The Internet and an Informed Citizenry

Michael X. Delli Carpini
University of Pennsylvania, dean@asc.upenn.edu

Scott Keeter
George Mason University

Follow this and additional works at: http://repository.upenn.edu/asc_papers

Recommended Citation (OVERRIDE)

NOTE: At the time of publication, the author Michael X. Delli Carpini was affiliated with Columbia University. Currently January 2008, he is a faculty member of the Annenberg School for Communication at the University of Pennsylvania.

This paper is posted at ScholarlyCommons. http://repositoryupenn.edu/asc_papers/2
For more information, please contact repository@pobox.upenn.edu.
The Internet and an Informed Citizenry

Abstract
A new communications environment, driven largely by the Internet and World Wide Web, is rapidly changing the economic, social, and political landscape. According to recent surveys, nearly seven in ten Americans (68 percent) now use computers at least “occasionally,” six in ten (59 percent) have computers in their homes, and more than half (55 percent) have access to the Internet, 43 percent of these from home. Of the 55 percent of Americans who are "wired," more than one-third (36 percent), or 20 percent of the general public, now go online five or more hours per week. These numbers are up significantly from just a few years ago. For example, the number of Americans who say they go online at least occasionally has increased from 21 percent in 1996 to 54 percent in 2000.

Comments
NOTE: At the time of publication, the author Michael X. Delli Carpini was affiliated with Columbia University. Currently January 2008, he is a faculty member of the Annenberg School for Communication at the University of Pennsylvania.

This book chapter is available at ScholarlyCommons: http://repository.upenn.edu/asc_papers/2
The Internet and an Informed Citizenry

MICHAEL X. DELLI CARPINI AND SCOTT KEETER

A NEW COMMUNICATIONS environment, driven largely by the Internet and World Wide Web, is rapidly changing the economic, social, and political landscape. According to recent surveys, nearly seven in ten Americans (68 percent) now use computers at least “occasionally,” six in ten (59 percent) have computers in their homes, and more than half (55 percent) have access to the Internet, 43 percent of these from home. Of the 55 percent of Americans who are “wired,” more than one-third (36 percent), or 20 percent of the general public, now go online five or more hours per week. These numbers are up significantly from just a few years ago. For example, the number of Americans who say they go online at least occasionally has increased from 21 percent in 1996 to 54 percent in 2000.¹

Although much of this increased Internet traffic is devoted to work, entertainment, and/or personal consumption, the Web has also become an increasingly important source of news (see table 9.1). One-third of Americans (33 percent) report going online for news at least one day per week, nearly one-fourth (23 percent) at least three days per week, and 15 percent every day. Although the Internet is not yet a predominant news source for campaigns—in February 2000, only 7 percent of citizens reported that the Internet was one of their top two sources for campaign news (up from 2 percent in 1996)—nearly one-fourth (24 percent) said they “regularly” or “sometimes” learned something about the presidential campaign or candidates from the Internet.²

The civic potential of the Internet is especially strong among younger Americans. For example, one recent survey found that 70 percent of 18- to 25-year-olds believe the Internet is a “useful” source of political and issue information (compared to 48 percent of those
Table 9.1 Patterns of Computer and Internet Use among the U.S. Public

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer use</td>
<td>56</td>
<td>61</td>
<td>67</td>
<td>67</td>
<td>68</td>
</tr>
<tr>
<td>Goes online</td>
<td>23</td>
<td>36</td>
<td>52</td>
<td>52</td>
<td>54</td>
</tr>
<tr>
<td>Goes online for news:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At least once per week</td>
<td>8</td>
<td>20</td>
<td>29</td>
<td>25</td>
<td>33</td>
</tr>
<tr>
<td>At least 3–5 days per week</td>
<td>4</td>
<td>13</td>
<td>19</td>
<td>16</td>
<td>23</td>
</tr>
<tr>
<td>Every day</td>
<td>1</td>
<td>6</td>
<td>12</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>Getting most of your news about the presidential campaign from . . . (1–2 responses accepted):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Television</td>
<td>75</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newspapers</td>
<td>44</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Internet</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Surveys conducted by the Pew Research Center for the People and the Press.

over 25), outstripping television news, newspapers, radio, magazines, personal conversations, and direct mail.³

As Internet use has increased, newspaper readership and television news viewing has declined. The percentage of Americans reporting that they “regularly” read a daily newspaper fell from 71 percent in 1990 to 63 percent in 2000. Larger declines have occurred in the regular watching of national television news broadcasts (from 60 percent in 1993 to 30 percent in 2000) and local TV news (from 76 percent to 56 percent). Even regular cable news viewing has declined, from as high as 30 percent in 1990 to 21 percent in 2000. Online news sites (CNN.com, ABCNews.com, MSNBC.com, etc.) are consistently rated as more believable than their broadcast or cable equivalents.⁴

