How the Internet affects social capital is neither a trivial nor an obscure question.
— Wellman et al. (2001, 436)

The concept of social capital emphasizes the notion of “investments and assets that bring benefits that are not fully appropriated by the individuals making the investments” (Helliwell 2001, 6). Social capital is created through the actions of individuals, and yet it is not only, or even necessarily, the individual who stands to benefit as a result: the benefits accrue to the entire community. As sociologist Robert Putnam points out (1993, 170): “This means that social capital, unlike other forms of capital, must often be produced as a by-product of other social activities.” In other words, whereas financial capital is usually privately held, and individuals deliberately seek to create it, social capital is a public good.

In this chapter, we argue that community networks can be considered among the “investments and assets” to which Helliwell refers. Government investment in community networks, both nationally and internationally, indicate that they are considered a public good, a critical part of the infrastructure of communities in an information society. (For additional discussion, see Appendix B.)
THE CRACIN COMMUNITY NETWORK SURVEYS: RATIONALE AND METHODOLOGY

In 2003, the CRACIN group began to assess the development of community-oriented ICT capacity and services and to document the contribution of community networks to local learning, to the strengthening of relations in and between communities, and more generally to community-focused social and economic development (Clement et al. 2003, 1).

As part of the CRACIN research, a survey of administrators and users of community networks was designed to collect information that could inform other researchers and policy makers in areas of community technology and economic development, social development, and communications. The goal was to provide the kind of micro-level data that Jeff Frank (2003), then project director and lead for the Social Capital as a Public Policy Tool project, suggests is necessary to gauge the impact of public investment in community communications technologies.  

The CRACIN survey described in this chapter consisted of two parts. The user survey, on which we report here, collected information concerning various user characteristics: why and how users use the service and the social and community activities in which users engage. In addition, an administrator survey collected general information about community networking sites and the people who run them. It included questions related to the size and characteristics of the site or sites, questions about funding, questions about goals and objectives, as well as questions about community impact. Information collected from the site administrator survey is available on the CRACIN website (Moll and Fritz 2007).

The surveys were undertaken for a number of reasons:

• To broaden the generalizability of the CRACIN research findings
• To provide a more quantitative basis for policy recommendations
• Investigate possible “public good” outcomes
• To explore patterns of interaction emerging from the new “connected” community.

The preparation and implementation of the surveys included:

• Collecting information about related surveys
• Developing possible indicators of social capital in the context of community technology initiatives
• Validating the surveys through focus groups (organized by two CRACIN partners, Communautique, in Montréal, and St. Christopher House, in Toronto)
• Seeking ethics clearance through the University of Toronto Ethics Committee.
Potential survey candidates were located through various personal networks, which included CRACIN community partners, members of Telecommunities Canada, and personal and professional contacts.

It was our goal to find forty-two cooperating administrators to complete the English language administrator survey. Given that survey overload is a major problem for this sector because of a constant round of data gathering required to satisfy the government accountability process (see chapter 19 for further discussion), responses to the CRACIN request to complete yet another lengthy survey were not always enthusiastic. In the end, we were able to contact thirty-three administrators from whom we received sixteen completed administrator surveys. Of these, twelve agreed to approach a few users about completing the user survey. It would have been impossible for the authors to do the kind of travelling necessary to contact users individually, so the cooperation of administrators was essential, despite the issues surrounding the validity of gathering data in this way. For example, the data set comes from users who had the time and opportunity to complete the survey, and who may have felt a commitment to or dependence on the site and/or had a good relationship with the administrator.

In the end, we received eighty-five user surveys from twelve sites across Canada, seventy-nine of which are included in this analysis. As this represents only a tiny fraction of the actual CAP site users at any time, this survey makes no claim to represent the entire population of users. To provide a wider perspective, results from the much broader but less detailed Industry Canada survey (Ekos Research Associates 2004) have, where relevant, also been included in this analysis, as have certain results from a BC survey of rural CAP sites conducted by GPI Atlantic (Colman 2002a, 2002b). The CRACIN survey provides an up-close and personal perspective on the use made of these sites by those who responded, including users’ direct comments, which often offer helpful clarification.

The survey responses were collected between January 2007 and February 2008 from five sites in Ontario, two in British Columbia, one in Nova Scotia, two in Prince Edward Island, one in Manitoba, and one in the Northwest Territories. Of the respondents, 60 percent were from rural/remote sites, and 40 percent were from urban/inner-city sites.

THE CRACIN USER SURVEY

The following are tales from two community networks.

The only thing I’d like to share is that I’m grateful that I have access to these computers. When I wasn’t working, I was bored and felt useless. But I would go to the Community House and look for a job. Then [a CAP worker] told me where to go [to find a job] and I did. I’m very happy that I got a job to help my family of 3 kids. I was a stay at home dad and now I can help support my family.
Also, I love to keep in touch with friends and family by emailing them. Please don’t take away these computers. You should be giving us better ones. I mean could you give us newer ones? Also the printer does break down a lot. That is the only real problem. Thank you.

—A respondent in the 21-to-30 age group, living in Ontario

I can’t live without my Community Learning Network. It provides a number of essential services beyond the Internet. It provides IP telephony, video conferencing, online learning platforms, web hosting, email, telemedicine, searching, etc., which I use every day. I feel that I am a part of the network planning process; it meets my needs because I have contributed to its design and I know that many other people can say that as well. The staff are incredible in ensuring the network is working smoothly and are always looking to the future for expansion, improving access and services. My Network is thriving because [it] is for everyone and anyone can contribute to it.

—An Aboriginal respondent, also in the 21-to-30 age group

Community networks are as different as the communities that host them—some are well endowed technologically, others are barely keeping pace. But these users offer us a taste of how their lives have been changed by their access to the community sites. It is obvious that they share a sense of ownership and a sense of belonging with respect to the site. These users are exhibiting some of the fundamental characteristics of social cohesion. Social cohesion can be defined as “a set of social processes that help instill in individuals the sense of belonging to the same community and the feeling that they are recognised as members of that community” (Jenson 1998, 4).

