Inclusion, Equality, and Discourse Quality in Citizen Deliberations on Broadband

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Abstract
Proponents of deliberative democracy have theorized that in order to contribute to improved decision-making, citizens should aim for high levels of inclusion, participation equality, and reciprocal, rational reasoning when they convene to discuss policy issues. To measure the extent to which these goals are achieved in actual practice, the authors analyzed transcripts from 13 public forums on the topic of broadband access in rural communities. Demographic attributes of participants were compared with their utterances during deliberation, coded by five quality variables: justification rationality, common good orientation, constructive politics, interactivity, and consideration of trade-offs. Analysis showed that turnout, quantity and quality of discourse varied significantly across different socioeconomic groups. For example, individuals with college education were more likely to provide higher levels of justification, alternative and mediating proposals, and consideration of the common good compared to those without college education. Non-salaried participants expressed the lowest level of justification for their arguments and showed significantly less interactivity with other participants. Addressing these differences requires greater effort by forum organizers to prepare participants through repeated, sequential forum experiences.

Keywords
Inclusion, Equality, Discourse Quality, Citizen Deliberation, Broadband

Acknowledgements
The authors would like to thank the editor and two anonymous reviewers for their careful reading and helpful comments.
Today, representative democracy as Americans perceive it, is rife with elected official’s reliance on exclusion, misinformation, and rhetorical substitutes for justification in decision making. Illustrative of these complaints is the case of decision making in telecommunications policy, reported by the *Topeka Capital Journal*. “Consumers were not invited” (Carpenter, 2013) to a meeting dominated by competing Internet service providers developing a bill that would influence everyone with a phone across the state. The article states:

‘This bill was written by telephone companies for telephone companies,’ said David Springe, consumer counsel with the state’s Citizens’ Utility Ratepayer Board. The product of labor by the bill’s authors passed easily out of Seiwert’s committee and was embossed by the House 118-1 in a vote belying gravity of policy on the line. The solitary dissident, Rep. Larry Hibbard, a Republican from Toronto, expressed dread framed as a warning. He said customers in rural areas of Kansas could experience a double-barrel setback: price increases and reduced services. (Carpenter, 2013)

An antidote to these flaws in decision-making is the idea of deliberative democracy promoted among scholars and practitioners for the past three decades. Deliberative theorists argue that, “informed, well-reasoned, and independent thinking by citizens who engage in public talk could replace rule by semi-autonomous elites” (Jacobs, Cook, & Delli Carpini, 2009, p. 8). Proponents of deliberative democracy suggest that citizen deliberation could lead to enlightened citizenry, more democratic decisions, and ultimately, ‘more government by the people’ (Dryzek, 2000; Gastil & Levine, 2005; Gutmann & Thompson, 2004).

In order to attain those ideal outcomes, however, deliberative theorists argue that citizens in the public sphere must adhere to certain norms, particularly inclusion, equality, and communicative rationality (Habermas, 1984; Knight & Johnson, 1997). The principles of inclusion and equality assert that deliberation must be open and accessible, and that everyone should be given an opportunity to participate (Benhabib, 1996; Bohman, 1996; Chambers, 1995; Cohen, 1997; Habermas, 1996; Young, 2000). The norm of communicative rationality suggests that reason giving must serve as the backbone of democratic deliberations (Habermas, 1984) and that citizens have an obligation to provide “mutually accessible and acceptable reasons” to one another (Gutmann & Thompson, 2004, p. 62).

While proponents of deliberative democracy uphold these normative standards, some critics question whether the standards can be met in reality (Bohman, 1996;
McCarthy, 1984; Rienstra & Hook, 2006). Some suggest that those who are marginalized in society are likely to be marginalized in public deliberation (Fraser, 1992; Mansbridge, 1983; Sanders, 1997; Young, 2000). Others contend that the heavy focus on reason giving tends to prize certain segments of the population while disadvantaging those who are inexperienced in particular modes of formal discussion (Bächtiger & Pedrini, 2010; Hastie, Penrod, & Pennington, 1983; Sanders, 1997). For these reasons, critics postulate that public deliberation may instead reinforce socio-economic inequalities and even lead to anti-democratic outcomes (Elster, 1997).

While the scholarly debate over the efficacy of public deliberation continues, groups demanding more public discussion of current issues have been convening forums, from which much has been learned. We intended to scrutinize the extent to which normative standards of inclusion, equality, and quality of discourse might be met in real-life citizen deliberation. This study is based on a program of Kansas library forums on broadband telecommunications policy.

