

Social Media as a Tool for Inclusion

FINAL RESEARCH REPORT

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The views expressed in this report do not necessarily reflect
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Most organizations serving vulnerable populations are just beginning to get a handle on what social media could mean for the way they deliver information and services, and the way their clientele handle the challenges in their lives. Sources for this study were interested that HRSDC should commission this research and many requested that the Directorate share the results.

The views and opinions expressed herein do not necessarily reflect those of HRSDC.

Much of the information comes first-hand from interviews and in this light I take responsibility for any errors or omissions.

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Executive Summary

Introduction

This is a report of the findings of research commissioned by the Horizontal Policy Integration Division (HPID) of HRSDC. The objectives of the study were to determine the extent, nature and benefits of social media use by five vulnerable populations – Aboriginal peoples, people with disabilities, recent immigrants, the homeless and seniors – and by the institutions that serve them, and to explore the extent to which such media help to overcome social isolation and barriers to inclusion in Canadian society. The Division also requested information on the topic from three levels of government – municipal, provincial and federal. The methodology consisted of semi-structured telephone interviews with sources, primarily but not exclusively, in the National Capital Region, and a literature review.

Findings –Vulnerable Populations

Data from different regions of Canada and anecdotal reports suggest that First Nations and Inuit peoples have embraced social media, using tools such as Facebook, YouTube and Twitter to keep in touch with home communities, fight addiction, showcase Aboriginal arts and crafts, preserve cultural identity and support political advocacy. Though there are well-founded misgivings among Aboriginal peoples regarding the potential negative impact of social media on their cultures and languages, it is clear that many are using these technologies in the fight to preserve Aboriginal cultures and identity. Despite a remarkable uptake of social media among Aboriginal people, recent research suggests that about half of First Nations communities across Canada do not have access to residential broadband. In a country as connected as Canada, adequate broadband is a major criterion for equity and inclusion in Canadian society.

Informants report that for many people with disabilities, connectivity is a lifeline. A recent Canadian study of over 700 students with disabilities reveals that they spend, on average, 18 hours a week engaging in social media for school and leisure activities. In the same study, well over half said that social media makes them feel less isolated. The barriers to internet access include low income and low levels of education. This underscores the double vulnerability of disabled people; studies consistently report lower average levels of income among disabled people, a factor that also has an impact on their ability to buy and maintain computers, broadband and the assistive devices that people with disabilities require to participate in an increasingly web-based society. Key informants and the literature reviewed

for this study indicate that a lag between the release of new software and the development of assistive technology for that software also pose challenges. In Ottawa the majority of organizations advocating for or serving the disabled lack the resources to study how their constituents use social media. They also lack in-house knowledge to exploit its potential.

The homeless are a surprisingly well connected group. Key informants in Ottawa say that almost all homeless people have cell phones and use text messaging and that the majority of homeless youth have Facebook profiles. Additionally, many middle-aged homeless people, particularly women, use computers and social media. Shelters are trying to respond to the web-based needs of the homeless by setting up computer labs, and the demand for time on computers is high. Homeless people use computers to find housing, look for jobs, create résumés and/or do homework for the courses they are taking. Informants indicate that Facebook is helping many homeless people to regain, repair and rebuild relationships. However most homeless people are careless about their personal privacy and some informants suggest that Facebook may expose this already vulnerable population to further risk on the streets.

The majority of recent immigrants of the skilled worker and professional categories are conversant in most aspects of social media, especially Facebook, LinkedIn and YouTube. Informants say their use of social media has increased substantially since 2008 and that many recent well-educated immigrants are more 'tech savvy' than the agencies that serve them. In addition to the social media options offered on the federal government's *Working in Canada* website, this group is tapping into the growing number of multi-lingual social media websites for information and advice from other immigrants, counsellors and Canadian citizens. However, refugees and immigrants of the family class tend to have considerably less facility with computers, the internet and social media and many have little knowledge of either official language. Informants say such newcomers require basic computer training (preferably in their own language) as well as face-to-face meetings and assistance in the settlement process. The great majority of settlement service agencies have yet to use social media to reach, inform and interact with their clientele; however, spokespersons from organizations that do use social media emphasize the economy of accomplishing some of their work online and the importance of building social media 'reach' into an accountability framework that will satisfy the demands of government funders.

The senior sector of the Canadian population has seen the greatest growth in internet users this decade. As of 2009 over 65 per cent of seniors were online, according to Statistics Canada. Their most popular online activities are email (90%), finding travel information (59%) and getting road/weather

reports (56%). Informants from this and other research indicate that email and social media increase contact with family, ease loneliness, lower rates of depression and enhance existing relations. The literature stresses that, for seniors, online social networking is unlikely to result in new acquaintances; and so, for the very isolated, online social networking is not a pathway to a real life social network. Internet use is higher among well-off seniors and among those whose families have helped them tackle the technology. The literature affirms what those interviewed for this study estimate: that poverty, low levels of education, low computer literacy and lack of family support act as barriers to the uptake of online communication. Most agencies and community centres serving seniors do not use social media, although some use email to communicate with those who are online. Though retiring 'baby boomers' are beginning to swell the senior ranks and will boost the rate of internet and social media use, in the short- to medium-term, policies must continue to take into account the majority of seniors 75 years and older who are not online.

Findings – Governments

There are some excellent social media initiatives among federal government departments as well as a growing awareness of the benefits of social media for engaging citizens, gauging public opinion and directing the public to accurate government website information. At the present time the use of social media and the degree of experimentation are uneven across and within departments. Though departments are tracking users, to date no formal evaluations of the impact and effectiveness of social media campaigns have taken place. The main challenges of social media use by government are human resources, risk management and working out the integration of program participation online with communications' traditional role of managing departmental messaging. Other than the CIC/HRSDC website *Working in Canada*, which was not included in this study, no government departments are specifically using social media to reach out to vulnerable populations.

The Government of Ontario appears to be making less use of social media than the federal government. Only a few Ontario ministries and a handful of pilot projects use Facebook, Twitter and YouTube. The same applies to the City of Ottawa. Although the municipality does not have an overarching plan for social media use, it is open to and experimenting with its use, especially in the area of public health. The Ottawa Public Library has been instrumental in opening its doors to hundreds of refugees and immigrants monthly through the Library Settlement Partnership and providing computer

classes for immigrants, seniors and others; it has, however, not used social media as a way to engage vulnerable populations.

Conclusion

The interviews in this study yielded useful information but the research also revealed that empirical evidence of the impact of social media on vulnerable populations is scant; and that the social media practices of community organizations and governments have yet to be formally evaluated. This study underscores the dearth of Canadian academic research and statistical survey data in this field. It suggests that government could increase internet literacy among vulnerable populations by: encouraging in-depth qualitative and quantitative research on the topic; providing incentives for service organizations to use social media to engage and inform their clientele; supporting organizations in a proactive campaign to bring computer access, computer training and internet literacy to all citizens.

1. Introduction

This report summarizes the findings of research commissioned by the Horizontal Policy Integration Division (HPID) of HRSDC. Anne Taylor of Stiles Associates Inc. conducted the research between October and December 2010 to study the use of social media by five vulnerable populations – Aboriginal peoples, people with disabilities, recent immigrants, the homeless and seniors – as well as by the institutions that serve them, and to explore the extent to which such media help to overcome social isolation and barriers to inclusion in Canadian society.

1.1 Research Objectives, Focus and Scope

The objective of this research is to assist HPID in deepening its knowledge about the nature and extent of social media by vulnerable populations and the agencies that serve them and thereby contribute to the Division's policy development and engagement strategies for these groups.

The HPID requested that the 28-day research project focus on the National Capital Region; provide a demographic profile of each vulnerable group in the region; identify demographic differences between social media users and non-users as well as barriers to use; examine the benefits of social media use and describe best practices and initiatives involving social media among community institutions, service-providing organizations and governments. Additionally, HPID requested a literature

review on the use of social media by each of the five vulnerable populations to complement the stakeholder research findings. (The detailed Statement of Work can be found in Appendix A).

1.2 Approach and Methodology

The original methodology comprised 14 semi-structured interviews with members of key institutions and organizations based on three department-approved interview guides. Shortly into the interviewing process it became evident that the approach was unsuitable: the use of social media by almost all informants was too new and their knowledge of its reach and role in encouraging the inclusion of vulnerable populations too limited. With the department's approval, the researcher modified the methodology to i) involve more informants in shorter, less structured interviews and ii) extend the research, where useful, beyond the National Capital Region. At the conclusion of the research, and with the Division's approval, the researcher placed the government-related information in the appendices as there was little to report regarding the use of social media by these sectors to engage vulnerable populations (see Appendix C).¹

The researcher limited the literature review almost exclusively to studies conducted between 2008 and 2010 because the field of social media is developing so rapidly. The literature search was conducted online through: i) academic portals using a wide range of search engines; ii) perusals of online journals; iii) personal contact with 16 academics in relevant fields; iv) scans of Canadian Institutes of Health Research (CIHR) and SSHRC project and proposal databases from 2008 – 2010; v) requests for information posted on Canadian and international academic listservs; and vi) postings on Twitter.

1.3 Constraints and Limitations

Considerable research is available on the psychological impacts and influences of social media on young people. Academic research on the use of social media by and for vulnerable populations is, however, difficult to find. The largest body of English-language research on this topic comes from the U.S.; much less has been contributed by Australia and Great Britain; and almost no research on the topic emanates from Canada. Also lacking are current institutional and government survey data on rates and patterns of social media use by the populations under study. Furthermore, the use of social media as an

¹ The successful *Working in Canada* website for recent immigrants was not included in the current study because it was the subject of a comprehensive study commissioned by HRSDC and delivered in March 2010. Please see: DeChief, D., Caidi, N., Allard, D., Lam, M. (2010). "Immigrants and the Internet: The information needs of Canadian Immigrant job seekers and www.workinginCanada.gc.ca." Final Draft Submission to Human Resources and Skills Development Canada (HRSDC).

engagement tool by governments and service-providing organizations in Canada is so new that, to date, it has yet to be formally evaluated. As a result, there is scant empirical evidence of the reach, benefits and effectiveness of social media initiatives. Finally, many of the questions outlined in the Statement of Work require more in-depth research with members of the targeted vulnerable populations; the resources limitations for this study did not permit such research.

1.4 Definitions

The following definitions apply to terms used in this report. *ICTs*: Interactive Communications Technologies; *Web 1.0*: one-way Internet broadcasting characterized by static websites; *Web 2.0*: web applications that facilitate interactive information sharing; *social media*: web-based media for social interactions and user-created content including social networking websites, microblogging sites, forums, weblogs, voice over IP, and music, photo, video and bookmark sharing sites, examples of which include Facebook, MySpace, Bebo, Twitter, LinkedIn, Flickr, YouTube, Skype, Digg and several hundred other options on the internet; *social networking*: using social media to network online; *social inclusion*: the capacity of individuals to participate in the social and economic life of their communities in order to optimize educational, employment, and health/well-being outcomes; *social capital*: a social network of relationships based on trust, reciprocity and social norms that increase a person's access to information, skill sets and ability to be an active participant in society.

1.5 Social Media Trends and Inclusion

In July 2010 Nielson reported that 22 per cent of all time spent online globally is social media-related. Social networking surpassed email in time spent in 2007 and in numbers of users in July 2009. Experts in the field say that the communications revolution is just beginning and that the coming explosion of mobile devices will further expand the use of social media.² Numerous studies show that Canada is on the cusp of this communications revolution which is revolving mainly around Facebook, Twitter, YouTube and blogging sites.³

² In her latest "State of the Internet" report, Morgan Stanley analyst Mary Meeker predicts that within five years more users will access the Internet using mobile devices than laptop PCs and that mobile data traffic will increase by 4000 per cent by 2014. <<http://gigaom.com/2010/04/12/mary-meeker-mobile-internet-will-soon-overtake-fixed-internet/>>

³ In June 2010 the research firm Inside Network announced that Canada was the fourth largest market on Facebook, on a per capita basis, after Iceland, Norway and Hong Kong. More than half of Canadians has a facebook profile. Forrester Research maintains that if one includes all social media, the number of Canadians using social media is almost 80%. <<http://www.cbc.ca/consumer/story/2010/06/02/facebook-users-data.html#ixzz150Prq5x>>

This study attempts to shed light on the impact of internet access and social media use on Canada's most vulnerable populations. To what extent do these groups participate in social media? Will these modes of communication further the inclusion of such groups in Canadian society or will their growth in Canada compound the disadvantages already experienced by vulnerable groups?

FINDINGS

2. Aboriginal Peoples

2.1 Aboriginal Peoples in Ottawa: A Demographic Snapshot

About 13,000 people living in the Ottawa area identify themselves as Aboriginal, according to the 2006 Census;⁴ over 50 per cent of Ottawa's Aboriginal population is under the age of 24, making the city home to one of the fastest growing urban Aboriginal populations in Canada. Ottawa is also home to the largest urban Inuit population outside of the North.

Among those 15 years and over, more than one third of Aboriginal people have a high school diploma or an apprenticeship or trades diploma and 37 per cent have a college⁵ or university degree. Nevertheless, Aboriginal leaders have signalled high rates of unemployment, substance abuse and illiteracy and a rate of homelessness that is disproportionate to the population.⁶ More than a quarter of Ottawa's Aboriginal population is disabled, a figure almost nine per cent higher than the general population.⁷

2.2 Use of Social Media by Aboriginal Peoples

The latest Statistics Canada data on internet use by off-reserve Aboriginal people goes back to 2001, at which time those of Aboriginal ancestry off-reserve were deemed "just as likely to use the Internet as non-Aboriginal people, with 72 per cent logging in at least several times a week."⁸ As with

⁴Statistics Canada. Aboriginal service providers estimate that 16,000-18,000 Aboriginal people now live in Ottawa (Equity and Inclusion Lens. Diversity Snapshot: Aboriginal Peoples, 2010).

⁵ Or GÉGÉP (*Collège d'enseignement général et professionnel*) diploma

⁶ Information from the City of Ottawa

⁷ Social Planning Council of Ottawa (2010). Disability Profile of the City of Ottawa: A Profile of Persons with Disabilities in Ottawa Based on the 2006 Census.

⁸ Crompton, Susan (2004). Off-Reserve Aboriginal Internet Users, Canadian Social Trends.

mainstream Canadian society, usage among Aboriginal peoples is somewhat, but not entirely,⁹ related to age, level of education and whether a person uses a computer at work.