The CRACIN user survey collected a wide range of information on user characteristics, activities, and preferences. Particular emphasis was placed on determining common activities and on the role that staff and volunteers played in helping users engage in these activities. We were also interested in documenting community crossover activities, that is, how activities at the sites interacted with the broader community. One of the goals was to paint a picture of the value of these sites in the everyday lives of these users.

This survey is one of the few that collected results directly from users of community networking sites. Another is an online survey of 7,004 CAP site users conducted by Industry Canada’s Information Highway Applications Branch (IHAB) in 2003, the results of which were incorporated into an evaluative study of the CAP program carried out by Ekos Research Associates (2004). We see a remarkable consistency between the results for similar questions, suggesting that, although relatively small in comparison, our survey reached a similar population of users.
Demographic Details

Age, gender, and education. Despite the difficulties inherent in finding people within a constantly changing user population who are willing to fill out a lengthy survey for no compensation, the responses we received do provide valuable information about the users who participated in the survey and their activities at the site:

- Female participation slightly exceeded male participation in community networking sites: 55.3% of our respondents were women (Ekos = 56.0%).
- 41.0% of the respondents to the CRACIN survey were under 30; 14.1% were under 20 (Ekos = 29% under 24).
- The largest group of users was the 21–30-year-old category.
- 62.4% of the respondents were under 40.
- 12.9% were over 50 (Ekos = 15% over 55).
- Of all the users aged 30 years or under, 34% were male and 66% were female.

Although the age and gender distributions in this survey are not an indication of who comes to the site but rather of who was willing to take the time to fill out the questionnaire, CRACIN survey responses present a demographic very similar to the much larger Industry Canada survey reported on by Ekos Research Associates.

Community network users were well educated, but there were interesting gender differences in education levels:

- 16% of users had high school education or less.
- 34% had some post-secondary education.
- 37.8% of male users and 18.2% of female users had completed a bachelor’s degree.
- Female users were more likely to have incomplete post-secondary or university education.
- 14.9% females and 8.1% males were more likely to have incomplete bachelor’s level education, a reverse of the trend for the post-secondary/university level.

In comparison, only 11 percent of the general Canadian population surveyed in the 2001 census reported that they had a bachelor’s degree. However, of that 11 percent, more than half (6.8%) were under the age of 44 (Statistics Canada 2003). The relatively high level of education among our respondents could thus be due to the fact that 41 percent of CRACIN respondents were under the age of 30.

In addition, we know that, as a result of the screening process, immigrants to Canada tend to be relatively well educated, and the use of these sites by immigrants might also help to explain the high levels of education among respondents. Speaking about how volunteering at the Vancouver Community Network allows newcomers to Canada to improve language and technical
skills, Diane Dechief notes in chapter 9: “Even though the volunteers are already skilled and knowledgeable, gaining some experience with these skills in Canada seems to enhance their human capital and to benefit their job-seeking processes. Volunteer contributions to the network—while resulting in enhanced technical skills and practice with English language skills—also build social capital.” This serves as a good example of Coleman’s theory that social capital is a by-product of other social activities (Coleman 1990, 317).

Similarly, one respondent to the CRACIN survey noted that the site was “very good for newcomers and for the people in-between jobs.”

- 28.2% of respondents indicated they were not born Canadian citizens.
- 30% of these indicated that they were recent immigrants (they had arrived in Canada on or after 1 January 2000).
- 83% of the immigrants responding to this survey were from urban sites; 17% were from rural sites.
- 41% of immigrants were male while 54% were female; this mirrors the gender breakdown in general respondents (55.3% female).
- Immigrants were, on the whole, a little older than the respondents overall. The largest group of immigrants was the 31–40-year-old category (29.2%), followed by the 41–50 group (25.0%). Only 20.8 percent were in the 21–30-year-old category.
- Immigrants were also somewhat better educated: 33.3% had completed a bachelor’s degree (survey overall = 24.7%).

Industry Canada did not collect information on immigrants in its user survey. The Ekos evaluative report does, however, note that 11 percent of administrators agreed with the statement that new immigrants used their site to “a large extent” (Ekos Research Associates 2004).

We know that community networking sites located in urban and inner-city areas play an important role in helping recent immigrants assimilate. As Diane Dechief concludes her study of immigrant volunteers at the Vancouver Community Network by commenting:

The vcn, communities within the Lower Mainland, and the volunteers themselves all benefit as interactions at the vcn contribute to newcomers’ settlement processes. These contributions include involving recent immigrants in a not-for-profit organization, supplying training for volunteer roles, offering a space in which to interact and share information with others, and providing a means to gain ‘Canadian experience’ including references for potential employers. . . Collectively, these interactions create social capital and enhance social inclusion at a community level.
Aboriginals. 11 percent of respondents identified themselves as Aboriginal (First Nations, Métis, or Inuit) (Ekos = 7%).

Income. Income distribution analysis of the user population represented in both the CRACIN and Industry Canada surveys reveals remarkable similarities. Both surveys showed that 56 percent of users had an income of $29,000 or less. The CRACIN survey allowed for a more detailed breakdown of this group:

- A considerably higher percentage of women than men earned $29,000 or less (66% versus 49%).
- 53% of all respondents over the age of 40 had an annual household income of less than $20,000. It is worth noting that $20,000 is near or below (depending on region) the before-tax low-income cut-off established by Statistics Canada for 2005 (National Council on Welfare 2006).³
- Almost 26% of CRACIN respondents had an annual household income of less than $9,999 per year, well below the poverty line by any definition.
- More women than men were earning less than $9,999 per year (32% versus 23%).

As a point of comparison with the general population at the time, according to Statistics Canada, the median total income of couple families (a couple living together with children) in metropolitan areas was $67,600 in 2005.⁴ The national median income for lone-parent families was $30,000 (Statistics Canada 2007). The Canadian Internet Use Survey showed that income is a factor in Internet use: “About 88% of adults with household incomes of $86,000 or more used the Internet last year, well above the proportion of 61% among adults living in households with incomes below $86,000” (Statistics Canada 2006).