Greater Internet use has coincided with increased availability of news and political information on the Web. All of the national broadcast and cable news networks have web sites, as do most local affiliates and major newspapers. Campaign web sites are becoming the norm for national and statewide candidates and are also increasingly common in races for local offices. One would be hard-pressed to find a federal or state government office, or office holder, without a public web site. And the number of both nonpartisan and advocacy groups that have an Internet presence is large and growing.⁵

There is little doubt that the way citizens consume political and public affairs information is changing. Less clear are the implications of this transformation for the practice of democratic politics. Whether the emerging information environment will be little more than “old wine in new bottles,” will further erode the already less than optimal state of civic life, or will usher in a new, more participatory citizenry and responsive government remains an open question. In this chapter we explore the potential impact of the Internet on a specific but crucial element of democratic citizenship: political knowledge. In the next section we briefly summarize the current state of political knowledge, making the case for why an informed citizenry is an important requisite for a well-functioning democracy. We then turn to a discussion of the qualities of the Internet that could potentially affect citizens’ ability to learn about politics, offering some data to suggest a relationship between Internet use and political knowledge today. Finally, we conclude by speculating on the ways in which the Internet (and its future incarnations) might be used to increase Americans’ political knowledge.

What Americans Know about Politics and Why It Matters

Several decades of research provide fairly compelling evidence for five conclusions regarding what Americans know about politics: (1) the average American is poorly informed but not uninformed; (2) average levels of knowledge mask important differences across groups; (3) most citizens tend to be information generalists rather than specialists; (4) knowledge is a demonstrably critical foundation for good citizenship; and (5) little change has occurred in any of these tendencies over the past fifty years.

The American Public Is Underinformed but Not Uninformed

One of the most common conclusions drawn from survey research is that citizens are poorly informed about political institutions and processes, substantive policies, current socioeconomic conditions, and important political actors such as elected officials and political parties.⁶ For example, in an assessment of more than 2,000 survey questions tapping factual knowledge of politics, the average level of knowledge was low: more than half of those surveyed could only answer four in...
ten of these questions. Similarly, in a fifty-question test covering a range of topics designed to tap knowledge of three key areas (institutions and processes, current issues and social conditions, and key political actors and groups), the average score for a national sample of American adults was about 50 percent correct.8

Among the questions that less than half of the public could answer were many facts that seem crucial to effective citizenship, including definitions of key terms such as liberal and conservative, knowledge of many rights guaranteed by the Constitution, and where candidates, parties, and public officials stood on important issues of the day. Yet although the public can be characterized as poorly informed, it is not uninform ed. Majorities demonstrated knowledge of rudimentary but potentially important facts such as the meaning of the presidential veto, key civil rights such as the constitutional guarantee to a trial by jury, the positions of presidential candidates and political parties on at least some of the major issues of the day, social and economic conditions such as the existence of a budget deficit or surplus, and the like.

Average Levels of Knowledge Mask Important Differences across Groups

Although the mean knowledge level is low, the variance is high: there are dramatic differences in how informed Americans are. For example, on the fifty-question political knowledge test mentioned above, the most informed 30 percent of the sample averaged better than seven in ten correct answers and the least informed 30 percent could only answer one in four questions correctly.9 In short, there is no single portrait of the American citizen: a substantial percentage is very informed, an equally large percentage is very poorly informed, and the plurality of citizens falls somewhere in between.

One could argue that we should naturally expect "some distribution across people and across issues of the cognitive demands of self-government" and ultimately that civic life must "integrate citizenry competence with specialized expert resources."10 The problem with this view is that differences in knowledge parallel other, more traditional, indicators of political, social, and economic power. For example, fully three-quarters of women in a 1989 survey had knowledge index scores below the median for men. Substantially more than three-quarters of Americans from families earning less than $20,000 per year scored below the median for those earning more than $50,000, as was the case for post-baby boomers when compared to pre-baby boomers. And three-quarters of black Americans scored below the twenty-fifth percentile of white Americans, a knowledge gap of dramatic proportions.11 Similar patterns are found in other studies.12 These group differences reflect the combined consequences of many factors, including systemic differences in educational achievement; social location; employment; motivation to follow politics; and the extent to which efforts are made by political actors to mobilize people to political action.