Though recent national survey data are lacking, local and regional statistics leave no question regarding the proclivity of Aboriginal youth for social media and the increasing involvement in social media by middle-aged Aboriginal people:

- A 2008 doctoral dissertation¹⁰ on the influences of social media on the Inuktitut language in Nunavik (Northern Quebec) showed that in 2007 over 96 per cent of the young people used social media¹¹ (64% “strongly agreed” that they did, while 32% “somewhat agreed”).
- The project manager of Nunavut Broadband reports that the use of social media is quite high amongst young Inuit people and increasingly popular among older Inuit people. Facebook has replaced Bebo as the favourite site, and many use MSN and Skype.
- A 2007 survey of over 1000 First Nations users of MyK-Net, a north western Ontario network of interlinked homepages that has served as a vehicle for social networking since the late 90s, revealed that 92 per cent had their own homepage and that many updated it once-to-several times a day (36.6%) or several times a week (21.3%). MyK-Net comprises 25,000 home pages in a region with a population of 45,000. Forty-six per cent of users are between 15 and 25 years of age; 17 per cent are over 35.
- The manager of a Community Access Program (CAP) in Iqaluit indicates that CAP sites in Nunavut are heavily utilized, so much so that management has to limit individual time. Although Iqaluit is about 60 per cent Inuit, the manager says that CAP usage is about 95 per cent Inuit, and that, while traffic is youth-heavy, adult and senior use is on the increase.
- Native Facebook, whose creators are based in Winnipeg, has nearly 37,000 members

It appears that Aboriginal internet users in the Ottawa area are “just as likely” as anyone to use social media and this is true as well for the rest of the country, apart from remote areas challenged by insufficient broadband.¹²

⁹ Reports from Iqaluit indicate that hunters routinely use the internet for weather reports before they set out, for instance.

¹⁰ Pasch, Timothy J. (2008). Inuktitut Online in Nunavik: Mixed-Methods Web-Based Strategies for Preserving Aboriginal and Minority Languages, Doctoral dissertation, University of Washington, Seattle. Proquest Dissertations. URL: <<http://proquest.umi.com/pqdlink?did=1674453291&Fmt=2&clientId=79356&RQT=309&VName=PQD>>

¹² The Coordinator of the B.C. First Nations Technology Council reports that social media is enormously popular in remote First Nations communities that have sufficient broadband. A senior researcher at the National Research Council (NRC) provides similar feedback based on recent visits to the Fort Severn Nation, Northern Ontario. A paper on how Fort Severn First Nation community members are using ICT, including Facebook and social media, is expected to be published in 2011 and will be available on the VideoCom project website at <<http://videocom.firstnation.ca>>.

Benefits of social media use

From the homeless to the established and highly educated, and from urban centres to rural and remote areas, Inuit and First Nations populations have embraced social media. They are using social media to keep in touch with nearby and far flung family and friends, to fight addiction, to sustain endangered languages and practices, to advance environmental stewardship, to showcase Aboriginal arts and crafts and to promote cultural identity and political advocacy. The names of these Canadian-based Facebook pages say it all: Yukon River Inter-Tribal Watershed Council (550 members); Proud, Beautiful Aboriginal Women (9600 members); Stop Violence Against Aboriginal Women (326 members); First People's Heritage, Language and Culture Council (1400 members); B.C. First Nations Artists (1130 members).

Aboriginal elders and leaders have long been concerned about the potential of digital media to undermine Aboriginal languages and culture.¹³ On the other hand, a scan of Aboriginal websites and reports from interviewees suggest that these communications technologies are also being used in the fight to preserve Aboriginal culture, language and identity. An assistant professor of museum studies at University of Toronto notes that members of the Haida Nation in their 20s to early 40s use Facebook to socialize, promote community events, distribute images of artwork and document informal and formal family and community history - often via old family photos. She comments:

"I am also seeing a growing trend of people using Facebook as a means of communicating cultural knowledge -- i.e. using their status to inform people of what you should do when someone dies to show respect or using posts to elicit and discuss Haida vocabulary. There are young people making a very concerted effort to learn the Haida language while mother-tongue speakers are still alive... these students use Facebook as a practice space."

It is surprising that the April 2010, 800-page *Urban Aboriginal Peoples Study* undertaken by Environics Research group and the Chair of Indigenous Studies at Trent University does not once mention the Internet or social networking, though these are clearly important forces in the lives of the young and middle-aged, and in the work of Aboriginal organizations

Barriers to social media use

The main barriers to social media use by Aboriginal peoples are slow connectivity and lack of broadband. Other contributing factors are poverty; low levels of education; and what one informant

¹³ Pasch, T. J. (2008). "Inuktitut Online in Nunavik: Mixed-Methods Web-Based Strategies for Preserving Aboriginal and Minority Languages." Doctoral dissertation, University of Washington, Seattle. Proquest Dissertations

calls “the social determinants playing out in a person’s life.” She explains: “If you’re ‘barely hanging on,’ coming out of drugs or not knowing where your next meal is coming from, you are into survival rather than social media.” It appears that many elderly Aboriginals are not online, but the barriers to internet use by this specific demographic were not discovered in this research.

2.3 Use of Social Media by Aboriginal Organizations

This research indicates that Aboriginal organizations actively use social media to engage members and that individuals use it to keep in touch with organizations:

- The Canadian Aboriginal AIDS Network (CAAN) used Facebook and Twitter strategies for the first time in its December 2010 Aboriginal AIDS Awareness Week campaign. The organizers were excited by the results but are concerned about the cost – good social media communication is labour-intensive and therefore expensive. The organization has hired a company to evaluate the effectiveness of social media in this campaign. The report will be completed in February 2011.
- Inuit Tungasuvvingat (IT), an Ottawa counselling and resource centre, hosts an active Facebook page for its members. The page posts information about coming events, cites an “Inuktitut word of the day” and aims to keep everyone in touch. An employment support worker estimates that most of the youth coming through IT’s doors are computer literate and use social media. Older people are “mostly not online,” although some take computer courses offered by IT.
- The Dream Catchers’ Youth program of the Ottawa Native Friendship Centre hosts a members-only Facebook page, the coordinator noting that “most youth are on Facebook and this is a way to keep track of how they are doing.”
- Several informants mentioned that during the last Assembly of First Nations leadership convention people all across the country followed proceedings minute-by-minute on Twitter, some of them learning of developments ahead of delegates on the floor!
- The Truth and Reconciliation Commission of Canada, which has garnered huge Aboriginal interest, hired a consultant to work three days a week online exclusively in social media. In fall 2010, when their national conference needed help, the consultant was able to round up 200 volunteers through Twitter in two days.

The Native Aboriginal Health Organization (NAHO) has developed a particularly effective social media presence, with links to Facebook, Twitter, YouTube, Blogger and SlideShare. Its 92 YouTube videos have had over 18,000 views. The organization has over 600 Twitter followers and runs a number of active blogs that engage youth-at-risk (See Appendix B -1 for further details).

Despite the uptake of social media among Aboriginal people, recent research suggests that about half of First Nations communities across Canada have no access to residential broadband.¹⁴ In a country as connected as Canada, adequate broadband is a major criterion for equity and inclusion in Canadian society.

3. People with Disabilities

3.1 People with Disabilities in Ottawa: A Demographic Snapshot

In 2006, the disability rate in Ottawa was about 18 per cent of the population.¹⁵ Over half of the disabled population is between 20 and 64 years of age; a third is over the age of 65.¹⁶ Rates of disability are well known to increase with age; the city can therefore expect a steady increase in disability beginning in 2011 as the older members of the 'baby boomer' generation turn 65.

The side effects of disability are also well known. 2006 Census figures show that just over 31 per cent of Ottawa's disabled have a university degree (as opposed to 43% of the general population); and 21 per cent live on a low income (as opposed 15.2% of the general population). In 2006, 44 per cent of working-age adults in Canada requiring aids did not have their needs fully met.¹⁷

3.2 Use of Social Media by People with Disabilities

Informants indicate that Web 2.0 applications offer enormous possibilities for the disabled who may be marginalized by lack of mobility, vision, hearing or other disability that makes it difficult for them to participate in the civic, social, cultural or work-related activities of mainstream society. The evidence is strong that the internet and social media, with the aid of assistive technologies, are improving the ability of many disabled people to participate more fully in their society. Members of the deaf community, for example, are said to be huge users of social media and video blogging. The Deaf Canada Conference that took place in June 2010 was supported by a lively 636-member Facebook page. There is even a Canadian Deaf Native Facebook page. A 2009 Canada-wide survey of over 700 self-described

¹⁴ O'Donnell, S., Molyneaux, H., Gorman, E., Milliken, M., Chong, C., Gibson, K., Oakley, P., Maitland, J. (2010). Information and Communication Technologies to Support Health and Wellness in Remote and Rural First Nations Communities: Literature Review. Fredericton: National Research Council.

¹⁵ Social Planning Council of Ottawa (2010). Disability Profile of the City of Ottawa..

¹⁶ The breakdown includes 11.7% pain, 11.5% mobility, 11.1% agility, 5% hearing, 3.2% seeing and 2.5% learning.

¹⁷ Human Resources and Skills Development Canada (2009). Federal Disability Report: Advancing the Inclusion of People with Disabilities, 2010.

disabled students with a mean age of 30¹⁸ revealed that they engage in social media 12 hours a week for non-school related activities and six hours a week for school-related activities using, on average, between one and two types of specialized software. The most popular sites are Facebook, YouTube, MSN/Windows Live Messenger and Skype.

Benefits of social media use

Informants report that social media are a lifeline for some disabled people. Social networking tools bring to disabled people the obvious benefits of reducing the physical and geographical barriers which may stand in the way of traditional social networking and inclusion. These tools also help overcome the isolation and stigma experienced by those with a disfigurement or distracting appearance. In the study referenced above, 74 per cent of respondents “strongly agree” that they use social media to stay connected to people they already know, and well over half the respondents agree that social media helps them feel less isolated.

Barriers to social media use

Two of the factors that affect rates of computer access, computer literacy and connectivity among the disabled are the same as those that impact rates among the fully-abled population – low-income and low levels of education. As one interviewee remarked “If your personal circle doesn’t have the knowledge, skills and equipment, you won’t either.” ‘Disability’ is one of the determinants of a lower standard of living; it is therefore reasonable to conclude that many individuals disadvantaged by disability will be further disadvantaged by exclusion from the benefits of ICTs.

Other barriers are physical, some of which can be overcome by assistive technologies such as scanners, narrators and enlargement or voice-activated technologies. For those connected to the internet, the challenges lie in keeping up with new versions of software and innovations in technology. Experts predict that things could get worse for some before they get better; innovations such as the diminishing size of technological devices and touch screen technology present new problems for those with certain disabilities. It will require time for these to be ironed out. In addition, informants say that

¹⁸ Preliminary Findings on Social Media Use and Accessibility: A Canadian Perspective, 2010 conducted by Dawson College’s Adaptech Research Network and the National Education Association of Disabled Students (NEADS) and presented at the CSUN International Technology and Persons with Disabilities Conference in San Diego on March 26, 2010.

one of the chief challenges is the time lag between the release of new tools or versions of software programs, and their adaptation for the disabled.

3.3 Use of Social Media by Organizations Serving People with Disabilities

The facility that many disabled people have with social media is not reflected in the organizations that serve them. Some Ottawa-based organizations representing disabled people have a Facebook page, used mostly by staff and other professionals, but other than the use of signed videos for the deaf, this research found little effective use of social media by organizations to engage their constituents:

- The Ottawa Hearing Society provides counselling, employment and other front-line delivery of services to the deaf. The Director says the deaf are known to be heavy users of the internet but the organization has not considered using social media.
- Citizen Advocacy of Ottawa, an organization that matches volunteers with disabled people connects staff and volunteers through a somewhat inactive Facebook page. Staff say there is not time to exploit the use of social media with their clientele.
- The Canadian Association of the Deaf (CAD), an advocacy organization, provides information thorough streamed sign-language videos. It hosts a Facebook page and has a Twitter account but both are inactive.
- The Deaf-Blind Canada Facebook page has 194 members but it too is inactive; the latest discussions go back to 2009.

A bright light with respect to social media use in the disability field is the Canadian Association of Speech-Language Pathologists and Audiologists (CASLPA). This organization uses social media extensively, for communicating with its professional members and also for ‘consumers’-- those who have a communication disorder themselves or who have a child or other person in their lives with an associated disorder. In addition to its consumer friendly website,¹⁹ CASLPA hosts a Facebook page²⁰ with more than 900 fans which it is currently using to advocate for universal hearing screening for newborns. The organization has a Twitter account, followed by over 500 professionals and consumers, to disseminate news, articles and information about organization-related events. CASLPA’s Director of Communications reports that the use of social media, especially by consumers, is steadily increasing.

¹⁹ www.speechandhearing.ca

²⁰ www.tinyurl.com/caslpaonfacebook. For CASLPA’s Oct. 2010 SlideShare presentation on social media use see <http://tinyurl.com/6cp2lex>

Tyze Personal Networks is another noteworthy initiative. Tyze provides caregivers, disabled people and the chronically ill with social media software that allows them to build an online network of support and care. Its director points out that as pressure on the health system increases, governments must find new, interactive ways of collaborating with the community of care that often surrounds a person who is disabled or ill. (For details, see Appendix B-2).

And finally, a City of Ottawa virtual training pilot project demonstrates the potential of internet-based work and social media for increasing opportunities in the job market for people with disabilities. This training initiative provides opportunities for people with disabilities to work from home in areas ideally suited to an online environment. Jobs include data input, editing, translation, transcription of digital tapes and taking in-bound telephone calls for sales orders or appointment scheduling. The project was extremely successful, with participants subsequently moving on to paid online work, and in some cases, on-site work outside the home. (For details, see Appendix B-3).

Social media communication requires an investment in time and human resources. The majority of organizations advocating for, or serving, the disabled lack the time and money to study how their constituents use social media, and have little in-house knowledge to exploit its potential.

4. The Homeless

4.1 The Homeless in Ottawa: A Demographic Snapshot

In its 2010 *Report Card*, the Alliance to End Homelessness in Ottawa (ATEH) reported that 7,445 individuals had stayed in an Ottawa emergency shelter in 2009. Forty-eight per cent were single adult men, 13 per cent were single adult women and over 5 per cent were youth 16 and over. The rest comprised children under 16 and families. The average length of a shelter stay was 57 days.

Three other recent studies²¹ fill in the demographic composition of Ottawa's homeless. They indicate that Aboriginal peoples are over-represented relative to their numbers; and approximately 25% of the single women and 40% of adults with children are landed immigrants or refugees.²² Some are foreign students. Economic factors are cited by most as the reason for being homeless. Other reasons

²¹ 1) University of Ottawa, Carleton University, Saint Paul University, City of Ottawa Housing Branch, Alliance to End Homelessness in Ottawa (2008). *From Homeless to Home*. 2) Dinning, L. B., Davis, C. (2008). *Community Action Plan on Homelessness: 2009-2014*, 3) Aubrey, T. *et al*, (2003) *Panel Study on Persons Who Are Homeless in Ottawa: Phase I Results*.

²² In a 2007 Toronto street health survey described in the e-book *Homelessness: What's in a Word?* figures were roughly the same: 36% were landed immigrants, and 5% refugees. In Vancouver- immigrants accounted for 18 per cent.

include substance abuse, family conflicts involving abuse, and physical or mental health problems.. Research shows that male adults and youth are likely to be homeless much longer than their female counterparts who, in turn, are more likely to use the housing and other services available to them. Drop-in centres are popular with all single homeless people, particularly with youth of both sexes.

4.2 Use of Social Media by the Homeless

It is not surprising that any reference to Internet use is missing in the reports cited above, given the dire daily challenges of the homeless and those that serve them. *It is surprising that no pertinent Canadian academic studies on this topic were unearthed, online²³ or otherwise, during the course of this research.*²⁴ Nevertheless, anecdotal reporting indicates that the internet and social media are extensively used by the homeless, especially those under 30, and this finding resonates with those of several U.S. studies on the topic (see Literature Review, Appendix B).