These results show that community networks are serving a group that is, by and large, economically disadvantaged and that the women in this group tend to be even more disadvantaged than the men. Women struggling at the low end of the economic scale know that they need to acquire new information and communication skills in order to improve their situation and are seeking help in a community setting, as women often do, to overcome technological disadvantages. It makes the continuation of CAP sites and community networks a gender equity issue as well as an economic and social issue. (See chapters 6 and 10 for more on the gender dimensions of community networking.)

Governments have an obligation to remedy major disparities in access to communications technologies. This is recognized in the telecommunications sector through basic service obligations imposed on incumbent telecommunications carriers. Recognizing the need for remediation in the area of new and emerging technologies, the Final Report of the Telecommunications Policy Review Panel (TPRP) recommended a national ICT adoption strategy “focused on using ICTs to increase the productivity of the Canadian economy, the social
well-being of Canadians and the inclusiveness of Canadian society” (2006, 7-20). It also noted that such an adoption strategy needed to be focused on the acquisition of new skills as well as on physical access to the tools (2006, 7-29). Perhaps some of these recommendations could become part of the basic service obligation currently under review by the Canadian Radio-television and Telecommunications Commission (CRTC) (2010). Such a policy shift would give a program such as CAP the long-term stability it needs to continue serving those who depend on these services.

General Activities

We asked respondents to tell us a little bit about their basic usage patterns at the site and their overall satisfaction with the site. The majority (80%) of respondents made use of the site at least a few times per week; 40 percent said they used the site every day. In addition, 65 percent of users indicated the site always met their computing needs in terms of availability and hours of service.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Every day</th>
<th>At least once a week</th>
<th>At least once a week, as reported by Ekos Research Associates (2004)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Send and receive e-mail</td>
<td>49.4%</td>
<td>83.5%</td>
<td>78%</td>
</tr>
<tr>
<td>Surf the internet for fun or general interest</td>
<td>25.9%</td>
<td>70.5%</td>
<td></td>
</tr>
<tr>
<td>Read news from Canadian sources</td>
<td>18.8%</td>
<td>57.6%</td>
<td></td>
</tr>
<tr>
<td>Type letters using a word processing program</td>
<td>24.7%</td>
<td>57.6%</td>
<td>38% (word processing and Internet research)</td>
</tr>
<tr>
<td>Search for information about local events</td>
<td>23.5%</td>
<td>55.3%</td>
<td></td>
</tr>
<tr>
<td>Read news from other countries</td>
<td>11.8%</td>
<td>48.2%</td>
<td></td>
</tr>
<tr>
<td>Search for government information</td>
<td>15.3%</td>
<td>44.7%</td>
<td>46% (federal)</td>
</tr>
<tr>
<td>Search for government information</td>
<td>15.3%</td>
<td>37.6%</td>
<td>34% (other levels)</td>
</tr>
<tr>
<td>Engage in independent study</td>
<td>15.3%</td>
<td>37.6%</td>
<td>55% (personal development/interests)</td>
</tr>
<tr>
<td>Seek health-related information</td>
<td>8.2%</td>
<td>28.2%</td>
<td>34%</td>
</tr>
<tr>
<td>Play games</td>
<td>3.5%</td>
<td>28.2%</td>
<td></td>
</tr>
<tr>
<td>Play music</td>
<td>4.7%</td>
<td>23.5</td>
<td></td>
</tr>
<tr>
<td>Purchase or sell goods and/or services</td>
<td>2.4%</td>
<td>9.4%</td>
<td>13%</td>
</tr>
</tbody>
</table>
We were also looking for specific patterns of use related to twelve common computer activities. These activities are listed in table 3.1 and in figure 3.1. Not surprisingly, sending and receiving email was the most popular activity, closely followed by surfing the Web for no special reason other than enjoyment. But the respondents also used the community sites for a variety of other purposes.

**Typing letters.** We were surprised to find typing letters using a word processing program so high on this list, with 24.7 percent indicating that this was a daily activity, and 57.6 percent engaging in this activity at least once per week. Users may be coming to the sites for this purpose because they need help using computers and printers. Although many users (61%) did have computers at home, they may not have had printers or word processing software, or what software they had may have lacked certain needed features (one user mentioned multi-lingual character sets). Responses to other questions indicate that job searching and, therefore, résumé building are important activities. The sites are also used by students, and, as one student noted, “schools expect a lot of projects to be typed and the CAP site lets me do that.” Clearly, then, community sites are important for reasons beyond Internet searches and email.
Searching for information about local and community events. A little over half (55.3%) of the respondents said they had made use of the site to search for information on local events at least once a week, if not more frequently (see table 3.1). This is considerably higher than the 42 percent of respondents to the Canadian Internet Use Survey (which surveyed 30,000 Canadians), who said they had used the Internet to research community events at least once during that year (Statistics Canada 2006).

Are community network users more connected to their communities than the general public? Along with other evidence presented in this chapter, the relative frequency with which users of these sites sought information about community events (see figure 3.2) suggests that this may indeed be the case. Further analysis showed that rural users were just as likely to use the site to search for community events as were respondents from urban areas.

**FIGURE 3.2  Frequency of searches for community information**

How often do you use this CNS to search for information on local community events?

As we show further on, community networks, which offer access to the new technologies combined with the in-house support that enables effective use of those technologies, also function as social enablers. This effect was also reported by the Ekos Research study (2004, 4), which found that one of the benefits of the CAP network model was “the fuller integration of citizens into society and greater social cohesion.”
Searching for government information. Government at all levels now relies heavily on websites for distributing information. A little time spent searching government websites will often turn up needed information in a fraction of the time it takes to contact someone by phone. Having made this commitment to the online delivery of information, government now has a responsibility to ensure that all citizens have access to the knowledge and tools needed to search for this information and to communicate with the government online.

