

**Facilitating Informed Public Opinion: Evidence from Face-to-face and
Online Deliberative Polls**

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A Deliberative Poll is both a social scientific quasi-experiment and a form of public consultation. As an experimental manipulation, the treatment consists of exposure to detailed briefing documents, participation in subsequent face-to-face small group discussions, and the ability to question competing experts and policy-makers. The goal is to create a counterfactual public opinion resting on a good deal of information and serious consideration of competing perspectives.

Democratic theory assumes that public opinion is so grounded, but empirical research has made it abundantly clear that the “state of nature” (respondents as they are typically found in their day to day environments) bears little resemblance to the democratic ideal. The mass public is typically inattentive, uninformed, and unaware of opposing views, perhaps even rationally so. As an exercise in social science, therefore, Deliberative Polling seeks to create the conditions that facilitate the expression of informed and thoughtful opinion. Our objective is to examine whether the deliberative experience sets in motion a process of learning, opinionation, or persuasion for creating opinions that are distinct from those held by the mass public.

As a form of public consultation, Deliberative Polls provide policymakers with a representation of collective, more informed opinion. In various contexts, such as Texas public utility decisions, or consultations about a new constitution in South Australia, the Deliberative Poll has served as official input into government decision-making. Deliberative Polls are also tools for educating the public about policy issues and electoral choices. When held before referenda, as in the case of Australia (on the Republic) or Denmark (on the Euro), or before elections, such as our effort in the 1997 British General Election, Deliberative Polls can clarify the electoral choices before citizens. And Deliberative Polling is also a demonstration project hinting at the prospects for making real-world democracy more deliberative -- for bringing the process to the mass public rather than to random samples of it¹

With the one recent exception discussed in this paper, Deliberative Polls have operationalized deliberation as participation in face-to-face small group discussions. Obviously, assembling a national random sample at a central location for some extended period of time (usually a weekend) is both cost and labor intensive. Participants must be provided free transportation, hotel accommodation, meals, as well as a significant honorarium for undertaking the experiment. Moreover, participation in the poll imposes real opportunity costs in the form of disruption to participants' personal and family schedules. Naturally, it would be nearly impossible to prolong the period of deliberation for more than a weekend, as the competing demands of work and family would likely cause significant sample attrition. In fact, the longest Deliberative Poll, the National

Issues Convention conducted by PBS in 1996, lasted from Thursday through Sunday and that seemed to define the outer limits of such gatherings.²

The rapid development of information technology has made it possible to replicate Deliberative Polling online. Today, the case for exploring online Deliberative Polling is compelling. First, deliberative polling is far less expensive online than face-to-face. A representative sample can be assembled on the Internet for a tiny fraction of the cost of transporting participants to a single location and lodging and feeding them there. Respondents in an online poll can participate fully without having to leave their homes. The advantages of online Deliberative Polling, moreover are likely to increase. The major expense of such efforts, providing computers for online access, can be expected to decline as the proportion of the sample already online increases. Some day, access to the Internet will be equivalent to access to a telephone and hence the online DP will be even more cost effective on a national (even international) basis as a regular means of providing an input to politics and policy for more informed opinion.

A secondary advantage of the online Deliberative Poll is flexibility. Unlike conventional Deliberative Polls, which require extensive logistics and preparation, an online poll can be assembled relatively quickly and the panel's deliberations could be extended over a considerable period of time—before, during and after the period covered by the weekend of a face-to-face Deliberative Poll. This flexibility allows researchers to capture important real-world events as the basis for deliberation. In the case of the Iraq War, for example, we were able to re-

assemble the original participants (who had discussed the prospects of war in January 2003) for a series of follow-up discussions in September.

Finally, the online process offers greatly improved metrics for determining exactly what the participants are doing, what aspects of the experimental treatment they are making use of, which parts of the briefing documents or the answers to questions they are reading. Hence online Deliberative Polling opens up new possibilities for understanding the mediators of the treatment effects (what exactly is causing the opinion changes), and whether there are inequalities in participation in specific aspects of the process.

