

The Politics of State Legislature Web Sites: Making E-Government More Participatory

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Web sites of the 50 state legislatures are evaluated on five criteria: content, usability, interactivity, transparency, and audience. An overall quality score for each site was computed. The evaluation revealed a wide range of quality in the sites, including that of features or aspects that could possibly foster citizen participation. The higher rated sites help define "best practices" in this regard and provide suggestions as to how other states' sites might make improvements and possibly increase participation.

Keywords: *state legislatures; participation; Internet; e-government; Web sites*

Web sites have become a common medium for political entities to disseminate information. As citizens increasingly search the Web seeking information, a case can be made that the Web will usher in a new age of citizen participation in governing. But the inferior quality of some Web sites makes their usefulness questionable. Lack of content, poor design, and the passive nature of many Web sites limit their utility for increasing public participation.

Our investigation of the quality of state legislature Web sites provides a knowledge base that can help inform larger judgments about their role in fostering cyberdemocracy. Here, our purpose is to evaluate the legislative Web sites of all 50 states in regard to the information they convey, their ease of use, and their degree of interactivity. Our evaluation includes a particular focus on Web site aspects likely to facilitate citizen participation and provides suggestions that the weakest Web sites could use to improve their efforts toward achieving that goal.

The Many Meanings of Participation

In a democracy, all people should be able to participate in some meaningful way in the decisions that directly affect their lives. Some, certainly not all, democratic theorists believe that all citizens need to exercise their rights and not just a small elite within society. Democracy means government by the people, but it requires more than just allowing everybody to participate in policy making (Dahl, 1989).

Citizens in a democracy deliberate the various policy options to determine the best outcomes for the common good. They derive the common good, a philosophical outcome that benefits society as a whole and not necessarily any individual or group of individuals, through interaction with each other. Many of the institutions within society, however, prevent citizens from adequately participating in their own governing (Foltz, 1999).

The idea of democracy has changed significantly over the past two centuries. According to Gordon Wood (1991), the Founding Fathers ended up creating a democratic nation drastically different from the more aristocratic one they originally envisioned. James Madison (1787/1961), in *Federalist #10*, assured his fellow citizens that the proposed government was a republic and thus able to overcome the flaws of pure democracy. But what Madison called a republic came to be known as a *representative democracy*, a term that was then shortened to *democracy*. The ambiguous use of the term in describing representative to direct forms of decision making creates many problems as *democracy* has become a vague term of shifting meaning (Barber, 1984).

Equating democracy with participation is problematic, as many versions of participation exist, but not all forms of participation are equally democratic. James Miller (1987) asserted that during the birth of the participatory democracy movement in the 1960s, different groups with drastically different goals and beliefs molded the idea of participation to their own ends and created more of a rallying cry than any specific form of governing. Decision making that includes full individual participation by the majority of the population in one form or another has appeared in a number of variations of the idea: participatory democracy, in which all aspects of civic life merge together (Miller, 1987; Pateman, 1970); direct democracy, with total input on all decision making (Cronin, 1989); and strong democracy, using a mixture of new public institutions and technology, such as a national system of neighborhood assemblies or a national civic communications cooperative (Barber, 1984).

Somewhat less inclusive is the idea of interest group liberalism (Lowi, 1979; Walker, 1991; Wilson, 1990), also known to some political theorists as "pluralism" or "polyarchy" (Dahl, 1982, 1989), a mainstream theory of democracy based on the actions of organized and voluntary interest groups representing individual desires. Finally, there is the notion of the "conflicting elite theory" (Bachrach, 1971), in which the public has very little input into the system outside of the periodic election cycle.

Although no single medium exists for promoting complete participatory decision making, many individuals believe that the Internet comes closest. The rise of the Internet and its attendant World Wide Web has led some to predict, indeed hope, that this medium will change and expand the nature of participation and lead us to a new era variously described as "e-government" and "cyberdemocracy." But views on how e-government can increase participation will vary depending on one's conception of democracy. Web site design may also vary depending on the site's definition of participation.