Our results show that searching for government information is an important activity for these respondents:

• 44.7% used the site to search for government information at least once per week.
• 64.7% searched for government information at least a few times per month.
• Age distribution of those seeking government information seekers was quite even: 66% under 40 and 60% over 40 searched for government information at least a few times per month.

In comparison, 52 percent of respondents to the Canadian Internet Use Survey indicated that they had searched for government information during the year (Statistics Canada 2006). Ekos also reported a high percentage of users searching for such information.

Community networks are important distribution sites for government information. This is certainly one very good reason to offer these sites some core funding. As we learned from the administrator surveys and through talking to site administrators, funding instability is an enormous drawback that really hampers program delivery:

The CAP funding . . . enables us to keep all five sites open and pays for much of the administrative work that keeps the partnerships running smoothly. Without it, we would have fewer services and staff would be working even longer hours with probably less pay. Our ability to manage all these services would be substantially reduced (Pam Gliatis, administrator of the Sea to Sky Public Access Network in Squamish, BC, quoted in Moll 2007, 12).

See chapter 19 for a thorough discussion of community networking experiences with government funding.

Seeking health-related information. Although relatively few respondents (8.2%) searched for health-related information on a daily basis, this was a fairly common activity among users.

• 83.5% of survey respondents had used the community networking site to search for health-related information at some time. In comparison, 58% of Canadians surveyed for the Canadian Internet Use Survey reported having
used the Internet over the course of the previous year to search for medical or health-related information (Statistics Canada 2006).

- 28.2% of respondents to the CRACIN survey (Ekos = 34%) indicated they searched for health-related information once per week or more.

The growing use of the Internet as a resource for such information suggests that users want to have a better understanding of health-related issues, presumably so that they can have more input into (and hence control over) health-related decisions. This raises the question of what community network users do with this health-related information and how they evaluate the information they find on the Internet.

“The key finding from the individual/micro-level research is that there is a very clear and very robust relationship between individual income and individual health,” says Shelley Phipps in her review of research literature on the impact of poverty on health (Phipps 2003, iii). Given that community networks users are often economically disadvantaged and possibly at greater risk for health problems, community networks could serve these users better if they were more fully integrated into the public health network. There is an excellent opportunity for partnerships between community networking sites and community health organizations, which could perhaps lead to workshops and information sessions on searching for and evaluating such information and applying it to personal situations.

The Importance of Community Networking Sites

I don’t have the Internet at home so this resource has been very important to me (as well as a lot of my neighbourhood friends) because I am able to do the research I need for school.

—A survey respondent who was attending high school

Although this respondent did have access to the Internet through the public library and at school, as was the case for many other respondents, the CAP site was clearly a critical part of her educational support system. She indicated that she could only use the site several times a week for completing homework, as it was not open every day.

Respondents were asked to consider how important these sites were for various online information search needs. The results presented in table 3.2 indicate the percentage of respondents who said the sites were either important or very important for specific information needs, as compared with other sources of information.
Respondents are telling us quite clearly that new information and communication technologies have quickly assumed a very important place in their lives. In the next few years, we can only expect these numbers to go up as the Internet becomes increasingly integrated into the daily information stream. Any citizens who do not have effective access to such services will be at a serious disadvantage, an issue that needs to remain a priority at all levels of government.

**Table 3.2  Relative importance of community network sites for information needs**

<table>
<thead>
<tr>
<th>Online activity</th>
<th>Ranked as important or very important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating with people (versus by phone or post)</td>
<td>78.3%</td>
</tr>
<tr>
<td>Looking for employment information (versus via newspaper, TV, or radio)</td>
<td>72.3%</td>
</tr>
<tr>
<td>Helping find employment (versus through training, peer support, networking)</td>
<td>63.9%</td>
</tr>
<tr>
<td>Looking for local information (versus via newspaper, TV, or radio)</td>
<td>63.9%</td>
</tr>
</tbody>
</table>

**Engaging in Individual Support and Personal Networking Activities**

It has helped me keep in touch with family and friends, that I grew close to while living in the North . . . and with new friends that I have made throughout the past years. It is great to know that this is a quicker way to keep in touch, instead of waiting for the regular snail mail from the post office. . . .

I would like to share that having this technology that we have in place now, is GREAT. I have learned quite a bit the past few years, in the knowledge that I have gained in the work place where I pretty well learned, and am pleased with what I know now. . . .

Having access to video conference is GREAT, as I am thinking of using this technology to keep in touch with my immediate family, who doesn't live with me, but I still would like to keep in touch with them, just to see their faces, and of course, with my beautiful grandchildren.

—An Aboriginal respondent, in the 41-to-50 age group

We were interested in the extent to which users engaged in self-directed learning activities at the sites as well as the extent to which the sites facilitated interaction with other people, both online and off. We posed the question, “Did using the computers at this site help you to . . .” and then provided a list of activities that focused on individual growth and improvement activities as well as on personal networking activities that users might undertake at or through the site. The results appear in table 3.3 and figure 3.3.
### Table 3.3 Role of staff and volunteers in effective use of community network resources