Citizens Tend to Be Information Generalists Rather than Specialists

One might argue that low and inequitably distributed aggregate levels of political knowledge are not incompatible with the existence of a myriad of distinct "issue publics." This version of the pluralist model of civic engagement posits a population of numerous well, but narrowly, informed issue publics that collectively ensure a healthy democracy. Although there are reasons to suspect that citizens focus their attention on issues of personal concern and so, collectively, would be informed about different aspects of politics, the evidence suggests that to the extent citizens become informed they do so across a wide spectrum of issues and topics.13 That most citizens are political generalists rather than specialists is consistent with what researchers know about the information environment and news gathering habits of the public over the past several decades. Most citizens do not read the elite newspapers that provide extensive coverage and so facilitate the acquisition of selective, detailed, in-depth information. Moreover, most television (the premiere source of political information for most citizens) provides relatively homogenized and surface-level information on current politics. As a result, the population is better described as general information haveves and have-nots rather than as a collection of selectively informed issue publics.

Knowledge Is Tied to Many Attributes of Good and Effective Citizenship

Evidence of systematic differences in political knowledge, especially when tied to other socioeconomic indicators of political power,
should give one pause. The significance of these knowledge gaps depends, however, on whether or not knowledge matters to effective citizenship. Although there is some disagreement on this, our own work and our reading of the larger literature strongly suggests that informed citizens are “better” citizens in a number of ways.

Specifically, research has found that better informed citizens are more accepting of democratic norms such as political tolerance; more politically efficacious; more likely to be interested in, follow, and discuss politics; and more likely to participate in politics in a variety of ways. Research also suggests that informed citizens are more likely to have opinions about the pressing issues of the day, to hold stable opinions over time, and to hold opinions that are ideologically consistent with each other. They are also less likely to change their opinions in the face of new but tangential or misleading information but more likely to change in the face of new relevant or compelling information.

There is also evidence that political knowledge affects the opinions held by different socioeconomic groups (for example, groups based on race, class, gender, and age differences). More-informed citizens within these groups hold opinions that are both significantly different from less-informed citizens with similar demographic characteristics and arguably more consistent with these citizens’ material. For example, informed women are more supportive of government programs designed to protect women’s rights, informed but economically disadvantaged citizens are more supportive of government programs designed to provide jobs and improve their standard of living, and so forth. These group differences are large enough to suggest that aggregate opinion on a number of political issues would be significantly different and more representative of the public interest were citizens more fully and equitably informed about politics.

Finally, political knowledge increases citizens’ ability to consistently connect their policy views to their evaluations of public officials and political parties as well as to their political behavior. For example, more-informed citizens are more likely to identify with a political party, approve of the performance of office holders, and vote for candidates whose policy stands are most consistent with their own views.

Little Change Has Occurred in These Patterns over the Past Fifty Years

Although data allowing for a systematic comparison of knowledge levels over the past 50 years are less comprehensive than one would hope, the evidence strongly suggests that the mean level of knowledge among Americans is about the same today as it was fifty years ago. Similarly, the knowledge gap between men and women, whites and minorities, and rich and poor is no narrower now than it was several decades ago, and there is some evidence that the gap between older and younger Americans has widened.

The lack of change in the mean level of knowledge can be seen as good news or bad news, depending on one’s perspective. The good news is that, despite concerns over the quality of education, the decline in newspaper readership, the rise of sound bite journalism, the explosion in national political issues, and the waning commitment to civic engagement, citizens appear no less informed about politics today than they were half a century ago. The bad news is that despite an unprecedented expansion in public education, a communications revolution that has shattered national and international boundaries, and the increasing relevance of national and international events and policies to the daily lives of Americans, citizens appear no more informed about politics today.

The relative stability in levels of political knowledge should not be mistakenly interpreted as suggesting that Americans are unable to monitor changes in the political environment, however. There are many examples of significant learning by the public. For example, as the Republican and Democratic parties differentiated themselves on the issue of civil rights in the 1960s, public perceptions of their positions tracked the changes. In the early 1960s, the public was divided on which party was more committed to civil rights. By the late 1960s, the public (correctly) perceived the Democrats as more liberal on this issue by a five-to-one margin.

Theorizing about the Internet’s Potential Impact on Political Knowledge

Given the stability in aggregate levels of political knowledge over the past half century with such dramatic changes in the information envi-
RONX MICHAEL X. DELLI CARPINI AND SCOTT KEETER

ronment, we might expect the introduction of a new form of communic
ations to have little impact on this aspect of citizenship. However, the Internet and other digital technologies are different enough from the past to warrant a closer look.