In collaboration with the Alliance to End Homelessness in Ottawa, the researcher posted two simple questions on the organization's listserv. Ten people²⁵ responded to these questions as follows:²⁶

Figure 1: Responses to a question posted on the ATEH listserv (2010).

1. Do the homeless people you know use social media for entertainment or to get information?					
No	1	Some do	4	Lots do	5
2. Does your organization use social media to reach/inform people who are homeless?					
Yes	4	No	6		

Use of cell phones, the internet and social media

Informants agree that almost all homeless people own cell phones (most using a pay-as-you-go system) and participate in text messaging. A few own laptops but very few have smartphones. The same sources estimate that most homeless people under 30 use the internet and social media, that usage decreases with age, but that many in their 30s and 40s and a few in the 50-plus group use the internet

²³ This includes the comprehensive resources of the website The Homeless Hub, a research and information center launched in 2009 by a York University professor. <<http://www.streamsofjustice.org/2008/05/homeless-hub.html>>

²⁴ The director of the Research Alliance for Canadian Homelessness, Housing and Health (REACH3) knows of no Canadian research pertaining to the use of the internet and social media by the homeless. The group includes some of Canada's leading academic researchers and community organizations with expertise on homelessness.

²⁵ The organizations represented by these respondents include: Centretown Community Health Centre, Ottawa Innercity Ministries, Shepherds of Good Hope, Shawenjagamik Drop-In Centre, Cornerstone Shelter for Women, The Salvation Army Shelter for Men, The Mission Shelter for Men and the City of Ottawa.

²⁶ The one person that responded 'no' worked for the City of Ottawa and so was likely not in frequent contact with the homeless.

and social media. At one shelter, a front-line worker estimated that 90 per cent of the women residents use Facebook.

Homeless people use the internet in the same way others do – to email, socialize, share photos, play games or look for information. Those among the immigrant/foreign student group are especially likely to use Google or sites such as <jobs.gc.ca> or <workopolis.ca> to look for a job. Individuals who are highly motivated, including immigrants and foreign students, use the internet for assistance in how to prepare a résumé and for homework in English or other courses; those in a lower-functioning group may use it to look up topics of interest such as ‘mental illness’ or ‘domestic violence.’ Indications are that Facebook is overwhelmingly the social media of choice. Not everyone uses computers, especially older adults, but once they have acquired the skills, Facebook seems to be the next step.²⁷ YouTube is very popular but informants did not mention Twitter.

Computer access and training

According to front-line workers, some, but not many, homeless people go to coffee shops, community centres or the library for internet access. Shelters or drop-in centres are the favoured spot but not all shelters are open during the day, and not all of those that are open offer connected computer access. Others are bending over backwards to provide access to computers and opportunities to become computer literate; for example:

- ✦ The Mission Shelter for Men (where the average resident age is 44) has an 8-computer lab which is open all day in a wireless environment. The Mission offers courses on basic computer skills and also an online learning centre. Currently 27 men are enrolled in school, some in Algonquin’s ACE program which helps them attain a ‘maturity credit’ in one to four months. The men are not allowed to access pornography or Facebook so as not to monopolize limited computer time.
- ✦ Cornerstone and St. Joe’s, two women’s shelters in Ottawa, offer computer classes through iSisters²⁸, a largely volunteer computer training organization. iSisters’ ongoing Basic Computer Training Course includes keyboarding, basic internet surfing, email and Facebook skills.

²⁷ This local observation concurs with a 2009 study of 100 homeless youth in Los Angeles and Denver, reported in a session for the 2009 American Public Health Association. The study found that 92% of the youth reported using technology weekly, and 41% daily. Social networking was used on average 3.8 days per week by members of these two groups who connected primarily with friends (81%), family (62%), employers (21%) and service providers (4%).
<<http://apha.confex.com/apha/137am/webprogram/Paper199105.html>>

²⁸ iSisters’ programs enhance employability skills development, with the goal of initiating long term and high impact positive change for marginalized women.

Participants are also taught to find practical information, do job searches and create CVs with online support. In spring 2011 iSisters will add a component on how to be safe online.

One front-line worker notes that male homeless youth mainly use computers at youth drop-ins, friends' apartments or internet cafés. Many youth will pay to stay up all night at 24-hour internet cafés, some of which offer a flat rate of 10-12 dollars to use a computer from 11:00 p.m. to 7:00 a.m. How do they afford this? "Some get it by panhandling or other means like drug dealing and prostitution. Also, you can get what some call a 'street allowance' – actually a Personal Needs Allowance or PNA," reports the worker. Adults, on the other hand, mainly use the libraries and community centres because adult drop-ins are less likely to provide a connection to the internet.

Benefits of internet and social media use

The number one issue for homeless people is loneliness; many have left behind them a trail of lost or damaged relationships. Facebook is seen to help the homeless regain contact with family members and actually help them rebuild relationships. A youth worker writes: "I frequently use Facebook as a means of staying in touch with youth who are homeless. They are often without a regular phone or address, but will find a way to update their Facebook status. This way I can continue to support them wherever they are at."

Front-line workers and instructors both consider the factors of empowerment and enhanced self-esteem among the most important benefits of computer training courses. An iSisters volunteer notes that that about half of the 30 women with whom she worked in the computer lab were new immigrants or foreign students who were using shelters while they got their feet in Canada. This group is highly motivated to learn and "move on;" as described above, the internet literacy plays a key part in preparing for an independent life in Canadian society. Canadian-born homeless women also participated in the workshops but instilling confidence in this group is a greater challenge.

In the 800-plus page 2009 e-book *Finding Home: Policy Options for Addressing Homelessness in Canada* written by some of Canada's foremost experts on the topic of homelessness, the issue of internet access is not mentioned. Clearly, researchers have overlooked the role of the internet as a source of essential information and autonomy as well as the potential of social media for personal growth as they deal with other challenges facing the homeless.

Barriers to internet and social media use

A number of informants think that the main deterrents to internet use are access, and for older homeless people, lack of skills and self confidence. Shelter computers may only be available at certain times and they are in short supply; public library computers are often fully booked; and internet café access is expensive. Moreover, many of the older homeless have not been in the workforce – or at least, not in positions that require computer skills. The lack of skills is exacerbated by the prevailing sense of low self-esteem in this population.

Both volunteers and front-line workers cite the vulnerability of homeless people vis-à-vis social media as a concern. They consider the homeless to be more vulnerable than most, and Facebook may increase this vulnerability. One frontline youth worker said he does not link his Facebook page from his centre's website and that he screens the people who are added to the centre's Facebook page because "we are serving a vulnerable population and do not want to give the youth we are serving access to potential threats." Another, from a women's shelter, says management is uneasy about the use of Facebook because some residents "are using it to find Johns, locate drugs or arrange meeting places to buy drugs." Informants favour an approach for the homeless that emphasizes training on how to use Facebook safely, "how to not open oneself up to an increased degree of risk."

4.3 Use of Social Media by Organizations Serving the Homeless

Computers and connectivity are expensive and some shelter budgets preclude computer labs and training. Some have only recently obtained computers for their own administrative work. Nevertheless, social media is being used by some shelters, and is being considered by other organizations serving the homeless:

- The person responsible for website management for a community resource centre writes: "As yet we, as an agency, do not have a Facebook page nor do we 'tweet,' however these are tools that remain a topic of discussion on how to reach our clients."
- A coordinator at an Aboriginal friendship centre says they do use a Facebook account to reach youth in general but that there are no plans to use Twitter.
- The Alliance to End Homelessness (ATEH) uses both Facebook and Twitter to communicate with partner organizations. A Carleton University professor who is active locally on homeless issues gave social media workshops last spring to staff at the ATEH and at the Coalition of Community Health Centres.

- ✦ Homeless Nation takes a proactive approach to social media for the homeless. This organization provides Canada's homeless population with computer training, access to the Internet and a collective, online voice through a website and social media. The organizers place computers and outreach workers in shelters and drop-in centres in Victoria, Vancouver, Montreal and St. John's Newfoundland.²⁹ The site has 4904 signed-in users.

Although internet access may not come before food and a bed, there is a growing acknowledgement in the literature that connectivity is a necessity and a right. In a connected society, a lack of computer access and skills further isolates the homeless from mainstream society. Housing and jobs are advertised online; résumés are created and sent online; courses and workshops are offered online; and one's social capital is partly built and supported online. Though there is no overall municipal policy in Ottawa to provide the homeless with computer and internet access, shelter managers clearly recognize the importance of computer literacy and access for inclusion in society.

5. Recent Immigrants

5.1 Recent Immigrants in Ottawa: A Demographic Snapshot

The City of Ottawa hosts more than 30,000 immigrants who have lived in Canada for five years or less.³⁰ Ottawa receives the highest share of university educated immigrants in Canada and between 2003 and 2006 received the second highest number of refugees. The largest source countries for immigrants to Ottawa are China (13.1%), India (5.4%) and the Philippines (4.5%). Almost a quarter of new immigrants are in the 30-40 age-bracket.

Although the percentage of university graduates among immigrants to Ottawa is double that of Canadians, the median employment income of recent immigrants working full-time in 2005 was 34 per cent lower than that of the general population.³¹ The Social Planning Council of Ottawa is especially concerned about the integration of recently immigrated women, who are in the lowest median

²⁹The Vancouver coordinator runs workshops twice a week out of two social services centres in Vancouver's Downtown Eastside. These workshops each get, on average, about 25 participants per week.

³⁰ According to the 2006 Census 29,650 people immigrated to Ottawa between 2001 and 2006. The City of Ottawa report, *Faces of Ottawa: A Snapshot of Immigrant Labour Market Integration Highlights* (2007) predicts a continuing growth of 6000 to 8000 new immigrants a year.

³¹ Social Planning Council of Ottawa (2009) *Immigrants' Economic Integration: Successes and Challenges*.

employment income ranges, and senior immigrants, whose incomes and lack of official language skills make them especially prone to exclusion.

5.2 Use of the Internet and Social Media by Recent Immigrants

Nationwide, a number of studies report higher online surfing and communication rates for recent immigrants than for those born in Canada.³² Recent immigrants, especially Internationally Trained Professionals (ITPs), are a 'tech savvy group;' and they are also more likely than Canadians to participate in social networking and contribute content to wikis and blogs.³³ Among causal factors are their relatively high levels of education,³⁴ the high degree of social media use in source countries and the high motivation of new immigrants to communicate with people from their homeland in an inexpensive way.³⁵ Immigrants' use of the internet for leisure is lower than that of Canadians, but considerably higher for searches relating to jobs or Canadian government information.³⁶

The use of social media by this population has increased greatly since 2008, in the opinion of those assisting immigrants to integrate into the Canadian social scene and labour force. This may be due to the greater number of immigrants coming from urban China and India, where the use of mobile technology and smart phones is considerably higher than it is in Canada.³⁷ Many new immigrants do not use immigrant-serving agencies. Social media initiatives appear to be supporting some of these people, providing an informal network for information, problem solving and mentoring. The activity on multilingual online portals is high and growing. The number of members on LoonLounge, an online social networking immigration site, for instance, expanded from 19,000 to nearly 59,000 between 2008 and 2010. Some of these sites have counsellors giving advice, but most feature new immigrants talking to other new immigrants, or new or would-be immigrants talking to Canadian citizens. Those interviewed on this topic estimate that 95 per cent of recent immigrants use email and 30-40 per cent use Facebook; many fewer user Twitter. LinkedIn is popular with professionals only.

Informants stress that most immigrants, even refugees, have a computer at home. A mobile phone and a computer with a webcam are often among a family's first purchases, even before a

³² Veenhof 2006b; OECD Adult Literacy and Skills Survey, 2006; Canadian Internet Use Survey, 2007.

³³ Zamira, Charles and Fletcher, Fred, (2008) Canada Online! Canadian Internet Project and Forrester Research, 2010. Nevertheless, Zamira & Fletcher note that immigrants to Canada prior to 1997 use ITC's less than those born in Canada.

³⁴ 51% of female and 52% of males immigrating to Canada between 2001 and 2006 had a university education (2006 Census).
³⁵ Schellenberg, G. (2004). Immigrants in Canada's Census, Metropolitan Areas. Ottawa: Statistics Canada. Catalogue, No. 89-613-MIE.

³⁶ Statistics Canada, 2007.

³⁷ See Forrester ladder http://www.forrester.com/empowered/tool_consumer.html

television, so that the family can communicate with those back home or find comfort in the diasporic online network. One service provider notes that those who come from difficult backgrounds are thrilled with the availability and reliability of online communication and anxious to take advantage of it. An informant from a Chinese community centre in Ottawa notes that most working-age, uneducated new Chinese immigrants are online; in fact, the majority of those working even in low-paying restaurant jobs have smartphones, considered an indispensable and 'cool' status symbol. Nevertheless, informants estimate that about 10 per cent of poorly educated immigrants, especially among the family and refugee categories, lack basic computer skills. As a result, this group, already marginalized by low levels of language facility, acculturation and income, is further excluded from mainstream Canadian society.

Benefits of social media use

The benefits of social media use are well documented in the literature (see Literature Review, Appendix C) and in the case studies of this report (see Appendix B-4 and B-5). Email, Skype and other social media allow new immigrants to communicate with family and friends, and get advice anonymously and asynchronously. Social media can cushion the emotional and psychological stress of the initial hardships and culture shock in an alien environment. Informants note that often the only spare time new immigrants have is late at night; in such cases social media websites and government sites such as Working in Canada³⁸ provide a convenient way to search for information, ask questions, compare notes with others and get support.

Barriers to internet and social media use

The main barriers to internet use relate to official language skills, computer access and computer literacy. Service providers report that some immigrants, especially from the refugee or family categories, have poor-to-no knowledge of an official language and no computer skills. The language barrier further prevents them from gaining new computer skills; informants underline the importance of providing computer classes in languages other than English and French.

Women have the greatest difficulty; transportation challenges and family responsibilities often hamper their ability to access computers in the community; in some instances, women are not allowed to use the home computer. For men and women, it may be difficult to find the time to attend computer literacy courses, especially if the courses are some distance away. They may be working shifts, working

³⁸ *Working in Canada* is a website and web tool to assist recent immigrants in their job-seeking efforts. It is jointly managed by HRSDC and Citizenship and Immigration Canada.

at several jobs and/or having to look after children. It appears, however, that a lack of acculturation and language skills does not stop the young. A Catholic Immigration Centre youth coordinator cites a recent example of Bhutanese young people who arrived in June speaking no English and who were up on Facebook in September.

Social networking presents its own challenges. Informants report that some immigrants feel reluctant to “jump in,” especially if they are not yet fluent in English; others have privacy concerns and are reticent to put personal information online. Computer instructors note that women who are refugees or who have suffered trauma, are afraid of Facebook; they think a Facebook profile will enable people to know where they are. Counsellors recommend LinkedIn for professional and other educated immigrants, but networking can be difficult for those who lack Canadian peers to link to. Many employers are now using Twitter to advertise jobs, and so some counsellors are beginning to explore the use of Twitter as well. But Twitter requires more technological savvy and it is time-consuming. Counsellors note that to take the time to use a tool such as Twitter, busy, newly arrived immigrants “have to see the value in it.”³⁹

Computer courses for immigrants

Where time and transportation allow, recent immigrants and refugees who are not computer literate are taking advantage of computer access and skills development opportunities.