In 2011, the Bill and Melinda Gates Foundation provided grants to seven states for the purpose of promoting broadband (high-speed Internet) access in rural, remote regions. In Kansas, the State Library distributed those funds across regional public library networks, one of which chose deliberative forums as a mode of stimulating inquiry into needs, uses, and modes of broadband delivery. North Central Kansas Libraries System (NCKL) worked with the Institute for Civic Discourse and Democracy (ICDD) to conduct 13 public forums in small communities in 2012. The topic of broadband connectivity was highly relevant to public libraries since a concurrent state legislative session was addressing the agency for implementing e-rate and other modes of public funding for these institutions.

The public issue of broadband access affects both urban and rural populations. Rural populations in particular face the prospect of increasing digital exclusion in the United States due to higher costs to telecommunications companies of extending “last mile” broadband connections to low-density markets. According to a national engagement framework, Building Digital Communities, “The cost of digital exclusion is great. Without access, full participation in nearly every aspect of American society – from economic success and educational achievement, to positive health outcomes and civic engagement – is compromised” (IMLS, 2012). This framework addressed the need for public learning and advocacy during a time of increasing competition and concentration of Internet service providers, along with disparities of service between rural and urban populations.
This concern for a growing “digital divide” between socioeconomic groups prompted NCKL and ICDD to promote public conversations on broadband policy. NCKL libraries understood their role as the “first and last resort” for Internet access, among patrons unable to afford high-speed connections at home (Bertot, 2006, p. 17). Before proposed Kansas policy changes to subsidized public access took place, library staff and their boards were encouraging patrons to become informed of potential impacts and alternatives. ICDD reinforced the choice of public deliberation, based on the principle articulated by Iris Young that legitimacy of a policy decision in a democracy “depends on the degree to which those affected by it have been included in the decision-making process and have had the opportunity to influence the outcomes” (Young, 2000, pp. 5-6).

As researchers affiliated with ICDD, we sought to capture data from these forums and submit them to analysis using selected variables from the Discourse Quality Index (DQI). Rather than using DQI as a whole to evaluate the overall quality of deliberation, selected variables were used to examine attributes of speaker utterances in relationship to demographic factors of participation. Since public libraries are required, by law, to feature open meetings, we anticipated that the libraries could attract a wide range of local participants. Using a content analysis of 23 citizen deliberations and survey data, this study examines the following questions: What are the relative *quantities* of participation across different demographic attributes? And, what *quality factors* associated with deliberative standards are correlated with demographic attributes?

**Methods**

**Forum Event Organization**

Concerted efforts were made by local and regional libraries to encourage an inclusive participation across their communities. The forums were publicized in local newspapers, at the library, and on their website (including social networking sites, e.g., Facebook). A majority of the libraries contacted their local chamber of commerce and schools to solicit participation, and some utilized local radio stations and posted flyers in restaurants, post office, and grocery stores. To reduce constraints to work-day evening attendance, a free pizza meal was provided to participants. All but one forum were conducted in local public libraries.¹

Each forum followed the same structure: a) an introduction by the lead moderator featuring the reason for addressing broadband access in rural communities, b) a

¹ One forum was conducted at a local bank.
short video of commentary from three regional stakeholders, c) description of ground-rules for effective forum discussion (see Appendix A), and d) facilitated small-group discussions structured by five questions.

A total of 142 individuals participated in the forums. Upon arrival, participants were asked to fill out a short questionnaire that included demographic items and the level of interest and knowledge on the issue of broadband connectivity in rural communities. After the completion of the questionnaire, participants were given an informative brochure containing key terms pertaining to broadband Internet, brief historical perspectives on policies on broadband access, and the roles of government (federal, state, and local) on the issue of broadband access. After viewing a short clip featuring a student, an Internet service provider, and a local economic development agent, participants were randomly assigned to small groups of three to eight people (average group size = 6), each hosted by a trained table facilitator. All forums followed the same procedure with each facilitator following a script to ensure uniformity in format.

On average, small group discussions lasted over 65 minutes (SD = 6, Range = 54 to 77 minutes). After the discussion, all groups shared ideas presented in their group. Participants were then thanked and asked to fill out a short questionnaire on their experience. Twenty-five small group discussions were conducted, and 23 group discussions were successfully audio-recoded, transcribed, and content analyzed.

Deliberation Quality Measures

The analysis is based on the version 2.0 of the Discourse Quality Index, or DQI (Bächtiger, Shikano, Pedrini, & Ryser, 2009). Version 1.0 was created through the work of Steiner, Bächtiger, Sporndli, and Steenbergen (2004) as a means of generating quantitative evaluations of deliberative forums. At the time, most investigations used qualitative methods (Steiner et al., 2004). Steiner et al. contend that qualitative studies are important for exploring the subtleties of deliberative practice; whereas, quantitative studies can speak to audiences (e.g. political theorists) who seek measures of efficacy.