Web sites could aid citizen participation by simply providing information and allowing participation through traditional channels. James Fishkin (1991) argued that although deliberation is at the heart of democratic participation, most people do not have the information required to adequately deliberate many of the important issues of today and, hence, cannot truly participate in decision making. Robert Dahl (1985) believed that computer-based technology could serve this function. The Web could provide an endless

stream of information concerning all aspects of an issue. Any group could easily have its voice "heard" via a Web site. Thus, Web sites can increase citizen participation by simply providing passive content to constituents.

Dyson, Gilder, Keyworth, and Toffler (1994) argued that the Web will allow citizens to supplant current government structures with a more direct participatory experience. Such participation, however, may not lead to a resurgence of individual-level influence on government and politics. Bruce Bimber (1998) disputed the assumed relationship between increased communication/information and political engagement and argued that the Internet will cause "accelerated pluralism," which will alter the structure of political power but not lead to a new era of democracy.

We tend to take the view that Web sites can provide an interactive experience and thus promote participation at an "active" level. Although additional information is good, Web sites can also provide the means to participate beyond traditional methods. Such Web site design would support Carole Pateman's (1970) view of complete "active" participation throughout all aspects of society.

Web site design should therefore encourage interaction with representatives and provide opportunities to provide input into the decision-making process. Benjamin Barber's (1984) concept of strong democracy more closely represents the ideal. In a strong democracy, computer-based technology not only disseminates information to the citizens to inform their participation but provides a means for quicker and more interactive participation in the decision-making process. Computer-based technology becomes one in a number of institutions set up to aid more direct participation by the public.

Method for Evaluating State Legislature Web Sites

During the late spring and early summer of 2002, we rated the primary Web sites of all 50 state legislatures based on their content, usability, interactivity, transparency, and adaptation to their audiences. The development of the evaluative criteria was influenced by earlier studies of political and governmental Web sites.

The Congress Online (COL) Project performed a comprehensive evaluation of all 605 congressional member office, committee, and leadership Web sites and found that only 10% received grades of A or B (<http://>

www.congressonlineproject.org/pfcongressonline2002.html). Furthermore, the project claimed that there was also a gap between what Web users wanted and what most Capitol Hill offices were providing. Web users, according to focus group research, want basic legislative information along with online interaction with members of Congress. Many offices, however, were primarily providing promotional content.

In a study tracking the progress of 1,680 state and federal Web sites between the summers of 2000 and 2001, West (2001) found that e-government had made improvements in making information, services, and interactive features available online. In looking for material useful to an average citizen, the study examined the content of the Web sites for the presence of 32 different features. A number of the e-government study features, in particular those associated with "democratic outreach," were incorporated in our evaluation of state legislatures' Web sites with regard to the information content and usability ratings.

The Cyberspace Policy Research Group has developed a Web site attribute evaluation system (<http://www.cyprg.arizona.edu/waes.html>). The categories include transparency and interactivity. Transparency concerns the organization's effort to make information about itself available to its users. Demchak, Friis, and La Porte (2000) argued that interactivity and transparency are the two main components of organizational openness. Wilson (1990) defined the openness of an institution as the degree to which it provides comprehensive information about itself to its various publics. This argument is further refined in Demchak, Friis, and La Porte (1998).

Five Evaluative Criteria

Our goal was to design an instrument that not only counted features but also included an evaluation of quality. West's (2001) e-government and the Cyberspace Policy Research Group (<http://www.cyprg.arizona.edu>) studies were predominantly checklist-driven evaluations. A site either had or did not have a component, and the score was the summation of these checks. This approach does not represent variations in the quality of the components. An instrument, similar to that of the COL Project, was constructed that was rating-based on both qualitative and checklist components.

Two evaluative criteria that are obviously critical are content and usability. The ultimate purpose of a Web site, or any medium, is to provide information.