- A counsellor at Ottawa’s Immigrant Women’s Services notes that there is always a waiting list for their 8-week computer courses and that the number of graduates has more than tripled since 2008. Typically, course content includes MS Word, Excel, PowerPoint, email, how to make an attachment, how to find information, safe surfing, desktop management and flickr.
- The Library Settlement Partnership program at the Ottawa Public Library offers everything from practical advice to English conversation, children’s and adult homework and computer courses. The organizers get many requests for basic computer training. In November 2010, 777 refugees and immigrants took advantage of this program which is one of ten in the city. There are 11 such programs throughout Ontario.
- The main branch of the Ottawa Public Library offers regular computer courses for adults, for seniors, and for Chinese seniors in Mandarin. There are often waiting lists for these courses.

³⁹ Twitter has also not yet caught on among the general Canadian population in the way that Facebook has. According to the 2010 Ipsos Canadian inter@active Reid Report, though 86% of Canadians with online networking profiles are aware of Twitter, only 10% have a Twitter profile and 5% actively use it.

Counsellors and instructors believe such computer classes reach far beyond the goal of improving computer skills. Participants meet others, come to understand what their kids are doing online and gain personal confidence through the mastery of skills that appear to be common currency in Canadian society. Hence, these skills foster social network building and the beginnings of social capital and inclusion in society.

5.3 Use of Social Media by Organizations Serving Recent Immigrants

In the opinion of one settlement expert, agencies are failing to take the “build your space and bring people to it” concept to online communication and so are falling behind the people they serve. Two factors help account for the gap between the use of social media by new immigrants and the agencies that serve them – funding structures and accountability. Federally funded programs require precise tracking. The question is: How does an agency build in a way of tracking and measuring social media use by their clientele so that the agency can be accountable to funders? Most agencies track everything they can, even telephone conversations. If immigrant-serving organizations cannot count social media ‘reach’ as legitimate, they are less likely to invest resources in it. A consultant notes “With social media, you can track a ton of information, but you don’t necessarily know who is accessing what online. We need to get funders’ heads around different levels of clients.”

Other reasons for the online service lag are: the (according to some, unfounded) fear that social media may make much agency work redundant; and the well-founded concern that certain immigrants cannot be reached through social media. A number of the ‘pro-online’ informants believe that face-to-face counsellor/client interaction is still important. They note that even when immigrants have obtained a lot of information online, they still like to meet with a counsellor to confirm that online information is true. However, they contend that much of what counsellors used to do, such as help with résumés or SIN cards, can now be done online, freeing up counsellors to focus on immigrants’ individual challenges.

A further barrier to social media use by immigrant-serving agencies is generational. As younger staff come into agencies, their expectations for social media use are high. However, most agencies have no policies covering such use and may even ban social media use. Their reticence is not without grounds. There are ethical considerations: Where does one draw the line between supporting clients and befriending them on Facebook, for instance? Guidelines are required and this demands that managers understand the opportunities and the risks of social media use.

Many Ottawa agencies and centres serving immigrants have yet to incorporate social media into their work; for example:

- ✦ An individual working on an HRSDC-funded Careers Focus project for Ottawa Community Immigrant Services Organization (OCISO) recently spoke to five directors from community centres about how they reach out to immigrants. None is using social media.
- ✦ The Coalition of New Canadians for Arts and Culture (CNCAC) communicates with its members through an e-bulletin but does not engage its clientele through social media. The CNCAC has recently added a technology-savvy person to its board and plans to look into how social media can be used for both fundraising and outreach.
- ✦ The Catholic Immigration Centre (CIC),⁴⁰ Ottawa's largest immigrant-serving agency, does not use social media to attract newcomers to its website.⁴¹ It has used Facebook and Twitter to announce special events but without much impact. CIC's Youth Program, on the contrary, makes extensive use of Twitter and Facebook to engage its 150 new arrivals, who respond online in a mix of many languages.

There are nevertheless promising social media initiatives among immigrant-serving groups and agencies. One such project is NewBridger, an internet-based social network, created by Chinese immigrants for Chinese immigrants, whose membership had grown in 2009 to 2,200 people. NewBridger's founders maintain that recent immigrants and new Canadians have an important role to play in assisting newcomers to Canada, and that governments should support such initiatives with financial assistance. (For details see Appendix B-4).

An initiative of the Toronto immigrant-serving agency Skills for Change piloted a closed social network two years ago designed to encourage information-sharing between counsellors and recent professional immigrants and among professional immigrants. The project gained momentum and members through agency promotion and word-of-mouth and developed in its second year into a supportive information- and strategy-sharing community. The co-ordinators maintain that Google and other program analytics make it possible for agencies to assess the effectiveness and reach of many online counselling activities. They believe that online counselling is the way of the future. (For details, see Appendix B-5.)

⁴⁰ A non-denominational immigrant services centre.

⁴¹ The CIC deals with all classes of immigrants, but the economic class tends to use the services of World Skills or one of the special professional services for doctors or lawyers, while the greater portion of CIC's clientele are refugees.

Other informants from this sector agree. Even those not currently using social media in their daily work believe that the use of social media tools will grow, both for service delivery to recent immigrants and for communicating with MPs and policy makers.

6. Seniors

6.1 Seniors in Ottawa: A Demographic Snapshot

Of the 100,870 seniors living in Ottawa, well over half are 65-75 years of age; 35 percent fall into the 75-85 age category; and nearly 10 per cent are aged 95 and older. Over 30 per cent of Ottawa seniors are immigrants, the majority in the 'younger senior' category. Overall, the population of seniors in Ottawa is expected to double in the next 20 years.⁴²

Language is an important factor in discussions about seniors' inclusion. Eighteen per cent of recent senior immigrants (2001-2006) and 16 to 19 per cent of seniors who immigrated between 1991 and 2001, spoke neither English nor French when they arrived, underscoring the likelihood of their exclusion from some social services and programs. According to studies and experts, at least 10 per cent of all Ottawa citizens over 65 are vulnerable and socially isolated.⁴³

6.2 Use of the Internet and Social Media by Seniors

In Canada

Nation-wide, seniors' internet use quadrupled between 2000 and 2007. This growth – the greatest of any age group – was as significant for those 75 and over as it was for the 65-74 age group.⁴⁴ By 2009, about 65 per cent of individuals 65 years and older were using the internet,⁴⁵ email being the top activity (90%) followed by travel information (59%) and road and weather reports (56%). As for social networking, Canada Online! reported in 2008 that as many as one in five people over 60 had

⁴² Social Planning Council of Ottawa (2009). Immigrants' Economic Integration: Successes and Challenges.

⁴³ Social Data Research (2005). Successful Aging Ottawa.

⁴⁴ Canadian Social Trends, Statistics Canada – Catalogue no. 11-008

⁴⁵ Statistics Canada (2009). Internet use by individuals, by selected frequency of use and age.

visited a social media site.⁴⁶ Between 2007 and 2010 the number of Canadian seniors (65+) contributing to content online doubled.⁴⁷

Facebook's website shows that 3.5 per cent of Canada's 16,877,320 Facebook users are 65 years of age and older⁴⁸. This puts Facebook use by Canadian seniors just below that of the U.S. (3.8%) and ahead of New Zealand (3.2%), Australia (2.7%) and the United Kingdom (2.6%). A 2009 survey revealed that eight per cent of Canadian seniors post content and 16 per cent comment in blogs.⁴⁹ All indications are that as the baby boomer generation ages in Canada, the amount and variety of internet uses will increase and extend further into the later stages of life.

In Ottawa

In 2005,⁵⁰ more than half of male seniors and over a third of female seniors used the internet and email. The table below shows a breakdown by age category.

Figure 2 Percentage of Ottawa Seniors Who Use the Internet and Email (2005)

Percent of Ottawa respondents who:	Ages 65-74	Ages 75-84	Ages 85+
Use the Internet for information	54%	30%	12%
Use email to communicate	55%	35%	20%

Information gleaned from the directors of assisted living seniors' residences confirms that most older seniors do not use the internet. Directors of senior drop-in centres see a growth in email use and they also note its benefit for enhancing a senior's social network. Their estimates of seniors' involvement with ICTs, however, do not measure up to the survey statistics:

- ➡ At Ottawa's downtown Good Companions Seniors Centre, about 30 per cent of 1200 registered seniors have provided email addresses. The director is noticing an increase in the number of seniors taking advantage of the centre's four connected computers.
- ➡ The Director General of the Centre de Services Guigues and three of the Centre's counsellors report that few of the 250 drop-in members have availed themselves of the computer courses offered by the Centre.
- ➡ At the Glebe Abbotsford House, about 17 percent of the drop-in crowd receives communiqués from the House by email. The Director of Community Programs notes there is "a fair take-up" in

⁴⁶ Zamaria, Charles, Fletcher, Fred (2008). Canada Online! The Internet, Media and Emerging Technologies: Uses Attitudes, Trends and International Comparisons.

⁴⁷ Veenhof, B. *et al* (2008). How Canadians Use the Internet Affects Social Life and Civic Participation, Connected Seniors, Statistics Canada.

⁴⁸ Retrieved from the internet January 1, 2011 at <http://www.checkfacebook.com/>

⁴⁹ Forrester Research, 2009.

⁵⁰ Social Data Research (2005). Successful Aging Ottawa.

the Centre's offer of one-on-one computer tutorials and that members are requesting to be taught about Facebook.

- ✦ The Program Coordinator for the seniors' program at the Ottawa Chinese Community Service Centre reports that a small percentage of Chinese immigrants over the age of 50 are using social media. Interest in computers is, however, high and "there's always a waiting list" for the seniors' computer classes.

The Ottawa Public Library (OPL) also has a waiting list for its courses offered in English and in Mandarin for seniors. The OPL offers a course for seniors in social media, but the instructor feels that participation is driven by curiosity and that once seniors understand Facebook and Twitter, they appear to feel no compunction to join in.

Benefits of internet and social media by seniors

Informants' opinions on the impact of ICTs on seniors' social capital are consistent with the literature findings. Social media use among the elderly is seen to increase contact with family, ease loneliness, lower rates of depression and strengthen relationships, resulting in overall enhanced well-being. Communication and photo sharing through email and Facebook help to keep social networks strong and supportive. Online social networking is unlikely to result in new acquaintances however; for the very isolated, it is not a pathway to a real life social network.⁵¹

Barriers to internet and social media use by seniors

Feedback as to *which* seniors communicate via the internet echoes other research findings: Internet use is higher among well-off seniors and among those whose families have helped them tackle the technology. Research affirms that poverty, low levels of education, low computer literacy and lack of family support act as barriers to the uptake of online communication by seniors. Concerns about privacy are high among seniors; only 27 per cent are "unconcerned about the issue."⁵² However, Statistics Canada data show that privacy concerns amongst those 65 and older declined by four percentage points between 2005 and 2009, while only dropping half a percentage point in the overall computer-using

⁵¹ Veenhof, B. *et al* (2008). How Canadians' Use of the Internet Affects Social Life and Civic Participation.

⁵² On average, 24 per cent of Canadians are "not at all concerned" about privacy. A 2010 Ipsos-Reid study found that 48% of Canadians have privacy concerns with regard to social networking and 80% have some concerns about online security.

population.⁵³ This suggests that older people are feeling more relaxed about participating and divulging certain information online.

Informants think older seniors do not use computers for a number of reasons: poor health; failing mental faculties; lack of means to invest in a computer and connectivity; and lack of mobility to access connectivity in the community. Other barriers not alluded to by the informants in this study, but strongly identified in social research, are cognitive decline, physical decline (especially eyesight and fine motor function) and anxiety about technology or about learning a new skill. The studies maintain that the latter two can be largely overcome by better designed websites, assistive technology and training geared specially for the elderly (see Literature Review, Appendix D-5.)

The issue of internet interactivity and its impact on the inclusion of seniors in Canadian society appears to be ignored in important research on depression and other issues among the elderly. For instance, the Chief Public Health Officer's 2010 Report on the State of Public Health in Canada, *Growing Older – Adding Years to Life*, does not mention internet communication among the elderly despite the dozens of studies concluding that interactive digital communication has a positive impact on health and general well-being.

6.3 Use of Social Media by Organizations Serving Seniors

None of the five senior residences surveyed for this assignment uses social media to inform and engage their clientele. A scan of senior-serving Canadian websites reveals little evidence of social media connections. Some senior-serving community organizations do have plans to use social media as one of their communications tools, however. The Good Companions Seniors Centre intends to set up a Facebook page in the near future, and the Executive Director of the Council on Ageing, who estimates that 90% of "young seniors" are online, says his organization will soon be redoing its website to make it more interactive. In the face of recent cuts, he is beginning to wonder if social media would be the smarter way to go in delivering services and making Ottawa more "age-friendly." But he questions: "Will it be taken up?"

Common wisdom says that that it will, especially in the medium-to-long term as boomers begin to be seniors in 2011. Two factors will increase the rates of social media use among the coming generation of seniors: the upcoming group will be far more computer literate than its predecessor; and the sheer number of boomers will swell the senior ranks and boost the rate of social media use as this

⁵³ Statistics Canada (2010) Internet use by individuals, by Internet privacy concern and age.

mode of communication evolves. In the short- to medium-term, however, policies must continue to take into account older seniors who are not online.

7. Conclusion

This study has focussed on the use of social media by populations considered to be vulnerable to exclusion from mainstream Canadian society – namely Aboriginal peoples, people with disabilities, the homeless, recent immigrants and seniors. The study has shown that within these target groups, many people are using the internet and social media to good advantage. Others have had less opportunity to develop the social capital that could enable them to benefit from the social, employment, educational and economic opportunities available in their communities and it is these same people who are also excluded from the online world.

As there are significant differences *within* the ranks of each group, it is difficult to generalize across them. There are, however, a number of findings that are consistent across all or most of the populations under study.

First, the criteria that appear to separate the digital ‘haves’ from the ‘have nots’ are poverty, low levels of education and broadband.

Second, many agencies and institutions have fallen behind the people they serve in their modes of communication. The majority of advocacy and service organizations serving vulnerable populations are overstretched and underfunded. Most are only vaguely aware that social media presents an opportunity to reach more people, more often and to bring new dynamics of group sharing and collaboration into an organization’s outreach and awareness strategies. Directors of service and advocacy organizations, many of whom are over 50 years of age, often do not have the knowledge or time to assess how their organization might be best served by social media, to create protocols for social media use, and to begin to experiment with the new media forms. Nor do they have the funds to hire an expert to do the job for them.

Third, social media use is being driven by the ‘cool’ factor, particularly amongst the young. Aboriginal, immigrant and homeless youth are defying income/education/connectivity predictors and finding a way to participate in social media. Cell phone and texting capabilities and a Facebook profile are seen as status symbols. To be without them is to be excluded from one’s society. Among some groups the iPhone has become the required symbol.