Although more than ten years old, the work of Abramson, Arterson, and Orren provides a useful summary of what is new about the “new media” environment. Specifically, they identify six core properties: (1) greater volume of available information (and reduced cost of both distributing and receiving information); (2) greater speed in the gathering, retrieving, and transmitting of information; (3) more control by consumers in what they receive; (4) greater ability of senders to target their messages to specific audiences; (5) greater decentralization of the media; and (6) greater interactive capacity. How might these properties affect citizen knowledge? As even a brief exploration suggests, it is not hard to see why theorists are of several minds regarding the likely impact of the Internet.

Below, we explore several scenarios regarding the potential consequences of the Internet for the level, distribution, structure, and use of political knowledge in the United States. Using survey data from several recent studies of the public conducted by the Pew Research Center for the People and the Press, we also offer some initial evidence regarding the plausibility of these scenarios.

Changes in the Aggregate Levels of Knowledge?
The most optimistic scenario is that the Internet will help increase the mean level of knowledge while not exacerbating (and perhaps even reducing) existing gaps in knowledge across socioeconomic groups. This view is based on the assumption that the availability of information is a key determinant in how informed citizens are. Since 1997, 14 trillion megabytes of information have been put on the Internet, with the volume growing daily. This wealth of information provides unparalleled opportunities for citizens to access political information of almost any kind from a variety of sources. In theory, greater volume (and thus opportunity to access information) should translate into a more knowledgeable public.

In addition, it is possible that interest or motivation can more easily be translated into political knowledge in this new information environment. Research suggests that people are more likely to learn about politics if information is available when it is most relevant to them. The Internet goes even further than television in its ability to draw public attention to breaking issues and events (for example, the entire American public had online access to the Independent Counsel’s report on the Clinton scandals less than an hour after Clinton himself received it) and does so in a way that combines television’s visual and oral cues with the benefits of textual information. Citizens can literally play the role of newspaper editor or news producer, determining what information they receive, how much they receive, and when they receive it. As citizens are more likely to learn about politics when they are interested or motivated, this greater control can mean greater knowledge. And even though most citizens are generalists rather than specialists, interest and learning about a particular aspect of politics could serve as a gateway into the world of politics more generally, eventually leading to a more informed public overall.

Just as the Internet offers greater control to consumers, it also offers producers the ability to gather data on consumers’ interests and habits and to use these data to reach large audiences with highly personalized messages. This increases the likelihood that citizens will receive information of interest or relevance, thus furthering the likelihood of political learning. Given the incentive of information producers to reach new and larger audiences, it is also likely that, over time, citizens would be exposed to new messages that are related (but not identical) to topics in which they have already shown an interest, thus slowly expanding their knowledge base. Similarly, greater interactivity and greater decentralization provide opportunities to be exposed to information and points of view that differ from one’s own, sparking new interests that in turn can lead to seeking new information.

A second and perhaps equally plausible scenario would predict a general decline in levels of political knowledge, however. In this view the Internet serves to divert the public from things political—a giant box of chocolates that lures citizens away from the nourishing food they need. We know that at least some political learning occurs because citizens are exposed to political information in the course of daily life, even if they do not seek it out. To the extent that the new information environment provides greater opportunities to avoid politics, such passive learning is less likely to occur. In addition, it becomes less likely that citizens will be exposed to the kinds of new information
that, by sparking a new interest or piquing one’s curiosity, can lead to political learning. The increasing dominance of commercial over civic interests on the Internet may further erode levels of knowledge as politically relevant information becomes increasingly less available relative to nonpolitical information. And Internet-driven declines in the opportunities and need to directly interact with other citizens in public spaces (especially with citizens different from oneself) could further erode the kind of community bonds that lead to political interest and thus to political learning. 31

Both of these scenarios assume increased penetration of the Web. Although this may be a safe assumption, it is by no means assured, especially in the short run. Although there is a clear upward trend in use of the Internet for news and political information, the percentage of individuals going online has been relatively stable over the past year, as has computer use overall. Technological changes such as increased bandwidth, smaller and more ergonomically comfortable computers, and the convergence of television and the Web may increase the pace of Internet use—but a simple projection from current trends suggests that growth in the population of online users is slowing down.

Regardless of trends in overall use, current data suggest that people who go online for news are better informed than those who do not. Evidence for this can be found in a 1999 survey by the Pew Research Center for the People and the Press. On an eight-point knowledge index (including familiarity with the candidates for the Democratic and Republican presidential nominations), those who reported going online for news every day received an average score of 5.5, while those who never went online averaged 4.2, a difference as large as that found between whites and blacks or between men and women. Other Pew surveys with different measures of knowledge show similar differences between Internet users and nonusers. Internet use remains a significant predictor of political knowledge even when we control for demographic and political differences among users and nonusers.