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2 Protocol questions: 1) Ask participants to describe their own and their community’s current and future anticipated Internet use; 2) Ask participants to describe Internet access along a value-oriented continuum, e.g. right, public utility, service, pay-to-play; 3) Examine four funding sources for broadband access and value orientations to them: federal, state, municipal and private; 4) Ask participants what would have to happen to achieve optimal access, and 5) Ask participants what they are willing to do to influence decision-makers.

3 This number excludes table facilitators and note-takers.
Both versions function under the assumption that deliberation occurs on a continuum ranging from ‘no deliberation’ to ‘ideal deliberation’ (Steiner et al., 2004). The categories of both versions track Habermas’ discourse ethics by including these principles: 1) open participation in deliberation; 2) justification of assertions and validity claims; 3) consideration of the common good; 4) treatment of other participants with respect; and 5) arrival at a rationally motivated consensus or “constructive politics” (Steiner et al., 2004).

While the original version of DQI was developed to measure the quality of discourse in elite deliberation (e.g., parliamentary debates), version 2.0 was created to analyze the quality of discourse in citizen deliberation (Bächtiger et al. 2009). This makes the version 2.0 of DQI an appropriate measure for this study. The version 2.0 encompasses a broader view of deliberation including interactivity, deliberative negotiation, and storytelling. First, all deliberation requires a certain amount of engagement among participants; a certain amount of “give and take.” Interactivity attempts to measure the extent to which participants recognize the merits of the claims of others. Second, Mansbridge (2009) argues that ideal deliberation is marked more by negotiation than by coercion and threats. Version 2.0 adds a component for “deliberative negotiation.” Because we were uncertain of the extent to which participants in our forums would actually engage in deliberative negotiations, we changed this variable to ‘Consideration of Trade-offs.’ Mansbridge (2009, p. 19) referred to negotiators exploring trade-offs when no single “right” or “fair” solution to a problem can be agreed upon. Third, feminists and other deliberative theorists have argued that Habermas’ standards for deliberative discourse privileges rational, dispassionate discussion over other form of communication (Bächtiger, et al., 2009). Version 2.0 adds a component of storytelling.

Given our interest in inclusion, equality, and communicative rationality, we examined the following five categories that are closely linked to these variables: a high level of justification for arguments, which justifications rest on references to the common good in their content; interactivity among participants; constructive politics; and tradeoffs. The definitions are given below.

**Justification Rationality.** According to Habermas, in an ideal speech situation, all claims and reasons are open to inspection. This variable assesses to extent to which participants offer justifications of their claims or proposals in some logically coherent way (Habermas, 1984, p. 177).

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4 The “storytelling” variable was initially included in our coding scheme, but the research team had a difficulty achieving an acceptable reliability score after multiple trials of sample coding and discussions. Therefore, the variable was dropped from our final analysis.
**Common Good Orientation.** This variable assesses the extent to which participants express claims or proposals that address more collective than personal impacts. Articulations of the common good can be cast in terms of the “difference principle,” addressing the needs of those most disadvantaged, or in terms of the “greatest good for the greatest many.”

**Constructive Politics.** During a deliberation, proposals and counter-proposals may be presented in sequence. Constructive politics denotes the degree to which participants offer alternative proposals, or attempt to mediate among proposals (as opposed to stubbornly maintaining unchanged positions on a proposal).

**Interactivity.** Evidence that participants are interacting with one another is indicated by their mentioning each other by name, or by their explicit reference to one another’s statements. The normative principle of reciprocity dictates that participants owe one another a considered response to their contributions.

**Consideration of Trade-offs.** When multiple proposals are put forward during a deliberation, participants are expected to weigh the potential advantages and disadvantages among them. The degree to which they are able and willing to examine proposals in such detail reveals the depth of deliberative quality achieved.

Steiner et al. (2004) employ the term “utterance” for an expression that is to be coded using the categories above. When a participant speaks, a separate analysis begins. A deliberation then consists of a sequence of speaking turns. If a person speaks multiple times during a deliberation, then each is coded separately and independently. If someone is interrupted, the interruption is coded separately.

**Measurement**

The quantities of participation across different demographic attributes were measured by the representativeness of the forum participants’ demographic characteristics (age, gender, race/ethnicity, education level, and income level) compared with U.S. Census data for the county of each forum. Equal participation was measured by the number of words uttered by each participant as a proportion of the total number of words uttered in a given discussion. For instance, if there were five participants in a given group and 5,000 words were uttered during the discussion, equal participation should amount to each person speaking roughly 1,000 words (20% of the total words spoken).