Fourth, findings from this study, strongly backed by research literature, indicate that predictions, so prevalent at the turn of the century, that immersion in the online world could result in real-life isolation, have been almost entirely put to rest.⁵⁴ All indications are that participation in social media enhances existing relationships, opens doors to information, diminishes feelings of isolation and, if anything, fosters community engagement.

Finally, the issue of internet interactivity and its impact on inclusiveness in society appears to be largely ignored in important Canadian research and publications focusing on vulnerable populations. The role of social media among vulnerable groups in Canada remains largely unexplored.

This study has revealed that empirical evidence of the impact of social media on vulnerable populations is scant; and that the social media practices of community organizations and governments have yet to be formally evaluated. The study underscores the dearth of Canadian academic research and comparable data in this field.

The study suggests that government could exert an influence towards levelling the playing field for all Canadians vis à vis the internet and social media. Government should consider the following action:

- Encourage researchers to turn their attention to in depth qualitative and quantitative research into the impact of the current communications revolution on the lives and social capital of each of the vulnerable populations so as to inform government policies and programs for inclusion.
- Accelerate the effective and efficient use of social media by advocacy and service organizations by providing incentives for organizations to attract the required expertise in social media, and by putting into place new funding frameworks for measuring organizational reach and effectiveness using social media.
- Support organizations in a nation-wide proactive campaign to make computer access, computer training and internet literacy available to all citizens.

If steps are not taken, exclusion from interactive digital technology will further compound the inequalities that the most vulnerable among vulnerable populations already experience. Of particular urgency is the issue of providing adequate broadband to everyone in Canada, including off- and on-reserve First Nations peoples in remote northern areas, half of whom cannot access the internet from their home communities.

⁵⁴ Veenhof, B., Wellman, B., Quell, C., and Hogan, B., (2008). How Canadians' Use of the Internet Affects Social Life and Civic Participation. This one of many studies that dismisses the notion of internet use working against off-line social engagement.

Ten years ago, there were concerns about the social ramifications of the 'digital divide.' Today there is no doubt that those who cannot access and judiciously use the information and communication potential of the internet are excluded from the fast-paced, web-based workings of mainstream Canadian society.

Appendices

Appendix A—Case Studies – Vulnerable Populations

Appendix B—Use of Social Media by Federal, Provincial and Municipal
Governments

Appendix C—Literature Review

Appendix A

Case Studies – Organizations Serving Vulnerable Populations

1. National Aboriginal Health Organization, Ottawa
2. Tyze Personal Networks, Vancouver
3. Virtual Training Pilot Project (2009-2011), Enhanced Employment Services, City of Ottawa
4. Newbridger, Toronto
5. Skills for Change

Appendix A-1

National Aboriginal Health Organization (NAHO)

The Native Aboriginal Health Organization (NAHO)⁵⁵ is an Ottawa-based organization funded by the federal government whose community consists predominantly of women health care providers, especially front-line workers. The organization is also mandated to reach young people and interest them in health careers.

The NAHO web site has developed a good social media presence, with links to Facebook, Twitter, YouTube, Blogger and SlideShare. Its 92 YouTube videos have had over 18,000 views while its 76 presentations have had more than 28,000 views. The organization's 600 Twitter followers range from individuals to politicians, journalists and Aboriginal organizations.

NAHO's Health News blog, which has over 500 followers, embeds links to items of interest from the internet, using bit.li⁵⁶ to shorten URLs so that they can be quickly shared and re-tweeted on Twitter. A further advantage of using bit.li is that it tracks the number of users and where they come from. One of NAHO's youth programs is The Honour Life Network (HLN) project, aimed at preventing suicide amongst the at-risk youth population. LHN hosts a number of interactive blogs for youth and youth workers. When the program was first introduced, NAHO gave participants free rein on their blogs. Now it supervises the blogs on its site, and removes any irrelevant or inappropriate comments. NAHO has held video contests for youth with prizes for the winners. The winning videos are posted on YouTube, which is very popular in the North and a big part of NAHO's youth strategy.

Another of NAHO's programs is the National Aboriginal Role Model Program (NARMP). The NARMP has a blog and hosts a contest each year, choosing about 12 contestants from 80-100 applicants. When role models are chosen, the blog will link to community newspaper profiles of the winners and to the winners' Facebook pages. One of the role models, a singer, has started her own blog which now boasts over 4800 "friends."

Social media only works if it is part of a larger communications strategy. NAHO advises: "If you're going to use social media you have to stay on top of things, build in flexibility and don't plan too much. By the time you've completed your plans and they've been approved at all levels – your plan may be obsolete." NAHO believes that an organization has to provide training and professional guidelines for the use of social media, and then trust the people in charge of it. Employees, in turn, must behave responsibly and professionally online. The coordinators at NAHO have both personal and professional Facebook accounts and they are careful not to mix the two. In turn, they train their youth role models and others to think about their virtual footprints.

⁵⁵ NAHO incorporates Inuit Tuttarvingat, the Métis Centre and the First Nations Centre, each of which has its own web site and own social media venues.

⁵⁶ bit.li is a web site where URLs can be shortened so that messages with links fit easily into Twitter's 140 character limit.

Appendix A-2

Tyze Personal Networks

Tyze Personal Networks (<<http://www.tyze.com>>) is a Vancouver-based organization that provides social networking software for caregivers of the disabled as well as shut-ins with disabilities or illnesses. The software enables these users to communicate with others in a safe, private online social networking environment. Its purpose is to mitigate the isolation that often accompanies caregiving and disability.

The site is based on the premise that a whole social network of family, friends and neighbours is involved in care. When members sign on with Tyze, a 'connector' helps them decide who they would like to include in their network, for social, practical or professional support. The advantage of Tyze over Facebook is ease of use, the privacy of a secured online environment and the availability of tailored tools such as special calendars for appointment scheduling. Tyze works with 25-30 family care organizations and has around 1,500 users. The Executive Director believes that the internet can change the lives of the disabled. She is also convinced that, in the face of a huge human resources 'crunch', the health system will have to change its one-way mode of communication and collaborate with those in the community, who provide 85 per cent of care.

Appendix A-3

Virtual Training Pilot Project (2009-2011), Enhanced Employment Services, City of Ottawa

Working with the Academy of Remote Employment, the City of Ottawa's Virtual Training Pilot Project teaches disabled people to work from home in areas ideally suited to an online environment. Jobs include data input, editing, translation, transcription of digital tapes and taking in-bound telephone calls for sales orders or for appointment scheduling. The program provides at-home software to the participants who log in from a distance for "real time" classes. The program's goal is to train people in high-demand areas and get them working, initially in unpaid placements. Employers and employees rate each other online; and Pay Pal acts as the payroll intermediary to protect both sides from shady dealings.

When the first course ended, participants wanted to keep in touch through social networking. The manager sees a huge role for social media in helping to keep the disabled connected with others in the working world. She notes that working from home and being able to communicate with others is a "huge boost to self-esteem." Following the first course, many participants continued working online and a few actually went out and got jobs in the off-line workplace.

The Virtual Training program is one of three Ontario Disability Support Program projects but the only one that has had such remarkable success.⁵⁷ The upcoming information sessions for future intake are full, the project has waiting lists and organizers have had to stop referrals from Ontario Works. The manager says of online work for the disabled: “The field is here to stay”.

Appendix A-4

Newbridger, Toronto

The Role of Internet-based Social Support Networks in Immigrant Settlement: A CERIS seminar slide presentation at the Ontario Metropolis Centre, Toronto⁵⁸

This online PowerPoint presentation documents the findings of a 2009 survey on NewBridger, an internet-based social network which was created by Chinese immigrants for Chinese immigrants in 2005 and has grown to a membership of 2,200 people. The researchers asked what terms members would use to describe the NewBridger site, to find out whether the network increased immigrants’ social capital. Ninety-nine per cent considered it ‘convenient’ and ‘friendly’; and 91 per cent said it provided useful information’. According to the respondents, the ways in which the site was most helpful was in ‘friendship’; ‘information’; and ‘belonging.’ The presenters note that social support increases as the size of an online social network grows, and that social networks have the added advantage of anonymity and asynchrony, which suits the busy life of new immigrants trying to stay afloat. The presenters maintain that immigrants are often seen as those who have needs to be met at the cost of taxpayers; their potential role as a player in providing settlement service is rarely examined. The presenters point out that many other immigrant groups could set up such a site without a large financial investment and that governments should recognize the contributions of such informal social support networks and provide financial assistance.

Appendix A-5

Skills for Change. Toronto

In the last few years Skills for Change has been working exclusively with recent professional immigrants, a very “tech savvy” group, fluent in most aspects of online information retrieval and social media communication. In its second year, the discussion forum began to gain participants and momentum

⁵⁷ The other two involved matching employers with disabled employees and providing financial incentives to potential employers of the disabled.

⁵⁸ By Julie Ziaoping Lin, Ryerson University; Shuguang Wang, Professor of Geography, Ryerson University; James Wang, Moderator of Newbridger. Ceris Seminar Presentation, January 15, 2010.
<http://ceris.metropolis.net/events/seminars/2010/20100115WangLinWangSemPres.pdf>

Two years ago, Skills for Change piloted a closed social network using Ning,⁵⁹ reserved exclusively for newcomer professional clients. They hosted a discussion area for everyone as well as subgroups for various professions and posted videos on such topics as interviewing skills or specific professions in Canada. In the first year, it was a moderate success with about 30 percent of sign-ups actively engaged and many listeners or ‘proawlers.’ Promotion was through flyers to agencies and by word of mouth. Slowly but steadily this online network grew to about 250 participants who were mostly between their mid-thirties and early forties. Each participant had to fill in a Newcomer Profile at Work (NPW) form and discussions were steered towards work-life issues. Participants were not resistant to giving out personal information because it was a closed system; and they were not asked for addresses or telephone numbers. In an atmosphere of support and “all being in it together,” participants shared challenges and success stories. Some subsequently sought out local interest groups through <meetup.com>⁶⁰ to extend their social networking off-line.

Skills for Change had plans to extend online service delivery to other categories of immigrants but it has recently joined the Employment Ontario Program and with a broader client base the organization faces a lower level of internet knowledge and comfort. Nevertheless, the Program Assistant says that Skills for Change is heading towards online service delivery. He contends that on-line service provision is, if anything, more accountable than other approaches. The back-end analytics capabilities of Google and other programs means that service providers can know who uses the site, how many people view posted videos, how many participate or “lurk” in which discussion groups and what topics are of most interest.

⁵⁹ Ning allows users to create their own social network platform.

⁶⁰ A website in which participants plug in their postal code which triggers an array of local professional, recreational or common-interest groups to join.

Appendix B

Use of Social Media by Federal, Provincial and Municipal Governments

1. Use of Social Media - Government of Canada
2. Use of Social Media - Government of Ontario
3. Use of Social Media - City of Ottawa

1. Use of Social Media - Government of Canada

In the last few years the federal government has begun to experiment with social media as a tool for communication and community engagement. As of November 2010, four blogs, 33 Facebook pages, and 74 Twitter accounts were being managed by departments, institutes, commissions and agencies of the federal government. Fifty-three of these also posted videos on YouTube.⁶¹

In 2008 the government set up an internal pilot project to explore and develop the government's use of social media. Situated in the Communications Community Office (CCO)⁶², the project involved over 150 communications officers representing 36 departments and agencies. This group established 'GCPEDIA,' an internal wiki platform for internal knowledge sharing and collaboration. Each member of the CCO is part of a larger community of practice and the wiki is a focal point for a great deal of support and cooperation. It now has over 20,000 active users within government; as well, an additional 40,000 to 60,000 civil servants use it to reference documents. The Government of Canada is using GCPEDIA as a testing ground for social media use and to further internal and horizontal communication. The wiki is perceived as an easier challenge than implementing social media externally, as it presents much less of an information-management risk.

At the present time, the degree of experimentation and use of social media across and also within government departments is uneven. Most departments use consultants to assist in strategizing and implementing social media initiatives, and are gradually developing policy for social media use. Though departments are tracking users through web analytics, to date none has conducted a formal survey on the impact and effectiveness of a social media campaign. CCO's Social Media Measurement Task Force is working to create a framework that government institutions can use to evaluate their social media initiatives.⁶³

Benefits and Challenges of Government 2.0

Social media allows governments to tailor information for an age group or other sector of society, and to regionalize government messaging. It provides effective tools for bringing citizens to well-crafted, official "Web 1.0" sources of information and keeps government abreast of public opinion. The main

⁶¹ For a breakdown of this social media activity, see http://www.gcpeia.gc.ca/wiki/GC_Web_2.0_in_Action_-_Web_2.0_

⁶² Established in 2002, the Communications Community Office (CCO) serves the communications community within the federal government. The CCO works with 37 departments and central agencies to identify and share existing tools and practices that meet the needs of the communications community in the Information Services (IS) category.

⁶³ http://www.gcpeia.gc.ca/wiki/Best_Practices_and_Training/

challenges for government are human resources, procedures, risk and security. Facebook and Twitter may be free, but employees' time is not. Being "part of the conversation" online requires time to listen, interact, respond, motivate, monitor areas of interest, influence conversations and provide timely and often corrective interventions on government and other sites. Managers feel the effective implementation of social media requires trained staff and clear guidelines. Some say that government employees will mostly self-train, but that the internal culture change required for government to work more openly is a greater challenge. Procedures is a major issue; there is a tension between the traditional controlled government culture and the flexible, responsive, 'just in time' social media culture. It is important to have knowledgeable civil servants online, but the procedure of having program messages vetted by communications departments is cumbersome and can bog down social media communication. The jury is out on this, but the majority of informants say that communications will continue to be the gatekeepers. They also acknowledge that program experts must become more involved, and responsibility for social media must be more widely distributed.

To date the federal government has made little use of social media designed specifically to engage vulnerable populations, other than to provide website design features and assistive technologies for the disabled, and to use social media within the successful *Working in Canada* portal for new immigrants. This will likely change when various departments have a better handle on how they can best participate in, and capitalize on, the social media online culture.

Informants note a number of successful government Web 2.0 initiatives, as did the author of a new report released by Transport Canada in December 2010.⁶⁴ Included in these examples are the following websites: the Public Health Agency of Canada during the H1N1 flu pandemic; Veterans' Affairs' 'Canada Remembers' awareness campaign; Public Safety Canada's Emergency Preparedness Week; HRSDC's Working in Canada site, especially for its YouTube presence; and National Defence's YouTube Canadian Army News. Several non-departmental initiatives were also noted: the Privacy Commission for its blog and Twitter activity⁶⁵; and Library and Archives Canada for its use of Flickr to post archival pictures. This report profiles the efforts of two departments below; descriptions of all these initiatives and others, including 'lessons learned' can be found on GCPEDIA and in the Transport Canada report.⁶⁶

⁶⁴ Web 2.0 Uses in the Federal Government, a 55-page environmental scan of the government's use of Web 2.0 applications. The report, commissioned by the Corporate Secretariat of Transport Canada, includes: a look at the concerns arising from government use of social media including policy requirements and security issues: some best practices within the federal government, and key questions that should be asked before a department joins the Web 2.0 world.