<table>
<thead>
<tr>
<th>Did the staff/volunteers at this site help you to...</th>
<th>Yes</th>
<th>No</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve your computer skills?</td>
<td>72.6%</td>
<td>11.9%</td>
<td>14.3%</td>
</tr>
<tr>
<td>Improve your Internet skills?</td>
<td>75.0%</td>
<td>8.3%</td>
<td>14.3%</td>
</tr>
<tr>
<td>Stay in contact with non-local friends and family?</td>
<td>47.6%</td>
<td>25.0%</td>
<td>20.2%</td>
</tr>
<tr>
<td>Stay in contact with local friends and family?</td>
<td>48.8%</td>
<td>22.6%</td>
<td>21.4%</td>
</tr>
<tr>
<td>Learn about community events?</td>
<td>71.4%</td>
<td>10.7%</td>
<td>14.3%</td>
</tr>
<tr>
<td>Find health-related information?</td>
<td>53.6%</td>
<td>16.7%</td>
<td>20.2%</td>
</tr>
<tr>
<td>Further your employment skills?</td>
<td>50.0%</td>
<td>13.1%</td>
<td>32.1%</td>
</tr>
<tr>
<td>Prepare a résumé or employment letter?</td>
<td>53.5%</td>
<td>15.5%</td>
<td>26.2%</td>
</tr>
<tr>
<td>Look for employment?</td>
<td>42.5%</td>
<td>11.9%</td>
<td>39.3%</td>
</tr>
<tr>
<td>Deal with personal challenges?</td>
<td>57.8%</td>
<td>16.9%</td>
<td>20.5%</td>
</tr>
<tr>
<td>Improve your basic literacy skills?</td>
<td>29.8%</td>
<td>27.4%</td>
<td>38.1%</td>
</tr>
<tr>
<td>Help you meet new people?</td>
<td>56.5%</td>
<td>12.9%</td>
<td>23.5%</td>
</tr>
<tr>
<td>Connect with support groups?</td>
<td>38.1%</td>
<td>23.8%</td>
<td>32.1%</td>
</tr>
</tbody>
</table>

### Figure 3.3 Use of community network sites to address specific personal needs and goals

Did using computers at this site help you...
**Finding health-related information.** To no one’s surprise, improving computer and Internet skills and email activities that allow users to stay in contact with friends and family locally and abroad are the primary activities at community sites. But “finding health-related information” still ranks fairly high in the positive responses to the activities on this list. As noted earlier, important synergies between community health programs and community networking sites seem to be emerging and should be explored.

**Learning about community events.** In their 1999 ethnographic study of “Netville,” an early wired Toronto suburb, Hampton and Wellman (1999, 12) found that “the local network brought neighbours together to socialize, helped them arrange in-person gatherings. . . . The high rate of online activity led to increased local awareness.” The CRACIN survey likewise found that respondents used community networking sites to connect with community events. Of all the respondents, 72.9 percent said computers at the site helped them learn more about events, groups, services, and issues in their local community (see figure 3.2), and 55.3% had previously indicated that they searched for local information at least once per week (see table 3.1).

Of the people who found the site useful for learning about community events, 63 percent were from rural sites, and 37 percent were from urban sites. This rural-urban split suggests that there was relatively little difference between rural and urban users with respect to using the sites to find local information. In fact, we had expected urbanites to make heavier use of community event listings if only to sort through the choices. However, in comparison to urban dwellers, who see posters and have easy access to local, on-street newspapers, rural users may have fewer readily available sources of information about community events. Online community event listings would thus appear to be an important source of this kind of information in rural areas. A report from a BC survey of rural CAP sites highlights the importance of these sites to everyday life in the areas they serve: “CAP sites also play an important role in strengthening rural communities, enhancing communication and reducing isolation, facilitating inclusion of youth, seniors, and disadvantaged groups, promoting equity, and providing opportunities for education, employment, and local learning” (Colman 2002b).

**Facilitating personal networking.** As the quotation that opens this chapter suggests, the effect of Internet communications on how individuals and communities function socially is an important field of study for Internet researchers. In their 1998 survey of 39,211 visitors to the National Geographic website, Wellman et al. (2001, 450) found that “Internet use supplements network capital by extending existing levels of face-to-face and telephone
contact. . . . Most Internet contact is with people who live within an hour’s drive."

The CRACIN user survey was particularly interested in how the sites facilitated personal networking and face-to-face interaction. In response to the question, “Do you find that using the computers or Internet at this community networking site helped you to stay in contact with family/friends in the local community/outside the local community?” over 80 percent of respondents indicated that they used the site for such purposes. Delving deeper into community connections, it appears that the sites were also instrumental in helping these users extend their local social networks. We asked whether the computers at the site had helped respondents meet new people: nearly half (49.4%) of the respondents said yes. Although the sites are used more for “maintaining” than for “extending” personal relationships, as suggested by Wellman et al. (2001), this result is still a good indication that community networking sites do serve as local meeting places. This was further supported by the findings in the administrator portion of the CRACIN survey. Providing a meeting place was the third most important goal of the sites surveyed, and one at which administrators felt they had been quite successful (Moll and Fritz 2007).

Events organized at the sites included the following:

- Computer classes and teas for seniors
- Graduations
- Semi-annual community gatherings
- Reading and literacy programs
- Local history and children’s programs
- Bi-monthly presentations by participants that are open to the public
- Award sponsorship
- Fundraising events, such as a dance or a concession

The Ekos report included a telephone survey of 503 “site representatives” (volunteers, paid staff, administrators). According to these site reps, users of CAP sites experienced:

- Improved computer skills (95%)
- Improved Internet skills (95%)
- Better integration into the community (72%)
- Improved economic situation (53%)

Although less detailed, this information from a much larger group of CAP users strongly supports the often unrecognized social role such sites play in their communities.
The Role of Staff and Volunteers

In August 2008 the Northern News Service carried a report on Rankin Inlet’s CAP program, established in 2005. Rankin’s free computer sites were now facing a serious shortage of cash and a lack of adequate staffing. The report quoted Darlene Thompson, CAP administrator for Nunavut, who noted that “being under-funded is standard for pretty much every CAP site across the territory.” The report continued:

A few years back, six communities in Nunavut did get added funding through regional Inuit organizations and Human Resources Development Canada. That money allowed them to hire a site supervisor. . . . “It made a huge difference for those communities and those CAP sites,” she [Thompson] said. “They were able to do a whole lot of programs that they couldn’t otherwise have done.”