The major liability of the online model concerns the representativeness of the participant pool. Access to technology remains closely dependent on socio-economic standing, and there is no reason to suppose that the “digital divide” will disappear in the ordinary course of events. The digital divide might, therefore, compromise the ability of online researchers to draw representative samples in the absence of special interventions. But interventions -- in the form of free access to technology -- are possible. Knowledge Networks Inc, a major online research firm, has pioneered this strategy by maintaining a nationally representative panel of research respondents, all of whom are given free online access in exchange for their regular participation in market research and opinion surveys. Our approach is similar; we first draw a representative sample of adult Americans and then provide personal computers and Internet access to “off line” respondents, thus substantially lowering digital divide-based eligibility barriers to participation.

The research described here explores, for the first time, an attempt to replicate the Deliberative Poll online. We administered two parallel experiments, one online and one face-to-face. Both addressed the same set of issues (the goals of U.S. foreign policy) utilized the identical briefing documents, and spanned approximately the same period of time.³ This design allows us to assess whether the effects of deliberation on public opinion that we have identified in the face-to-face process can be replicated, or even strengthened in the online environment.

Based on over twenty deliberative polls conducted in multiple countries, we know that deliberation has wide-ranging effects on participants' opinions. A brief summary of these effects (but by no means an exhaustive one) would include:

1. Substantial acquisition of factual information, as demonstrated by knowledge questions asked before and after. While these questions provide only a small indication of the many kinds of learning that occur over a weekend, they almost always indicate substantial increases.
2. Significant attitude change on the "target" policy issues indicating that informed opinion is often at odds with the public's initial "top of the head" responses.
3. Concentration of attitude change among participants who underwent the most gains in information.

Because the participant samples in all Deliberative Polls are fully representative, these results can be taken as indicative of the state of public opinion with an attentive and informed public.⁴ The fact that people who are given the opportunity to deliberate actually change their opinions on the issues

suggests that the course of American politics could be altered should a majority of the electorate be provided the same opportunity.

In this paper, we will limit the analysis to the effects of face-to-face and online deliberation on information gain and opinion change. Our results show that both forms of deliberation significantly enhanced participants' level of information about foreign policy-related issues. Deliberation also shifted opinions on the appropriate course of American foreign policy -- in both cases in a broadly internationalist direction.

Research Design

The subject of both DPs was "America in the World" -- an agenda of foreign policy discussion prepared by the National Issues Forums and the Kettering Foundation. The subject matter for discussion included four main areas -- the use of military force, promotion of democracy abroad, trade and economic relations of the US with other countries, and humanitarian issues such as dealing with AIDS, world hunger and the global environment.

The face-to-face poll was conducted in collaboration with MacNeil/Lehrer Productions and the Berkeley Survey Research Center. It culminated in a National Issues Convention held in Philadelphia in which the sample engaged in a dialogue with major policymakers following a weekend of small group discussions. After the discussions and the ensuing television broadcast of the proceedings, the sample answered the same questionnaire administered on first

contact yielding before and after results. Simultaneously, in collaboration with the Program on International Policy Attitudes, a separate random sample took the same questionnaire providing a post-test only control group.⁵

In the case of the online DP, the market research firm of Knowledge Networks recruited the online sample and the Political Communication Laboratory at Stanford University administered the online Deliberations. After taking the pretest survey, the online sample deliberated for two hours a week for four weeks. Approximately 275 participants were randomly assigned to small groups of 12-15 who were led by trained moderators. As in face-to-face DP's, each online group formulated key questions they wished to have answered by experts. The Online Newshour, a partner in the experiment, relayed the questions from each online group to experts representing opposing views and posted their answers on the Online Newshour web site. Thus, the interactions making up the online deliberative experience paralleled the face-to-face sessions.