The medium is only useful if people can access the content. In addition to COL and e-government, our assessment of quality of content was guided by criteria found in previous Web site studies (see Alexander & Tate, 1999; Faber, 1998; Gray, 1999; Hawkes, 1999; Horton & Lynch, 1999; Kaye & Medoff, 1999).

Interaction is the third evaluative criterion and one that Web boosters push as a primary engine of social change and increased citizen participation. Aspects of interaction were found in the COL, e-government, and Cyberspace Policy Research Group studies.

Transparency and audience complete the evaluative criteria. Transparency of the organization logically would relate to the ability for interaction, but it also plays an informative role. Audience was defined as the ability of the site to serve multiple audiences, categorized as nonexperts (citizens) and experts (lobbyists, journalists, and researchers) and to provide user-focused content.

Thus, the instrument evaluates sites based on five 10-point components: content, usability, interactivity, transparency, and audience. Content focuses on the information provided by the site. Usability measures site design, ease of navigation, and ability to access information. Interactivity includes any features that promote user-government communication. Transparency provides the users with knowledge about who owns and controls the content on the site. Finally, audience evaluates how well the site services both citizen and expert users.

Three of our five evaluative categories are especially relevant in regard to citizen participation: content, usability, and interactivity. Content provides the information necessary for good participation, but without a high level of usability, the utility of the information would be limited. Fostering participation requires sites not to just have good content but also to provide a variety of means for interactivity.

Evaluation Procedures

The National Conference of State Legislators (NCSL) Web site at www.nscl.org lists URLs for the legislative sites for all 50 states. The NCSL lists a specific single site for 48 of the 50 state legislatures.

All three researchers reviewed all states' sites, which allowed us to judge a site's usability from a number of different platforms as we used different machine configurations, a variety of Internet connections, and various browsers and different editions of these browsers. By checking sites on different days,

we were able to detect any idiosyncratic conditions such as connection problems.

Standardization in scoring was achieved by performing two rounds of pretests on several states, which included revision of the instrument and criteria necessary for baseline scores and the range of criteria for each score.

Formal evaluation took place from late May to early July 2002 and included regular meetings to compare results and review each other's findings. This process helped ensure that one evaluator did not simply miss something, for in poorly designed sites, even basic content and features can be missed.

California and New York did not have specific legislature sites, but the NCSL does list separate senate and assembly sites for both. Thus, we had to treat California and New York differently from the rest of the states. The assembly and senate sites were initially treated as sites of a unicameral legislature (like Nebraska), and then a composite state score was computed with points deducted from their content, usability, and transparency scores. The rationale was as follows: For content, the sites were each missing half of the content of a true legislative site. For usability, the lack of a comprehensive site made it difficult to obtain information on both houses. For transparency, the sites did not show the reality of the bicameral legislative system. New York's assembly lacked a link to the senate and barely acknowledged that it exists.

Quality Index Scores

Each state's set of component scores (content, usability, interactivity, transparency, and audience) is compiled from the average of the three researchers' component scores. The state's quality score is the total of these five scores.

Table 1 ranks the quality score for each of the 50 states and creates the quality index. New Jersey had the best site, and Mississippi had the worst. It is important to note the wide variation in quality across the 50 states. These results were particularly surprising as a number of technology-oriented states (those with large technology-oriented industrial centers and large numbers of technology-based institutions of higher education) had fairly low quality scores.

Quality and the Digital Divide

The quality index was tested for relationships with various demographic and political characteristics of the states. Associations were found between the index

