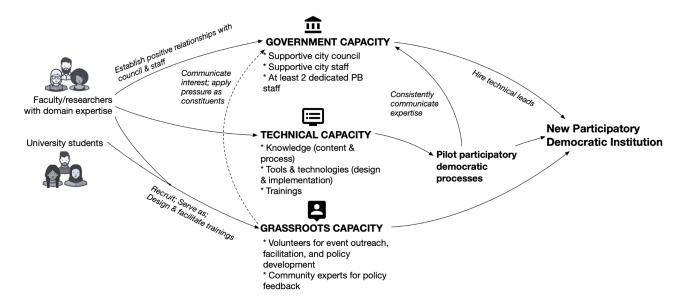


Figure 4.1 The Participatory Democratic Organizing Model. To build capacity to organize new participatory democratic institutions, communities need to build technical, government, and grassroots capacity. University assets can be leveraged to conduct pilot participatory democratic processes to build initial technical and grassroots capacity in the short term, which can be bootstrapped to government capacity to formally kickstart a new participatory democratic institution.

In this section, I will discuss the theoretical implications and practical design recommendations for implementing this organizing model, based on the previously listed capacity building challenges of the start up phase.

4.4.1 Lack of Institutional Resources: Leveraging University Assets to Bootstrap
Technical and Grassroots Capacity

The major defining characteristic of the start-up phase is lack of institutional resources and legitimacy—challenges that are core to institutional entrepreneurship (Macguire et al., 20014;

Scott, 2014) and require capacity building from the ground up. Building capacity from the ground up requires leveraging existing assets—actors, resources, socio-cultural factors, and relationships—already present within the community (Eade, 1997; Chaskin, 2001; Cuthill & Fien, 2005). However, it is not clear from existing high-level capacity-building frameworks *what* existing assets can be leveraged for capacity building, nor how to leverage them towards building capacity for participatory democracy. This is problematic because participatory democratic institutions can be extremely resource-intensive to get off the ground. Experiments like deliberative mini-publics, public deliberations, or participatory budgeting processes are typically initiated at the behest of established government actors with resources dedicated towards starting these efforts, whether public agencies, public officials, or external civic and advocacy organizations devoted to providing business services for implementing these efforts (Fung, 2015). As a result, it is not clear how community members on the ground might identify and leverage existing assets within the community to build capacity for organizing new participatory democratic institutions from the ground up.

Chapters 2 and 3 present an approach to leveraging community assets, many of which were anchored in organizers' home university, to bootstrap the technical and grassroots capacity for organizing new participatory democratic institutions. The approach relies on organizers (that is, my research team and me) identifying and optimizing existing assets within our community network to build *initial* capacities needed to get our grassroots effort off the ground. In this case, many of these community assets were anchored in our home university because these were the community assets most immediately and easily accessible to us as organizers. While university assets may not always be accessible to grassroots organizers in other participatory democratic contexts and thus suggests a limitation to this organizing model, I would argue that leveraging university resources may not be as inaccessible as it may immediately seem. Community-engaged learning models previously outlined, including service learning and experiential learning models, all similarly rely on university-community

partnerships. This organizing approach of leveraging university assets towards bootstrapping—that is, building the *initial* capacity to jumpstart further capacity building—can thus be considered comparable to university-community partnership models, insofar as both models require access to university resources, community-based organizational resources, and often also resources from government institutions to function.

My studies specifically demonstrate an organizing approach in which grassroots organizers leveraged the following assets to bootstrap grassroots and technical capacity:

- Motivated, skilled, and committed policy students and student volunteers, who were motivated to commit approximately 2-5 hours a week out of either a deep interest in local policy implementation and/or receiving course credit (if participating through the civic engagement course taught by the third author). As university-level or graduate students, these individuals were already more likely to have the appropriate skills for effective participation, with some individuals having specific expertise and even professional experience in policy research, public policy, or science policy.
- Organizers' expertise in civic technology, education, democratic deliberation, and design,
 which served as a high source of motivation for organizers in committing to this startup
 phase and more importantly served as a foundation for prototyping training materials,
 facilitation guides, and even technological platforms for this effort.
- Grant funding for supporting organizers' academic research, which provided financial support for organizers to commit their research time to building and studying this effort.
- Access to university infrastructure, which allowed organizers to access informational resources like libraries, high-speed internet, meeting and classroom spaces, printers, and other physical materials.
- Access to publicly available online resources for PB from external organizations, which
 allowed organizers to gather and synthesize materials on how participatory budgeting is
 carried out in other communities.

Existing relationships with community members and public officials in Anderstown and
Howard Grove, upon which organizers built to gain momentum for their campaign (i.e.,
by having 1-on-1 conversations with community experts they were already familiar with,
or interviewing experts from Howard Grove about their startup experiences.

By leveraging these assets to run a pilot participatory democratic process, organizers were able to build technical and grassroots capacity. This initial grassroots and technical capacity allowed organizers to develop expertise from pilot work, the results of which they consistently communicated to government officials to connect to government capacity. In the absence of other available technical consultants, this initial grassroots and technical capacity ultimately allowed organizers to formally kickstart a new participatory budgeting process as technical leads.

To be clear, organizers were highly fortunate in their position as researchers at a large R1 university, which allowed them to have access to these resources. However, this position is not unique in the sense that many academic institutions have resources like the ones identified above (such as policy education courses or physical meeting spaces). Perhaps most unique to our case here is organizers' expertise and grant funding available to dedicate towards prototyping this effort—a limitation worth exploring further but also potentially mitigated by sharing open access versions of developed prototypes with future organizers and research into other grant opportunities that may be interested in providing seed funding for this kind of effort.

4.4.2 Organizing a small, committed group of early volunteers

In addition to finding and leveraging existing assets in the absence of institutional resources and legitimacy, the start-up phase is defined by the activities of a small, committed group of "early adopter" volunteers who are willing to invest and put up with extra uncertainty to get initial efforts off the ground.

Findings across Chapters 2 and 3 suggest that university students with interests in local policy and civic engagement offer a promising recruitment pool for early volunteers to pilot participatory democratic processes. In Chapter 2, half of the policy developers (5 of 11) who participated in developing policies did so through an undergraduate civic engagement course, while another half of the policy developers (6 of 11) participated through a volunteer graduate student association focused on science policy outreach. The main motivation risk in Study 1 was that policy development volunteers would not be motivated by being tasked with developing a policy agenda they did not themselves determine, particularly if their policy assignments fell in policy areas outside of their previous expertise or interests. In the course of this work, I found that not only was this not the case, but moreover, policy development volunteers were motivated by educational benefits that are not currently captured in open democratic frameworks. In follow-up interviews with 4 of these graduate student volunteers, they expressed a personal interest in policy development as a skill and potential career path. All expressed value in having a real-world opportunity to apply their interests and gain experience. Additionally, all but one of the undergraduate students who participated in policy development for this study stayed on in the class, with two undergraduate members even recruiting friends to join the team, offering early unexpected evidence of bootstrapping.