The two especially notable features of this online experiment were the provision of computers to previously "offline" individuals and the use of voice-based discussion. While members of the KN panel were already "online" (through web tvs), only some had home access to personal computers that would permit the use of the discussion software. Hence we provided computers to those participants who did not have them. Computer owners in the sample were provided a significant cash incentive (\$300). The second distinctive feature of our design was the use of moderated voice-based discussions. All participants were provided headsets with microphones. The Lotus Sametime software

permitted respondents to request (and release) the microphone, identified the speaker and the list of people who wished to speak. Our hope was that the use of voice-based (instead of text-based) interaction would accomplish three objectives: a) facilitate some of the affective bonding and mutual understanding we observe in the face-to-face groups. b) avoid disadvantaging less literate participants (who may be intimidated by the task of typing their responses), and c) in contrast to most Internet studies, which rely exclusively on text-based “discussion,” achieve a closer match with face-to-face discussions.

Our design necessitated two separate control groups, corresponding to the online and face-to-face treatments. The online control group completed the same questionnaire, both before and after, but did not deliberate. The face-to-face control group, however, was only surveyed at the posttest and completed an abbreviated version of the questionnaire.

Measures of Political Knowledge and Foreign Policy Attitudes

Our survey instrument included a set of nine factual knowledge questions addressing various aspects of U.S. foreign policy. The questions ranged from the global environment (President Bush’s position on the Kyoto Accords and the causes of global warming), the extent of the AIDS epidemic in Africa, U.S. budgetary outlays on the military and foreign aid, the extent of U.S. international trade, to international institutions including the WTO and the U.N. Security Council.⁶

Most of the questions in our survey were foreign policy preference items - - questions about what the U.S. should or should not do, should give greater or

lesser priority to, or do more or less of. Based on these disparate items, we constructed eight policy indices, consisting of up to eleven items, in every case making use of items that both referred to an underlying aspect of American foreign policy and that correlated with others within the same subset. In a couple of cases, the “index” is only trivially an index, consisting of just one item. In one other case, it consists only of two items. We include these results nonetheless on the grounds that some evidence is better than none.

In all cases, we scored the item response categories consistently, averaged across items, and then converted the index score to a [0, 1] interval so as to assign a common metric to all the indices. Items that were classified as “missing data” -- either “don’t know” or “can’t say” response -- were excluded for that respondent. That is, respondents receive their average score only on the items they did answer.

In a number of cases, we “pre-averaged” subsets of items prior to averaging the whole set to form the index (effectively giving the individual items in the pre-averaged subset less weight than the rest). We do this for batteries of items significantly reflecting attitudes besides the one being measured. An example is a battery about the priority that should be given to various ways of promoting democracy. One might value democracy but think little of any specific proposal for promoting it. Thus, support for foreign aid as a means of promoting democracy in developing societies will necessarily reflect attitudes toward foreign aid as well as democracy. The *average* response, however, *across* all six means of promoting democracy may be taken as a reasonable measure of the

respondent's attitude toward democracy as a foreign policy goal.⁷

The indices and their component items are listed below.

Protecting The Environment. This index included a pair of pre-averaged items asking whether the respondent supports or opposes "requiring higher mileage from automobiles even if that means less powerful automobile engines" and "requiring cleaner production of electricity, even if that means higher electricity rates" as ways of reducing greenhouse gases. The average response to these two items were then averaged with items asking what priority, on a scale from 0 to 10, should be accorded "protecting the global environment" as a long range foreign policy goal and to what extent global warming "is not really a problem" versus "a serious problem." All three items (counting the pre-averaged two as one) were strongly inter-related; the obtained value of Cronbach's Alpha (a measure of scale reliability) was .64 in the face-to-face sample and .65 in the online sample.