Table 1. Quality Index and State Ranking

	Quality Index	State Rank
New Jersey	42.33	1
Minnesota	39.33	2
Alaska	38	3
Hawaii	36.67	4
Connecticut	36	5
Oregon	36	5
Iowa	35	7
Nevada	35	7
Virginia	35	7
North Carolina	34.67	10
Washington	34.33	11
Florida	34	12
Wisconsin	34	12
Tennessee	33.67	14
Louisiana	33	15
Delaware	32	16
Massachusetts	31	17
Oklahoma	31	17
Kentucky	30	19
Nebraska	30	19
North Dakota	30	19
Michigan	29	22
Maine	28.67	23
Vermont	28.67	23
Arizona	28.33	25
Maryland	28.33	25
Ohio	28	27
Utah	28	27
Wyoming	28	27
Indiana	27.67	30
Kansas	27.67	30
Georgia	27.33	32
New Hampshire	27.33	32
Missouri	27	34
Idaho	26	35
South Carolina	25.67	36
Texas	24.33	37
Colorado	24	38
New Mexico	23.33	39
Alabama	22	40
South Dakota	21.67	41
West Virginia	21.33	42
New York	20.83	43
Arkansas	20.33	44
Montana	20.33	44
Rhode Island	20.33	44
California	19	47
Illinois	17.67	48
Pennsylvania	17.33	49
Mississippi	12.33	50

and a state's percentage of households with Internet access ($r = .42$), per capita income ($r = .35$), percentage of population with high school education or more ($r =$

.34), and voting participation in the 2000 presidential election ($r = .30$) (Ferber, Foltz, & Pugliese, 2002).

Legislatures with higher quality Web sites tended to be those in states with populations whose characteristics suggested higher levels of political participation. We suspect that this indicates that demand is driving quality, in that citizens with more desire to participate are asking, directly or indirectly, for better tools to do so.

The associations above also suggest that the quality divide found in our Web site evaluation is associated with the digital divide said to exist in the nation's population. Citizens who are already inclined to use the Internet, and have better access, are being provided with higher quality legislative Web sites. Citizens on the wrong end of the digital divide appear to be also on the low end of the quality divide, as their states provide relatively inferior sites. These citizens, already less inclined to use the Internet in general, are less likely to interact with their state legislatures' relatively poor sites.

The suggestions for improvement we offer, many simple to implement, provide a way for some states to address their poor standing in the Web site quality divide. But perhaps more important, they provide some action, which may help governments to address the growing concern over the digital divide of disparities relating to education, income, and racial characteristics of citizens.

Content Score

Content directly links to the idea of participation by providing citizens with the information they require to competently participate in their own governing. Democracy requires knowledge, and Web sites can help provide this knowledge. Most states had a considerable amount of content, but some, such as Mississippi and its neighbor Alabama, were lacking. Of course, not all of the content was particularly useful or necessary for increasing citizen participation. Texas and Virginia included cafeteria menus on their sites. Some had legislative stores, such as New Hampshire where you could purchase a "Moose Mug" or a "Live Free or Die" T-shirt. A little more useful is Louisiana's listing of members going back to 1888, though knowing who was your senator in 1892 might be more useful to a historian than the average citizen.

Many sites included items that provided more useful information concerning the legislature and current public affairs. Most had searchable pending legislation. North Dakota included session statistics, much

like a box score of bills discussed, voted on, and vetoed. Many had searchable state laws, although a good number such as Delaware, New Mexico, and North Dakota relied on LexisNexis for this function. All sites had some contact information, and most had district maps, although there was considerable variation. Many used portable data files, whereas others employed interactive maps useful in finding representatives. Tennessee had by far the best interactive map. Most sites had some form of locating one's representative via maps, zip code, address, or district number.

Some useful items we expected to find on all sites were fairly thin. Only about half had floor schedules, although in their defense, many legislatures were not in session. Although a number of states provided some press releases, this was often limited to those of the leadership. Few had an extensive collection from across the membership, such as Missouri's archive of past floor speeches. Identification of staff members tended to be minimal but ranged from none in about 10 states to extensive in some such as Washington and Alaska.

Some of the other items useful for participation that we looked for included links to other sites and archived content accessible from the site. We believe that good sites should include active links to other relevant locations such as the governor's and state judiciary sites, federal and local sites, and issue-oriented sites. Rhode Island contained a massive amount of links. Vermont had good federal links and, like many others, used the NCSL as a source of links to other state legislatures. Idaho provided information for U.S. House and Senate members but provided no active links or even e-mail addresses for them. Links on some sites, like that of Kansas, were minimal.

