Internet Use in the State Legislature

A Research Note

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Using a survey of state legislators in Iowa, Georgia, and California, this article examines how often legislators use the Internet as a source for policy information, and which legislators tend to make more frequent use of the Internet to gather information. The author finds that there is tremendous variation as to how often state legislators use the Internet to gather policy information. The author did not find evidence of a digital divide as it pertains to urbanism, or gender. It appears that a digital divide remains, however, between young and old legislators—with younger legislators using the Internet more often—and legislators in California versus legislators in Georgia and Iowa. In the end, it appears that the digital divide in the state legislature is shrinking. As the older generation of legislators retires, the author expects that the Internet will become a more institutionalized part of the information environment of state legislators.

Keywords: information technology; state legislature; digital divide

Much has been made recently of the digital divide—the idea that there is a wide gap between the haves and have-nots of computer and information technology. Traditionally, studies discussing the digital divide have found that the wealthy, city dwellers, Caucasians, men, and the young use computers and the Internet more often than their counterparts. At the same time, a few studies have begun to examine the use of e-mail (Cooper, 2002; Richardson, Daugherty, & Freeman, 2001) and the Internet (Pole, 2000) in the state legislature. Nonetheless, we know little about the frequency with which legislators use the Internet to gather policy information. In this article, I address the presence (or absence) of a digital divide in state legislatures using a survey of state legislators in California, Georgia, and Iowa.

This subject is important for two reasons. First, studies in Congress (Kingdon, 1989) and state legislatures (Herbst, 1998; Mooney, 1991) show that the media can provide a cue for legislator decision making. Unfortunately, because the Internet is so new, we do not know much about how legislators gather information on the Internet. Although we would assume that the legislators use the Internet to gather policy information, we have no empirical evidence that verifies this.

Second, a burgeoning literature examines the digital divide in the general population (Bimber, 2000). Examining the digital divide in the state legislature provides a case study of the digital divide when people have similar resources, salaries, and so forth. In other words, because all state legislators have access to the Internet in their legislative offices, we can test theories of the digital divide while controlling for access.

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THE INTERNET AND AMERICAN POLITICS

No one has looked at how state legislators use the Internet to gather information, but some have speculated about how the Internet influences American politics more generally. For instance, Dahl (1989) and Grossman (1995) suggested that the Internet has the potential to revolutionize the way that citizens keep in touch with their government and the way that government works. On the other hand, Richard Davis (1999) argued new technology is unlikely to change the way in which politics and government work in America. Instead, Davis believes that the Internet will merely be co-opted by the traditional holders of political power. The one thing that most commentators agree on, however, is that more empirical work needs to be done to better assess the impact of the Internet on the American political system.

The remainder of the work that has been done on the Internet and American politics centers on the following three areas of inquiry: the use of web pages by legislators to disseminate information to a variety of audiences, the use of e-mail to communicate, and the use of the Internet as a tool to gather information. I address each of these in turn.

Adler, Gent, and Overmeyer (1998) found that members of Congress often use their web pages as a means of expressing their homestyle (Fenno, 1978). The content of this homestyle changes little whether it is on the Internet or expressed through traditional means of constituent contact. They also found that members of Congress were increasingly adopting web pages with similar appearances. In sum, early in the life of the Internet, it appeared that using web pages to reach constituents was becoming an institutionalized part of Congress. Unfortunately, the possibility that legislators might use web pages to reach other audiences has not been adequately explored.

The second stream of research examines how lawmakers use e-mail to communicate with a variety of audiences. Although little of this work deals with Congress, we know more about how state legislators use e-mail. Richardson et al. (2001) examined how Tennessee state legislators use e-mail to communicate with constituents. Richardson et al. (2001) found that legislators use e-mail to reach constituents, although neither district nor personal characteristics predict the volume of constituent e-mail that legislators receive. The legislator's general orientation toward constituency service, however, is a significant predictor of constituency e-mail. Richardson et al.'s (2001) work reinforced the notion that the Internet will not radically change legislator-constituent contact but rather will be used like traditional modes of communication.

Although still examining the use of e-mail in the state legislature, Cooper (2002) has slightly different focus. He suggested that although legislators do use e-mail to communicate with constituents, this is not the only goal for e-mail communication. State legislators also use e-mail to communicate with other legislators and a variety of political elites. Cooper also found evidence of a lingering digital divide, as male state legislators in his sample were more likely to make use of e-mail than female legislators.

The third area of research examines how citizens and legislators alike use the Internet to gather information. In her case study of the New York legislature, Pole (2000) suggested that a number of legislators now use the Internet in the course of their jobs, although older legislators have some remaining trepidation about using the Internet to gather information. Conte (1999) echoed a concern that older legislators are less apt to use computer technology. Unfortunately, apart from these two works, we know little else about how, when, and why state legislators use the Internet to gather policy information.