We cannot conclude from this finding that the Internet causes greater knowledge, but it is clear that greater knowledge and extensive use of the Internet for news gathering and greater knowledge go together. Thus, we might assume that the mean level of knowledge for the citizenry as a whole will increase as more citizens use the Internet. But will the benefits be spread across the full spectrum of the public as the Internet achieves greater penetration? The evidence for this is mixed and appears dependent on the interaction between opportunity, motivation, and ability.

Increases in Knowledge Gaps?

Political learning occurs when citizens have the ability, motivation, and opportunity to do it. 32 As noted above, the Internet provides unprecedented opportunities to access information and so should continue to increase overall levels of political knowledge among those who go online. But is opportunity alone enough to increase political knowledge? In the case of traditional mass media (print and electronic), there is at least some evidence to support this. For example, research conducted in Virginia demonstrated very dramatically that residents of the Richmond area (where state politics is regularly covered in the local media) were significantly more informed about state political leaders and issues than were residents of other parts of Virginia where such news was less readily available. The differences were especially large when Richmond was compared to the northern Virginia media market, where the media must divide their coverage of local and state issues across three major jurisdictions (Virginia, Maryland, and the District of Columbia). These differences were demonstrable even after controlling for a broad range of factors known to affect political learning. 33 In short, the information environment affected aggregate levels of knowledge regardless of citizens’ interest or ability to learn.

But it is not clear that there is an appropriate analogy between the Richmond and northern Virginia media markets and the comparative opportunities to learn about politics provided by the pre-Internet and current information environments. For example, although it is now quite easy for a resident of northern Virginia to use the Internet to learn what is going on in state government (by looking at the websites of the Richmond-based Times-Dispatch or the Norfolk Virginian Pilot, both of which devote considerable attention to state politics), there is little reason to think citizens will be exposed to this information unless they have the motivation and ability to actively seek it out.

Most likely, both passive and active learning occurs with Internet use. If this is correct, we would expect citizens who go online for news to be somewhat more informed than those who do not. But we would also expect online users who are motivated to follow politics (and so
more likely to fully exploit the Internet’s resources) to learn more than those who are less motivated. That is, we would expect to see an interaction between motivation and going online.

The 1999 Pew Research Center survey provides confirmation of this pattern. Paying more attention to government and politics is associated with significantly higher levels of knowledge about the presidential candidates (both prominent and obscure) and other facts in the news. Similarly, going online for news is associated with higher levels of such knowledge as well (even taking account of demographic differences between those who go online and those who don’t). But knowledge levels rise more steeply for Internet users than for nonusers as attention to politics rises (figure 9.1).

Among young citizens—those aged 18–29—the interaction is even stronger (figure 9.2). In fact, the interaction between going online for news and paying attention to politics is the strongest single predictor of political knowledge. As the figure shows, among respondents who follow politics “most of the time,” those who go online for news daily score a full point higher (on an eight-point scale) than those who never go online. Indeed, among those who say they pay attention to politics “hardly at all,” increased use of the Internet for news is negatively associated with political knowledge. In the absence of motivation, more time spent on the Net—even in the pursuit of news—is associated with holding less knowledge of the type measured here.

This evidence suggests that the Internet, at least in its current form, is an excellent information resource for people who are motivated to gather information about politics. Those individuals are apt to benefit greatly from access to and use of the Internet. To the extent that they learn more about politics, the mean level of knowledge in society will rise. But it is equally clear that although less-motivated individuals may also benefit from use of the Internet, at best these gains will be less dramatic, increasing the gap between information haves and have-nots. The rising tide may not lift all boats equally.

Two additional qualities of the Internet as it is currently configured seem particularly likely to exacerbate this tendency. The first is that although the cost of retrieving information on the Internet is small, the cost (financial and psychological) of entry to the Internet remains nontrivial. The second (and in the long run more important) quality is that with greater volume and fewer gatekeepers come greater costs associated with organizing and finding relevant information, and these
costs will be more difficult for poorer, less educated, and less politically experienced or motivated people to meet. This notion, often referred to as the "knowledge gap hypothesis," has been well documented for other forms of mass media and is likely to be especially relevant to a medium as inherently complex as the Internet.

For example, the leading Internet search engines select sites through algorithms (based on fees paid by the sites; popularity as determined by number of visitors; institutional and financial interconnections between search engines, portals, and sites; keywords imbedded within particular sites; and so forth) that can lead to an overwhelming number of "hits," the majority of which are irrelevant or only tangentially related to the information being sought. At the same time, no single search engine is thought to reach more than 16 percent of the sites actually on the Internet. One study found that one in five web pages is twelve days old or younger. As research suggests that most users seldom go further than the first few sites that are called up by search engines, much of the power of the Internet can be lost. Effectively navigating this complex environment can put a premium on interest and ability, exacerbating existing differences in knowledge based on socioeconomic differences. This gap will also be increased by the likely tendency of political information producers (candidates, news outlets, interest groups) to target their messages to those citizens who are most likely to respond.