Dated content varied from relatively little, as in the New York Assembly, to considerable, such as Vermont, which included content back to 1987. Pennsylvania's bills and resolutions were word searchable back to 1991, and you could access bills by their bill numbers back to 1981. Nevada included a historical research capability all the way back to 1873.

Audio or video feeds were found on many sites, but we were usually frustrated when we tried to use them. They tended to work poorly, slowly, or often not at all. At present, they seem to be more of a Web site gimmick than a useful aid to following the legislature. Even if they do work, they provide content only when the legislature is meeting. Some states offered archived video material, which is probably more useful, if it can be played, than a live feed.

One problem that we ran into repeatedly was that many Web sites used specific terminology that only someone familiar with the legislative process would understand. Even worse, some sites used idiosyncratic terms that would confuse all but people familiar with the legislative process of that state. The content of these sites could be improved with some sort of definitions of features and terms.

A number of states had glossary pages to explain key terms, which is a start. A few had pop-up descriptions of features that appeared when the cursor pointed at the link. Oregon may have provided the best explanation of functions with a dialogue box that explained various functions as you moved the cursor. At the simplest, many sites could have added a short description at the top of a page explaining the item (e.g., blue books, strike everything bills, grand committee, posting sheets, and blue sheets). Adequate description of features not only improves the clarity of the site but may also serve to educate users about the legislative process.

Many sites had content specifically designed to educate citizens so that they could better understand the legislature and possibly participate in its process. Educational material focused on a broad range of ages. A number of states also have information specifically oriented to "kids," "students," or "teachers and students." Such features make it easier for teachers to encourage or assign students to visit a site. Washington had good information for children to access, and Nebraska may have had the most kid-focused content with "Unicam Kids." Others included teachers' guides and explanatory information for adult users.

Experts using a site may not need much education, but many users, both adults and children, can learn about the legislature through the Web site. Many sites did not even include a glossary or explanation of abbreviations, whereas others did not even have a description of "how a bill becomes law." Frequently asked question sections were often useful but many times oriented to questions about the site as opposed to the legislative process. A "how a bill becomes law" description may already exist in print for many states and thus would not be difficult to add to the site. One could visit another site that has such a description and use it as a model for his or her site.

It was often not easy to determine who was responsible for the content of the site. One way of gauging the value of information is to know who placed that information there and what explicit criteria, if any, control that selection. We found great variation between sites

as to the identification of the group with ultimate responsibility for the content. North Carolina and Wisconsin had excellent examples of ownership statements. In many states, there was an indication as to who maintained the site, such as a "Legislation Information Services," but with no information regarding content control. In other sites, one was left to assume, by default, that it was owned by the state legislature.

Legislative Web sites will be more likely to foster participation if users have a sense of trust in the content of the site. The failure to claim ownership detracts from both the content and transparency of the site.

Only 27 sites had a privacy and/or policy statement addressing the privacy and security of the site and such issues as the tracking of users and the use of cookies. But citizens are significantly concerned about the security and privacy of Web sites, according to data cited in the study of e-government conducted at Brown University (West, 2001). Sites should post their privacy policies. They may very well already have one; if so, it should be a simple matter to post it.

The research of the COL Project found that citizens want Web sites to include voting records. But in most states, it was difficult to determine how a member voted on a particular bill and virtually impossible to determine the comprehensive voting record of the member. In many states, one could find the member's votes in the legislative journals but to do so required considerable skill and patience. This information could be made easily available, as found in New Hampshire's "Roll Call Search" and Washington's House member bios, where users could select a feature that produced a listing of votes for the member.

Usability Score

The largest variation between sites was in usability. In some instances, it was a simple matter to find all the content, and in others it was a tedious struggle. Usability affects the ability of citizens to use a site to actively participate in their governing. A difficult-to-use site, no matter how much content it offers, does little to aid citizens' participation.