These findings suggest that the educational opportunity offered by the participatory democratic pilot can offer significant, exciting real-world motivation for students with interests in local policy implementation. Some, though not all, of our policy development volunteers had previous coursework and sometimes even professional experience in policy research and writing. Yet the ones who did often explained why their experience on the campaign offered a unique opportunity for them to understand the policy context in their immediate local community, while the participatory democratic aspect of PB crucially provided the rare potential of having their research and writing work translate into real, actual policy outcomes.

Moreover, findings from interviews with policy development volunteers demonstrated that helping to facilitate an open democratic policymaking pilot can further motivate early volunteers to stay engaged with organizing and outreach tasks. As organizers, we had initially expected that recruiting students and community volunteers with an interest in civic activism, organizing, and issue-based advocacy would be a more promising route for building an initial base of volunteers who would be interested in conducting more outreach for bootstrapping volunteer resources. While we had initially recruited and trained individuals more interested in outreach, community engagement, and activism, we ultimately found that these individuals grew unmotivated by the pilot aspect of the work, the lack of legitimacy from the government, and the overall high uncertainty with regards to how to communicate the status of PB to community members in Anderstown for recruitment purposes. None of these recruitment and outreach volunteers ultimately stayed on with the campaign after the conclusion of the academic year in June 2022.

While this suggests limitations to the grassroot capacity built through students recruited to conduct outreach for the pilot process, we found instead that policy development volunteers, while initially involved not in outreach but in building technical capacity for policy development, grew more excited and enthusiastic about the campaign and organizing aspects of the project as the policy development work grew more concrete. This finding aligns with the theory of small wins, which argues for the motivational benefits of tangible, incremental progress towards a long-term goal (Weick, 1989), yet remains nonetheless surprising for establishing a connection between technical capacity building and grassroots capacity building. Following the completion of the 8 policy memos in Chapter 2, all policy development volunteers not only stayed on board with the organization, regardless of the increasing uncertainty regarding the campaign's relationship with the city, but moreover demonstrated evidence of increased motivation. Two of the policy developers recruited their friends to join the effort, while another policy development volunteer ultimately turned one of her policy assignments into a longer series of podcast

episodes on innovative efforts to address mental health in the city. As the campaign shifted into organizing territory (Chapter 3), more of the policy developers became interested in the campaigning aspects of policy implementation. Frustrated along with organizers with the uncertainty and lack of clear action from the city regarding the status of PB, the undergraduate policy developers in our organization began following local news and city websites to stay apprised of developments with PB, growing so excited about this that they even began planning to show up at city council meetings. It was through the policy developers' interest in holding the city accountable to their promises to start up PB that organizers ultimately learned about the PB Committee's monthly meetings, their communications with other participatory budgeting technical consultants, and began increasing our efforts to present our pilot work and findings to the committee, which ultimately led to the campaign's recognition of legitimacy and the organization's role in taking on the official work of PB.

With regards to the knowledge needed to organize a new participatory democratic institution, the start-up process does require knowledgeable organizers who put additional work into researching, gathering and synthesizing resources, and designing materials and facilitating training sessions for volunteers. It is important for these organizers to be aware of what institutional designs they aim to implement, and towards what outcomes. In our case, a crucial factor to note is that city officials were initially the ones interested in participatory budgeting (that is, a good amount of government capacity had already been built). PB aligned well with our interests as researchers and designers of open and empowered democratic systems. This confluence of factors particularly motivated us as organizers and researchers to further research, develop our expertise, and translate that expertise into training materials and technological tools for the start-up phase.

Design recommendations: Recruiting an initial base of policy students

One of the most exciting and promising findings from these studies was the appeal of working on a local, real-world, authentic policy implementation project to policy students and students with general interests in policy. My findings suggest that partnerships with educational institutions, either through extracurricular or, as in many other community-engaged learning models, with some course credits offered for participation, can both offer a promising pool of motivated, committed, and likely skilled early adopters for organizers. More importantly, the opportunity to participate in the start up phase of an empowered participatory democratic grassroots campaign can offer an exciting and unique opportunity to these students, many of whom our findings suggest are hungry for more opportunities to connect their classroom or debate club policy research and writing experiences to real-world contexts, particularly those that allow them to connect, learn more about, and give back to the immediate local community beyond the ivory walls.

Organizers should recruit these students by bridging their educational experiences in classrooms and coursework with their interests in joining extracurriculars that build on policy interests. In contrast with motivating members of the public to commit their time and resources to civic organizations and campaigns, policy students recruited to participatory democratic efforts can but do not need to be motivated by particular issues (Han, 2009). The new skills and potential social relationships they can build on a grassroots campaign to start up open and empowered participatory democratic efforts certainly do translate from traditional issue- or candidate-based campaigns (Han, 2009; McKenna & Han, 2014) and ought to be communicated in recruitment efforts. This also offers clear potential opportunities for recruitment through policy courses, departments, and professional organizations.

4.4.3 Building an organizational model focused on training

When fields are in their early stages of development and few, if any, organizations provide community members with authentic experiences to build capacities for participatory democracy,

researchers and practitioners must create new organizational models from scratch (Suchman et al., 2001, p.359). During this start-up phase, we developed and tested an organizational model (Fig. 4.2) for a university-based participatory democratic organization. In this organizational model, organizers were largely responsible for creating training materials, building coaching and mentorship opportunities, and facilitating training and reflection opportunities that allowed the organization to keep making progress achieving campaign wins even in the face of high uncertainty as to what those wins ought to be.

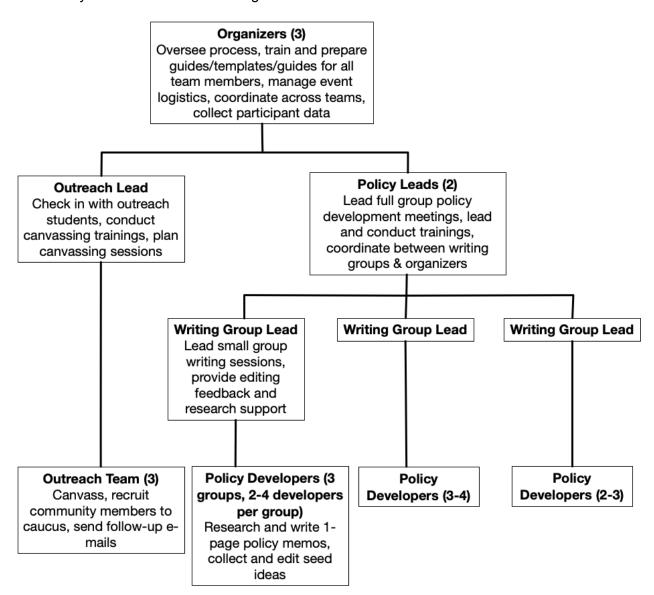


Fig. 4.2. University-based Participatory Democratic Organizational Model. Approximately 20 individuals, all faculty, undergraduate or graduate students at our university, carried out the pilot participatory democratic processes.