⁶⁵ Cited by the report and most informants

⁶⁶ <http://www.gcpeedia.gc.ca/wiki/Transport_Canada/Corporate_Secretariat/Web_2.0_Uses_in_the_Federal_Government>.

CASE STUDIES

A) Public Health Agency of Canada

Within the Public Health Agency of Canada (PHAC), social media “took off” during the H1N1 flu epidemic in the winter of 2009. With rumours abounding, the Agency felt it important to listen to what Canadians were saying: correct misleading information and direct individuals to up-to-date, accurate PHAC website information. The Agency set up a Facebook page and Twitter and YouTube accounts and provided a widget for receiving RSS feeds. During the H1N1 period, over 55,000 people were referred from the Agency’s Facebook page to its website. Web analytics provided useful tracking information but the Agency’s Senior Communications Executive stresses that numbers are less important than ‘the ripple effect’ of social media’s reach. PHAC’s Facebook followers were 70 per cent women, mostly 25-40 years of age with a post-secondary education. The Communications Executive notes that if you reach these women, whom he refers to as “the chief public health officers of the household,” the impact is huge. In its upcoming campaign on obesity aimed at young people, PHAC plans to draw Canadians to its online information through Twitter. In preparation for the mobile revolution, the department is developing a strategy to make some of PHAC’s more popular pages mobile friendly. It is also setting up social media monitoring contracts using monitoring software for which the department supplies the parameters. Future strategies will require the involvement of the whole agency on the premise that program people should do the monitoring and subsequently draw items and issues to the attention of communications personnel.

B) Veterans Affairs Canada

Veterans’ Affairs Canada (VAC) has used Facebook extensively for the last two years as the focal point of its ‘Canada Remembers’ campaign. VAC Communications felt ‘Canada Remembers’ was an excellent fit for a social media campaign – a low-risk topic, with a specific time focus, aimed at the general public. VAC’s budget was limited; Facebook was “free;” and it had matured to a point where it was connecting with a wide spectrum of the Canadian population. The time frame also suited a social media campaign – 8 weeks to build momentum towards November 11th. Moreover, this was an ideal two-way project, demanding the active collaboration of Canadians. VAC Communications put the challenge out – How will you remember?—and took the approach of facilitating rather than orchestrating the public’s participation. Communications used traditional advertising campaign items such as posters, a TV vignette and an e-mail blast to signpost the public to the well-established platforms of Facebook and Twitter. Only 13 per cent of the project’s overall media buy went to online activity, but in 2009 their YouTube videos had over 50,000 views, and between November and April Facebook fans grew from over 17,000 to 183,525. By November 2010 the number of fans had risen to 450,000 and an iPhone application for accessing the sites rated in the top-25 for social networking at the Apple Store. PCO guidelines recommend one Facebook account per department, but VAC managers feel it would be a mistake to mix the functional side of what the department does (veterans services) with the annual remembrance campaign.

2. Use of Social Media - Government of Ontario

The Government of Ontario appears to use social media less than the federal government. A few Ontario Ministry websites have social media links, namely: the Ministry of Aboriginal Affairs and the Ministry of Children and Youth and in 2009 the government launched Careers Island, an award-winning recruitment tool⁶⁷ constructed to showcase the range of jobs available in the Ontario Public Service through Second Life programming. Early in 2010, the Ontario Provincial Police Force joined the social media movement. The Ontario Ministry of Community and Social Services makes extensive use of streamed, captioned and signed video and in 2010 launched Access On, a YouTube initiative of the Outreach and Compliance Branch⁶⁸ to promote the Ontario Accessibility Directorate's new Customer Service standards to Ontario businesses. Recently, the Directorate conducted a survey of 300 small business people. The findings revealed that half of Ontario's small business people would prefer to get information in a Webinar than in a live workshop.

3. Use of Social Media – Municipality of Ottawa

City of Ottawa

The City of Ottawa does not yet have an overarching plan to use social media, but there is a lot of interest. Several informants predicted that in two years' time the City will have added social media to its communications and community engagement strategies. The Community and Social Services Centres for instance, plan to use Facebook for their Young Mums' program. As well, the City has recently completed the first phase of a very successful training program designed to allow people with disabilities to work from home online. (See Appendix B-3 for details). Currently, most activity appears to be concentrated in the department of public health which got involved in social media during the 2009 H1N1 epidemic. Public Health has 4000 Twitter followers and in October the department added a Facebook component. One informant said that staff is beginning to 'come on board' with regard to using social media but that the "rapid casual" nature of social media is at odds with how the City is used to doing business. Another informant agreed that they were moving in the direction of social media but that they had to work out

⁶⁷<http://slurl.com/secondlife/OPS%20Careers/122/129/27/?img=http%3A//modernepromotions.com/OPS/DiscoverOPSad512d.jpg&title=Teleport%20to%20OPS%20Careers>

⁶⁸ The Director of Policy Research and Analysis for the Ontario Ministry of Community and Social Services knew of no plans in the ministry to incorporate social media into the ministry's overall communication plan. He says that his ministry is still piloting an Online Application program for Ontario Disability Support Program and Social Assistance. A survey found that 95% of those who availed themselves of the online program would do it again.

security, budget, and accessibility issues, as well as internal training and awareness. (For a case study of a City of Ottawa virtual project, see Appendix B-3.)

Ottawa Public Library

Members of all the vulnerable populations studied in this research use the Ottawa Public Library (OPL), but the OPL has no statistics and no social media strategy to draw them into the library. The OPL hosts a popular blog, but its Facebook and Twitter activity is minimal. The library is nevertheless an important locale for computer access – all 33 branches offer up to 2 hours of computer time per person per day. Librarians say that among the regular clientele there are always some homeless individuals, and usually new immigrants of the economic category who may bring their own computers to the wireless environment or consult with the Business Librarian. As mentioned in section 5.2 of the report, the OPL offers computer courses for seniors, some of which are in the Mandarin language. The OPL also participates in the provincial Library Settlement Partnership (LSP), a three-way partnership between the OPL, Citizenship and Immigration Canada and various settlement agencies in Ottawa. The LSP offers referral and other programs to help immigrants adjust to life in Canada. One of the opportunities offered is a basic computer course.

Appendix C

Literature Review

1. Literature Review –The Internet, Social Media and Aboriginal Peoples
2. Literature Review – The Internet, Social Media and People with Disabilities
3. Literature Review – The Internet, Social Media and Homeless People
4. Literature Review – The Internet, Social Media and Recent Immigrants
5. Literature Review – The Internet, Social Media and Seniors

Appendix C-1

1. Bibliography: The Internet, Social Media and Aboriginal Peoples

Alexander, C. J., Daborn, G., Houston, J., Tootoo, V. (2009). "Inuit Cyberspace: The Struggle for Access for Inuit Qaujimajatuqangit." *Journal of Canadian Studies*, Vol. 43(2).

Bell, B., Budka, P., & Fiser, A. (2007). "We Were On the Outside Looking In: MyKnet.org: A First Nations Online Social Network in Northern Ontario." Paper presented at the 5th CRACIN Workshop, Concordia University, Montreal, Canada, June 20-22 2007.

Budka, P., Bell, B., & Fiser, A. (2009). "MyKnet.org: How Northern Ontario's First Nation communities made themselves at home on the World Wide Web." *The Journal of Community Informatics*, 5(2), Online: <http://ci-journal.net/index.php/ciej/article/view/568/450>

Budka, P. February 2008. Report on the MyKnet.org Online Survey.

Crompton, S, (2004). "Off-reserve Aboriginal Internet Users." Canadian Social Trends, Statistics Canada – No. 11-008.

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Pasch, T. J. (2008). "Inuktitut Online in Nunavik: Mixed-Methods Web-Based Strategies for Preserving Aboriginal and Minority Languages." Doctoral dissertation, University of Washington, Seattle. Proquest Dissertations. URL: <http://proquest.umi.com/pqdlink?did=1674453291&Fmt=2&clientId=79356&RQT=309&VName=PQD>

Perley, S. (2008). "Representation and Participation of First Nations Women in Online Videos." *The Journal of Community Informatics*, Vol.5(2).

1. Literature Review – The Internet, Social Media and Aboriginal Peoples

There appears to be only one academic research conducted since 2008 that specifically examines the use of social media (e.g., Facebook, Twitter, blogging, YouTube) by Inuit, First Nations and Métis peoples and the impact this may be having on social inclusion.⁶⁹ This is surprising, in light of consistent anecdotal reports of high social media use among young and some middle-aged Aboriginals. No current national survey data are available on this topic. The latest Statistics Canada report⁷⁰ on Aboriginal use of the internet was released in 2004 and based on information gathered between 2000 and 2002.⁷¹

The Statistics Canada study (Compton, 2004) nevertheless offers insights into the relationship between ICTs and social inclusion for Aboriginal peoples. Though barriers to ICT uptake – cost and lack of access, skills and training -- are relevant to this population, Compton noted that off-reserve Aboriginals were just as likely to be internet users as non-Aboriginal Canadians. She also noted that Aboriginal users, compared to non-users, were better educated, had higher levels of income and education and lived in urban areas. Compton sees a ‘second digital divide’ – not between Aboriginals and non-Aboriginals but between urban Aboriginals and those living in rural and northern areas. She pointed to the lack of broadband and ICT accessibility in rural areas, an issue that continues to challenge many remote and northern Aboriginal communities today.

The papers included in this review describe the impact of ICT projects on Aboriginal communities. Several of these projects were early precursors of social media, and continue to serve this function. Others examine the impact of ICTs on social capital.

Two papers (Budka et al, 2009 and Bell et al, 2007) relate the remarkable story of MyK-Net.org, an online social environment described in this literature as a ‘computerization movement’ that began in 1996 in north-western Ontario. This project was grassroots and community-driven. It was led by local leaders intent on adapting technology to community needs. The project was, and continues to be, oriented towards public good, such as telemedicine and e-learning, and towards personal social networking. Since the late 90s and using dial-up, MyK-Net.org users created and linked personal profiles on their own web pages and shared profiles, messages, jokes and stories.

⁶⁹ A research paper about how Fort Severn First Nation community members are using ICT, including Facebook and social media, is in preparation by the VideoCom research project, and is expected to be published in 2011 and available on the publication section of the VideoCom project website <http://videocom.firstnation.ca>

⁷⁰ Off-reserve Aboriginal Internet Users by Susan Crompton, Statistics Canada, Winter 2004.

⁷¹ Crompton, Susan (2004), Off-reserve Aboriginal Internet Users. Canadian Social Trends, Statistics Canada – No. 11-008.

Bell *et al* note that while MyK-Net.org does not visually resemble social networking sites, it is nevertheless a network of interlinked homepages and is similar in some functions and uses to social networking sites.⁷² Users post photos, create and update blogs and maintain active links to a large number of other personal sites. Locally controlled and developed, the sites are used to maintain ties in the community and retain links with those who have left. The authors highlight the great distances that separate families and contend MyK-Net.org not only strengthens familial ties and other interpersonal connections but also facilitates inter-community communication and civic action.

In 2007, a researcher (Budka, 2008) conducted a survey of more than a thousand MyK-Net users, which revealed that subscribers considered MyKNet.org to be their most important communication medium, over telephone, television and community radio. Although 73.5 per cent of respondents had an email address with another provider and 47 per cent had a profile on Bebo, Pizco, MySpace or Facebook, more than 92 per cent had retained their own MyKnet.org homepage which they updated once to several times a day (36.6%) or several times a week (21.3%). Nearly three quarters of respondents did this from a home computer. More than 46 per cent of users were between 15 and 25 years of age and 17 per cent were over 35. The study illustrates the proclivity of some First Nations people for this kind of connectivity, bandwidth capacity notwithstanding.

Two other recent studies by the same authors (Mingone and Henley, 2009) examine the impact of ICTs in Aboriginal communities. In one, the authors explore the educational, economic development, health, cultural continuity, governance and socializing opportunities supported by technology networks in five Aboriginal communities situated from British Columbia to Nunavut. They also capture the drawbacks – the marginalization of those who cannot afford equipment and service, and the inability of small communities to attract infrastructure providers. The authors offer a range of solutions, underscoring connectivity as a basic infrastructure, and technical and skills training in IT as essential for bridging the digital divide. In the second study, drawing from experiences in the same communities, the authors use the notion of social capital in assessing the impact of ICTs and conclude that ICTs are a powerful catalyst for bonding within group relations, for bridging through inter-community ties and for linking with formal institutions. Among other factors they mention: the role of ICTs in preserving language, culture and values; the human investment in the training of in-community ICT providers; the facilitation of collective action previously impossible in remote communities; and the involvement of community members in developing, implementing and sustaining ICT networks. The authors maintain

⁷² The authors note that this is in an area of approximately 45,000 First Nations peoples in 49 First Nations communities spread over an area the size of France. In 2007 there were 25,000 registered users.

that ICT infrastructure is a right and that rural and remote communities lacking proper bandwidth are precisely the communities that stand to benefit most from ICT infrastructure.

Only one research initiative (Pasch, 2008) was uncovered that touches directly on Aboriginal use of what is referred to today as social media – a doctoral dissertation that explores the impact of social media on indigenous language in the northern Quebec community of Inukjuaq. The thesis investigates Inuit language preferences on the English-interface social networking site Bebo, and examines the divergent attitudes of youth and elders toward the linguistic consequences of such a powerful online influence. The paper proposes a series of digital recommendations for empowering the Inuktitut language, including blending social networks with embedded, culturally-specific technological solutions such as Inuktitut dictionaries and translation plug-ins.

Another study (Alexander et al, 2009) examines the relationship between Internet-based new media technologies – a community Inuktitut/English website called *Nanisiniq Inuit Qaujimajatuqangit* -- and the preservation and advancement of Inuit knowledge. The authors assert that giving voice to the Inuit via the internet resulted in new patterns of engagement between elders and youth and among communities.

And lastly, a recent study (Perley, 2008) provides a critical analysis of the representation and participation of First Nations women in online videos. The author analyzes three videos created by Aboriginal women that have been streamed on YouTube and two First Nation websites. Perley notes that as it becomes increasingly easy to create and upload videos, there are new opportunities for First Nation women to represent their perspectives, to challenge mainstream representations of First Nations peoples and issues, and to promote social change.

This literature review, along with anecdotal research, paints a picture of Aboriginal people (especially the young who comprise half the population) as having an appetite and aptitude for social media. There is a clear need for research that examines the impact of, and potential for, today's social media tools with respect to Aboriginal identity, social and familial relationships, health and lifestyle issues, cultural preservation, and self-determination, as well as their social, economic and political inclusion in Canadian society.

Appendix C-2

2. Bibliography – The Internet, Social Media and People with Disabilities

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2. Literature Review – The Internet, Social Media and People with Disabilities

Studies on disability, ICTs and the ‘digital divide’ were abundant in the nineties and in the early part of the last decade. However, the trend appears to have passed. Research published in this area in the last five years is scant and that which is available does not address the impact of the new generation of social networking tools or the latest new assistive technologies on the lives of the disabled.⁷³ For this reason the researcher has opted to include some articles published earlier than 2008 and to include studies on the involvement of disabled peoples in email and earlier generations of online communities. The reader should bear in mind, however, that in the world of digital communication, five or six years is a long time.