In Clyde River, for instance, the site supervisor helped establish a media centre and train local youth in computer editing. Now filmmakers and visiting researchers can hire “youth not just as load bearers, but as camera people and editors,” she said. (Mackenzie 2008)

The importance of the effective use of new technologies—“the capacity and opportunity to successfully integrate ICTs into the accomplishment of self or collaboratively identified goals” (Gurstein 2003)—is well documented in community informatics literature and has been recognized by policy makers as a strategic element of success in a networked society. For example, in 2006, the final report of the Telecommunications Policy Review Panel (TPRP) acknowledged that the social infrastructures that enable the use of ICTs are at least as important as the technical infrastructure and that the community is the key provider of the social infrastructure:

A new generation of ICT applications allows communities to adapt ICTs to their own situations, develop local content, and access and use content created by others. However, none of this will happen in the absence of e-literacy and technology skills at the community level. . . . The Canadian Research Alliance for Community Innovation and Networking noted in its submission to the Panel that community networks and other community-based organizations provide both technological and social infrastructures for ICT development and innovation. Through training programs, for example, they help ensure that all Canadians, particularly those most at risk of being left behind, have the necessary skills to participate in a networked economy. (Telecommunications Policy Review Panel 2006, 7-43)
In the CRACIN survey, users were asked to indicate whether staff and volunteers had helped them with the individual support and personal networking activities already listed in figure 3.3.

From the responses, it is clear that the staff and volunteers at the sites played an important role in enabling users to tap the available resources effectively. Staff and volunteers helped respondents improve their computer and Internet skills, which in turn would make them less dependent on assistance with basic computer activities such as email. Of the 86 percent who said using the computers at the site helped them with their Internet and computer skills, 75 percent and 72.6 percent, respectively, said that staff and volunteers were important in facilitating these activities (see table 3.3 and figure 3.4).

**FIGURE 3.4 Assistance provided by community network staff and volunteers**

Did the staff or volunteers at this site help you . . .

![Bar chart showing assistance provided by community network staff and volunteers](chart)

An unexpectedly high rate (over 50%) of positive responses regarding assistance of staff and volunteers was found for the categories “dealing with personal challenges” (57.8%) and “help you meet new people” (56.5%). This seems to indicate that the volunteers in community networking sites do much more than help people find their way around computers and onto the Internet. Write-in comments about the staff and volunteers confirmed this:
The staff as well as the volunteers of the community networking program have helped me in a way to be more confident, helped me tap into those inner computer skills that I thought I lost way back in school. They also helped me enjoy myself on the computers instead of making it feel like such a chore.

—A respondent, in the 21-to-30 age group, who was taking college courses though a CAP site in BC

As noted in a 2003 report on the social and economic impacts of CAP networks, one of the key benefits of the CAP model was “the fuller integration of citizens into society and greater social cohesion,” as well as “community capacity building through the creation of a critical mass of knowledge over time on how to integrate ICT into community social and economic development programs/services” (Secor Group, quoted in Ekos 2004, 4). The CRACIN survey provides further evidence for these impacts.

As CRACIN researcher Diane Dechief (2005, 14) observes in her study of volunteering at the Vancouver Community Network, volunteers, too, see a substantial payback: “It is important to note that social capital building and increased social inclusion take place in the physical environs of VCN, in a face to face manner. While all of the volunteers I spoke to have the digital skills required to keep in touch with friends and family in their home countries and to find online information about living in Canada, they are looking to connect with people in-person” (emphasis in the original).

Searching or Sharing

For those who reported that they were using the resources at the site to look for health-related information (see figure 3.3), further analysis showed that the information seeking, not information sharing, appeared to be the major activity in this area. The survey included a specific set of questions asking users whether they participated in discussion groups on politics, cultural issues, health issues, lifestyle issues, and economic issues. Only between 19 and 26 percent indicated that they did participate in such discussions (see figure 3.5). When asked if they posted to newsgroups, websites, and/or blogs in the areas mentioned, politics scored at the low end of the scale (4.7%), while, after “Other,” cultural issues scored highest (21.2%) (see figure 3.6).

The results show that, for the most part, respondents rarely used the sites to formally post content in these areas. When they did participate in online discussions, it was mainly on health and lifestyle issues. Male and female participation in online discussion on these topics was almost equal, with men scoring slightly higher than women in cultural discussions (27% versus 21%, respectively), and women scoring slightly higher than men in health discussions (28% versus 24%).
**Figure 3.5 Use of community network sites to participate in online discussions**

Do you use this CNS to participate in discussions about . . .

![Bar chart showing use of community network sites for discussions.](image)

**Figure 3.6 Use of community network sites to post information online**

Do you use this CNS to post information to a listserv/blog/website about . . .

![Bar chart showing use of community network sites for posting information.](image)

**Community Networks and Skills Acquisition**

We know from the administrator surveys that most responding sites had some programs targeted to the needs of the unemployed. As already noted (see figure 3.3), looking for employment, furthering employment skills, and writing résumés were common activities pursued by the respondents. In the words of one respondent:
I was able to determine the direction of my career by learning about what employment options are available to me and what appropriate aptitudes and skills I possess. . . . The staff and volunteers were very helpful and friendly. I am very proud to say that [this community network] has given me new insights and opened new opportunities for me.

—An immigrant from the West Indies, in the 41-to-50 age group

Respondents were asked whether they had “ever taken courses or classroom instruction provided by this community network.” Responses showed that 40 percent of the respondents had taken at least one course at the site. Of these respondents, 35 percent had taken courses on how to use the Internet and computers, but only 25 percent had taken courses on how to look for employment. In addition, 31 percent had taken courses on computer software training. Other types of courses mentioned by respondents included reading, group literacy, accounting, website design, hardware troubleshooting, drafting software, digital camera use, and project management. Some indicated they would have liked to have access to courses on graphic production related to business cards and related activities.

A further analysis showed that 50 percent of users over 40 years of age with a household income of less than $20,000 had used the computers at the site to look for employment and further employment skills. However, only 19 percent of these users had taken a course on how to look for a job. Although we do not know whether users were taking such courses elsewhere, it seems reasonable to conclude that there could be a role for community networks in doing more follow through with programs that enable users to take advantage of new skills learned.

Civic Engagement

According to Internet researchers Quan-Haase and Wellman (2004, 113), civic engagement and social contact are two complementary uses of social capital. Social capital, as explained earlier, relates to collective benefits that accrue to the community as a whole. “Life is easier in a community blessed with a substantial stock of social capital,” says social science researcher Robert Putnam. “In the first place, networks of civic engagement foster sturdy norms of generalized reciprocity and encourage the emergence of social trust” (Putnam 1995, 67).