Chapter 2 introduced an early version of this model, which we adapted slightly in Chapter 3 to increase mentorship and coaching opportunities. The model, based loosely on the leadership ladder in civic groups and organizations and organizational charts for extracurricular newspaper staffs, had four main task roles: Writers, Editors, Policy Leads, and Organizers. By the conclusion of the campaign (end of Study 2) in June 2022, our organization had 14 policy writers, 3 editors, 2 Policy Leads, and 3 organizers. These task roles were not mutually exclusive, particularly given the small size of the "startup"; similar to newspaper staff structures, editors and Policy Leads also wrote policies, and Policy Leads also served as editors. Policy Writers were assigned to working groups to research and develop their policies and give on-the-spot feedback to one another. In Study 1, writers were in larger groups of 3 or 4, assigned by policy area; in Study 2, Policy Leads and organizers felt it better to give writers more flexibility and potential coaching and mentoring opportunities, so shifted to assigning writers policies in groups of 2. Each pair included one graduate student and one undergraduate student, to further increase potential social bonds.

Policy Leads and Organizers, the two higher level time commitment and leadership roles, were primarily distinguished from the other leaders in having additional training, coordination, and campaign strategy responsibilities. In our case, one of the three organizers (this author) was specifically responsible for interfacing with and designing training materials for policy development; the other two organizers focused primarily on outreach and recruitment, as well as communications with the City and higher-level teaching goals.

Policy writers, policy leads, and organizers typically held 30-minute check-ins once a week, and additional 45-60-minute online check-ins every two weeks for graduate student volunteers who couldn't make the in-person check-in. These check-ins were typically led by Policy Leads or Organizers, with a meeting agenda agreed upon in advance by these

individuals. Meetings started with updates, typically from organizers, about high-level campaign wins and changes, followed by updates and presentations from Policy Leads of new training materials and/or demonstrations from organizers of new policy editing features in *DeliberationWorks*. Each meeting concluded with some work time for policy writers to connect with their partners, though most of the writing and editing work happened asynchronously and online.

Findings across both studies suggest that this organizational model was effective in providing policy developers with the flexibility to work on their own policy research and writing with some degree of flexibility, while also having the support, training, and structured check-ins with Policy Leads and Organizers on a weekly to biweekly basis. Policy writers developed 1-page policy memos for all policies in deliberation participants' policy agenda from Chapter 2, and developed 9 more policies in the first two weeks of Chapter 3. As campaign direction shifted, weekly and biweekly check-ins allowed organizers to quickly coordinate updates with policy leads and writers, with policy leads and organizers focused on developing new training materials and updated *DeliberationWorks* features to address issues like tracking community member feedback and editors' comments. There is further evidence that the collaborative structure led to increased social bonds; policy developers remarked upon the new friendships they built during their time on the campaign and several expressed interest in taking on leadership roles even as tasks shifted from policy development to canvassing and outreach (see Study 2). These social outcomes are arguably more important than policy development outcomes, as goals of the startup phase emphasize building and retaining a committed base of volunteers. This commitment is much easier to build when volunteers have social and interpersonal reasons for participating in civic activities (Han, 2009).

These findings suggest that coming up with an organizational model that allows for some flexibility but importantly prioritizes coaching and mentorship (i.e., through writing and mentorship pairs, through coaching and reflection check-ins with Organizers and Policy Leads)

and training sessions (i.e., through Organizers and Policy Leads designing and updating training guides, templates, and technological tools each step of the campaign) is particularly important during the start-up phase. Having a structure that emphasizes training and support is critical for navigating the high uncertainty and somewhat nebulous measures of success associated with this phase of campaigning to implement open and empowered participatory democratic structures.

4.4.4 Focusing on pilot activities that train volunteers build knowledge and skills for participatory democracy

At the heart of the startup phase is training volunteers to build the knowledge and skills that help them effectively participate in participatory democracy. Despite increased interest by learning scientists and political science educators towards designing authentic learning environments to build learners' capacities for engaging with their communities (i.e., Allen & Reiter-Palmon, 2019), these learning environments, in which learners typically engage as student consultants or community service volunteers, fall short of authentically building learners' own capacities for empowered democratic participation. Organizing and participating in new participatory democratic institutions requires learners to both build capacities to organize to demand opportunities to practice direct citizen authority *and* build capacities to authentically engage in democratic participation beyond voting, like deliberation and policy development.

Across Chapters 2 and 3, I found that an approach towards teaching students to participate in and support a pilot participatory democratic process, towards the explicit purpose of developing implementable policies for participatory budgeting, provided an authentic and motivating opportunity for learners to build capacities for empowered democratic participation. In this approach, organizers emphasized two kinds of training for policy developers: (1) training to help policy developers and volunteers learn how to moderate deliberative discussions and

develop policies that meet the criteria for implementation through PB and ARPA funding, and (2) training to help policy developers learn how to organize to connect policy development to policy outcomes and public action. The first involved developing templates, writing guides, tools, and even technologies for supporting their policy development and project management. The second was less formal in these studies and mainly involved having policy developers participate in different organizing tasks throughout the campaign, including training policy developers to understand organizing goals like the need to build popular support on policy ideas from community members, providing them with an online dashboard to track weekly shifts in their own goals based on campaign updates, and recruiting new volunteers.

Across both Chapters 2 and 3, we designed and employed a diverse set of training materials to quickly train policy developers how to moderate policy deliberations, as well as to research, write, and incorporate feedback on 1-page policy memos. In Chapter 2, we designed and deployed training guides to teach volunteers how to moderate and record information during policy deliberations, as well as a brief training on policy development and templates from previous Participatory Budgeting processes to serve as a writing structure. In Chapter 3, policy developers were provided with a more developed policy writing guide that included a general policy writing template and key policy writing components (Appendix 4). Editors and policy leads were also provided guides and structures for their editing process. Organizers walked through all guides, templates, and scripts with policy developers and volunteers and led them through practice sessions to increase their comfort and familiarity with the material.

Importantly, much of the training was provided during the weekly or bi-weekly check-in meetings, during which organizers and policy leads walked through all templates and examples point-by-point, explained the rationale behind each design choice, invited questions, and provided important updates and changes to research, writing, and editing goals based on changes in the campaign. Evidence from Chapters 2 and 3 suggest that this training material was effective in providing all policy developers with the baseline structures they needed to

moderate and scribe during policy deliberations, write complete 1-page policy memos, to collect and refine over 70 policy seed ideas, and ultimately present two complete policy memos and key questions to city staff members for feedback. However, this evidence is preliminary, as we will not know how implementable, effective, or high quality these policy memos are until the official PB process is underway.

