

A RESEARCH NOTE

E-Mail in the State Legislature: Evidence from Three States

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IT IS OFTEN ASSUMED that e-mail is changing the way in which government officials communicate, but there is little evidence to support this claim. Only recently have scholars begun to examine how legislators' communications have changed and expanded with the use of e-mail and the Internet (Adler, Gent, and Overmeyer 1998; Messmer, Carreiro, and Metivier-Carreiro 2000; Richardson, Daugherty, and Freeman 2001). This article reviews the literature on the use of information technology in state legislatures and in Congress and uses results from a survey of legislators in California, Georgia, and Iowa to examine how state legislators use e-mail.

Information Technology in Legislatures

Members of Congress officially began using the Internet in association with their jobs in 1993, when secured e-mail accounts were assigned to virtually every member under U.S. Rep. Newt Gingrich's Cyber Congress project (Browning 1994, cited in Adler, Gent, and Overmeyer 1998). Hundreds of legislators have

since created web pages associated with their office (Adler, Gent, and Overmeyer 1998). State legislators have been somewhat slower than their congressional counterparts in the adoption and use of information technology, but this gap has been closing (Davis 1999). One study of the New York Assembly (Pole 2000) found that although there has been some resistance from older legislators, many state legislators are now using the Web to gain information as well as to disseminate it.

In their study of the Tennessee legislature, Richardson, Daugherty, and Freeman (2001) investigated how state legislators use e-mail to communicate with their constituents. They found that e-mail is an increasingly important part of constituency service and constituency contact. Moreover, neither district characteristics nor legislator characteristics significantly predicted the number of constituency requests a legislator received by e-mail. The only significant factors predicting this relationship were the legislator's attitude toward constituency service in general and the frequency of other contact methods such as the frequency of office hours (Richardson, Daugherty, and Freeman 2001). In short, these authors found no large "digital divide" among the types of citizens who make e-mail requests. Although their findings regarding the patterns of e-mail

This article is part of a larger study examining the role of media in state legislatures.

use in the Tennessee legislature are not generalizable to other legislatures—and the study is limited to the use of e-mail for constituency contact, ignoring other possible uses of e-mail—their study provides the only baseline from which to make comparisons.

The evidence regarding Americans' attitudes toward use of the new technology in government is equivocal. A recent survey found that 72 percent of Americans think the growth of Internet technology and e-mail will improve the process of representation in the United States (Greenberg 2001). Other observers claim that the advent of new technology will have little impact on the democratic process in the United States (Davis 1999).

The Questions and The Data

The research questions that guided this study are as follows:

1. How pervasive is the use of e-mail in state legislatures?
2. Whom do legislators intend to reach when they use e-mail? It is assumed that they aim to reach constituents, but do legislators aim to communicate with other members of the public as well? Other legislators? Other elites? Previous studies have left this question unanswered.
3. What factors predict a legislator's propensity to use e-mail frequently?

To answer these questions, a survey of state legislators was conducted in California, Georgia, and Iowa. The survey was conducted during January and February of 2000. Although costs precluded a survey of all 50 states, the states that were selected provide a broad array of political and geographic characteristics (see Table 1). California, Georgia, and Iowa differ in terms of professionalism. Generally, professionalism “refers to the enhancement of the capacity of the legislature to perform its role in the policy making process with an expertise, seriousness and effort comparable to that of other actors in the process” (Mooney

1994, 70–71). California ranks high on the scale of professionalism, but Iowa falls in the middle, and Georgia ranks near the bottom (King 2000). These differences should be reflected in this study because more professional states have more staff members to deal with a variety of issues, including e-mail and Web technology. States also differ in terms of political culture (Elazar 1966), policy liberalism (Erikson, Wright, and McIver 1993), region, and population. In short, the three states chosen are consistent with a “most-different-systems” approach to comparative state research.

Legislators in the sampled states were sent surveys. Legislators who did not respond were then sent a follow-up survey. Responses from the initial survey and the follow-up survey showed no significant differences. Response rates for the three states surveyed are California, 31.1 percent; Georgia, 31.7 percent; and Iowa, 50.7 percent, resulting in a 38.2 percent response rate for the entire survey. This response rate surpasses that found in recent published work surveying state legislators (Richardson, Daugherty, and Freeman 2001) and members of Congress (Kedrowski 1996; 2001). In all, 193 surveys were returned. Evidence suggests the legislators who returned surveys bear close resemblance to the population of all legislators in the sampled states. There were no significant differences in the two groups in terms of gender, chamber, age, tenure, or party.

Because of time constraints, staff members often fill out survey instruments on behalf of legislators (Hess 1984; Kedrowski 1996). Respondents were therefore asked to indicate whether they were legislators or staff members. Staff members who completed the instrument were instructed to report the opinions and strategies of their representative rather than their own personal opinions. Legislators completed 77 percent of the surveys; staffers completed 23 percent. The average staff member who filled out the instrument had worked for his or her current employer for 2.5 years. The results from legislators and staffers differed in no substantive way.