Fighting Terrorism. This index consisted of two pre-averages. The first was based on three items asking how much importance the U.S. should place on "building up our military capabilities," "working with other countries to identify and combat terrorism," and "building up our intelligence capabilities" as ways of reducing future acts of terrorism against the U.S. The second was based on two items asking how strongly the respondent agreed or disagreed that "it is the job of the U.S. as a global leader to protect the world from countries that are likely to use weapons of mass destruction" and "to protect the world from countries that are likely to assist terrorists." The remaining ingredients of the index were items

asking what priority (on a scale from 0 to 10) the U.S. should accord “preventing the spread of weapons of mass destruction,” “fighting terrorism,” and “protecting the U.S. from attack,” and the importance assigned to “discouraging countries from trying to develop nuclear weapons” as a reason for providing foreign aid to these countries.” Cronbach’s Alpha for this index was .78 in the face-to-face sample and .83 among online participants.

Support for Foreign Aid. We were limited to a single item: “Should the amount of money the U.S. is now devoting to foreign aid should be increased, reduced, or kept about the same.” Because this item focuses exclusively on the amount of foreign aid spending without specifying the objectives of U.S. foreign aid, we decided to keep it distinct from the items making up the next index.

Supporting Global Development. This index also taps attitudes concerning U.S. foreign aid, but the questions concern the specific objectives of aid. Specifically, the index is the average of the priorities respondents assigned to “providing food and medical help to poor countries,” “reducing world poverty,” “reducing hunger and disease in poor countries,” and “helping poor countries develop their economies” as reasons for providing foreign aid to other countries. The average response to these items was then averaged with the responses to a pair of trade-off questions asking whether the U.S. should spend more money “to help fight world hunger in developing countries” and “to help fight the AIDS epidemic in developing countries” versus “concentrate on dealing with problems at home first.” Cronbach’s Alpha was .84 and .82 in the face-to-face and online treatments respectively.

Protecting Human Rights. This two-item index averaged the priorities given to “protecting human rights in other countries” and to “protecting weaker nations against foreign aggression” as long-range foreign policy goals. The items were correlated at .65 face-to-face and at .62 online.

Internationalism. This is a single item asking the extent to which the respondent agrees or disagrees that "this country would be better off if we just stayed home and did not concern ourselves with problems in other areas of the world."

Unilateral Versus Multilateral Action. This index was based on the pre-average of two parallel items asking whether “the U.S. acting by itself,” “the U.S. acting with close allies like NATO,” “the U.S. & its close allies acting through the United Nations,” “the United Nations,” or “nobody” should “take the lead in trying to resolve international conflicts” and in “providing foreign assistance to other countries.”⁸ Two other items measure the extent to which the respondent supports or opposes American military action “with United Nations support” versus “acting alone.” The resulting scores were then averaged with questions asking how strongly the respondent agrees or disagrees that "the U.S. should intervene to protect the world from countries that are likely to use weapons of mass destruction ONLY if we have support from our key allies or the United Nations" and that "the only way to solve environmental problems like global warming is through international agreements, requiring countries to work together" and how important it is to "involve international organizations like the United Nations" in tasks like "building the country's economy," "making the new

government friendly to U.S. interests," and "making the new government democratic" if "the U.S. succeeds in changing a government like Iraq's by military intervention." The Alpha values for this index were .63 and .75 in the face-to-face and online conditions.

Support for Democratization. For this index, we averaged items asking how important it is for the post-Saddam regime in Iraq to be democratic "if the U.S. succeeds in changing a government like Iraq's by military intervention," whether the respondent agrees more that "the U.S. should be promoting democracy in other countries" or that "how other countries are governed is not our concern," the priority that should be given to "helping newly democratic countries develop their democratic institutions" as a basis for providing foreign aid, the importance that should be placed on "encouraging more democracy in Middle East countries like Egypt & Saudi Arabia" as a way of "reducing future terrorism directed against the U.S.," and the pre-average of the importance that should be placed on each of six possible ways the U.S. might "promote democracy outside of the U.S." (These included building democratic institutions, increasing trade, penalizing governments for human rights violations, foreign aid, providing U.S. troops to help keep the peace, and increased support for humanitarian organizations like the Peace Corps.) The obtained values of Cronbach's Alpha were .75 (face-to-face) and .71 (online).