More importantly, the success of these trainings are demonstrated by two organizing outcomes in Chapter 3: (1) the process of developing policies, and committed volunteers to develop those policies, allowed organizers to demonstrate technical capacity to the City Council and built interest from community experts in the PB process, and (2) the trainings ultimately provided policy developers with a learning experience they found rewarding and motivating enough to stay engaged on the campaign past the start-up phase. Given the goals of the start-up phase, these capacity building outcomes are arguably more important to achieve through training materials than evaluations of quality or proficiency in policy development or deliberation facilitation, both of which could be improved through further training and more developed, accurate training materials in later stages of the implementation process.

4.4.5 Organizing to attain institutional legitimacy: Running pilot participatory democratic processes to build initial technical and grassroots capacity

At the center of the Participatory Democratic Organizing Model is the design recommendation to run pilot participatory democratic processes as an organizing mechanism—that is, to build initial technical and grassroots capacity that achieves the outcome of a new, legitimate participatory democratic institution. These pilot processes include deliberation, policy development, and seeking and supporting policy feedback from other members of the community.

First, towards technical capacity building, Chapter 2 demonstrates that authentic engagement in democratic practices like deliberation and community-driven policy development

builds learners' capacities to participate in these practices, often removed from daily life or school curriculum, as well as organizers' capacities to facilitate them. My findings suggest that by having policy students and organizers recruit community members, facilitate deliberative mini-publics, develop implementable policies based on their deliberative policy agendas, and invite community members back to iterate on, ratify, and give feedback on policy memos, a burgeoning grassroots organization can build technical capacity to carry out a participatory democratic policy agenda. Students learn and authentically practice important skills like canvassing and policy development, while organizers build technical knowledge about how to design, plan, and facilitate these events.

Second, towards grassroots capacity building, the concrete policy agenda that results from the pilot deliberations can build further momentum for students and organizers towards organizing additional support from the community. Policy students, as seen in my findings, can become more motivated to organize to implement policies they worked to develop, while organizers can use the concrete policy ideas to build further community support for a new participatory democratic institution to provide a formal pathway towards implementing these policies. As demonstrated in Chapter 3, the concrete policies developed from a pilot process can be used to gather feedback from other community members, to increase their popularity and/or identify critical "deal breakers" that need to be considered in further developing the policy. While this was not seen directly in my findings due to the shift in campaign strategy towards taking on the role of Technical Lead, this policy feedback process could help organizers start conversations with other community members or community groups who may share interests in these pilot policies, gradually building the grassroots interest for supporting a new participatory democratic institution that would provide a formal implementation mechanism for popular policies.

Together, this initial technical and grassroots capacity is critical for demonstrating to actors within government institutions that there is sufficient capacity built within the community

to institutionalize a participatory democratic process. Our case, while not unique in this respect, was fortunate in already having support from government stakeholders, including several members of the Anderstown City Council, for experimenting with a new participatory democratic institution. However, support from government officials, while necessary, is not sufficient for organizing a new participatory democratic institution. Chapters 2 and 3 demonstrate that in addition to government support, additional capacity needs to be built both within government institutions (e.g., hiring dedicated PB staff) and among other members of the community for a participatory democratic institution to have the resources, invested stakeholders, political support, organizational structures, and technical know-how to be properly implemented for the first time. Findings from Chapter 3 demonstrated that the initial grassroots and technical capacity organizers built from running pilot participatory democratic processes—including evidence of committed and knowledgeable policy developers and organizers' demonstrated expertise facilitating and training novices in policy deliberation—were critical in convincing government stakeholders to offer organizers the position of Technical Assistance Lead. This decision ultimately was a watershed one in formally kicking off Anderstown's very first participatory budgeting process.

In the close examination across these two studies of how we as researchers and lead organizers designed social processes, tools and technologies, organizational structures, and new relationships to build this initial technical and grassroots capacity, this dissertation also contributes a novel methodological approach to sociotechnical design in participatory action research. In this approach, the participatory design researcher-organizer integrates social, technical, organizational, and institutional design towards organizing to form a new public and building its future capacities to engage in empowered democratic practices. Building on the sociotechnical approach of infrastructuring, which focuses the activities and purpose of the designers on developing relationships and supporting conditions that enable a community's capacities to act (Ehn, 2008; LeDantec, 2016), I extend this approach towards organizing

contexts in which a public does not yet exist and the researcher is herself directly involved in organizing (and designing systems to support that organizing work) to build that public.

Following Dewey's conception of publics as groups of individuals bound by common issues and affected by a specific set of conditions (Dewey, 1954, p.15-16), this dissertation focuses as much on organizing new institutions of participatory democracy as on forming new public(s) associated with this new institution—whether organizations invested in supporting outreach and event facilitation for running parts of the process, or CBOs interested in contributing policy ideas or holding officials to account for outcomes. The nature of these publics are not entirely clear at the outset precisely because the institution itself is still in the process of formation; so, too, then, are the social group(s) who would be differently affected by the rules and conditions of that institution.

The design approach taken across this dissertation retains many of the same goals and characteristics of infrastructuring, in that researchers similarly focuses design activities on future capacities of porous publics bound by a common cause in confronting shared issues (Dewey, 1954) and a shared set of commitments and dependencies in doing so (Marres, 2007). In this dissertation, I focus on methodologically investigating how the role of the design researcher shifts when we are not only designing with and for existing issue publics, as in the case of participatory design (LeDantec, 2016), but when the participatory action researcher as simultaneously designer and organizer is also focused on building capacities for *new* publics—that is, infrastructuring to support a group of individuals who have not yet formed around shared issues and attachments. Specifically, in designing sociotechnical systems for supporting pilot open democratic processes in Chapter 2, I found that in contexts of organizing to institutionalize new participatory democratic pathways for policy implementation, the initial technical and grassroots capacity we built were the key outcomes to focus on in organizing to build additional capacity for institutional processes. That is, while the technical outcomes—the developed policy briefs, the technological features of *DeliberationWorks*—were important and

effective towards evaluating the exploratory design hypotheses of the study, they were *more* important as a means of organizing initial capacity for participatory democratic work. In Chapter 3, I focused on designing to build on these initial capacities towards outcomes of organizing additional stakeholder capacities across the broader community towards participatory budgeting. By extending sociotechnical design considerations from our pilot work to considerations of how we, as design researchers and lead organizers, might design grassroots organizing activities in a capacity building campaign to achieve additional institutional support, this research thus contributes a new methodological approach to sociotechnical design towards organizing outcomes. This approach is one that shifts the focus for design as a discipline to apply to community-based participatory researchers who are engaged not only in going beyond the design of products, services, or even relationships and capacities, but moreover towards organizing, power- and institution-building towards more empowered democratic futures.