As is well known, the Internet audience is considerably more affluent and educated than the general public. Figure 9.3 shows the percentage of individuals of different levels of educational achievement who report going online for news at least three days per week. The figure illustrates a very strong association between education and Internet use for news, with those who have some graduate school experience nearly four times as likely to go online for news as those who only finished high school. But the figure also suggests that the association between educational achievement and online news gathering was usually as strong or stronger in 2000 as it was a year earlier. The pattern for income, race, and gender is similar: The gaps in Internet use for news between rich and poor, black and white, and men and women are as large now as a year ago. Indeed, a statistical analysis that takes account of many different demographic influences on online news gathering in 2000 (using age, income, education, race, and gender) produces virtually identical results in nearly every respect to the same model using 1999 data. If socioeconomic characteristics were becoming less critical in affecting who surfs the Internet for news, we would expect to see these characteristics' importance in such a model decline between 1999 and 2000, but this does not occur.

One comparison between 1999 and 2000 goes against the grain of our other findings, however. Figure 9.4 shows the percentage of respondents of different ages who report going online for news at least three days during the past week. (Each data point in this graph is an average of results from individuals covering a five-year age span. For example, the entry for 30-year-old respondents averages data from respondents who are 28, 29, 30, 31, and 32 years old. This technique is called a five-year moving average and helps to smooth out fluctuations in the trend line that result from sampling error and other random sources.) At least two conclusions are readily obvious. First is that in both years of the survey, younger individuals were more likely to report going online for news than were older respondents. The second is that although increases between 1999 and 2000 can be seen for most age groups, the greatest growth in online news gathering is among citizens under age 35.

Figure 9.5 shows the age-related trend for regular use of newspapers and television news in 1998 and 2000. The pattern is just the opposite. Older citizens are much more likely to use these media, and
the younger citizens evidence a larger falloff in use between 1998 and 2000. Taken in combination, figures 9.4 and 9.5 suggest that the pattern of news consumption for younger Americans is changing dramatically, but the growth of online news use may not be a harbinger of greater political awareness among younger cohorts: online news use may simply make up for what is lost in the use of more traditional media. 38

We do not have adequate data to examine possible changes in the "knowledge gap" over time, but taking account of growing Internet use, we did examine the gap in 1999, comparing those who gather news on the Internet with those who do not. In comparisons of men and women, blacks and nonblacks, and younger and older citizens on the knowledge index described earlier, we found the knowledge gap to be no narrower among those who used the Internet for news than those who did not. This was true whether or not we controlled for other demographic characteristics such as education, income, and attention to politics.

The Growth of Information Specialists?

A third possible impact of the new information environment is to discourage the kind of information generalist quality that currently characterizes informed citizens. The Internet's greater volume coupled with greater consumer control, targeting, and decentralization will allow citizens to focus on the specific levels of politics (e.g., local, national, international) and substantive issues (e.g., abortion, the environment, the economy) in which they are most interested. Once chosen, producers of information are likely to give these consumers more and more of the same, creating very different information environments for different segments of the public. The deliberative, interactive aspects of the Internet will only serve to reinforce this fragmentation as citizens self-select or are exposed to only those chat groups or other venues that are frequented by like-minded people. Gary Selnow suggests that this fragmentation carries dangers for a political system that is otherwise built on a consensus of views among a popular majority of voters. One such danger is that citizens will miss issues that occur outside of their particular surveillance patterns. The second is that citizens will "run the risk of an information blind spot within an issue when they chase down sites given to partisan and ideological viewpoints." 39

But increased specialization may not inevitably be bad for the system if the specialized knowledge gains are in addition to a continued pattern of general surveillance. Moreover, to the extent that the Internet helps previously uninvolved citizens develop an interest in
specific issues, this could serve as a gateway to more general political interest (and thus general political knowledge) as they come to feel more connected to the system and more politically efficacious.

We are much too early in the life of the Internet to say with any certainty where the path ahead is leading. But some preliminary indicators are suggestive of trends. A Pew Research Center survey conducted in 2000 asked respondents which is more important: "getting news that gives you general information about important events that are happening, or getting news that is mostly about your interests and what's important to you." Two-thirds (67 percent) of respondents preferred general news, but 28 percent wanted information relevant to their personal interests. Figure 9.6 shows the relation between this question and going online for news. As the chart indicates, heavy Internet news consumers are only slightly less likely to want general news—at least for now. And though younger respondents were a little more likely than others to want news of specific relevance to them, there was no clear pattern of increased interest in personalized news among the heaviest users of the Internet in this age group.