The most extensive body of research examines how ordinary citizens use the Internet. These studies have generally concluded that there is a gap between (a) those who have access

to the Internet and those who do not as well as (b) those who frequently use the Internet and those who do not. This gap varies between access and usage,[1] but is generally understood as a function of age (Bimber, 2000), urbanism (Gillespie & Roberts, 1989; Hindman, 2000), income (Irving, 1999), race, occupation, and education (Bimber, 2000).

HYPOTHESES

In this article I ask the following: (a) how often do state legislators use the Internet as a source for policy information? and (b) Which legislators are most likely to use the Internet to gather policy information? The hypotheses that accompany the second question follow.

Guided by past research, I employ variables that are generally understood as components of the digital divide. First, I include an independent variable for age. Research in the state legislature (Conte, 1999; Pole, 2000), as well as in the general population (Bimber, 2000), suggests that the young are significantly more likely to use the Internet than the old. Thus, I expect that age is inversely related to how often a legislator uses the Internet to gather policy information.

Hindman (2000) suggested that people in rural areas are generally less avid Internet users than those who live in urban areas. I include a variable for urbanization and hypothesize that legislators from urban areas are significantly more likely to use the Internet to gather policy information than rural legislators.[2]

Gender differences are also commonly found in studies of the digital divide. Perhaps because Internet content embodies "male values, content that favors men, sex differences in cognition or communication, or other factors—in addition to socioeconomics," women are generally "less intensive Internet users than men" (Bimber, 2000, p. 874). I expect that male state legislators are more likely to use the Internet to gather policy information (1 = male).

Finally, considering California's reputation as the center of the Internet boom, I hypothesize that its legislators are more likely to use the Internet to gather policy information than legislators in Iowa and Georgia.

Three other variables are often identified as key components of the digital divide—race, income, and education (Bimber, 2000). None of these are included in my models, however. I do not include an independent variable for the educational attainment of the legislator for two reasons. First, it is extremely difficult to gather consistent data on the educational attainment of state legislators.[3] In addition, because most state legislators have completed at least some college,[4] there would not be much variation, even if educational attainment were included.

Although a number of studies have found an income bias (Bimber, 2000) in Internet use, it is impossible to gather these data on individual legislators as Georgia and Iowa legislators are not required to disclose their income outside of the legislature.[5] Similar to educational attainment, however, even if this variable was included, it would not likely be significant. State legislators generally have incomes well above the national average.[6] Finally, although legislator race is an easy variable to collect, Iowa provides no variation on this variable. As a result, it is not included in the models.

THE DATA

To test these hypotheses, I conducted a survey of state legislators in California, Georgia, and Iowa during the winter of 2000. These states differ on a number of characteristics, including professionalism, policy liberalism, political culture, region, and population size.[7] In addition, they differ some as to the percentage of households with Internet access (*Govern-*

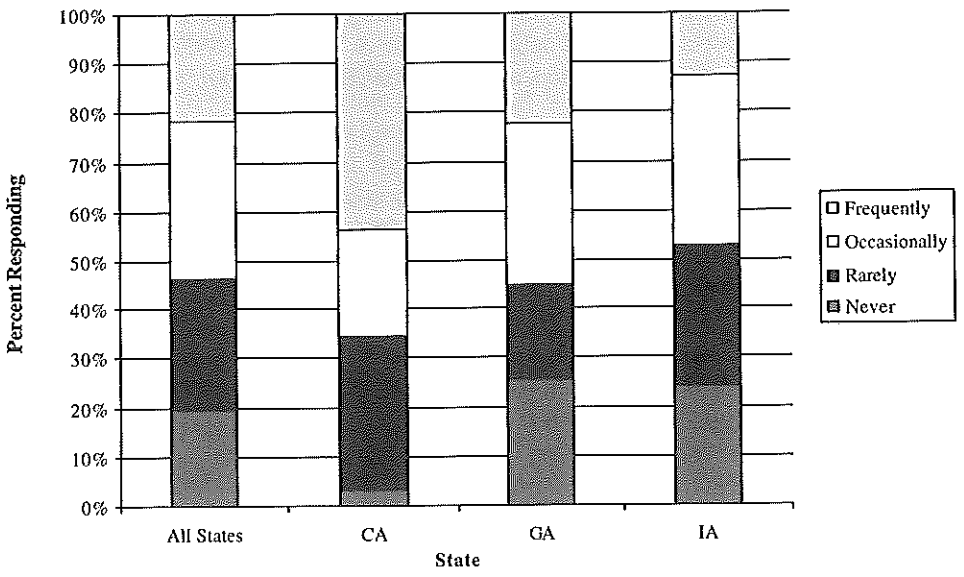

Figure 1: Percentage of Respondents Who Use the Internet for Policy Information
NOTE: Survey of 187 state legislators in California, Georgia, and Iowa.