In order to standardize for a varying group size and the number of words spoken in each group, a word ratio was created. A word ratio indicates each person’s contribution (in terms of the number of words spoken) divided by the expected...
number of words per person under a condition of equal participation in a given group. If a participant spoke as much as expected under this idealized condition, the word ratio would equal 1. A word ratio less than 1 signifies lesser participation while a word ratio larger than 1 denotes greater participation. *t*-tests and *F*-tests were conducted to examine the differences in the level of participation by six demographic groups: gender, age, education level, income level, occupation, and holding public office. While the volume of participation does not equate the influence of each participant on deliberation, many deliberative theorists consider the volume of speech as a critical factor in equal participation during deliberation (Karpowitz, Mendelberg, & Shaker, 2012). For instance, Sanders (1997) states, “If it’s demonstrable that some kinds of people routinely speak more than others in deliberative settings, as it is, then participation isn’t equal, and one democratic standard has fallen” (p. 365).

To measure the quality factors associated with deliberative standards for communicative rationality across these demographic groups, transcripts of citizen discussions were content analyzed using the following variables: Justification Rationality, Common Good Orientation, Constructive Politics, Interactivity, and Consideration of Trade-offs (see Appendix B for our coding scheme).

**Unit of Analysis.** Following the method provided by Steiner et al. (2004), an individual participant’s “utterance” within the group discussion comprises the unit of analysis.

**Inter-coder reliability.** A team of researchers was trained to code over 2,300 utterances of citizen deliberation for this study. The coding team met over a month to ensure the reliability of their coding. Inter-coder reliability statistics (Cohen’s Kappa) showed acceptable agreements on all coding categories, ranging from .75 to .90.

**Data analysis.** A chi-square test of independence was performed to examine the relationship between the DQI variables and demographic variables. When a chi-square value was statistically significant at $p \leq .05$, using a two-tailed test, we concluded that the relationship between these variables was significant. To correct

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5 The utterances examined for this study (n = 2,335) include claims and proposals made by participants (not by moderators or note-takers).

6 Cohen’s Kappa measures the degree of agreement between two coders who are evaluating content. The measure adjusts for the agreement attributable to chance, which makes it a more conservative measure of reliability than measures based solely on the percentage of agreement among coders. Scholars generally recognize that, for most purposes, values greater than .75 represent excellent agreement beyond chance (see Fleiss, Levin, & Paik, 2003). The Kappa for each variable is as follows: Justification Rationality = .90; Common Good Orientation = .75; Interactivity = .82; Constructive Politics = .89; Trade-offs = .84.
for Type I error inflation, a post hoc analysis of the data was conducted and the alpha level was reset for a two-tailed test using a Bonferroni correction. Cramer’s V was used for a measure of effect size.

Results

Inclusion of Turnout

Among 142 citizens participating in the forums, over half were female (56.3%) and most of the participants identified themselves as Caucasian (93.4%). Compared to the countywide census data, those who attended the forums tended to be much older ($M = 56.3$ years-old, $SD = 14.8$, Range = 18 to 94). In fact, over half of the participants were above the age of 58. Forum participants tended to over-represent those from higher socio-economic status as well. 73.5% of the participants had a Bachelor’s degree or above (compared to 21.7% from Census data) and over a third of the participants reported to have a graduate degree (35.6%). 20.9% of the participants reported their household income as above $100,000 while only 3.5% reported household incomes less than $20,000. These data suggest that while efforts were made to include citizens from different walks of life, those who came to the table tended to be older, wealthier, and more highly educated. Table 1 summarizes this information below.
### Table 1. Demographic Characteristics of Participants and Census Data

<table>
<thead>
<tr>
<th></th>
<th>Forum (n = 142)</th>
<th>Census(^a) (Population = 236,435)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>56.3%</td>
<td>49.9%</td>
</tr>
<tr>
<td>Male</td>
<td>43.7%</td>
<td>51.1%</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>56.5</td>
<td>n.a.</td>
</tr>
<tr>
<td>Median</td>
<td>58.0</td>
<td>39.7</td>
</tr>
<tr>
<td><strong>Race/Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>2.3%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Caucasian</td>
<td>93.8%</td>
<td>88.0%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1.5%</td>
<td>5.8%</td>
</tr>
<tr>
<td>Asian</td>
<td>0.0%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Other (including &gt; 2 races)</td>
<td>2.3%</td>
<td>3.0%</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school graduates</td>
<td>100.0%</td>
<td>90.3%</td>
</tr>
<tr>
<td>Bachelor's degree</td>
<td>73.5%</td>
<td>21.7%</td>
</tr>
<tr>
<td>Graduate degree</td>
<td>35.6%</td>
<td>n.a.</td>
</tr>
<tr>
<td><strong>Household income(^b)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median range / Mean</td>
<td>$61,000-$80,000</td>
<td>$43,937</td>
</tr>
<tr>
<td>Less than $40,000</td>
<td>23.5%</td>
<td>45.8%</td>
</tr>
<tr>
<td>$41,000-$80,000</td>
<td>39.1%</td>
<td>31.7%</td>
</tr>
<tr>
<td>$81,000 and above</td>
<td>37.4%</td>
<td>22.4%</td>
</tr>
<tr>
<td><strong>Household with children</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>With children &lt; 18</td>
<td>23.4%</td>
<td>30.6%</td>
</tr>
</tbody>
</table>

\(^a\) Census data from 12 counties in Kansas combined.