As in all Deliberative Polls, we are interested in gauging the effects of deliberation on both political knowledge and policy preferences. The additional twist here is that we are especially interested in the differences (if any) in the

magnitude of effects brought about by online versus face-to-face deliberation. We have two basic tests of the effects of each form of deliberation. First, we examine the changes over time in political knowledge and policy preference for each treatment group. For each measure, we compute the difference between the post-deliberation (T2) and pre-deliberation (T1) means among the face-to-face and online participants. We then take the difference of those differences as a measure of the mode effect.

We begin by examining the effects of deliberation on the level of political knowledge. For each of the nine knowledge questions, we first computed the pre- to post-deliberation gains in both treatment groups. These results are presented in Table 1.

(Table 1 here)

Participants in the face-to-face Deliberative Poll became significantly better informed in six of the nine instances. For online participants, the effects of deliberation were significant in three of nine cases. Using individual-level gains in knowledge as the criterion, face-to-face deliberation was clearly the more powerful treatment.⁹ Overall, the average increase in knowledge among face-to-face participants was 11 percent, as compared with four percent for the online sample. The difference between these effects was significant, suggesting the greater impact of face-to-face deliberation. Both the average effects, however, proved statistically significant. If we exclude the question on foreign aid spending (on the grounds that the +45 percent effect was abnormally high among face-to-face participants), both versions of deliberation achieved relatively

comparable levels of learning -- a net gain of seven percent in the case of the face-to-face condition ($p < .01$), and three percent in the case of the online condition ($p < .05$).

Our second test of learning is to compare the post-deliberation level of knowledge across control and treatment groups. Using this less stringent standard (see Table 2), the evidence is more unequivocal – in virtually every comparison, those who deliberate are substantially better informed than those who do not. In the case of the face-to-face treatment, we can make seven relevant comparisons. (Two of the original nine questions were not asked of the control group.) In six of the seven instances, control group participants were significantly more ignorant, with an average difference of +15 percent ($p < .01$). The contrast was nearly as stark in the case of the online Deliberative Poll. Online participants were significantly more informed than their control group counterparts on five of the nine questions, for an average effect of +15 percent ($p < .01$) on these items, and an overall average effect (using all nine items) of +10 percent ($P < .01$).

In sum, our results demonstrate that both face-to-face and online deliberation provide citizens with opportunities to become informed about foreign affairs information. Using a relatively stringent definition of an “informed citizen” (one who could correctly answer at least four questions), the increase in the percentage of informed citizens post-deliberation was 10 and 8 points respectively in the face-to-face and online conditions respectively. Once again, the effects of the two treatments proved uniform rather than distinctive.

We turn next to considering the effects of both forms of deliberation on foreign policy attitudes. Unlike our analysis of political knowledge, we are limited here to an examination of pre-post changes in attitudes among both sets of participants. We cannot supplement the analysis of attitude change with posttest comparisons between the treatment and control groups because several of the component items used to construct the attitude indices were excluded from the face-to-face control group questionnaire. The T1-T2 changes in policy attitudes are presented in Table 3.

In keeping with previous analyses, deliberation altered many attitudes. Pre- to post-deliberation attitude change among face-to-face participants was significant on all eight indices. In the online treatment, participants registered significant change on six of the eight indices. For two policy areas in particular, the face-to-face sample changed dramatically -- they became far more internationalist and in favor of greater spending on foreign aid. The online participants also changed substantially in the direction of supporting additional outlays on foreign aid.