ing's State and Local Sourcebook, 2002, p. 108), although Georgia and Iowa are relatively close on this measure.[8]

Respondents were sent two waves of the survey instrument. In the end, I achieved a 38% response rate for the entire survey, resulting in a sample size of 187.[9] This response rate is higher than many recent published works surveying members of Congress (Kedrowski, 1996) and state legislators (Maestas, 2003; Richardson et al., 2001). To check for the possibility of response bias, I compared the demographic characteristics of respondents to those of nonrespondents and found that the two groups are remarkably similar, although the population of legislators in Iowa and California is slightly more Democratic than the sample would suggest (9% difference in Iowa and 5% difference in California).

HOW OFTEN IS THE INTERNET USED IN THE STATE LEGISLATURE?

Each respondent was asked how often they consult the Internet for information regarding public policy.[10] The response options were "frequently," "occasionally," "rarely," and "never." The distribution of results to this question can be found in Figure 1.

The first thing that stands out from Figure 1 is that there is tremendous variation on this variable. It appears that the Internet is not a tool used by all legislators to acquire policy information. For instance, the distribution of legislators in all states is split in half between legislators who claim to use the Internet frequently or occasionally to gather policy information, and those who claim to use the Internet rarely or never. Despite suggestions that the Internet is radically altering the information-gathering behavior of citizens and legislators alike, these data suggest that the frequent use of the Internet to gather policy information is far from universal.

TABLE 1
Logistic Regression Results Predicting Internet Use in the State Legislature

	All States		*CA*		*GA*		*IA*	
	B	SE	B	SE	B	SE	B	SE
Age	−.052**	.013	−.011	.031	−.085**	.022	−.023	.020
Urban	.286	.322	−.462	.443	.702	.497	−.092	.551
Male	.006	.352	.550	.874	.170	.557	1.12	.628
California	1.013*	.428	—	—	—			
Iowa	−.255	.321	—	—	—			
Model χ^2	670.06		83.46		154.35		201.02	
Nagelkerke R^2	.176		.064		.284		.086	
N	161		37		62		67	

*p <.05 (two-tailed test). **p < .01 (two-tailed test).

The distribution in Figure 1 changes slightly once the data are broken down by state. California legislators are more likely to use the Internet frequently as a source of policy information, followed by Georgia and Iowa legislators. Certainly, this fits with the stereotypical image of California as the center of the so-called information revolution.

A DIGITAL DIVIDE?

Although the above discussion highlights broad trends in the use of the Internet, we still do not know what accounts for this variation. To find out, I ran four logistic regressions in which each dependent variable indicates how often a legislator uses the Internet to obtain policy information—1 = frequently and sometimes; 0 = rarely and never. One model examines all states together, the next three look at each state considered individually. I employ a number of independent variables traditionally associated with the digital divide, including age, and the urbanization of the legislator's district (urban). In the model for all states pooled together, I also include dummy variables for two of the three states (CA, IA). The results are displayed in Table 1.

The data suggest that there is no digital divide in the state legislature as it pertains to urbanism or sex. These variables are not significant in any of the four models. There remains a digital divide, however, between young legislators and older legislators and between legislators in California and legislators in other states. Below, I take each of these findings in turn.

Gender is not a significant predictor of Internet use by state legislators. This flies in the face of what we know about how citizens use the Internet (Bimber, 2000) as well as how state legislators use e-mail (Cooper, 2002). One reason for the difference in findings could be that the socioeconomic status of women in the state legislature is roughly equal to that of men. An important reason often cited for gender differences in patterns of Internet usage in the general population is the lower socioeconomic status of women (Bimber, 2000). Obviously, in the context of the state legislature, that is less of an issue. Although all state legislators do not have equal net worth, within each state, they do receive the same salary from their job as legislator. Even in less professional states, such as Georgia, where many legislators may have outside employment, it is unlikely that there is a tremendous disparity between the socioeconomic status of legislators across sexes. The differences between these findings and Cooper's (2002) findings about e-mail suggest that there is a different digital divide between

use of e-mail and use of the Internet. Gaps that appear in the use of Internet may not appear in the use of e-mail, and vice-versa.