4.5 Next steps for Organizing Participatory Democracy

The Participatory Democratic Organizing Model emerged from the findings of this 9-month case study and, as such, presents a theoretical hypothesis that certainly needs to be tested and further iterated upon in other contexts (Beach & Pedersen, 2013; George & Bennett, 2005). In refining the model further, I propose focusing future research on deepening our theoretical understanding of connecting democratic practices like deliberation and policy development to organizing strategies. Additionally, future research should practically examine how participatory democratic organizations can support empowered democratic participation beyond the start up phase, including how the initial base of volunteers can bootstrap to grow the base of committed community volunteers in an organization, and how organizational structures and activities may need to change once a campaign has gained institutional legitimacy and are working in collaboration with government institutions.

4.5.1 Connecting democratic practices to organizing strategies

Theoretically, we need to deepen our understanding of models of democratic practice that incorporate organizing strategies towards policy outcomes. The organizing model presented in this dissertation highlights the need to consider democratic deliberation as an organizing exercise, one that brings stakeholders across a community together to articulate, iterate upon, and build commitment towards starting a new participatory democratic institution, and moreover motivates policy development volunteers to further organize to implement policies they worked on. I propose the startup phase of capacity building for participatory democracy to illustrate why this connection is necessary: Participatory democratic practices, as governance mechanisms, ultimately need to attain institutional legitimacy so that members of the public who participate in these practices can exercise decision making authority. Yet organizing to build power to attain that legitimacy is a complicated power-building endeavor, especially since civic organizing principles have not been formally applied towards efforts to empower participatory democratic practices.

The Participatory Democratic Organizing Model begins to bridge our theoretical understanding of how these two bodies of literature might productively be linked to address this gap, but there are still many questions in the startup phase of benefits and potential conflicts of connecting democratic practices like deliberation to organizing strategies. For example, deliberation scholars and practitioners often aim to negate or significantly reduce the role and influence of power inequities within what might be considered the idealized space of deliberative dialogue, even those aimed towards pragmatic goals of collective problem solving (Mansbridge, 1983; Fung & Wright, 2003). In some ways, then, the very idea of attempting to connect democratic deliberation to theories of power-building (organizing) is oxymoronic; prior democratic scholars have also noted the seemingly oppositional dynamics in "adversarial"

countervailing power," as is often found in organizing contexts, and participatory collaboration in participatory democratic contexts (Fung & Wright, 2003, p.265). Practically speaking, implementing this connection is even harder. Campaign shifts and organizing practices can logistically interfere with democratic practices like deliberation and policy development, leading to even more uncertainty and confusion as to what policy actions and outcomes for deliberation ought to be. As illustrated in my findings from Chapter 3, organizers struggled to come up with an organizing strategy that translated towards a participatory democratic context, and policy developers struggled to stay abreast of constant shifts in campaign strategy that necessitated quick and sudden shifts in their research and writing priorities. While this uncertainty is acute during the start-up phase, organizing and power-building strategies in general require flexibility and a willingness to adjust plans based on newly learned information (Booth-Toobin et al., 2021).

Deepening our theoretical understanding of when democratic practices like deliberation can and even should be connected to organizing strategies—for example, what shared outcomes could be advanced in bridging these approaches to civic problem solving, and where are potential sources of conflict—is an important first step to further advancing and refining the theoretical hypothesis raised by this organizing model.

4.5.2 Beyond the "start up": Organizational questions for supporting new participatory democratic institutions

The studies in this dissertation focused on building the grassroots capacity of an early group of committed organizers and student volunteers to implement new participatory democratic efforts by carrying out pilot democratic processes. I identified this as the start-up phase of capacity building because we focused on campaigning for legitimacy, piloting democratic processes, and designing training and organizational structures for supporting those campaign goals. But how

does the organizational model change for supporting a grassroots organization beyond the start-up phase—that is, once the organization receives institutional legitimacy and resources, as we did by the conclusion of Chapter 3? In conducting further research for building capacity in participatory democracy, the move beyond the startup phase surfaces a number of important questions.

An important aspect of supporting grassroots capacity building beyond this startup phase is investigating how a core group of grassroots organizers can bootstrap the capacity they built so that they can grow the base of committed volunteers in the organization. To understand how an organization can bootstrap grassroots capacity beyond the startup phase, a first practical consideration is understanding how the roles, activities, and associated organizational chart may need to shift once an organization gets beyond the startup phase. This could mean when an organization gains institutional legitimacy, as in our case of ending the campaign phase upon being asked to formally lead the participatory budgeting process in Anderstown. It could alternatively mean when the organization gains a clear understanding of their organizing strategies for policy implementation and are ready to build further grassroots momentum by focusing on recruitment of additional volunteers. In these different scenarios for establishing the clear goals and identity of an organization, a different set of roles, activities, and structures may be appropriate.

Similarly, future research should consider the organizational characteristics of these grassroots organizations focused on empowered democratic learning. In contrast to startups in the traditional sense, which may be "aged" by rounds of venture capital funding, or even civic organizations that may have indicators like how many active members they have or number of policy or political wins, we do not yet know what clear indicators are of when a grassroots organization may have built enough capacity to get beyond the startup phase—or whether what my studies have suggested is a startup phase are, in fact, core capacity building practices regardless of how "mature" a grassroots organization is. Future research should investigate

what grassroots capacity building looks like once an organization has received some degree of external legitimacy, resources, or financial support. This research should extend to consider how organizational structures and activities may need to shift once organizers are working directly in collaboration with government stakeholders, which necessitates a potential shift from persuasion or "adversarial" power-building activities to co-governance and power sharing structures (Wright & Fung, p.264-267).

Practically speaking, we need to understand how participatory democratic organizations can be implemented in other contexts. The early organization that emerged from my studies falls somewhere between a civic organization and an academic class/extracurricular, with students partaking in activities as part of a civic engagement course as well as graduate student volunteers who participated in activities as part of an extracurricular club. Similarly, the organizing model for empowered democratic learning, while emphasizing the process of learning how to carry out new democratic processes by training individuals to carry out processes like deliberations and policy research and writing, also has empowerment goals that translate into the need for individuals to achieve real organizing wins and policy outcomes out in the community. Practically, this kind of model requires that members of the organization view themselves as members of the organization, rather than students in a class or one-off volunteers committing discrete amounts of time to service activities. This presents a challenge for existing models of university-community partnerships to support community-engaged learning (Allen & Reiter-Palmon, 2019), as students need to feel motivated to commit to organizing outcomes that do not fit neatly into the constraints and structure of traditional university classes (i.e., authentic campaigns do not follow the academic calendar and often involve high uncertainty and shifts in strategy that do not easily translate to class planning). Likewise, to engage authentically in organizing, community members will also need to trust student organizers to work on power building outcomes. Thus, there are many rich

organizational questions about how such organizations can be replicated in other contexts, particularly those supported by university partnerships.