Table 1: Characteristics of Sampled States

State	Professionalism score and rank	Political Policy Culture	Liberalism
California	.900 1/50	Individualistic/moralistic	1.49
Georgia	.136 44/50	Traditionalistic	.44
Iowa	.238 27/50	Moralistic/individualistic	-1.04

Notes: *Professionalism* is based on Squire (1993) and includes three components: legislator salary, staff per legislator, and length of session. Professionalism is measured relative to Congress (i.e., the most professional legislature). Therefore, Congress would receive a score of 1; a legislature with half the resources of Congress would receive a score of 0.5; and so on. See also King (2000). *Political culture* is defined as "the particular pattern of orientation to political action in which the system is embedded" (Elazar 1966, 79). Elazar posits that three political cultures exist in the United States: individualistic, moralistic, and traditionalistic. Some states (e.g., California, Iowa) have a mixed culture combining two different cultures. *Policy liberalism* is a function of state opinion liberalism, legislative liberalism, and Democratic legislative strength and is derived from a variety of sources, including a composite of the CBS/*New York Times* polls from 1976 to 1988, the average Democratic strength from 1977 to 1984, and elite party ideology scores. A higher score on the policy liberalism index is associated with more liberal policies. See Erikson, Wright, and McIver (1993, 77) for a complete list of state scores on a "standardized index of composite policy liberalism."

Results

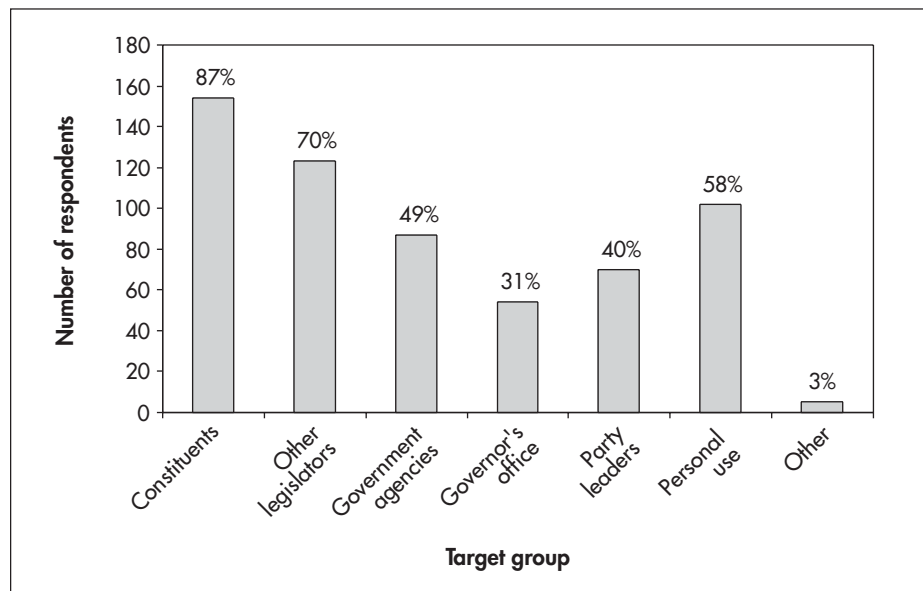
Each legislator was asked a number of questions regarding the use of e-mail. First, each legislator was asked, "Do you have an e-mail account?" Of 193 legislators who returned surveys, 177 responded that they do have an e-mail account (91.7 percent). The question then arises, with whom are legislators communicating by e-mail?

Previous studies have established that legislators aim to reach constituents and that e-mail is a new means of constituency service (Richardson, Daugherty, and Freeman 2001). Indeed, most articles speculating about the role of e-mail in state legislatures concentrate on constituency contact (Boulard 2000; Bouquard and Greenberg 1996; Greenberg 2001; Jones 1999). To determine whether legislators used e-mail for this purpose alone or to reach other groups as well, each legislator who indicated that they have e-mail was asked, "Who do you use e-mail to communicate with? Check all that apply." Response categories were as follows: constituents, other legislators, government agencies, governor's office, party leaders, personal use, and other.

The data suggest that legislators do use e-mail to communicate with people other than their constituents (see Figure 1). Of the 154 (91.7 percent) legislators who indicate that they

use e-mail to communicate with constituents, over three-quarters indicate that they use the technology to communicate with other legislators. Over half of the legislators who responded indicate that they use e-mail to communicate with government agencies. About half indicate they use e-mail to communicate with party leaders, and over one-third of legislators use e-mail to communicate with the governor's office. These data suggest that e-mail is becoming an important means of communication, not only for constituent contact, but for reaching political elites as well. Particularly when the legislature is not in session at the state capitol, evidence suggests that e-mail can provide a vital link between legislators to build coalitions and discuss policy and legislative issues.

Although most legislators have e-mail access, that does not mean they utilize the technology. Each legislator was therefore asked, "In an average week, how often do you check your e-mail?" Responses to this question provide a rough measure of how much time legislators devote to communicating by e-mail. Certainly, legislators who check their e-mail more than once a day put a higher priority on e-mail communication than do those who check their e-mail once a week. Responses were coded as follows: 5 = more than once a

Figure 1: Whom do you use e-mail to communicate with?

day; 4 = once a day; 3 = every other day; 2 = once a week; and 1 = less than once a week.