(Table 3 here)

In addition to increasing support for foreign aid, face-to-face deliberation made participants more likely to endorse democratization, economic development and protection of human rights as objectives of U.S. foreign policy towards the Third World, and strengthened their support for anti-terrorism measures and for multilateral over unilateral U.S. actions. Online deliberation strengthened support for foreign aid, protecting human rights, global development, democratization,

and multilateralism. In the one solitary instance of inconsistent effects, online deliberation strengthened participant's support for environmental protectionism while face-to-face deliberation had the opposite effect.

Despite the stronger effects of face-to-face deliberation on support for internationalist programs and multilateralism in foreign policy, the overall pattern of effects was generally parallel across both versions of the Deliberative Poll. The similar pattern of results in the online and face-to-face conditions is especially striking given the multiple differences of detail in the treatments. The face-to-face and online versions differed not only in mode of deliberation. The moderators were largely different. The content and tenor of the small group discussions were different. The "elapsed time" from start to finish differed. (It was much longer, but less concentrated online.) The total quantity of organized deliberation, despite our best guesses at what would constitute equality, may have differed. Certainly the proximity to the expert panelists, and the immediacy of their responses to the groups' questions were enhanced in the face-to-face condition. The net effect of these differences was to strengthen the persuasiveness of face-to-face over online deliberation: the face-to-face treatment induced greater opinion change than the online treatment in four of the eight tests. The online treatment was more persuasive in only one instance -- unlike face-to-face participants, who became less likely to support tighter regulation of automobile emissions and who assigned a lower priority to protecting the global environment, online participants did adopt a more pro-environment stance. In the three remaining instances, the two treatments produced equally significant shifts

in opinion. In sum, the broad pattern of change was, all things considered, remarkably similar.

In summary, our comparative analysis of the online and face-to-face Deliberative Polls shows that the two forms of deliberation exert generally similar effects. Both increase participants' factual knowledge about foreign affairs and persuaded participants to adopt more internationalist, pro-development, multilateralist, and anti-terrorist policy preferences. On both counts -- enhanced information and changed attitudes -- the effects of face-to-face experience exceeded those of online deliberation. Nonetheless, online deliberation did provide a significant impetus to both information gain and attitude change. Online deliberation may not have all the qualities of face-to-face deliberation, but it has enough to make a difference.

Conclusion

As the first-ever test of online deliberation, the results of this study are encouraging. Clearly the Online Deliberative Poll is a viable process with significant potential for improving practices of public consultation and for illuminating our understanding of the role of deliberation in opinion formation. This experiment represents the initial launch of the process. Already we can see that the online process produced changes that roughly paralleled those from the face-to-face experiment -- participants became more informed and underwent significant changes of opinion in a generally more internationalist direction (in comparison to their respective control groups). Several additional analyses await completion. We are especially interested in the question of who changed. Did the

typical patterns we have seen in other Deliberative Polls hold up here in that those who become more informed are also those who changed? Did those from all socioeconomic strata change? In other Deliberative Polls, the changes have been uniform across socio-economic factors. We will report on these issues in further iterations of this report.

The development of the online Deliberative Poll also enables many other comparisons of online and face-to-face deliberation. Does voice allow for the same kind of mutual understanding and apparent “empathy” that we find in the face-to-face projects? Will it have the same positive effects on civic engagement? Will it also avoid the “polarization” that Sunstein hypothesized as a universal result of deliberation,¹⁰ but which we have not found in other Deliberative Polls?¹¹ In other projects in which we use ranking questions, will we find that online Deliberative Polls produce the same constructive effect on preference structuration, effectively making voting cycles impossible?¹² Such questions await further research and analysis.

But in the meantime, we can say that the online Deliberative Poll offers a practical tool for public consultation that should only grow in its potential over time. First, while the initial online effects were smaller than those from the face-to-face project, it is worth noting that we arbitrarily limited the duration of the deliberations to eight sessions over four weeks (with the Christmas holidays in between). However, there is no reason, in principle, why these deliberations could not last for far longer. Instead of eight sessions, such a sample could be maintained for eight weeks or eight months. Eventually we would expect the

cumulative effects of online deliberation to surpass those we get from a weekend of face-to-face discussion. Unlike the face-to-face version, the online process does not require taking respondents away from their homes and jobs and families. Hence there is no obvious outer limit to its duration.