Some simple changes could drastically improve a site. An example is Maryland's home page, which in its lengthy scroll (the equivalent of about five pages of text) contains much more information than Mississippi's entire site. Maryland's usability would be much improved by simply moving most of its content off the home page and creating links to the subsections. Maryland also had the problem that the links to the

Senate and House pages were hidden within the massive text of the home page. Two simple links called “Senate” and “House” at the top of the home page would have increased usability tremendously. A number of other sites would also benefit by adding well-marked chamber links.

We were also concerned about currency or timeliness of the site because updated information is more valuable than outdated information. This varied considerably and in many cases was not determinable as no dates appeared on the sites. We also looked for the degree of dynamic appearance or impression of currency that the page presented. We thought that a dynamic page might create a stronger incentive for users to return. Some sites employed various dynamic items such as changing dates and times, waving flags, and flashing “new” markers. Iowa had a changing quotation on the home page. New Hampshire had a special Memorial Day picture on its home page over Memorial Day weekend. Delaware had a marquee on its home page with a scrolling schedule of events. New Mexico had a greeting that changes with the time of day from “Good Morning” to “Good Evening.”

One of our concerns was the ease of navigation within the sites, especially the presence of site search engines and site maps. Content only matters if someone can actually access it. For example, South Carolina had a good district map, but it was hidden so far down the site (more than seven levels down) that only a very determined person could ever locate it. Some 20-plus sites had some form of site map or index, and even fewer had a site search. Site maps were a godsend for very complicated, very intricate sites with lots of content. A single page with a logical set of links to key elements allowed direct access to items that in some cases were deeply embedded within the site.

Indiana had its site search under construction, and Virginia’s search engine link went literally nowhere. Ohio had a massive set of search engines one page down from its home page that allowed you to search for all sorts of information including bills, laws, your legislator, and the site. The index of the Wyoming legislature was particularly useful, as it was considerably easier to navigate the site from the index than from the home page. A number of other related features also helped usability at some sites. Florida had a “How to Navigate Guide,” as did Nebraska. Ohio included good descriptions of the elements in its site index. Utah included a page for downloading all the tools required to use its site. Florida included quick links

that provided easy access to related sections of their site.

Another aid to navigation found in many states was banners. They presented key choices to users and were especially helpful when they remained with the user throughout various sections of the site.

Another problem for public participation was browser incompatibility. Many sites were designed especially for state-of-the-art browsers (the latest editions). The home page would suggest that the site is best viewed with Internet Explorer 5 or Netscape 6, and in some cases, they really meant it. South Carolina claimed that its site was specifically designed to be usable for all browsers, but it kept crashing any machine using Netscape. Although we applaud the effort to be state of the art, many of the users (and even some evaluators) are running older computers, older browsers (Netscape 4.1), and low-speed connections. And they may be discouraged by having their browsers freeze.

By staying state of the art, sites were inadvertently excluding large portions of the population. Digital divide issues mean that a large chunk of the population is excluded from participation via the Web. However, some sites were further dividing up the individuals with computer access. Not everyone can afford to keep up with the rapidly changing computer technology.

Interactivity Score

Interactivity provides the means for citizens to use the Web to participate in new and more meaningful ways. Our evaluation’s interactivity component was the most difficult item on which the states could score highly. This finding was consistent with the West (2001) e-government study of 1,680 government sites, which concluded that “government Websites tend to offer more basic information than features that make their websites interactive” (<http://www.OutsidePolitics.org/egovt01us.html>). This interactivity is what serves as a democratic outreach—facilitating communication between citizens and government. During the pre-testing, we decided to set a baseline score of 4 (out of 10) for sites that had e-mail to members and the Web master.

To receive a score above 4, states had to provide toll-free phone service, e-subscriptions to updates, and/or access to public forums. Many states provided some toll-free service, many times for teletypewriter service or specific hotlines. Connecticut, Indiana, Maine, and Tennessee had direct 800 lines to their members.

Amazingly enough, active e-mail links were not present in some states. Illinois and South Dakota did not provide e-mail addresses for their members, Texas only had e-mails for the senate side, and Mississippi provided addresses but did not have active links. A link to e-mail the Web master was also missing in a number of sites including Montana, Mississippi, Kansas, and the California assembly.