Finally, future research should turn towards examining the organizers at the highest rungs of the leadership ladder. As researchers and designers with interest and expertise in community-based participatory research, my research team and I were particularly motivated to design, iterate, investigate, and document these unexamined questions of starting new grassroots efforts to realize open and empowered participatory democracy. Moreover, we conducted this work under the unique conditions of a city council that had already publicly announced an effort to adopt a PB process, which gave us a major head start in that we did not need to organize the political will to adopt a participatory democratic mechanism. Many questions remain on the organizing side of what motivates other individuals to take on tremendous leadership and invest their time, resources, knowledge and energy into realizing new grassroots efforts to empower their community to participate in democratic governance.

4.6 Conclusion

The research presented across the two chapters of this dissertation suggests that the problem at the heart of the "paradox of participatory democracy" (Kaufman, 2017; Mansbridge, 2003) is one of democratic learning: People who have not had the experience of participating, or being empowered through their participation, in their democracy often do not have sufficient capacity to power successful democracy. Over the two studies comprising this 9-month campaign to build grassroots capacity to start a new empowered participatory democratic effort, my research suggests that the answer to this paradox, or at least a piece of the answer, may come from empowering people to participate by trying out authentic practices of democracy in their local communities, and then organizing to translate those practices into policy outcomes.

By building capacity among members of the community to try out the practices of democracy on a smaller scale—short, quick deliberations; pilot policy memo-writing—and then teaching them organizing principles to build power to connect those practices to policy outcomes, this model of participatory democratic organizing seeks to demonstrate that people-powered democracy relies on quick, iterative cycles of trial and error, and an investment in developing grassroots leaders. To build people's capacity to authentically practice democratic processes, we need to build authentic, community-based organizations dedicated to this kind of training and organizations that practice deliberation and policy development as the problem solving skills that members of the public need in order to be active and engaged participants in their own democracy. To empower people's capacity to make real policy change, we need learning-centered organizations that do the challenging work of organizing, that train people how to make progress in the face of uncertainty, and most importantly, that invest in developing the deep social bonds and relationships that truly define the meaning of community.

This research highlights the need for scholars of democracy and institutional design to interrogate the complex learning challenges in building public capacity for empowered democratic structures, and the need for scholars of learning and organizing to consider how we might design to apply principles developed in civic classroom or activism contexts to be applied towards the participatory democratic reform of local government institutions. In calling for new, active, and transformational ways of participating in our democracies, we need to push the boundaries of what civic learning looks like and invest in building authentic people-powered structures that translate passion, curiosity, and a love for community problem-solving into real, actionable, and deliberative policy change.

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6 APPENDICES

Appendix 1.

Anderstown Residents Interview Guide

Hi! Do you have 30 seconds to talk about COVID relief in Anderstown?

My name is [name of person doing the assenting], from Northwestern University. What is your name?

I'm here because the City of Anderstown has recently received COVID relief funding from the federal government.

As part of this process, we're running a research study to hear from residents about how they would like the City to spend the money. Are you interested in helping with this?

Great, so I have a few questions about what you care about, what policies you support. Could I ask you a few questions now?

OTHERWISE: Is there a phone number and a convenient time we could reach you?

If you're interested, there's an opportunity to continue this conversation at a later time with other citizens, and I'll collect your contact information, which we will keep safe, to send you more information. Your participation is voluntary and you can ask me questions at any time. If you want to stop at any time, just let me know. Do you want to participate in this study?

Record participant's response: Yes No

Would you be okay with us recording audio of this interview for data analysis purposes? If you want to stop the recording at any time, just let me know. I will tell you when I start and stop recording.

Record participant's response: Yes No

Uncover opinion
How willing are you to spend one hour helping the City of Anderstown design COVID-relief policies in the next two weeks or so? On a scale of 0-10, where 0 is absolutely NOT and 10 i absolutely yes?
Record participant's response:
Why is that the right number for you? What is on either side of the issue for you? What are some reasons that you would be not willing? Willing? Undecided?
Identify concerns (unless they don't have any)
I hear that you're concerned about:
☐ Too busy
☐ Too old
☐ Transportation
☐ Childcare
Don't know enough
☐ Discussions are not effective
□ Not into politics
☐ Other:
Is that right?
I hear you and I resonate with these concerns as well. We'll get back to them, but first, let me
ask you another question.
Identify interests, policy area, issue publics
Is there a specific issue, like education, small businesses, climate, you'd like the city to spend
money on?
☐ Education
☐ Small businesses
☐ Climate
☐ Infrastructure

Policy Positions

☐ Healthcare

Do you have a proposal on how the city should spend money on this issue? Pull up the policy database (DeliberationWorks) and get ready to write

negatively affected by the pandemic?

• If they have proposals: Look for policies related to what they are proposing

• If not: How were you affected by the pandemic? Do you know anyone who was

- o If none exist, write down their proposed policy and help them develop it further.
- o **If there is one**, ask them to help you update the policy.
- If not:
 - o The city actually has a few proposals on how to spend this money, would you like to take a look?
 - If yes, show them all policies in the policy area they are interested in
 - If not, that's not a problem!

Debrief and address concerns

Thank you for improving these policy proposals! We'll be having these chats with residents for the next few months, and every month we'll be hosting a 1h deliberation, or discussion, about policies that we're collecting. The goal of these discussions is to have a list of policy proposals for the city to implement.

Retest opinion

Email address: ____

Record participant's response:

Thank you, again, for your time. To wrap things up, back on the 0-10 scale, how willing are you to spend one hour helping the City of Anderstown design COVID-relief policies in the next two weeks or so?

[If moved] Why is that the right number? What makes you rate yourself differently?	
[Otherwise] What would've made it more convincing to you? Is there anything that would	've
been more persuasive to you?	

Invite to participate in a future deliberation

Would you like to be contacted to	participate	in a future	deliberation	to discuss	these po	olicies
with other residents?						
Record participant's response:	Yes	No				

Contact information	
Can I get your name, phone number,	and email address?
Name:	Phone number:

Network

Whom else should I speak with? Do you know anyone who's particularly interested or affected by COVID policies?

Record participant's response: Yes No

Appendix 2

Facilitation Guide

11/30 City of Anderstown ARPA Deliberation

About this guide

This guide was designed for in-person deliberations.

Participants will be filling out a worksheet, which is generated by DeliberationWorks.