The other datum of relevance to this question pertains to the potential displacement of other media by the Internet. If Internet users are less likely to read newspapers or watch television news, the agenda-broadening benefits of those media may wane. The 2000 Pew survey asked online news seekers if they were using other sources of news more or less often than before (only those going online for news at least one to two days per week were asked this question). Overall, 58 percent said there was no change in their use of other media, but 10 percent said they were using other media more often, and 18 percent reported using other media less often, with television and newspapers accounting for most of the loss. But, as might be expected, displacement was most likely to occur among those who go online the most. Among those who gather news every day on the Internet, 28 percent said they were using other sources less often.40

The Consequences of Political Knowledge: The Marriage of Information and Action?

A final consideration is how the Internet might affect the relationship between political knowledge and citizenship. Political knowledge and political action are strongly linked in the literature on participation, and so any impact of the Internet on levels of political knowledge of the sort discussed above should translate into changes in the amount and type of participation. In addition, however, the Internet has the potential to affect the strength of the link between information and action either by easing the ability to participate or, in contrast, by providing opportunities for pseudopolitical activities that have no impact on the political process.

It is unclear whether the Internet, as presently configured, will promote conventional forms of political participation. Bimber's analysis of 1996 and 1998 National Election Study data on participation suggest that the only demonstrable linkage thus far is between Internet use and financial contributions to campaigns in 1998.41 We may reasonably guess that this connection has been strengthened since 1998, if for no other reason than that contributions via the Web were illegal in that election cycle.

Despite the apparent lack of impact to date, the Internet's most unique characteristics—the marriage of increased information, targeting by providers, filtering and active self-selection by consumers, and bidirectionality of communication—seem to offer truly new prospects for civic engagement. In particular, the Internet's ability to provide
information to a citizen and simultaneously permit him or her to act on that information (e.g., by communicating a reaction to friends, interest groups, or public officials; giving money; signing a petition; registering and voting; joining an organization; agreeing to attend a meeting; etc.) is a radically new feature of the information environment.

Although the Internet's value for increasing civic engagement has only begun to be exploited, there is suggestive, if anecdotal, evidence of its potential. For example, it appears that the Internet was critical to organizers of the Seattle protests against the World Trade Organization, to the anti-land mine campaign, and to the Free Tibet movement. Bimber provides two additional examples of mobilization via the Internet: a national campaign on homeschooling and a local issue involving the homeless in Santa Monica, California. He describes this general phenomenon as "accelerated pluralism," arguing that the Internet will not change the basic logic of pluralism. Citizens will continue to participate in politics and be mobilized largely through groups to which they belong. At the same time, Bimber writes, the Internet "will lower the obstacles to grassroots mobilization and organization by political entrepreneurs, activists, and others, and will speed the flow of politics. Lower costs of organizing collective action offered by the Net will be particularly beneficial for one type of group: those outside the boundaries of traditional private and public institutions, those not rooted in businesses, professional or occupational memberships, or the constituencies of existing government agencies and programs." He speculates that this, in turn, will lead to an intensification of group-centered politics and a decreased "dependence on stable public and private institutions."

The Longer Term

One of the first newspaper accounts of the (then still experimental) medium of television declared that it was a passing fad that would hold little interest for most Americans and have little long-term impact. Given the poor quality of television's sound, image, and content at that time, it is not hard to see why an observer might draw this conclusion. In many ways the Internet of today is analogous to that flickering image of more than a half century ago, and predictions about its impact are just as likely to fail the test of time.

Nonetheless, the preliminary evidence, subject to many caveats, is that the Internet is already having an impact on the political knowledge levels of citizens who actively use the medium to gather information. This impact is strongest among citizens who are most motivated and able, raising the possibility of (but in no way ensuring) growing divides between information haves and have-nots. There is little evidence to suggest an increasingly fragmented citizenry divided into distinct "information publics." Evidence that the Internet will increase civic engagement is also sparse, though specific examples of its value in mobilizing small but intense segments of the public is suggestive of its potential in this regard.