Interactive internet-based communication has the potential to remove many of the barriers that disabled people face -- barriers to education, employment, health information, independent living, travel, entertainment and social interaction. The study findings in this review suggest that the internet significantly reduces social barriers in the physical and social environment for disabled people (Guo *et al* 2005).

ICTs are viewed as tools that allow people with disabilities to escape the isolation and stigma that sometimes accompany their disabilities and to participate in the social and civic life of their society (Dobranski & Hargittai 2006, Jaeger & Xie 2009, Guo *et al*). ICTs have been proven to help disabled people build support networks and engage in discussion in asynchronous online environments that permit slower response times (Jaeger and Xie). ICTs have also been shown to improve health outcomes and health-related quality of life for disabled people who use the internet to obtain more and better information (Dobranski & Hargittai). Seymour and Lupton (2004) find that self-help groups are the preferred online destination of people with disabilities, allowing them to interact with others to a degree that may not be possible off-line. Another positive outcome is that computers and related competencies attract social value and enhance self esteem (Seymour and MacKinnon, 2004). In a study conducted in China, Guo *et al* found that 54 per cent of respondents felt that there was less discrimination towards disabled people on the Web, while 35 per cent were uncertain and only 10.6 per cent disagreed. These researchers also found that the use of the internet appears to influence friendship structures and that the more frequently disabled people use the internet, the more likely it is that they will develop real friendships with non-disabled individuals.

⁷³ The 2005 version of “How People with Disabilities Use the Web” published online by the Web Accessibility (WAI) initiative and World Wide Web Consortium (W3C) is presently being updated. A new draft is online at <http://www.w3.org/WAI/EO/Drafts/PWD-Use-Web/2009/> with instructions to neither use nor quote until the final report is posted.

People with disabilities tend to focus their time online toward disability-related activities. This suggests that people who are socially inactive or dissatisfied with their social interaction in the real world tend to use the internet more frequently, and hence benefit more from the internet (Seymour & MacKinnon). Guo *et al* also note that people with low or unsatisfactory interpersonal supports tend to seek compensatory benefits online.

Two research teams look at ICTs from the viewpoint of disabled users to determine what works, and what makes people feel uncomfortable. In a study of internet use by six people with disabilities, Seymour and MacKinnon (2004) find that for some, computer competence brings status. The authors note, however, that computers and connectivity also pose challenges and frustrations. Despite the downsides, the subjects in their study were “unequivocal” that the computer is critically important to their lives. The authors maintain, however, that the benefits of ICTS are unevenly distributed and they cite Sapey (2000) in his observation that the ICTs have the economic power to perpetuate or to create more profound forms of disablement. In the second study, Third and Richardson (2009) describe the engagement of disabled and chronically ill young people, aged 10 -21 in a secure environment called Livewires, which was set up to help members overcome their social isolation. The online community that developed became crucially important to members’ lives and to their sense of well being. The researchers note that participants defined online safety as freedom from prejudice and marginalisation on the basis of their disability or illness.

In connection with the above project, Seymour and Lupton (2004) leave the reader with a warning. Though they concede that “talking with people who understand” provides disabled people with much needed comfort and support, these authors maintain that this may serve to divert attention from the struggle that must take place if change is to occur. The authors worry that providing a comfortable space to “talk among ourselves” isolates disability issues to the special world of disability, a world removed from issues of significance in the public domain. Seymour and MacKinnon maintain that disabled people can take control of the forces which construct disablement in the information age but they must engage with technology, and fight.

Researchers appear to be in agreement that the ‘disability divide’ has not yet been overcome. Several studies mention the issue of the underuse and abandonment of ICTs by disabled people (Seymour & MacKinnon, Hollier, 2007). They make the connection between the “disability divide” and other disability-related issues such as poverty, unemployment and a lack of educational opportunities (Seymour & MacKinnon).

Dobransky and Hargittai, drawing from statistics from the Bureau of Labour Statistics and the Census of the United States, found that people with disabilities are 10 to 15 per cent less likely to: live in households with computers; use computers that are in the home; and be online. But once socioeconomic background is controlled, people with hearing or limited walking disabilities were not less likely to be internet users.

The authors note that those without impairments are more likely than those with impairments to communicate with others through email or instant messaging, search for product information or make purchases, get news, bank online, trade stocks, take courses or search for jobs. This leads Dobransky and Hargittai to suggest that even among those with disabilities that are online, such 'capital enhancing' uses of the Web are less likely, making payoffs of internet use weaker. Those with impairments, on the other hand, are more likely to look for health information, play games and search for information on government services. The authors postulate that technical accessibility barriers are likely the cause of these groups lagging behind those without disabilities. In another study of middle aged and older disabled adults comprised of computer users and non-users, Mann *et al* (2005) found that cost, lack of knowledge and of perceived need were the main reasons for older disabled people not to use a computer.

More recently Fox (Pew Institute, 2011) reports results similar to those of Dobransky and Hargittai. In her study, Fox found that 81 % of healthy American adults go online, while only 62% of adults with a chronic disease do. Those with chronic diseases, however, are slightly more likely than other internet users to access health information online. The study also found that 41 per cent of people who are online have broadband at home, compared with 69 per cent of those without a disability. Two online activities stand out among those who are chronically ill – blogging and online health discussions which are seen to provide both information and empathy.

A paper by Stienstra (2005) also recognizes the digital divide between disabled people and the healthy fully-abled population. This author maintains that e-democracy initiatives may remove geographic barriers but accessibility and usability issues remain. This requires governments to be proactive in their efforts to include the perspectives of people with disabilities and others from marginalized populations. In an evaluation of access for people with disabilities in two Canadian federal government eConsultations, she discusses what is necessary to ensure that people with disabilities are truly included in a technology-based consultation process. She suggests that populations should be engaged in the eConsultation development process, a process that can ensure people with disabilities have the technology tools that will allow them to participate. She recommends that the following

questions be asked: Are people with disabilities adequately trained and skilled in the use of the technology? Are in-person supports in place for those who may require it? Do they have access to the information needed in the format (e.g. plain language, Braille, etc.) to engage in the process? Are there multiple entry points for participation that allow for different capabilities and interests?

Among the challenges for disabled people cited by several studies are the constant innovations in technology. By the time a disabled person has become comfortable with new accommodations for technology software, that software has become outdated (Dobransky and Hargittai, Kreps 2008, Vaughn 2006). This partly accounts for the poor uptake, and often, the abandonment, of internet activities by people with disabilities (Hollier, Jaeger & Xie). In his doctoral dissertation, Hollier (2007) found that people who are blind or vision-impaired are unable to use computing and internet-related technologies as effectively as the mainstream population. He concludes that emerging technologies do not effectively cater to the needs of this group because most designers fail to consult with the end users. The Chairperson of the National Council on Disability warns that assistive devices will continue to get more complex to operate before they get simpler. The increases in use of digital touch screens, the shrinking size of products and the increasing use of self-service devices in unattended locations create new barriers for those with specific disabilities. Vaught also warns that without action, the gap will increase between the mainstream technology products and the assistive technologies necessary to make them accessible.

In his article on how the web continues to fail people with disabilities, Kreps gives a history of the development of assistive technologies over the lifetime of the internet as a tool of mainstream society. He concludes that those engaged in producing websites for government bodies and blue chip companies are by and large not responding well to the urge for professional standards and compliance with painstakingly developed guidelines for accessibility. He writes that the “strange and contorted network of competing influences, inadequate standards, and speed of development, continues to leave disabled people on the wrong side of a digital divide.”

Media Access Australia (MAA),⁷⁴ a not-for-profit Australian organization devoted to promoting access to media for people with disabilities, attempts to keep the pressure on companies to ensure their internet tools are accessible (Cahill & Hollier, 2009). The organization puts out an annual evaluation report each year on the most popular social media tools in terms of their accessibility by the disabled. The report gives Facebook top marks, and Skype fair marks, but Twitter and MySpace fall short. The

⁷⁴http://www.mediaaccess.org.au/index.php?option=com_content&view=category&layout=blog&id=5&Itemid=18&limitstart=40

authors note that more videos are being captioned, now that the web offers captioning tools, and that Skype now offers new features for the blind and for those who cannot use a mouse. Twitter poses all kinds of barriers, including an audio option link that is too small for a visually impaired person to see and a text resizing function that is locked. The organization predicts that accessibility will become central to the development of social media businesses. CEO Alex Varley states, "Social media are the cornerstones of modern communication and it is essential that people with disabilities, who can become socially isolated, are able to use these tools and stay connected with the world." Jaeger and Xie predict that as online communities become a more important forum for communication and social networking, the provision of equal access to online communities will grow in importance as an issue of public policy and social justice.

Appendix C-3

3. Bibliography – The Internet, Social Media and Homeless People

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3. Literature Review – The Internet, Social Media and Homeless People

Recent literature found on the digital divide and social media use as it applies to the homeless is almost entirely American.

The profile of the homeless population in the US is consistent throughout the literature: homeless populations are predominantly male with low levels of education, high levels of unemployment, pervasive health and mental illness problems and they include a growing number of families. This profile is similar to that of Canada's homeless population with one important exception: the high percentage (between 18 and 33 per cent) of very recent homeless immigrants to be found at any one time in Canada's major urban centres.

As with the mainstream population, younger and more educated homeless people are more likely to use computers than older and less educated homeless people (Le Dantec and Edwards, 2008). Predictably, researchers report a correlation between low levels of education and literacy and access to information, and that the lack of economic independence found among the homeless restricts access to computers and the internet. Many question whether the increase in digital applications in society today will widen the gap between mainstream society and the dispossessed or whether it will bridge the digital divide and contribute to the inclusion of this population.

Le Dantec and Edwards report that there is a digital divide within most homeless communities. Some homeless people are distrustful or disinterested in computers, and others possess a range of computer skills. However, the authors note that "as long as there was a perceived benefit, participants were excited about the prospect of using a new technology." This applies as well to the mentally ill. Eyrich-Garg (2010) found no correlation between mental health and a reticence to use computers. In fact, she reports the reverse; those with a lifetime history of serious mental illness were more likely to report computer use during the past month.

Technology's importance in relation to identity and self-esteem among homeless youth features in almost every study. Beyond facilitating communication, the cell phone is a potent social symbol, and internet-mediated forms of communication are important for "managing ...presentation of self and mitigating the social stigma of homelessness" (Le Dantec and Edwards, 2008). For youth, the acquisition of computer and internet skills translates into a sense of empowerment.

Another common thread throughout the literature is the importance of the homeless staying connected to others, especially family and friends. Many come from other parts of the country and feel disconnected from those they know best. Eyrich-Garg proposes that social networking sites could help

homeless individuals meet some of their social needs and give them a stable place in their ever-changing lives. The majority have a cell phone, which is the preferred way to keep in touch, but cell phone ownership is not without its problems: phones need power for recharging; they are expensive and they often get lost or stolen (Le Dantec and Edwards, Bure 2006).

All the literature reviewed acknowledges that greater access to social support systems usually results in better quality of life and health outcomes, and so much of the research is focused on computer technology as a way of accessing and improving social support networks (Woelfer and Hendry 2010, Le Dantec and Edwards, Eyrich-Garg) The researchers conclude that internet use, and increasingly, social media use, are common among homeless youth and are increasingly being used to maintain social connections and for job and housing searches.

Eyrich-Garg (2010) studied the computer use of 100 unsheltered men and women in Philadelphia, the majority being male, African-American, middle-aged and involved in substance abuse. Even in this population, almost half had used a cell phone and a computer, over a fifth had received emails and seven had used social networking sites in the previous month. She notes that those who perceive themselves as having greater access to their support networks have better physical and mental health outcomes as well as lower rates of victimization. Eyrich-Garg concludes that digital technology has the potential to facilitate prevention and intervention and enhance communication between homeless clients and health care providers. In her opinion, public health officials could consider computers as a cost-effective vehicle with which to communicate with the homeless.

This finding is echoed in the work of Rice and Young (2010) who, in a study of the social network data of 103 sexually active homeless youth between 16 and 26 years of age in Los Angeles, concluded that developing health services and interventions on online social networks could reduce sexual risk behaviours.

Woelfer and Hendry (2010), who set up a technology centre and a six week computer course for homeless youth, contend that any information system for homeless young people must on the one hand respond to the vulnerability, basic needs and demand for self-reliance and on the other attend to demands of the work world which requires conformity, youth-adult relationships and goals. On the subject of social media, the authors observed that prior to the project, 100 homeless youth had already linked their MySpace pages to the service agency's My Space page and that during the program, 33 of 34 program participants created a MySpace page and actively maintained it, overcoming any internet access challenges to do so. These pages were mainly used to keep in touch with friends and some family members. Page content ranged from favourite music, poems about self and homelessness, and

remembrances of friends who had passed away to highly provocative videos and imagery glorifying illegal drug use and violent punk/thrash music. Some of the youth understood the importance of restricting some information from access by general audiences; others rejected any such advice, leading the authors to conclude that “teaching how to use privacy settings is trivial, but the work required to move youth to using privacy settings can be considerable.”

Several studies pointed to a disconnect between the researchers’ views of technology’s utility for the homeless, and those of service providers. Some counsellors believe that social media could replace the invaluable one-on-one, real life relationships that homeless youth have with their counsellors. Le Dantec and Edwards conclude that any successful technology-based intervention would have to preserve or enhance the critical personal contact time with caseworkers. Woelfer and Hendry also note that service agencies fear that social applications of the internet reinforce street life, (intuitions the authors consider possible) and take time away from developing in-person relationships with case managers. These authors feel that the developmental benefits of social networking sites and the benefits of ties among acquaintances for learning, information access and social capital were largely unrecognized by the workers. They conclude that homeless young people, like all young people, need to learn how to control the presentation of identity information in social media and decide what to make public and what to make strictly private.

Clare Bure’s 2006 study of the internet and cell phones by homeless people in central Scotland underlines the complexity of trying to promote inclusion through technology. Her research concluded that homeless people can be digitally included, while still remaining socially excluded. She found that the homeless appropriate ICTs in ways that are relevant to their own lives; cell phones, for instance, are used to reinforce the patterns and practices of their homeless lifestyle including drug-related or criminal activity. She did note, however, that information and communication technologies were helpful for those people who are trying to become more stable, by providing pathways to communication and to practical information on employment and affordable housing.

Suggestions for adaptations and design features to facilitate positive technology-based interventions with the homeless population include the following:

- Post online information about shelter locations, availability, where to get showers, food and free clothing;
- Post information to enhance communication between the homeless and health care providers;
- Encourage online peer communication for emotional support and practical assistance;

- ✦ Orient search engines and job directories to the needs, abilities and backgrounds of the homeless;
- ✦ Extend résumé builders and templates to allow homeless youth to represent themselves with dignity;
- ✦ Develop software for eliciting peer and expert feedback on résumés; and
- ✦ Provide simulations of job application forms for the purpose of practice.

Most of these studies conclude that there are opportunities for productive technological interventions in the lives of the homeless. Only one, however, addresses the changes in the lives of homeless people that future waves of lower-cost mobile technologies will bring.⁷⁵ Looking to the future, Le Dantec and Edwards caution that Urban Computing – the design of technology-mediated environments – must design for inclusion, and consider the breadth of social diversity. While wireless-enabled parks, train stations and public squares are shared by all, the gateways that afford access – smartphones, PDAs and computers – are private and not necessarily accessible to the more vulnerable sectors of the population.