Each table should have

To prepare:

- Recruit participants (5-10)
- Print out worksheets (13-15 copies)
- Decide on policy areas to deliberate on (subset or all?)
- Recruit moderators and scribes (1 of each per policy area)
- Teach moderators and scribes how to use the system (e.g., enter comments, vote on policies, create new policies)

Reasoning behind this guide: <TODO>

Time	Instructions	Moderation
0:00-0:09	Welcome! Thank you for being here! By being here today, you are serving as a representative on behalf of the [university] community in helping the City of Anderstown allocate Covid relief funding.	
	For those who don't know me, I'm Kristine. I'm a PhD student here in the LS program, and also a co-founder, along with Gus and Matt here, of a civic student group, Indivisible Northwestern. For those who aren't familiar, The Open Democracy Project is a group committed to helping [university] students get started with civic activism. Our club is supporting students on various parts of tonight's process as part of our Open Democracy Campaign, including recruitment, policy development, and caucus moderation. If	

you're interested in learning more about how you can get involved, please feel free to ask [organizers]!

Before we get started, I'd like to remind everyone that tonight's meeting will be recorded. Our fantastic scribes, whom we will introduce shortly, will also be recording the ideas you discuss tonight so we can share them with the City and other community members.

Okay, so we're all here because the City of Anderstown has received \$43 million from the Federal government to alleviate the impact of COVID-19. The City wants community members to decide how to spend \$2.5 million of that money, so that is what we will be discussing tonight.

Our three goals for gathering here today are:

- 1. Have fun and meet people
- 2. Learn about current proposed policies
- 3. Choose or create new policies to be developed further

To do that, we'll start by having you choose a broader policy area, and then we'll each pick one policy to go deeper into. At the end, we'll get back together and share our positions.

One quick thing to note before we get started—these are seed ideas in various stages of development, so I'll encourage you to take a constructive and early stage approach to the policies you'll see today. Our discussion is really going to be about focusing on what policies *you're* interested and excited in seeing the City invest in and develop further!

Does anyone have questions before we get started?

	At this point, I'd like to introduce our moderators and scribes for today: Gus and Ruth will be your moderators tonight, and Donny, Donovan, Hana, and Lily will be your Scribes. They will be helping moderate the discussions, take notes, answer questions and all that. Great, if you have questions along the way, please feel free to stop me, ask your moderators Gus or Ruth, or raise your hand!	
0:10-0:14	Break into small groups We're going to start with some introductions in your small groups. Your moderator will lead you through next steps! Keep track of time: 10 mins to choose policy 2 mins for filling out engagement survey	
0:15-0:44	Small group discussions 15 mins to share policies with small group	See Moderator Guide: 11.30.2021 Moderator
0:45-0:60	Discussion Thank you everyone for sharing your policy. That was fun! Now let's get back to our big group to share what policies we're each supporting. <wait back="" come="" for="" people="" to=""> Task: We'll go around and share the one policy we support and why. I'll ask you to raise your hand in support, in opposition, or if you're uncertain about the policy after each person shares so scribes can capture that information. You only need to vote on policies shared by</wait>	

the other group, unless you want to change your vote for policies shared in your own group.

Alternate sharing of policies from the two groups.

Thank you for sharing your policies, everybody! Now, we're going to have everybody rank the policies that were shared based on your individual preference of which policies they most want to see implemented. Moderators, can you please give everyone a post-it? Everyone, write your name and your final policy rankings on the post-it and hand the post-it to your moderator. Remember, only rank the policies you would be in support of implementing!

At the end

Thank you so much for participating! It was awesome to hear from everyone and your input will be extremely helpful.

What will happen now is we'll have our incredible policy development team incorporate your feedback into the proposals and talk to experts and city staff to get *their* feedback on the policies you worked on today.

Lastly, we want to invite all of you back on Tuesday, February 1st, at this same time (7-8PM), to vote on the final proposals developed based on your votes today. Final proposals that receive 75% or more support will be recommended for implementation to the City Council.

If you signed up to stay involved with a policy, we'll follow up with you based on your preferences.

To wrap up, if you haven't already filled it out, please take a few minutes to fill out the engagement questions at the end of your participant work packet.

We'll be hanging out here for a bit if anyone has any other comments you'd like to share on the process today! Thank you so much for coming today, and we'll look forward to seeing

all of you again in Enhand	
all of you again in February!	

Appendix 3.

Structure of policies in this document

Please use the following template and structure your memos accordingly. ALSO ADD: Are there existing or alternative sources of funding?

VII. What Will Your Committee Produce?

. Project Proposal Form

(Note: This is what you'll submit to the Budget Department for vetting. Each committee typically submits 5-10 proposals for vetting)

Project Name:
I continue to be forther and the continue of t
Location(s): (address, intersection, or landmark name)
Brief Description: (1-2 sentences describing what the project involves)
Full Description: (A few paragraphs explaining: Why is this project necessary? What local
problems or needs does it address? Which communities will the project benefit? Is the project
feasible? Other details?)
Potential Challenges?
Estimated Cost:
City Department Responsible for Implementation:
City Department Responsible for implementation:

Appendix 4.

Policy development guide

Please follow these STEPS in your policy research:

- 1. Framing the Problem
 - First, identify a problem highlight a narrative and decision making process in identifying a problem. Remember, there are no objective problems in the world. How you frame it is a political and persuasion act. Presenting the problem is step 1 and WHY is it a problem (what is its cause), to whom is it a problem. Why would someone care about this problem? What are the causes & how might you use evidence to demonstrate the cause associated with the problem?
- 2. Proposing the solution and causal model
 - Specify your specific, fundable solution and build out an evidence-based causal model to demonstrate that your solution can address your proposed problem.
- 3. Gather data from other cities to indicate the causal model
 - Use local policies that other cities (that are similar in size, SES, etc. to Anderstown) have implemented or are in the process of doing so. Use academic articles to provide evidence for mechanisms. Reference local journalism sources as needed.
- 4. Apply the model to Anderstown
 - Show current state of the problem, and if you did the same thing as example cities you've gathered research from, what do you think it might be
 - Search for information using Anderstown city databases, local journalism sources like Anderstown Now & Anderstown Roundtable, CALL 311 (it's a very helpful resource!)

POLICY WRITING CHECKLIST. Answer these questions in Policy Brief. If there are any you can't answer, please note them as comments on the policy: In 250-500 words

- What is the problem that this policy is solving? Is the problem clearly related to one of the listed ARPA Eligibility Criteria (see below)?
- Who is the impacted population? Is there evidence that these are "impacted" and "disproportionately impacted" classes (see below; impacted classes experienced the general, broad-based impacts of the pandemic, while disproportionately impacted classes faced meaningfully more severe impacts, often due to preexisting disparities)?
- What evidence do we have that this population is affected by the problem? How significantly are they affected (i.e., % of people)?
- What is the proposed policy solution (the designed response that addresses/responds to the impact)? Make sure it's specific enough to be fundable. Types of responses can include a program, service, or capital expenditure
- What are its estimated costs?
- The outcome: How would your proposed response benefit the impacted population? How much would they benefit?
- How would you measure the outcome?
- What is the evidence for the causal impact of the intervention on the outcome? (What is your evidence that the solution would address the problem you have determined?)
 - o Based on academic research + other attempts
 - Use evidence to make the argument that this intervention would transfer to Anderstown context

- What are the pros/cons on this policy idea from the community (we'll get this from the online platform)?
- Who are the stakeholders involved: Who are different groups affected by the problem, involved in implementing the solution?
- Who proposed this policy idea?
- Is this feasible/vetted?
- Location
- Potential challenges for implementation
- Sources of previous funding
- First steps to Implementation: Scoped ideas for projects to fund that are within the \$280,000 budget allocated for participatory budgeting in each ward
- City departments responsible for implementation
- Word Limit: 250-500 words max

Here is a possible template you can use!