Beyond active e-mails, providing a basic contact page linked from the home page would also allow for citizen interaction with their state governments. A single contacts page that provides information for the key support offices and legislative leadership would improve many sites. Many times, support offices were totally ignored by the site even though citizens might need their assistance rather than their representative's.

Many sites do have a "contact us" button, but they tended to lead to a page where "us" could be better defined. Users wishing to comment on legislation were sometimes directed but not always linked to the legislators. Users wishing to comment on technical aspects of the site were sometimes invited to contact the *Web master*, but some states did not use that term, perhaps because they did not have a single Web master. Whatever the terminology, users should be able to easily understand who to contact regarding substantive or technical matters.

Nevada has a superb contacts page that is clear and concise and provides telephone, fax, and e-mail for the senate, assembly, and various offices of the Legislative Counsel Bureau. Maryland provided organizational charts of the legislative branch. A more extensive change would be to create an expanded contact page, similar to that in Nevada. The Nevada contact page covers hard mail, e-mail, and telephone and has buttons to contact the Web master and access individual legislators. Nevada also is one of a limited number of states providing fax and toll-free numbers.

Some 15 states provided a free subscription service, such as Arizona's "Weekly Senator." The California Senate site provided various update services including bill tracking and public access cable schedules.

Paid subscription services were found in some states, and although we noted their presence, we did not use this as a positive factor in our evaluation scores. The charges in some cases were fairly steep, such as Indiana's \$49.50 a month for its "Bill Watch" service and Maryland's \$800 per year for its service.

Conspicuously absent were public forums, chat rooms, or group listservers where users could discuss issues. A rare example was the Massachusetts "E-vent,"

a chat room where students could discuss issues with state senators.

Another problem related to public participation was that most sites did not allow for access by individuals who do not understand English. Of the state legislature sites, 12% had some non-English content, which was double that found in West's (2001) e-government study of 1,680 government sites.

No site provided a fully non-English mirror. New Jersey had the only significant Spanish-language content accessible from its home page. Oregon's home page provided a description of the legislative process in Spanish ("Commo Una Idea se Hace Ley"), and the New York Assembly would electronically mail Spanish versions of some of its documents (though they were not directly downloadable). Rhode Island had a Spanish "How a Bill Becomes a Law" and glossary. However, it is so well hidden that no Spanish-speaking person could ever locate it. Of the states we assumed might have Spanish-mirrored sites, there was some Spanish content in the Texas Senate but oddly enough not in the House. Some of the personal pages linked to the California Assembly and Assembly Republican Caucus site also had Spanish versions, though again not the senate.

On the theory that good sites serve multiple audiences, some legislatures' sites have specific statements about special features serving those with disabilities. Those descriptions are sometimes of services offered at the capitol and sometimes describe features on the Web site. The "Bobby Approved" label, signifying compliance with disability access criteria, is found on only a couple of legislative sites, such as New Jersey and Nevada. We do not know what it would take for a site to qualify for the label, but we can say that having it sends a clear message that you are trying to serve this audience.

Discussion

The Web sites of the 50 state legislatures, as of summer 2002, provide a wealth of useful information but offer few truly new methods through which citizens might participate in the governing of their states. At present, their chief impact appears to be dissemination of information and the facilitating and encouraging of participation through more or less traditional methods.

The information presented, more useful and of higher quality in some states than in others, does provide a base for informed citizen participation. The unprecedented ease of access to the information may

stimulate more citizens to follow politics and perhaps engage in further political activity. The educational content of the sites, again better in some states than in others, may help citizens better understand how they can most effectively participate. Both increase individuals' political efficacy, which research has shown in turn increases their likelihood to vote and participate in government via traditional political venues (Gant & Luttbeg, 1991).