Quan-Haase and Wellman (2004, 113) define civic engagement as “the degree to which people become involved in their community, both actively and passively, including such political and organizational activities as political rallies or book and sports clubs.” In order to explore the extent to which community networks support strong communities, the CRACIN survey asked questions concerning two types of civic engagement: political engagement and community volunteer activities.
Political engagement. In this section, we asked about users’ political activities, both on- and offline. We chose, as examples of such activities, voting in elections, attending public meetings or meetings of political parties, communicating with politicians, writing letters to local newspapers on political issues, engaging in discussions with friends and/or neighbours about political issues, and participating in political action by delivering flyers, donating money, attending demonstrations, or joining boycotts.

Results showed that over half (between 56% and 57%) of the respondents had voted in at least one of the most recent federal, provincial, and/or municipal elections. In comparison, 59 percent of eligible Canadians voted in the 2008 federal election, and 52.6 percent of eligible Ontarians voted in the October 2007 Ontario provincial election. However, for the most part, that remained the extent of their political involvement. Only 11 percent of respondents to this survey indicated they had worked for or attended meetings of a political party. Moreover, other than discussions or debates with friends and neighbours (in which 13.4% had engaged), virtually none of the respondents had participated in activities such as contacting local politicians, attending public meetings, writing letters to newspaper editors, or becoming involved in local political action or community groups.

In examining the importance of the community networking site to the respondents in helping them participate in political activities, most indicated the site was less important or not at all important compared to other resources. There was, however, some indication of indirect impacts. One respondent noted that community network staff had made an effort to notify users of upcoming elections by sending notices through email. Another said that the Internet made it possible to find out “what was going in the world.”

In the Statistics Canada 2003 General Social Survey (GSS): Social Engagement, which canvassed 25,000 Canadians 15 years of age and older, respondents were asked whether they had participated in specific types of political activities during the year prior to the survey: “About 28% of Canadians reported that they had signed a petition, while 26% had searched for information on a political issue. About one-fifth had attended a public meeting. Similarly, about one-fifth had boycotted or chosen a product for ethical reasons. About 13% had expressed their views on an issue by contacting a newspaper or a politician, while 6% had participated in a march or demonstration” (Statistics Canada 2004). Of the respondents to the CRACIN survey, 11 percent had attended a public meeting. There was virtually no activity in the other categories. Although they represented only a small proportion of the respondents (14.1%), users less than 20 years of age were more likely to have engaged in political discussions, attended political meetings, or communicated with politicians.
The GSS survey also made a positive connection between level of education and household income and involvement in political activities. Although many respondents to the survey were well educated, the low income levels reported, combined with a high proportion of recent immigrants (who may not yet be Canadian citizens and therefore cannot vote), are one possible explanation for the low level of formal political activity reported by these users.

Volunteering. A very different view of civic engagement emerged in the responses to questions about volunteering activities among respondents and how, or whether, they found support for these activities through the sites. As we discovered, 71 percent of respondents had volunteered in some form or another in the previous twelve months, with their time commitments evenly distributed across the response categories (more than 15 hours, 5–15 hours, or 1–4 hours per month). In a snapshot of some of the types of volunteering activities undertaken, we see the following:

• 52% helped organize or supervise events for an organization
• 30% did administrative work for an organization
• 29% taught or coached in an organization
• 23% collected/delivered/served food and other goods
• 30% sat on a board or executive committee

When asked about the relative importance of the site to their volunteering activities, approximately 58 percent of the respondents indicated that email and Internet access at the site was as important as other resources, if not a very important resource. Approximately 59 percent of respondents indicated that the site’s staff and volunteers were at least an equally important source of support compared to other sources, with many saying they were very important.

In comparison to the 71 percent of the CRACIN survey respondents who reported engaging in volunteer activities, the 2003 GSS found that 61 percent of Canadians belonged to at least one group or organization, such as sports or recreational groups (hockey leagues, health clubs, and so on); unions and professional associations; cultural, education or hobby groups (such as book clubs); religiously affiliated groups (such as church choirs); and school-, neighbourhood- or community-associated groups (Statistics Canada 2004).5

The GSS also made a positive connection between level of education and household income and involvement in local activities. Despite generally low incomes, the users of community networks we surveyed reported a high level of involvement in their local community. Given Quan-Haase and Wellman’s definition of civic engagement (see above), these users were displaying a high level of such engagement and were substantially contributing to the
circulation of social capital in their communities. It is an interesting result, one that would benefit from further study.

The GPI (Genuine Progress Index) Atlantic survey of rural CAP sites in British Columbia, which was designed to assess the value of the voluntary work generated by BC’s rural CAP sites, indicated that CAP volunteers contributed an estimated 630,000 hours of voluntary time each year to BC’s rural CAP sites (Colman 2002a, 3). “These volunteer hours are worth $9.5 million annually, and are the equivalent of 330 full-time jobs,” according to the economic evaluation of the survey results (Colman 2002b, 2).

Assessing the economic value of CAP sites, Colman (2002a, 32) points out that this kind of community activity is often underestimated and undervalued:

The strength of society’s commitment to voluntary work is, for many social scientists, a touchstone of social health, stability, and harmony. A weak civil society, by contrast, is more subject to social unrest, alienation, and disintegration. It is associated with higher rates of crime, drug abuse, and other dysfunctional activities, which eventually produce high social and economic costs. From this perspective, wise investments in community and other voluntary associations can help strengthen the fabric of civil society, and produce long-term economic savings.