\(^b\) Forum participants' income was measured using the following categories: 1. Less than $20,000, 2. $21,000-$40,000, 3. $41,000-60,000, 4. $61,000-$80,000, 5. $81,000-$100,000, and 6. Over $100,000. Census data divides income using the following categories: 1. Less than $20,000, 2. $20,000-$39,999, 3. $40,000-$59,000, 4. $60,000-$74,999, 5. $75,000-$99,999, and 6. Over $100,000. The collapsed category for household income “between $41,000-$80,000” for census data includes the income range between $40,000 and $74,999 and the category for “$81,000 and above” includes the income level above $75,000.
Data on occupation indicate that certain groups of individuals were underrepresented at deliberation. While there was no U.S. Census data available to compare the relative representation of the forum participants in terms of occupation, we found that stay-at-home moms, students, and unemployed persons were low in turnout. Forum participants comprised of those in business (27.9%), retirees (23.6%), public sector employees (22.9%), Internet service providers (9.3%), agriculture/farmers (5%), stay-at-home moms (2.1%), students (1.4%), and an unemployed person (0.7%).

<table>
<thead>
<tr>
<th>Table 2. Average Word Count &amp; Ratio by Demographics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word Count (Mean)</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
</tr>
<tr>
<td>Female (n=75)</td>
</tr>
<tr>
<td>Male (n=57)</td>
</tr>
<tr>
<td><strong>Age</strong></td>
</tr>
<tr>
<td>58 or younger (n=63)</td>
</tr>
<tr>
<td>Over 58 (n=62)</td>
</tr>
<tr>
<td><strong>Education</strong></td>
</tr>
<tr>
<td>No college degree (n=34)</td>
</tr>
<tr>
<td>W/ college degree (n=92)</td>
</tr>
<tr>
<td><strong>Income</strong></td>
</tr>
<tr>
<td>&lt; $40,000 (n=27)</td>
</tr>
<tr>
<td>$41,000-$80,000 (n=44)</td>
</tr>
<tr>
<td>&gt; $81,000 (n=39)</td>
</tr>
<tr>
<td><strong>Holding office</strong></td>
</tr>
<tr>
<td>Elected official (n=12)</td>
</tr>
<tr>
<td>Non-office holder (n=120)</td>
</tr>
<tr>
<td><strong>Occupation</strong></td>
</tr>
<tr>
<td>Public sector (n=38)</td>
</tr>
<tr>
<td>Private sector (n=55)</td>
</tr>
<tr>
<td>Non-Salaried (n=39)</td>
</tr>
</tbody>
</table>

* Statistical tests were conducted on the word ratio (not the word count). The word ratio of 1.0 indicates equal participation.
**Equality of Participation**

In aggregate, over 150,000 words were spoken during the forums. The average number of words spoken by participants was 1,145 words ($SD = 664, Range: 156 words to 3750 words) and the word ratio ranged from .15 to 3.66. Table 2 shows the average word count and ratio for each demographic characteristic. On average, men took more than their fair share and spoke more than women ($p = .001$).

Furthermore, those who held a college degree spoke disproportionately more than those who did not ($p = 0.01$), elected officials spoke more than other citizens ($p = 0.002$), and those who were younger spoke more than older participants ($p = .046$). Notably, those who are employed in the public sector spoke more than those who are non-salaried ($p = .025$) and those in higher income brackets participated more than those in lower income strata ($p = .037$).

**Discourse Quality**

Table 3 illustrates the results for each variable in the content analysis. Each variable is examined for the following demographic characteristics: gender, education, income, occupation, holding public office, and age.

*Justification Rationality*. The categories for justification were collapsed due to a small number of “sophisticated” arguments as indicated in DQI (26 out of 2335 claims). Since the results were remarkably consistent among different groupings for all demographic variables, the variable was divided into the following classes: low-level support for claims (i.e., “none” and “inferior”) and high-level support for claims (i.e., “qualified” and “sophisticated”). Justification was significantly associated with five of the six demographic variables: education ($\chi^2(1, n=2186) = 11.45, p = .001, V = .072$), age ($\chi^2(1, n=2198) = 49.58, p < .001, V = .15$), holding