Second, the major cost of the process, providing computer access to close the digital divide, will only get less and less expensive as the digital divide narrows in the country at large. Eventually, we foresee the online Deliberative Poll as a cost effective but deliberative alternative to conventional polling as access to computers become more and more like access to telephones. Once it is cost effective, online Deliberative Polling can become a widespread institution for improving public consultation. In this sense the process parallels the early aspirations of the conventional poll. Gallup thought that the public opinion poll might bring something like the New England town meeting to the large scale nation state.¹³ This online version has the potential to do just that.

Table 1.**Pre- to Post-Deliberation Gains in Political Knowledge: Face-to-Face vs. Online Participants**

	T1		T2		T2-T1 Gain		Mode Diff
	Face-to-Face	Online	Face-to-Face	Online	Face-to-Face	Online	
Adm, position on Foreign Aid Spending	.17	.14	.17	.15	.01	.01	.00
Level of Defense Spending	.28	.25	.30	.27	.02	.020	.00
Level of Foreign Aid Spending	.19	.19	.64	.26	.44***	.07**	.38***
Extent of US International Trade	.09	.17	.15	.15	.06**	.03	.09**
HIV Rates in Africa	.54	.47	.68	.51	.14***	.05	.10**
US Veto Power/WTO	.40	.46	.52	.48	.13***	.02	.10**
US Veto Power/Security Council	.61	.71	.69	.74	.08***	.03	.05
Adm. Position on Kyoto Accords	.37	.38	.53	.45	.16***	.07**	.09**
Human Activities as Causes of Global Warming	.66	.64	.67	.72	.02	.09***	-.07*

***p < .01 **p < .05 *p < .10

Table 2.**Post-Deliberation Differences in Knowledge Between Treatment and Control Groups**

	Control Group		Treatment Group		Group Diff		Mode Diff
	Face-to-Face	Online	Face-to-Face	Online	Face-to-Face	Online	
Adm, position on Foreign Aid Spending	.16	.15	.17	.15	.01	.00	.01
Level of Defense Spending	.24	.14	.30	.27	.06**	.13***	.07
Level of Foreign Aid Spending	.14	.15	.64	.26	.50***	.11***	.39***
Extent of US International Trade	.09	.12	.15	.15	.06***	.03	.03
HIV Rates in Africa	.57	.41	.68	.51	.11***	.10**	.01
US Veto Power/WTO	.33	.43	.52	.48	.19***	.05	.14***
US Veto Power/Security Council	.56	.68	.69	.74	.13***	.06	.07
Adm. Position on Kyoto Accords	--	.25		.45	--	.20***	--
Human Activities as Causes of Global Warming	--	.58	.	.72	--	.14***	--

Note. *p < .10; **p < .05; ***p < .01.

Table 3

The Effects of Face-to-Face Versus Online Deliberation on Foreign Policy Preferences: T1-T2 Differences

