@Stake: A Game to Facilitate the Process of Deliberative Democracy

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Abstract
Public engagement in government decision-making is often hindered by a lack of diversity, underutilization of digital tools, and unclear feedback mechanisms – a problem made acute in the context of historically low levels of trust in American government [5]. But one thread of democratic innovation is in mini-publics for deliberation and discussion. Games are a productive mechanism for this. @Stake is a game designed to build deliberative capacity through role-play and ideation. The present research examines the use of @Stake within a Participatory Budgeting process and presents evidence that it leads to increased empathy and creativity in the civic process.

Author Keywords
Civic engagement, games, play, deliberation, group creativity

ACM Classification Keywords
H.5.m. Information interfaces and presentation (e.g., HCI)

Introduction
The ways in which people interact with civic life in the United States occur through many different channels: from voting, to attending a town hall meeting, to

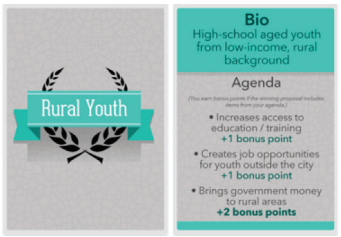

Figure 1: Image of a sample @Stake role card with the character title on the front and bio and agenda on the back.

advocating for something online. While innovations in civic technology have sparked new conversations about where and when people connect, innovations in non-digital participatory methods have sparked conversations about how and why people connect. For example, processes such as participatory budgeting, world café, or community co-design have challenged the comfortable assumptions about the nature of community consultation and put pressure on institutions to be accountable to those whom they consult. These process innovations have placed emphasis on face-to-face interaction, empathy, and collective decision-making. Josh Lerner demonstrates that there is considerable overlap in the intentional outcomes of this work and the experience of playing games [3]. Lerner points to the example of participatory budgeting and suggests that many of the affordances of games and game design, including taking turns, empathy building, and play, neatly align with the goals and outcomes of deliberative democracy.

While there are compelling parallels, the empirical research on "civic games" has been light. Scholars have pointed to games' ability to cultivate trust [2], community connection [6], and empathy [4] but there is a need to study civic games as they are played in context to understand precisely how these affordances improve or enhance civic processes.

We present findings from an early phase study of the @Stake card game played within the Participatory Budgeting (PB) Process in New York City. The game was designed to cultivate a deliberative democratic process in a variety of settings by enhancing perspective taking and group creativity. The current study looks specifically at its deployment within a series of budget delegate meetings in the 2014-2015 PB process in New York City. There is encouraging evidence that integrating gameplay into civic process can have positive impacts on participant attitudes about process effectiveness.

@Stake Rules and Mechanics

@Stake is a 4-5 player card game that takes about one hour to play. It was designed to facilitate collective decision-making processes within large group meetings, where groups of 50 people split up into 10 groups of 5. During the course of the game's three rounds, players brainstorm, pitch, and debate issues specific to their community. Examples of issues are: improving literacy, neighborhood participation, access to healthy food, etc. In @Stake, players act out a variety of roles (Figure 1) and pitch ideas under timed pressure while competing to produce the best idea in the eyes of the round's "Decider." The roles represent diverse stakeholders in the affected community such as single parent, elected official, activist, artist, business owner, veteran, etc. Players practice a wide range of skills including improvisation, rapid ideation, and deliberation throughout the game. Players balance personal agenda items on their role cards with those of the collective good, while considering opinions that differ from their own. The game allows players to experiment with new ideas, while learning to consider others' views in a playful context. The winner (the player with the most points after three rounds) wins a prize such as a candy bar. Additionally, the game is followed by a debrief where players are guided through a reflection on their game experience, and how it connects to larger community issues.

@Stake has been played in multiple settings, including UNDP policy meetings on youth unemployment, an educators' curriculum design workshop, and several academic conferences. Before embarking on the current study, the game had been played by over 500 people.

Study Design

This study utilized mixed-methods including participant observation, pre and post surveys, and follow-up interviews. We facilitated the game during three budget delegate meetings in three distinct districts in New York City. Districts were selected to represent a diversity of backgrounds based on factors such as population size, average household income, ethnicity, and education levels. For the majority of participants across districts, this was their first time engaging with PB. Each district had a treatment and control group. The treatment group played @Stake and the control group played a trivia game in which delegates guessed the answers to questions about the neighborhood.