But what of the promise of the Internet to provide new means of participation? In the case of most citizens' relationships to their state legislatures, that presently seems limited to using a relatively new method of communication, e-mail, in place of traditional letters. Many e-mail users will immediately note how easier it is to send e-mail than letters, which could result in increased communication directed at legislators. That, however, may not be a boon to effective participation.

Reports have started to surface from some legislatures suggesting that members are being inundated with e-mail, including a significant volume from nonconstituents (Greenberg, 2001). E-mail technology has made it easy for interest groups and their members to use pasted paragraphs and mailing lists to flood a state legislature with a message. Some state legislature Web sites even facilitate this by having downloadable lists of members' addresses. Research regarding local government officials has found that 12% report problems in handling e-mail volumes (Larsen & Rainie, 2002). This study also noted that local officials receive a relatively small amount of nonconstituent mail, compared to members of Congress.

The value of e-mail as a citizen-legislator medium is debatable. It is perhaps broadening citizen input in that local officials, according to the Digital Town Hall study, believe that e-mail has brought them into contact with individuals from whom they had never heard before (Larsen & Rainie, 2002). A downside for e-mail input was that local officials placed less weight on e-mail than on meetings, telephone calls, or letters, with only 14% saying they placed the most weight on e-mails. E-mail may also facilitate "outreach" activities of elected officials, but although *outreach* has a nice democratic ring to it, such communication is seen by some as simply a high-tech version of traditional public relations.

Beyond the problem of devoting sufficient member and/or staff time to answer the e-mails, there is also the difficulty of identifying constituents versus persons from outside the district. E-mail return addresses,

unlike those of the U.S. Postal Service, do not show where the e-mail writer lives. An argument can be made that legislators should not limit their attention solely to the opinions of constituents but should take a broader view. But it becomes harder to argue that the opinions of a member's constituents should be buried in the avalanche of e-mail from around the state or outside the state.

Technology may provide some means to deal with the e-mail deluge. The COL Project reports that some congressional offices are weeding out nonconstituent e-mail by requiring that senders use Web forms as opposed to e-mail addresses (<http://www.congressonlineproject.org/080702.html>). Somewhat less inspirational is EchoMail, software that can read and respond to e-mails by sorting through the senator's position papers, extracting information, and putting together paragraphs from its database to produce a coherent, personalized e-mail message to be sent as a response (Reidy, 1999). The specter of computer-generated messages receiving computer-generated responses should not warm the heart of someone seeking increased citizen participation in the democratic process.

The most prevalent means of nontraditional participation we encountered in our evaluation were the free e-subscriptions to various services that 15 states offered. We found them to be a good means of providing individuals with specific information at periodic intervals. They facilitate the ability of individuals to follow the legislative process and perhaps engage in it. Subscription services have the limitation, however, of being a means of getting information out but not a means for getting ideas in. We also wonder whether these services are of more use to citizens or lobbyists. For some of the services, the answer is undoubtedly both.

We found very few venues for soliciting citizen input other than the e-mails discussed above. The concept of public forums or chat rooms heralded by Web enthusiasts such as Dyson et al. (1994) was essentially not found. The Massachusetts forum was exclusively for students and only operated at a preestablished time. No state offered any type of online straw votes where tallies could be kept regarding citizen opinion. Currently, legislative Web sites are not in a position to support Barber's (1984) notion of an engaged public.

The lack of two-way communication may be a direct result of the ease of electronic communication. A truly interactive site might become overwhelmed by advocacy groups that could overwhelm individual

constituent input. Chat rooms could be dominated by a small number of expressive citizens. Online straw votes could be manipulated by groups, dusting off the old adage of "vote early and often." Thus, instead of creating greater active participation, Web sites might actually distort constituent input.

The promise of true interaction, we conclude, remains no more than a promise. The information flow from legislative Web sites is almost exclusively one way—out from the site. The value of Web sites should not be underestimated even if this is all they accomplish toward the objective of fostering participation. Encouraging citizens to follow public affairs, to know who their elected representatives are, to communicate informed opinion to these elected officials, and perhaps even to vote on election day are all admirable accomplishments.

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