	T1: Participants		T2: Participants		T2 – T1: Participants		Mode Diff.
	Face-to-Face	Online	Face-to-Face	Online	Face-to-Face	Online	
Protecting the Environment	.76 (.01)	.68 (.01)	.73 (.01)	.70 (.01)	-.04*** (.01)	.02*** (.01)	-.06*** (.01)
Fighting Terrorism	.85 (.01)	.86 (.02)	.86 (.01)	.85 (.01)	.01** (.01)	-.01 (.01)	.02** (.01)
Protecting Human Rights	.68 (.01)	.60 (.01)	.71 (.01)	.64 (.01)	.03*** (.01)	.04*** (.01)	-.01 (.01)
Unilateral Vs. Multilateral Action	.72 (.01)	.72 (.01)	.76 (.01)	.73 (.01)	.04*** (.01)	.02* (.01)	.03*** (.01)
Supporting Global Development	.64 (.01)	.53 (.01)	.72 (.01)	.57 (.01)	.08*** (.01)	.04*** (.01)	.04*** (.01)
Internationalism	.75 (.02)	.67 (.02)	.85 (.01)	.69 (.02)	.11*** (.02)	.02 (.02)	.09*** (.03)
Support for Foreign Aid	.48 (.02)	.31 (.02)	.73 (.02)	.41 (.02)	.25*** (.02)	.10*** (.02)	.15*** (.03)
Democracy	.63 (.01)	.58 (.01)	.68 (.01)	.61 (.01)	.04*** (.01)	.03*** (.01)	.01 (.01)

Entries are mean scores with standard errors in parentheses. *p < .10; **p < .05; ***p < .01.

¹ For a proposal in this spirit, see Bruce Ackerman and James Fishkin *Deliberation Day* (New Haven and London : Yale University Press, forthcoming 2004).

² Of course if participation were mandatory, as with juries, the gatherings could be convened for longer. However, this is not a possibility we advocate at this point.

³ In fact, the posttest survey in both experiments occurred during the same week in January of 2003.

⁴ The use of random sampling distinguishes the DP from other attempts at deliberative consultation, such as citizen juries, focus groups, or the consensus conference.

⁵ Both projects, online and face-to-face, received major support from the William and Flora Hewlett Foundation.

⁶ The nine knowledge items were worded as follows: (1) “As far as you know, does President Bush want to increase foreign aid, decrease foreign aid, or keep it the same, OR haven't you heard anything about this?”; (2) “Out of every \$100 in the federal budget, about how many dollars would you say goes to military spending?”; (3) “Out of every \$100 in the federal budget, about how many dollars would you say goes go to foreign aid?”; (4) “For every \$100 in goods and services produced by the U.S., how many dollars worth would you say are sold to customers abroad?”; (5) “In those African countries with the highest rates of infection with the AIDS virus, roughly how many adults out of every 100 would you say have AIDS or the AIDS virus?”; (6) Please indicate whether you think the following statements are true or false – “The U.S. has a veto on World Trade Organization decisions.”; (7) Please indicate whether you think the following statements are true or false – “The U.S. has a veto on the United Nations Security Council.”; (8) “As far as you know, does President Bush support or oppose recent international agreements to control greenhouse gases, or haven't you heard anything about this?”; (9) “Which of the following is closest to what you believe is true about global warming?” – “It is caused mostly by human activities, like driving cars and burning fuel,” “It is caused mostly by natural changes in the climate,” “It is not occurring at all,” or “Haven't thought much about this.”

⁷ We have tried using these items without pre-averaging them, but the index generally coheres less well than with the pre-averaging.

⁸ “Nobody’s taking the lead,” which was chosen by only a handful of respondents, was treated as missing data.

⁹ There was only one instance in which online participants registered a significant increase in knowledge while face-to-face participants did not. This occurred in the case of the question on global warming.

^{10 10} See Cass R. Sunstein “Deliberative Trouble? Why Groups Go to Extremes” *Yale Law Journal* (2000), Vol 110, pp. 71-1119.

¹¹ For evidence that Deliberative Polling does not produce polarization see our analysis of the crime DP in Robert C. Luskin, James S. Fishkin and Roger Jowell “Considered Opinions: Deliberative Polling in Britain” *British Journal of Political Science* (July 2002): 455-487..

¹² See Christian List, Iain McLean, James Fishkin and Robert C. Luskin “Deliberation, Preference Structuration and Cycles: Evidence from Deliberative Polls” Paper presented at the meetings of the American Political Science Association, September 2000.

¹³ George Gallup “Public Opinion in a Democracy” (Princeton: the Stafford Little Lectures, 1938), p. 6.