By comparing @Stake with a traditional ice breaker game, we sought to test the assumption that the affordances of empathy-driven game play in deliberative processes can lead to engagement on issues beyond mere self-interest. We wanted to see increased involvement in community process, and a higher degree of commitment to social justice. We tested this assumption by measuring short term impacts immediately present, during and after game play. The pre-play and post-play survey, as well as one-on-one interviews were designed to measure how much people understood about the group context, their willingness to listen to others, and their commitment to the fairness of the process (Table 1).

Short-term Objectives	Mid-term Objectives	Long-term Objectives
Social awareness	Deeper commitment to process	Open to more process
Greater willingness to listen	Increased empathy	Advocacy beyond self interest
Novel ideation	Increased creative ideas in PB	Increased creative ideas beyond PB
Enhanced systems-thinking issues in the game	Enhanced systems thinking about budget	Enhanced systems thinking about gov't
Comfort w/ deliberation	Greater participation in PB	Continued involvement in community process
Attend to issues of procedural fairness	Greater ability to evaluate fairness in PB	Increased commitment to social justice

Table 1: *Theory of change for @Stake implementation*

Findings

Results from this pilot study were encouraging. The treatment group demonstrated greater capacity for empathy and openness to new ideas. Several of the players shared what they remembered of each other's ideas and personalities- demonstrating an aspect of peer learning. Others remarked on the usefulness of the game as a kind of rehearsal for the participatory budgeting process they then embarked on. Multiple interviewees suggested that they can better understand what motivates policy decision-makers. One participant shared, "At first it was great and then in the part to come up with the proposal and convincing people, I found myself empathizing a lot more with the people who actually have to do this for a living. It was surprising for me; I did not expect that."

Some players reported generally feeling less comfortable with public speaking. Yet roleplaying opportunities may elicit greater participation. It is important to explore this in more detail to more fully understand how the game impacts traditional power dynamics during group deliberation.

Figure 2: Image of a sample wireframe from the mobile version of @Stake.

It is our belief that the turn-taking, imaginative, and lightly competitive nature of @Stake creates a better context for deliberation amongst Participatory Budgeters. This may be in part because @Stake has features similar to Sawyer's notions of group creativity, derived from investigations of improvisational comedy and jazz musicians [7]. Civic games can infuse play into processes that might otherwise seem disingenuous. Thus playful practices have potential for revitalizing the state of community engagement practices and participation in civic discourse. We will further test these outcomes of learning, collaboration, and creativity with the developing mobile version.

Developing the Mobile Game

During game play sessions, we collected feedback for the design of the digital mobile version (Figure 2). the game is currently quite complex. The digital version needs to streamline the onboarding process and provide game play tutorials. We anticipate that the simultaneous nature of progressing through the game on the mobile version will simplify the rules and drastically reduce the need for hands-on facilitation. Beyond creating a streamlined play experience, the mobile game will allow for easier tracking of ideas generated during the game, and a deeper understanding of how players take meaning from deliberation.

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References:

1. Benjamin R. Barber. 2003. *Strong democracy: Participatory Politics for a New Age*. Univ of California Press. Berkeley, CA
2. Eric Gordon and Jessica Baldwin-Philippi. "Playful Civic Learning: Enabling Lateral Trust and Reflection in Game-based Public Participation." *International Journal of Communication* 8 (2014): 28.
3. Josh Lerner. 2014. *Making Democracy Fun: How Game Design Can Empower Citizens and Transform Politics*. MIT Press, Cambridge, MA.
4. Chad Raphael, Christine M. Bachen, and Pedro F. Hernández-Ramos. 2012 "Flow and cooperative learning in civic game play." *New Media & Society* 14.8 (2012): 1321-1338. doi: 10.1177/1461444812448744
5. Pew Research Center (November 23rd, 2015). Beyond Distrust: How Americans View Their Government: Broad criticism, but positive performance ratings in many areas." Online available: http://www.people-press.org/files/2015/11/11-23-2015-Governance-release.pdf.
6. Susana Ruiz, Benjamin Stokes, & Jeff Watso. 2003. The civic tripod for mobile and games. *International Journal of Learning and Media*, 3(3). IJLM) June 2012 – in Volume 3, Issue 3. doi:10.1162/IJLM_a_00078
7. Keith Sawyer. 2003. *Group creativity: Music, theater, collaboration*. Psychology Press. New York. NY