- Sentence(s) 1: [What is the problem? What evidence do you have that it is clearly related to one of the listed ARPA Eligibility Criteria? Who is the impacted population/disproportionately impacted population in Anderstown, and how significantly are they impacted?]
- Sentence(s) 2: [What is the design response/policy solution AND its proposed outcome? How would the outcome be measured? How would your proposed response benefit the impacted population? How much would they benefit?]
- Sentence(s) 3: [What is your causal model for the solution on the problem? What
 evidence do you have from cities of size, proximity to an urban center, and
 demographics similar to Anderstown that have implemented this policy or a similar one
 that provide evidence for the causal model?]
- Sentence(s) 4: [Public opinion in Anderstown support/opposition for this policy idea]
- Sentence(s) 5: [How much money are you proposing for this policy? Note: all policies must cost under \$1 million]
- Sentence(s) 6: [Who in the city (government, businesses, non-profits will need to be mobilized to make this policy happen? What are the first steps]
- Sentence(s) 7: [How will this idea be eligible using ARPA funding to benefit local Anderstownians?]
- Sentence(s) 8: [Who proposed the policy idea and is it feasible/has it been vetted?] ARPA Eligibility Criteria: Related to behavioral healthcare Food assistance Emergency Housing Assistance Programs, services or capital expenditures that respond to public health and negative economic impacts of pandemic COVID-19 mitigation and prevention Medical expenses Preventing and responding to violence Aid for re-employment, job training, food, rent, mortgages, utilities, affordable housing development, childcare, early education, addressing learning loss Loans or grants to mitigate financial hardship to small businesses and nonprofits Technical assistance for small businesses Impacted industries like travel, tourism, and hospitality that faced substantial pandemic impacts Premium pay for eligible workers performing essential work Invest in water, sewer, and broadband infrastructure High-speed broadband infrastructure in areas of need that recipient identifies Construction of schools and hospitals Road building and maintenance Health services General government administration, staff, and administrative facilities "Environmental remediation" Provision of police, fire, and other public safety services (including purchase of fire trucks and vehicles)

ARPA Eligibility Criteria:

- Related to behavioral healthcare
- Food assistance
- Emergency Housing Assistance

- Programs, services or capital expenditures that respond to public health and negative economic impacts of pandemic
- COVID-19 mitigation and prevention
- Medical expenses
- Preventing and responding to violence
- Aid for re-employment, job training, food, rent, mortgages, utilities, affordable housing development, childcare, early * education, addressing learning loss
- Loans or grants to mitigate financial hardship to small businesses and nonprofits
- Technical assistance for small businesses
- Impacted industries like travel, tourism, and hospitality that faced substantial pandemic impacts
- Premium pay for eligible workers performing essential work
- Invest in water, sewer, and broadband infrastructure
- High-speed broadband infrastructure in areas of need that recipient identifies
- Construction of schools and hospitals
- Road building and maintenance
- Health services
- General government administration, staff, and administrative facilities
- "Environmental remediation"
- Provision of police, fire, and other public safety services (including purchase of fire trucks and vehicles)

Additional fields/criteria to include (especially for "Public Health")

- "Impacted" and "Disproportionately impacted" classes:
 - Low-income households and communities
 - Households residing in Qualified Census Tracts
 - Households that qualify for federal benefits like TANF, SNAP, NSLP, WIC, etc (see footnote pg. 19)
 - Households receiving services provided by Tribal governments
 - Households residing in US territories or receiving services from these governments
- [for public health and economic impacts] (1) identify a COVID-19 public health or economic impact on an individual or class (i.e., a group) and (2) design a program that responds to that impact.
- Eligible categories for "public health"
 - Public health
 - Assistance to households
 - Assistance to small businesses
 - Assistance to nonprofits
 - Aid to impacted industries
 - Public sector Capacity

Here is an example:

[Proposal name]

Microloans program for local Anderstown businesses

[Headline]

Dedication of \$100,000 to a microloans program for businesses at risk of closing will 1) maintain existing jobs 2) create new jobs and 3) address inequities faced by minority-owned businesses.

[Short Description]

A survey from the Anderstown Chamber of Commerce found that as a direct result of COVID-19, 480 employees have lost their jobs and dozens of businesses have permanently closed their doors. Many Anderstownians (citation needed) have expressed how this has taken a toll on the local economy and have watched beloved businesses close due to financial strain.

[Full Description]

To address this problem, this policy proposes that the City of Anderstown launch a microloans pilot program that can provide small amounts of money to vulnerable businesses unable to access traditional capital loans, which includes many minority-owned businesses. The impact of this infusion of capital will be seen through the number of businesses that are able to remain open, jobs maintained, and even new job growth made possible through investment. Cities such as Chicago, Wichita, and Baltimore have instituted microloans programs to support the economic success of local businesses (Mayor's Press Office, 2013; Kelly, 2021; Baltimore Community Lending, 2021). In Chicago, 80 small businesses have benefited from the program and created 340 jobs with just \$650,000 of investment. At \$2000 of investment per job, a \$100,000 infusion into such a program in Anderstown could create up to 50 new jobs in the City. At an interest rate of 10%, these loans will pay back on themselves thus creating a sustainable program that can last beyond the current crisis. Private-led microloans programs in Anderstown have been incredibly popular and successful, especially for women and minority entrepreneurs (Wright, 2010, Holland, 2017).

This program should begin with an investment of \$100,000 which would support 10-20 \$5,000-\$10,000 loans. The City Office of Economic Development should recruit 10 businesses who lack access to traditional capital with the greatest need and at risk of closing, provide them the loan, then track the businesses over a 2 year period with current staff handling regular repayments. At the end of the trial, the City should then report out the number of businesses that remained open and the jobs created over time.

As a direct result of this policy, we expect to see local Anderstown businesses remain open as well as maintain their current employees, and in the best case scenario grow their businesses and create jobs that are needed to revive the economy as the City recovers from COVID-19. As a sustainable program, this loan-program acts as a revolving fund, as businesses' repayments help to maintain and grow the fund to continue to support entrepreneurs at risk. This policy idea was proposed by the ARPA policy team and is feasible within an initial scope of \$100,000.

References: [Redacted for anonymity]