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7 A total number of words spoken = 151,259. This does not include words spoken by moderators and note-takers.
8 Age was divided into two categories: younger than 58 years-old (median age for the forum participants) and older than 59 years-old.
9 Non-salaried category consists of those who are retired, students, stay-at-home moms, and unemployed.
10 It should be noted that for an argument to be considered “sophisticated” under DQI, a claim or proposition must be made along with at least two complete reasons or one reason must be developed in-depth (See Appendix B). Given that DQI is originally created to measure discourse quality in non-public arenas (such as parliamentary debates), it is not surprising that only a small number of arguments in citizen deliberation (which is often characterized by long periods of exploratory talk) were coded as “sophisticated.” Steiner et al. (2004) indicate that deliberation in non-public arena often exhibit more sophisticated arguments than public arenas such as citizen deliberation.
office ($\chi^2_{(1, n=2302)} = 17.02, p < .001, V = .086$), occupation ($\chi^2_{(2, n=2299)} = 48.24, p < .001, V = .145$), and income ($\chi^2_{(2, n=1966)} = 6.85, p = .033, V = .059$).

As might be expected, participants with a college education tended to express more claims with high-level support compared to those without a college degree. In terms of age, younger participants tended to produce arguments containing high-level support than older participants. Holders of public office were more likely to provide high-level of support for their claims compared to those who were not. Publicly employed persons (as distinct from occupations in the private sector) also expressed more comments with high-level support, and non-salaried individuals tended to express low-level support for their claims.

### Table 3. Percentages of DQI Variables by Demographics

<table>
<thead>
<tr>
<th></th>
<th>Justification</th>
<th>Common Good</th>
<th>Constructive Politics</th>
<th>Tradeoff</th>
<th>Interactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>25.0</td>
<td>10.6</td>
<td>4.2</td>
<td>6.0</td>
<td>24.3</td>
</tr>
<tr>
<td>Male</td>
<td>27.5</td>
<td>5.4</td>
<td>9.4</td>
<td>8.1</td>
<td>24.1</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>58 or younger</td>
<td>32.8</td>
<td>8.1</td>
<td>6.9</td>
<td>8.5</td>
<td>26.6</td>
</tr>
<tr>
<td>Over 58</td>
<td>19.5</td>
<td>7.6</td>
<td>6.5</td>
<td>5.9</td>
<td>21.5</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
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Common Good Orientation. Results show that four demographic variables were significantly related to common good orientation: gender ($\chi^2(1, n=2335) = 21.59, p < .001, V = .096$), education ($\chi^2(1, n=2190) = 13.11, p < .001, V = .077$), occupation ($\chi^2(2, n=2303) = 24.65, p < .001, V = .10$), and holding office ($\chi^2(1, n=2306) = 3.99, p = .046, V = .042$). Women were more likely to make comments arguing for the common good than men while men tended to produce comments arguing for self- or group-interest than women. College-educated participants expressed more comments with arguments to the common good, those with no college degree made fewer arguments for the common good. Holders of public office were more likely to produce comments arguing for the common good while privately employed citizens often expressed arguments for self- or group-interest.

Constructive Politics. Constructive politics focuses on individuals who are likely to propose solutions, like alternative or mediating solutions, instead of remaining steadfast to a particular position. For the analysis, alternative and mediating solutions were collapsed into a single category due to their small frequency of occurrence. Three demographic variables were related to constructive politics: gender ($\chi^2(1, n=958) = 10.54, p = .001, V = .11$), education ($\chi^2(1, n=896) = 5.12, p = .024, V = .076$), and holding public office ($\chi^2(1, n=948) = 8.56, p = .003, V = .10$). Men were more likely to propose alternative and mediating solutions than women. Citizens with a college degree more frequently expressed mediating or alternative proposals while citizens without a college degree remained steadfast in their position. Finally, holders of public tended to propose alternative or mediating solutions more often than other participants.

Interactivity. This variable examined if participants engaged others in an attempt to listen to them, internalize their arguments, and respond. Two demographic variables were related to this variable: age ($\chi^2(1, n=2202) = 7.53, p = .006, V = .058$), and occupation ($\chi^2(1, n=2303) = 7.51, p = .023, V = .057$). Younger participants tended to engage with others participants more than older participants.