Responses to the previous question were used as a dependent variable in ordinary least squares regression. A number of independent variables were tested, including district characteristics, institutional characteristics, and legislator characteristics. The variables employed are as follows: average district income (district income), urban or rural composition of the district (1 = urban), state (Georgia, California), chamber (1 = upper house), party (1 = Democrat), age, leader (1 = party or legislative leader), and gender (1 = male). A final attitudinal variable was included (Internet attitude). Legislators were asked, "When you are seeking information regarding public policy, how often do you consult the Internet?" Answers were coded on a four-point scale ranging from "never" to "frequently" (see Table 2).

It appears that district characteristics have little effect on a legislator's propensity to frequently check e-mail, despite the expectation that legislators from wealthier districts would receive more e-mail and would there-

fore check their e-mail more often than would their counterparts in poorer districts. Neither urban nor district income are significant. Both of these findings are contrary to those of previous studies. It has been suggested that the rich are more likely to use e-mail than are the poor (Hindman 2000; Pitkow 1998). Similarly, Hindman (2000) found evidence of a rural-urban digital divide. Nevertheless, the findings of the present study support those of Richardson, Daugherty, and Freeman (2001), who determined that district income and the urban composition of the district had no impact on the number of casework requests that Tennessee legislators received by e-mail.

The data suggest that the state in which a legislator serves is significant. Georgia legislators are less likely to check their e-mail frequently than are legislators from Iowa and California ($p < .05$). Because of California's reputation as the center of the technological revolution, it was expected that legislators from California would use e-mail more often than would legislators from other states. However, the relationship between these variables was

Table 2: In An Average Week, How Often Do You Check Your E-Mail?

Variable	B	SE
District income	.000	.000
California	-.430	.283
Georgia	-.496*	.213
Urban	-.033	.083
Legislator age	-.163	.136
Democrat	.068	.212
Leader	-.268	.205
Male	.669**	.216
Internet attitude	.468**	.093
Constant	2.739**	.561

* $p < .05$. ** $p < .01$. $N = 145$. $R^2 = .243$.

not significant, nor was it in the expected direction: California legislators do not check their e-mail more than legislators from other states and, in fact, may check their e-mail less often. This seemingly counterintuitive finding may be attributed to the professionalization of California's legislature. Staff members rather than legislators themselves may use e-mail in the legislative office, replying to e-mails on behalf of a legislator, for example (Boulard 2000). It may be that because California legislators receive so many e-mail requests, they do not check e-mail themselves, or they may limit the number of times they check e-mail.

The variables of age, Democrat, and leader are not significant in the model. Despite findings in other populations that those who use e-mail frequently are younger than their counterparts who do not use the technology (Hindman 2000), the data suggest that legislators do not follow this trend. The findings regarding party support those of Richardson, Daugherty, and Freeman (2001), who found that neither age nor party were significant predictors of whether Tennessee legislators use e-mail for constituency service.

The variable "male" is significant in this model ($p < .01$), suggesting that male state legislators check their e-mail more often than do female legislators—a finding that is consistent with trends in Internet usage. Most stud-

ies have found that men are more likely than women to have web pages, to check e-mail, and to spend time online (Davis and Owen 1998; Hindman 2000; Pitkow 1998). However, Richardson, Daugherty, and Freeman (2001) found that female legislators in Tennessee received more e-mail requests for casework than did male legislators. The findings here suggest that although female state legislators may receive more constituent requests by e-mail than do males, women do not appear to use e-mail as often for other purposes. That females receive more constituency requests by e-mail is likely a function of their general outlook toward constituency service (Richardson and Freeman 1995) rather than an indication of their propensity to use e-mail.

Attitude toward the Internet is significant ($p < .01$). It appears that legislators who frequently use the Internet to gain policy information are more likely to check their e-mail frequently. In other words, their attitude toward the use of the Internet and e-mail is likely consistent among all information technologies.

In sum, this model demonstrates that legislators from Georgia are less likely to use e-mail frequently than are lawmakers in Iowa and California. Conversely, male legislators and legislators who actively use the Internet as a source for obtaining policy information are more likely to use e-mail frequently.

Conclusion and Implications

The findings of this study help us to understand how e-mail is used in the state legislature. Based on a survey of state legislators in California, Georgia, and Iowa, results show that, despite trends indicating otherwise, younger representatives and representatives from urban areas do not necessarily use e-mail more often than do other legislators. Although men are more likely than women to check their e-mail frequently, other aspects of the "digital divide" are not found among legislators. Moreover, virtually all legislators have access to e-mail, but their attitudes toward the use of e-mail vary.

Legislators most often use e-mail to communicate with constituents, but they also use the technology to reach other actors, including other legislators and government organizations. These alternative uses of e-mail have been ignored in the literature. Further research is needed to determine how e-mail is changing the way in which legislators communicate with policy actors other than constituents. Scholars should recognize that e-mail is a new means of communication that has implications for how legislators do their work.

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