Community Networks Are People Networks

Respondents were asked whether they had a computer at home. If they indicated they did, we asked them to comment on why they chose to use the community networking site rather than their home computer. In reply, 61 percent (Ekos = 51%) of our respondents said they had a computer at home, mainly for personal use, rather than for work or education. Their reasons for using a community site are broadly summarized as follows:

• They had no Internet access or slower Internet access with their home computer.
• Their home computer wasn’t always working.
• Using the community site allowed them to take advantage of the training and software course offerings.
• The staff at the site could assist them with online searches.
• They enjoyed their personal contact with the staff.
• A few indicated their computer at home was shared and they preferred the privacy of the community networking site.
• One respondent noted that the computer at home was not equipped to read Chinese characters, whereas the computers at the site could.

One respondent said that the community networking site provided “a professional place to look for a job without being interrupted or disturbed by family
and friends.” The privacy reason is, perhaps, a surprising one, given that these are public sites. However, this response is supported by interviews collected in a recent study on the complexity of online privacy (Viseu, Clement, and Aspinall 2004). Just as the public library offers many services beyond the lending of books, it appears that community networking sites serve many roles in the community beyond simple access to computers and Internet resources.

According to CRACIN researcher Ken Werbin (2006, 15), whereas CAP sites “were designed to provide people with ICT access and training,” these sites “have in fact been operating in a completely different way than was intended.” His research suggested that that “successful community-networking initiatives tended to actively encourage, support and maintain the ‘third spaces’ emerging around ICT in the community center” (2006, 15–16). Werbin found that “access to such valuable, physical, on-the-fly ‘third spaces,’ where site users have the chance to meet others and develop social networks, plays a far greater role in fostering a sense of community than mere technological access and training alone” (2006, 24). As one survey respondent put it: “The computer resources here have greatly improved my knowledge about the community and people around us. I’ve met new people and made some new friends.”

CONCLUSION

The results of the CRACIN survey provide a closer look at who uses community networking sites and how they use them. In our survey, the largest demographic segment was female and under 40 years old, and the levels of income were very low. The sites were used for many different activities beyond email and web searching, and the staff and volunteers were a key element in the success of these sites. The level of political engagement among these users was generally low, but the level of community engagement, in the form of volunteering, was unusually high. Our results demonstrated that the resources available at the site were an enabling factor in this high rate of volunteerism and that community networking sites play a significant role in facilitating face-to-face local social interaction for these users. In other words, community networking sites are places where social capital is invested and accumulated and the process of developing a community of shared values is well established. Our research adds to the growing evidence that these sites are important hubs around which communities help their members find economic and social stability in the new information society.

Some of the most convincing evidence, however, comes to us from stories contributed by the sites themselves. One such story is from Sanikiluaq, the southernmost community in Nunavut, located near the southeastern corner of Hudson Bay. In this community of eight hundred people, 98 percent are Inuit.
The government is the main employer. Soapstone carving and other Inuit arts and crafts are local economic mainstays, but marketing them is a challenge:

In this small isolated community, homes are more likely to have cable TV than telephones and, increasingly, more likely to have computers than cable TV or telephones. Located in the school and the daycare centre, the CAP site offers an interface by maintaining a local cable TV channel. In addition to local cultural and educational programming, it serves as a local shopping channel used to move needed items around inside a community where you can’t just drive down to the local Canadian Tire to replace a snowmobile part. Locals bring their wares to the CAP site, have them photographed and put on PowerPoint slides which are then broadcast on the channel. In an unusual version of the “moccasin telegraph,” Channel 3 also serves as a way for the school to contact parents who don’t have a phone—a message is broadcast from the CAP site and, if the parents don’t see it, a friend or neighbour most certainly will.

Supported by grants from Canadian Heritage but using the CAP resources, students have made and sold videos of local knowledge about making the famous fish skin dolls which are unique to Sanikiluaq and about Inuit methods of starting fires with friction. The CAP site has also been instrumental in facilitating the marketing of the fish skin dolls and the unique local baskets to international customers, bringing much-needed revenue into the community.

It is not just about buying and selling, but also about making outside training programs available locally. Through their school and the CAP site, local youth have been able to participate in an Internet-based competition aimed at Aboriginal students in Grades 10 to 13 across the country. The goal of the Business Development Bank of Canada’s E-spirit Aboriginal Youth Business Plan Competition is to expose Aboriginal youth to the potential of entrepreneurship and the Internet. (Moll 2007, 13)

Supported by the Industry Canada and GPI surveys, the CRACIN user survey provides further evidence that these new actors on the community stage can and do play a role in the creation and exchange of social capital in their communities. As Tom Schuller, a professor of lifelong learning at the University of London’s Birkbeck College, argues (2001, 20), it is important to look at social capital as a policy instrument because it provides a balance to other policy instruments that can be too narrow to deal with the complexities of modern life: “Technological innovation and human capital are both very powerful in their own terms, and essential features of prosperity, but they cannot be taken out of their contexts of social relationships. Social capital demands a wider focus… It deals with the social infrastructure that enables other policies to be effective.” When viewed from this perspective, community networking sites should be on the radar of governments at all levels, as part of the critical infrastructure needed to build strong communities in an information society.
ACKNOWLEDGEMENTS

We know that it was not easy for CAP site administrators to find users willing to respond to a very detailed survey. We thank those administrators for taking time out of an already overloaded work schedule to assist in this study.

NOTES

1 Putnam cites James Coleman (1990, 317), who argues: “Social capital is an important resource for individuals and can greatly affect their ability to act and their perceived quality of life. They have the capability of bringing such capital into being. Yet because many of the benefits of actions that bring social capital into being are experienced by persons other than the person so acting, it is not to that person’s interest to bring it into being. The result is that most forms of social capital are created or destroyed as a by-product of other social activities.”


3 A low-income household is one that spends a disproportionate amount of its income on the necessities of life, such as food, shelter, and clothing (National Council of Welfare 2006). “Fact Sheet: Definitions of the Most Common Poverty Lines Used in Canada, June 2003,” http://www.ncwnbes.net/documents/researchpublications/OtherFactSheets/PovertyLines/2003DefinitionsPovertyLinesENG.htm.

4 The median income is the middle value in the range of family incomes. In other words, half of all families had an income greater than $67,600, and half had less.


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