A digital divide remains, however, between young legislators and older legislators. This variable is significant for the all states model ($p < .01$), and the Georgia model ($p < .01$), but is not significant in the California or Iowa models. Overall, the finding that age matters is consistent with Pole (2000) and Conte (1999). To explore this relationship further, I calculated the mean age for legislators who score a 1 on the dependent variable and compared this to the mean age of legislators who score zero on the dependent variable. Although legislators who claim to use the Internet frequently or sometimes have an average age of 52, those who claim to use the Internet rarely and never have an average age of 59.

The two final variables are state context and urbanism of the district. The findings in Figure 1 appear to hold up in a multivariate context, as California legislators are more likely to use the Internet as a source of policy information than legislators in Georgia and Iowa, even controlling for other factors. Finally, I find no relationship between legislator use of the Internet and urbanism of the district. It appears that legislators do not bring with them the trappings of their district that may impact Internet usage.

CONCLUSIONS AND IMPLICATIONS

The data suggest a number of things about the use of the Internet in state legislatures. First, the use of the Internet as a source of policy information is far from universal. Indeed, nearly half of the legislators surveyed indicated that they use the Internet to gather policy information rarely or never. Nonetheless, some state legislators do use the Internet to gather policy information. Certainly, this is important information for scholars of state legislatures. The literature on the cues legislators use in gathering policy information and making decisions is vast (Kingdon, 1989), yet virtually none of this literature recognizes that the Internet may be yet another way that legislators gather information to make decisions. Considering criticisms of the content of much of the information on the Internet (Postman, 1992), this could be quite deleterious for democratic decision making. Nonetheless, my data do not speak to the specific web sites that legislators visit when using the Internet to gather policy information.

By examining the digital divide in the state legislature, I find that the urban/rural nature of the district and gender of the legislator appear to have no impact on how often a legislator uses the Internet to gather policy information. This runs contrary to my hypotheses, as well as much of the existing literature. Two components of the digital divide, however, remain (at least in certain contexts). First, younger legislators are significantly more likely to use the Internet to gather policy information than older legislators. Will this trend continue as these younger legislators age and older legislators retire? I would expect not. As use of the Internet becomes more widespread, I expect most of these differences to disappear. Indeed, the fact that more people are familiar with the Internet now than were 5 years ago could go a long way in explaining the disappearing digital divide. Second, Californians appear to be more Internet savvy than legislators in Georgia and Iowa. It is difficult to tell whether this is because of the professionalism of the California legislature or California's position as one of the leaders in the information technology movement.

As more and more citizens and policy makers use the Internet, scholars should increase their efforts to understand how the Internet is used. It is hoped that this will enable us to determine whether the Internet will radically change American politics or will merely result in politics as usual.

NOTES

1. Douglas Hindman (2000, pp. 549-560) pointed out that the term digital divide can be applied to either the divide between people who have access to the Internet and those who do not, or those who use the Internet and those who do not. Because all state legislators have equal access to the Internet (at least within each state), I use the term digital divide to refer to issues of usage, not access.

2. These data were collected from Lilley, DeFranco, and Bernstein (1998). Urbanism was coded as follows: 4 (*urban*), 3 (*suburban*), 2 (*mixed*), 1 (*rural*). In a previous version of this article, I ran this variable as a dichotomous variable (1 = urban or suburban, 0 = mixed or rural). The findings did not look substantively different.

3. For instance, the Iowa state legislative web site does not list educational attainment for any of its legislators. The web sites for the Georgia and California legislatures have educational attainment for some legislators, although these data are not listed for other legislators.

4. For instance, Moncrief and Hamm conducted a survey of nonincumbent legislative candidates in 8 states and found that 61 of 69 candidates attended at least some college (cited in Maddox, 2002).

5. For financial disclosure statements for each state, see `http://50statesonline.org/`.

6. For instance, in an 8-state survey, Moncrief and Hamm found that the median income for nonincumbent state legislative candidates ranges from $50,000 to $69,999 and is even higher in professional legislatures (cited in Maddox, 2002).

7. For professionalism scores, see King (2000). For scores of policy liberalism, see Erikson, Wright, and McIver (1993). For political culture, see Elazar (1966).

8. California = 46.7%, 10th highest in the country; Georgia = 38.3%, 35th highest; Iowa = 39%, 33rd highest.

9. California = 31%; Georgia = 32%; Iowa = 51%. *N* for California = 37; *N* for Georgia = 73; *N* for IA = 72. Because some legislators crossed out their ID number, it was impossible to determine the state of origin for the remaining respondents; 23% of surveys were filled out by staff members.

10. The question wording was, "When you are seeking information regarding public policy, how often do you consult each of the following sources?" A number of response options were given including the Internet.

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