But it is far too early to know if these partial findings represent a passing stage in the Internet's political development or the beginnings of what will become stronger and more lasting trends. What is clear is that the Internet itself will change. Undoubtedly there will be a convergence between television (and other media) and the Internet. Miniaturization of hardware, growing sophistication of software, and increased bandwidth into the home carry with them several implications. First, it will be ergonomically much easier to spend time on the Internet than it currently is. Citizens will be able to get the full functionality of the Internet from their couches or easy chairs, with the television serving as a computer monitor and a television simultaneously. Small, comfortable, book-like devices will bring the functionality of television and the Internet to the lap. Thus, one important disincentive to Internet use will be removed. Second, convergence means that whatever we call news will increasingly combine the qualities of television, newspapers, and the Web. News shows undoubtedly will continue to be created with many of the same production values they have today. But newscasts, like virtually all other programming, will be available on demand and can be stopped and started at the convenience of the viewer. Many viewers will still want to watch an entire newscast, but a menu will be available (as with today's DVD movies) from which stories can be chosen. These systems will also provide the kind of text-based resources we currently enjoy on the Web. Searching for information will get easier and be more likely to return what the seeker is looking for.

These changes will mean that citizens can dig deeper if they choose to do so and that it will take fewer cognitive resources to be successful in a search; it will also mean that citizens can avoid news more readily
than in the present. The political impact of these changes will continue to depend on the ability and motivation of citizens, coupled with the radically transformed opportunities to learn and to translate this knowledge into action. In turn, this ability, motivation, and opportunity will depend as much as on the content and context of this new information environment as on the technology itself. And as always, this is ultimately a question of political choice, power, and imagination.

Notes
The authors are also grateful to the Pew Research Center for the People and Press, which provided several national surveys used in the chapter. Authorship is equal; names are listed alphabetically.


5. A review of state government web sites can be found at www.digital.govt.com/statesprogram.html.


7. These questions covered a range of topics one might expect an informed citizen to know, including knowledge of institutions and processes (for example, how a bill becomes a law, or what rights are guaranteed by the U.S. Constitution), of substantive issues and indicators of the day (for example, whether there is a federal budget deficit or surplus, or the percentage of Americans living in poverty), and of public figures and political organizations (for example, the name of your U.S. Representative, the stands of presidential candidates on the key issues of the day, or which party controls the Senate).


12. The one exception was race, in which the knowledge gap was less dramatic than in the 1989 survey (approximately three-quarters of blacks scored below the median for whites). We attribute the smaller knowledge gap to the predominance of party-oriented questions in the 1988 survey.


14. We acknowledge that our understanding of this aspect of political knowledge is limited by practical difficulties in gathering data about the depth of knowledge people have regarding very specific issues. Research by Shanto Iyengar (“Whither Political Information,” Report to the Board of Overseers and Pilot Study Committee, National Election Studies, 1986) is suggestive of the possibility that issue specialists exist, and we agree that there are many citizens with special expertise on topics such as social security, tax policy, environment issues, and the like. We suspect, however, that such issue “experts” would also have a reasonably strong base of knowledge about general political topics.


20. Delli Carpini and Keeter, What Americans Know about Politics, 238–51. In some cases greater information also seems to lead “more advantaged” citizens (e.g., whites) to hold opinions that are more supportive of government policies designed to assist the less advantaged (e.g., minorities).


24. Delli Carpini and Keeter, What Americans Know about Politics.


27. Also see Neuman’s propositional inventory of the characteristics of the new media (“New Media, Public Knowledge And Political Behavior.” Paper presented at the annual meeting of the American Political Science Association, Atlanta, Georgia, Sept. 2–5, 1999).

28. Measuring the effects of the mass media on characteristics of the public such as political knowledge is difficult. One problem is that with many media—especially television—exposure is so widespread that comparisons of the exposed and unexposed are hard to make. This is not yet a challenge with research on the Internet, as nearly half of the public remains unexposed to the Internet. A more difficult problem is ascertaining the direction of causality. If people in an audience are better informed than those not in the audience, does this mean that they learned from the medium, or did the well-informed choose to attend to the medium because of greater interest in the subject or awareness that the medium was a good source? In the end, both dynamics are likely to be at play. At a minimum, correlations (controlling for possibly confounding demographic and attitudinal factors) between levels of knowledge and media use are highly suggestive of the potential informational value of those media.


30. Delli Carpini and Keeter, What Americans Know about Politics.


38. In 1998, 49 percent of the youngest age group (18–29) used neither the Internet nor the two traditional sources of news (newspapers and television) on a regular basis. In 2000, the comparable figure was 48 percent. Thus, the rise of news gathering on the Internet has displaced news gathering from other sources; in any event, the total percentage attending to the news (from any of these major sources) has not increased.


40. The impact of this is unclear, as web sites operated by the major television networks and newspapers are the most popular. Thus, simply moving from one medium to another does not mean that the content viewed will be entirely different.


43. Bimber, “Information and Political Engagement in America.”