Consideration of Trade-offs. Three demographic variables were related to this variable: gender ($\chi^2(1, n=2334) = 3.90, p = .048, V = .041$), age ($\chi^2(1, n=2201) = 5.43, p = .02, V = .05$), and holding public office ($\chi^2(1, n=2305) = 4.54, p = .033, V = .044$). Men were more likely to express consideration of trade-offs than women. Citizens who were younger tended to recognize trade-offs more often than expected by chance compared to those who were older. Finally, public office holders recognized trade-offs more frequently than expected by chance compared to those who do not hold public office.
In summary, our analysis of transcripts from 23 citizen discussions on broadband accessibility indicates that the quality of discourse varied across different socio-economic groups. Male participants were more likely to offer alternative and mediating proposals and trade-offs than women, while female participants had a pronounced tendency to address the common good, in particular, emphasizing the most disadvantaged in society. Public office holders tended to contribute arguments with high-level justification and higher levels of interaction. On the other hand, non-salaried participants expressed the lowest level of justification for their arguments and showed significantly less interactivity with other participants. Participants with college education were more likely to provide high-levels of justification, alternative and mediating proposals, and consideration of the common good compared to those without college education. Those of a younger age also tended to produce higher quality discourse with more high-level justification, consideration of trade-offs, and greater interaction with other deliberants than older participants.

**Discussion and Conclusion**

**Turnout and participation**

Proponents of deliberative democracy recognize the need for inclusivity and diversity of participation. Without these, the exclusive influence over decision-makers by narrow interests produces scenarios such as that described above in the case of Kansas telecommunications legislation. Merely offering a greater spectrum of the public an opportunity to discuss broadband together, however, did not itself assure more equal representation in the forums of our study. The self-selection bias that favored higher turnout of older, white, college-educated, higher-income participants in disproportion to county averages is a well-known challenge to deliberation organizers and theorists (McLeod et al, 1999). To address this problem, more vigorous, personal solicitation of under-represented groups to achieve diverse turnout must be pursued by organizers. In communities where library conveners took extra steps to repeatedly invite diverse sectors of the public through personal contacts, a more heterogeneous pool of residents did take part in the discussions.

But the quantitative dominance of forum utterances by some demographic groups in this study underscores another challenge of inclusion: that disproportionate participation might eliminate critical considerations from deliberation that could contribute to more informed decisions. Our data illustrate that certain groups of participants (i.e., public office holders, more highly educated, those employed in the public sector) demonstrated more propensity for public discussion than
citizens with less formal education, or non-salaried individuals. The one reported case of a broadband forum participant following up to formally testify before a legislative committee was that of a white, male, highly-educated, public employee. Future research should examine the influence of facilitated forums on diverse participants’ efficacy for pursuing communication after the event, with peers, with experts, and with elected officials.

One attempt to address uneven participation across socioeconomic groups is “enclave deliberation.” In enclave deliberation, “disempowered groups deliberate in their own enclaves (interest groups, parties, and movements) before entering the broader public sphere” (Karpowitz, Raphael, & Hammond, 2009, p. 576). As argued by Sunstein (2000), “a certain measure of isolation will, in some cases, be crucial to the development of ideas and approaches that would not otherwise emerge and that deserve a social hearing” (p. 105). A case study of enclave deliberation by Karpowitz, Raphael, and Hammond (2009) demonstrates that participants from economically disadvantaged populations engaging in a multi-stage consensus conference protocol can incorporate a diversity of viewpoints and produce reports perceived as highly credible to decision-makers.

Research on the role of facilitators in shaping the experience of deliberation (e.g., Myers, 2007) highlights the potential for unequal participation, and experienced facilitators employ techniques to address this, such as establishing ground rules, using sequential turn taking, and monitoring interruptions. Conveners may also consider group size and advance notice of the special participatory nature of deliberative conversations when planning public forums. While varying levels of experience among facilitators on this project may have been a contributing factor to patterns of participation, lack of citizens’ prior expectation for a deliberative event could also have limited the self-monitoring required to follow guidelines for equal participation. We suggest that a cyclical approach should be taken to public forum organizing that enlarges the pool of participants by holding repeated events, while acquainting citizens with the purposes and norms of deliberative democracy and their pertinence to a given public policy issue.

**Discourse Quality**

This study compares demographic alignments with deliberative quality variables, showing that the amalgam of differences in a group of deliberating citizens matters. Each of the DQI variables used in this study showed a significant difference in at least one demographic category, with *justification rationality* showing pronounced differences in all categories except gender. We do not suggest that demographic factors be consulted in isolation in order to optimize expression of a specific quality variable in a deliberation. If forum organizers did
so for justification rationality, soliciting participation of persons aged 58 or younger who have held public office, earned a college degree and $41,000-$80,000 income, they would be mimicking the more privileged profile of attendance in legislative hearings. By focusing instead on a representative sample, the chances are strengthened for the widest possible selection of citizen contributions to the quality of deliberation.

The DQI variable of common good, however, does merit special attention in the case of these public discussions on broadband. A key question asked of participants by the facilitator was their perception of broadband as right, public utility, service, or pay-to-play access, reflecting a spectrum from common good to special interest. Participants grappled with this concept in relation to uses of the Internet (consumption) they had described in the first question, and later considered their understanding of what public and private investment occurs (production) that makes access possible. Our data show female participants cited common good values almost twice as much as male participants. However, this is mirrored by the pattern in constructive politics, that male participants were twice as likely as female participants to modify their original positions on a claim after considering commentary by others.

Common good as a quality variable has been elevated by some theorists to something of a “gold standard” for deliberants to pursue. Ackermann and Fishkin (2002) state that “the task of citizenship is to rise above self-interest and take seriously the nature of the common good” when those two interests do not converge (p. 143). Others argue that self-interest, when examined in deliberation as the relative stake individuals or groups have in the issue, is required to determine “what is in the equal interest of all” (Rostbøll, 2008, p. 29). The topic of broadband offers a useful experiment in balancing the perceived tensions between common and special, due to the deep interconnections of government and business, consumer and producer, which characterize telecommunications. Learning how participants perceive the interplay between the common good and special interest may require exploring their responses based on their attributes such as age, gender, education, income, and public roles.

Facilitators are tasked with helping participants to share these perceptions, as well as their unique experiences of equality and inequality on a given issue during deliberation. Facilitators can benefit from the DQI variables by prompting participants to consider trade-offs of proposals, asking participants to reconsider original positions on the issue, and encouraging interactivity as a means of achieving equal participation, regardless of the topic or demographics represented in the forum.
In conclusion, to pursue quality deliberation, forum planners should aim for turnout representing the diversity of the *demos*. This may demand multiple, repeated event opportunities. However, focus on turnout without corresponding attention to full participation in the conversation itself overlooks a central goal of deliberation: the discovery and exploration of diverse interpretations and solutions to shared problems. Ultimately, we argue that the repeated exercise of public discussion is critical, not only to develop issue learning and the facility for participation, but to promote more effective, inclusive deliberative outcomes.
References


Appendix A

Guidelines for Discussion from Lead Facilitator Script

ICDD always begins a forum by asking participants if they can agree to a basic set of guidelines that are known to improve the quality and success of public discussions.

Our ground rules for public discussion are:

- Seek understanding and common ground
- Expect and explore conflicting viewpoints
- Give everyone opportunity to speak
- Listen respectfully and thoughtfully
- Appreciate communication differences
- Stay focused on issues
- Respect time limits

Can everyone agree to these principles for the next hour of discussion?

Your tabletop facilitators are here to make sure that everyone gets the chance to speak and to keep us on schedule with the topics for each segment of the conversation.
Appendix B

Coding scheme

Justification Rationality. Participants are expected to provide justification for their claims and propositions. In this study a “claim” is a participant’s statement describing the world as it is (e.g. “X exists” or “X causes Y”), while a “proposition” is a statement expressing policy proposals to issue resolution. Justification Rationality is broken down into the following four levels.

(0) No justification: A claim/proposition X is made but no reason Y is offered.
(1) Inferior justification: A claim/proposition X is made along with additional statement(s) Y that do not clearly present a justification of X (such as illustrative, rather than supportive statements).
(2) Qualified justification: A claim/proposition X is made along with a single reason Y for X.
(3) Sophisticated justification: A claim/proposition X is made along with at least two complete reasons Y and Z, or one reason Y is developed in-depth.

Common Good Orientation. Participants are expected to cast their positions in terms of the common good rather than in terms of narrow self-interest, or group/constituency interests. This is indicated by utterances that include:

(0) Explicit statement(s) concerning self-interest or a particular group interest: Someone or some group has a vested interest in the outcome of the deliberation.
(1) Neutral statement(s): A morally neutral justification is provided; there are no specific references to self or group interests, or to the common good.
(2) Explicit statement(s) of the common good: Some mention of the greatest good for the greatest number of people or helping the most disadvantaged in society is made explicit.

Constructive Politics. Participants are expected to strive for a degree of consensus by providing alternative or mediating proposal.

(0) Positional politics: A speaker maintains original position with no attempt at compromise, reconciliation, or consensus building.
(1) Alternative proposal: A speaker states a proposition that is alternative to his/her original proposition.
(2) Mediating proposal: A speaker states a proposition that mediates between prior propositions.
Interactivity. Participants are expected to engage each other in interaction. This variable is indicated by utterances that include:

(0) Not interactive: No reference is made to either another participant, or to his or her arguments.

(1) Interactive: Reference is made to another participant’s name; to another participant’s arguments by agreeing or disagreeing with those arguments or to a previous utterance of another participant (e.g., “you said,” “as you said,” “you pointed out”).

Consideration of Trade-offs. Participants should consider potential trade-offs of the proposals made during deliberation. A deliberant recognizes a trade-off when a desirable outcome is relinquished for another outcome that is also desirable.

(0) No trade-offs mentioned: A speaker does not mention potential trade-offs for a proposal.

(1) Possible trade-offs mentioned: A speaker states potential trade-offs for a proposal.