⁷⁵ Christopher Dantec is presently working on a PhD thesis: Exploring Mobile Technologies for the Urban Homeless.

Appendix C-4

4. Bibliography – The Internet, Social Media and Recent Immigrants

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4. Literature Review – The Internet, Social Media and Recent Immigrants

Over the past decade Canada has rapidly become a web-based society, with ICTs becoming an integral part of everyday life. Over that same period, Canada has welcomed each year over a quarter of a million new immigrants and has been investing substantial resources to ensure that this new population is included in Canadian society and its market economy. What is the role of ICTs -- and the ubiquitous social media tools --in assisting or limiting the integration of recent immigrants into a new society? A search of the literature on this topic suggests that Canada may be a source of some of the best research and thinking on the subject in the world.

ICTs have helped change the immigration and social inclusion landscape, and their potential to facilitate successful integration is huge. However, the literature shows that there is no one size that fits all with respect to the impacts and opportunities afforded by ICTs. In their comprehensive study⁷⁶ Caidi *et al* (2008) emphasize that immigrants are a heterogeneous group with different requirements for inclusion across immigration classes and stages.

According to the literature reviewed for this study, the largest group of immigrants – those of working age in the economic class – are using the internet and social media extensively in the process of settling in Canada. As the use of social media grows and the technology to support it continues to improve, so do the opportunities for new immigrants to confer with compatriots who perhaps have preceded them to the new country or with others who have experienced the physical, emotional and psychological upheaval of immigration. Social media sites that offer chat, forums, and selective one-on-one communication are growing rapidly. Research shows that new immigrants give a lot of weight to this online transfer of knowledge. Whether help comes from strong ties (relatives and friends) or weak ties (acquaintances or helpful strangers), the timely information that is delivered through virtual online communities can support newcomers as they grapple with challenges in their new country.

In their analysis of Twitter, LoonLounge.com, Settlement.org, YouTube and the Working in Canada (WIC) Facebook page, Dechief *et al* (2010)⁷⁷ found that new immigrants use these tools both for orientation and for problem-solving. They note that off-line social networks have long been prime information sources for newcomers; these networks have now been extended online, allowing new immigrants to enlarge their social networks and to interact with past, current and potential immigrants. The authors also concluded that the federal government's use of social networking tools was essential. Social media, they note, is defined by the underlying facilitation of social engagement; the authors cite

⁷⁶ The study was conducted for HRSDC

⁷⁷ This study was also commissioned by HRSDC.

as an example a type of online “polling” or quick advice seeking, which mimics face-to-face conversational behaviour.

Similar findings were reported by Chien (2005) who analysed the use of the Settlement.org site, noting that the site’s discussion board was its most popular destination after the home page. Chien postulated that users value access to information and experiences coming directly from people rather than the more solitary retrieval of information through online searches. She argued that in addition to informing immigrants on settlement-related issues, online bulletin boards contributed to involving immigrants by connecting them to others, including the Canadian-born, and giving them a sense of belonging. Chien also noted the high levels of reciprocity and trust in the discussion board interchanges – key elements in the building of social capital, online and off.

One advantage of these social networking sites is that they offer communication opportunities in an immigrant’s mother tongue. Chien noted that newcomers often participated in their first language, sometimes sharing information with others from their country who were contemplating emigrating to Canada. Da (2008) also notes the involvement of the Chinese community in helping its members settle through settlement-related Chinese-language websites that provide links to immigrant community and government sites.⁷⁸ These websites assist new immigrants to become better connected with their ethnic community and with resources that will help them settle.

Social media use, however, is not, *de facto*, a measure of inclusion in Canadian society. Statistics Canada cites Kayahara *et al* (2005) who found that connecting with friends and family back home is a top priority for nearly all recent immigrants. Does this strong tie to the mother country inhibit integration into Canadian society? Research from China suggests that, as time passes, immigrants’ online web surfing and social communication with the homeland decreases, while such activity shifts to the host country and region (Chen, 2010). While homeland-based internet activity can aid the initial transition, Chen’s research suggests that social communication in the host country is a critical component in successful adaptation to the new country. Nevertheless, she believes that a positive relationship exists between access to host country websites and overall socio-cultural adaptation. Caidi *et al* (2008) agree, arguing that an approach to inclusion which embraces “a transnational identity” will increase social inclusion in this country.

Another debate relates to the question of strong ties and weak ties. Most research finds that strong ties – a network of close and dependable family members and friends – are essential for successful integration. Da (2008) notes that whereas there is consensus among most researchers that

strong ties are essential for immediate support in the initial stages of settlement, the findings of a study of immigrant women in Montreal (Pia Carasco and Associates, 1999) concluded that it is the weak ties that are critical in helping immigrants acculturate into mainstream society. Citing Rose, Carrasco and Charbonneau (1998) and Wierzbicki (2004), Da postulates that maintaining strong ties within one's compatriot community may actually hinder the level of immigrants' integration into mainstream society and close off some bridges with access to useful information and resources.

While agility with ICTs and high comfort levels with social media support the recent immigrant in his or her integration process, the literature stresses that one must not lose sight of the extra challenge that Canada's internet-driven society is posing for immigrants who are uneducated, come from underdeveloped countries or refugees camps, have no knowledge of English or French and no basic computer skills. Caidi *et al* point out that though the majority of economic immigrants from the wealthier countries will be able to handle both the access to and the content of essential information, there will nevertheless be many in the refugee, family or caregiver class that stand to be marginalized without sufficient ICT support. Caidi *et al* see the wired world as making already disadvantaged immigrants and refugees even more disadvantaged. Chien also wonders about those who do not have the equipment, the skills and the leisure at home, which are prerequisites to participating in social media environments. If websites offering comprehensive information and dynamic social media environments become the norm, she wonders whether one of the central roles of immigrant agencies should be computer and information literacy.

Caidi and Allard (2005) stress that the digital divide relates not only to access but to the various forms of literacy required to use information technologies effectively and that integration is a long-term process, requiring institutions to provide relevant content in languages other than English or French as well as information literacy programs. In an HRSDC-commissioned report, Caidi *et al* also address such misgivings. These authors discovered, through interviews with settlement workers in five Canadian cities, that immigrants' levels of ICT skills reported in the literature did not match the interview findings and that many members of the refugee or family classes are non-users or novice users of ICTs. These authors argue that issues of language proficiency, lack of cultural relevance, digital literacy, and barrier-free public access to ICTs must be kept front and center. Simply providing access to ICTs will not be enough. Da echoes these concerns: in her work with Chinese immigrants in London Ontario, she came to see that women who lacked a facility with English, who were without transportation and/or trapped at home looking after children, would look to Chinese-language websites for support and comfort.

Some of these questions are also dealt with in several papers from the European Union, which show the extent to which the EU is aspiring to a fully inclusive information society through “fostering pluralism, cultural identity and linguistic diversity in the digital space.” A 2009 report (Haché *et al*) provides a simple but thorough inventory of good practices in Europe that promote ICT for socio-economic integration. A 2010 EU report (Redecker *et al.*) details over 30 combination online/offline initiatives that explore the potential of ICTs to support the socioeconomic integration of immigrants. It concludes that ICTs can facilitate intercultural exchanges and provide attractive learning opportunities and environments. Though recently published, the report reflects more of a Web 1.0 than a Web 2.0 approach. A third EU paper, a policy brief (Diminescu *et al*, 2010) argue that Web 1.0 portals strengthen immigrants’ ties to their homeland or diaspora, whereas Web 2.0 applications empower the individual and challenge the collective organization of the diaspora. The report highlights five such Web 2.0 applications from specific countries-of-origin, compares them with the more static Web 1.0 sites and concludes that Web 2.0 enables social networking processes between newly arrived migrants, already settled migrants and members of the host society by supporting weak ties established both off- and on-line. The authors maintain that social networks are an effective means of producing social capital which in turn encourages commitment to a community and an aptitude to participate in collective activities. They note that the “top-down” (Web 1.0) model offers hospitality services and useful information but that it contributes only on an informational level to the complex business of integration. By contrast, the “bottom-up” (Web 2.0) process relies on informal and social hospitality and is directly linked to the dynamics of bonding, bridging and social capital.

Among the best sources on the above topics are the comprehensive reports, both produced for HRSDC, by Caidi *et al* (2008) and Dechief *et al* (2010). The reports include broad discussions regarding the challenges and opportunities of ICT use in fostering the successful integration and inclusion of immigrants to Canada. The former report includes a full literature review, findings from detailed interviews with immigrant service providers in five Canadian cities, an analysis of literature gaps and recommendations for action. The latter provides an analysis of the information needs of recent immigrants and of the effectiveness of the Working in Canada Portal and its social media initiatives in meeting these needs.

Literature gaps on the topic of ICTs, social media and the societal inclusion of immigrants identified by these authors include: i) empirical research on immigrant ICT use and non-use; ii) research on immigrant-produced online information; iii) cross-cultural usability of service and program content and iv) participatory approaches to designing information systems.

This researcher endorses particularly the first topic in this list, that of research on immigrants who are non-users of ICTs. There is a dearth of Canadian research on ICTs and immigrants from the refugee and family classes. It is important to understand the challenges and pathways to digital literacy, from the viewpoint of the refugees and immigrants themselves. As the mobile revolution gathers speed in the next few years, newcomers who are not web literate will be even more prone to exclusion from Canadian society.

Appendix C-5

5. Bibliography – The Internet, Social Networking and Seniors

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5. Literature Review – The Internet, Social Media and Seniors

There is a large body of literature on the capabilities and motivation of seniors to adapt to internet communication and on the benefits that ICTs hold for this sector of the population. There is also a growing collection on seniors' use of social media. Most studies and surveys lump the senior population into 'over-50' or 'over 65' categories; little comparative data is available on use rates, activities, benefits, and challenges of those in their sixties, seventies, eighties and nineties.

In 2009, just over 50 per cent of Canadian seniors were using the internet (Veenhof & Timusk, 2008). Ninety per cent of these seniors use email and eight per cent actively contribute content online.⁷⁹ Though recent statistics are lacking for Canadian seniors, the rate of social media use among American internet users over 65 doubled between 2009 and 2010 to 26 percent (Madden 2010).

The Pew Institute (Madden) attributes the recent growth in social media use among seniors to a number of factors: 1) social networking is reconnecting this age group with people from their past and that this is providing a welcome support network; 2) older adults are more prone to chronic disease and are reaching out for support, particularly through blogs and online health forums; and 3) social media are bridging generational gaps, connecting family members and friends across age groups and this is highly attractive to seniors. The literature reviewed for this study consistently supports these findings.

The Social Capital Benefits of Social Media

Studies in the early years of the millennium predicted that a growth in internet activity would weaken social and community ties. A large volume of more recent literature suggests that social networks and strong ties to community help manage stress, reduce depression and improve health outcomes in the senior population (Hogeboom *et al*, 2010). Most researchers now believe that if anything, social media use among seniors increases the *frequency* of contact with friends and family and that community engagement increases. Most studies find no difference in the number of close relationships between internet users and non-users. However significant differences are found in the frequency of contact with family and friends as well as participation in organizations (non-religious) and clubs (Hogeboom *et al*). Researchers also find that internet users have a far greater diversity of age in their social network than non-users. (Pfeil *et al*, 2009).

Social media, especially Facebook and blogging sites, are seen to solidify and even build a support network for people as they age, thereby reducing isolation (Madden, Hogeboom *et al*, Sum *et al*

⁷⁹ Forrester Research, 2009

2009, Russell *et al* 2008). No evidence was found that age negatively impacts the relationship between internet use and real life social networks (Russell *et al*); in fact, the reverse is most often observed by older adults who feel their relationships with children and grandchildren have improved as a result of online communication (Lehtinen *et al*, 2009). A 2009 study of 222 Australian internet users between the ages of 55 and 95⁸⁰ found that time spent online had a strong positive effect on contact with family and friends and involvement with hobbies, and a moderately positive effect on contribution to community life (Russell *et al*, Sum *et al*). Russell *et al*, who were working with financially secure, healthy seniors, propose that online communication strengthens 'weak ties' -- new connections generated online that in turn facilitate access to new ideas, activities and information and ultimately enhance participants' abilities to access the economic, social and political institutions and services of their community. According to Lehtinen *et al*, current research suggests that it is often older people who can benefit most from online communities and social networking sites; not only can elders connect with like-minded people, they can give information and support to other people. The authors cite Saphiris and Sarwar (2006) who found older people to have a higher degree of responsiveness and reciprocity in their online communication than young people, even though teenage newsgroups had higher numbers of, and longer, messages.

Researchers (Arnott *et al* 2010 and Lehtinen *et al*) maintain that social media could play a valuable role in maintaining existing social networks of older seniors as they face changes in their lives brought about by increasing disability or lack of mobility, death or illness of partners and friends or geographical relocation.

Demographic Differences between Users and Non-users

Most studies conclude that users of social media tend to be younger seniors, have higher levels of education, higher incomes and are healthier and more active than those who are not (Cresci *et al*, 2010). Prior web experience and a proclivity to give and get information are also major indicators of whether a senior will participate in social networking (Lewis *et al*, 2010).

Lack of education, low level incomes and lack of confidence are all predictors of non-participation in the digital world. In two studies, (Chou *et al*, 2009 and Jung *et al*, 2010) researchers set up computer instruction programs for approximately 100 seniors in low-income areas and reported positive results, especially in raising seniors' confidence about computer use. Jung *et al* recommend addressing seniors' fears when recruiting for computer training and informing potential new learners of

⁸⁰ The largest groups being in the 60-69 age category

the benefits. The researchers' findings supported other findings that women, especially those who are fearful of aging, are less likely to participate in computer courses.

Motivations and Barriers Regarding Social Media Use

Many studies cite "keeping in touch with family" and particularly grandchildren, as the prime motivator for the elderly to get online. They confirm that family members are the main instigators for making this happen. Other motivations include: communicating with friends and accessing health information.

In-depth focus group studies shed light on the reticence of some seniors to participate in social media. The major concerns are confidentiality, privacy and security. Seniors, especially older seniors, are more cautious than younger people and most do not understand how they can control the levels of privacy on a social networking site. Seniors do not like to register personal information before 'looking around' on a social networking site and would prefer a more incremental approach to divulging aspects of their identity online. It is a common perception among non-users that a social media site is a place for publicity seekers and superficial relationships. Many don't like the term "friend" applied to casual relationships. They see the web as a public site and are uncomfortable being candid amongst friends online. Some feel that social networking sites are too trivial to waste one's time on (Lehtinen *et al*, Arnott *et al*).

Consequently, seniors are generally more reticent than younger people to chat or post personal information and photos online 'for the world to see.' Many have concerns, based on adverse media coverage, about fraud, identity theft and hacking, and having what they put up on the web used maliciously or inappropriately. Some have gleaned from the media that social networking sites house socially unacceptable behaviour. The 'perception of benefit' comes up in numerous studies as a factor that determines whether a senior participates or not. When seniors understand the value of social networking they are more likely to participate. They are unlikely to participate simply because others are doing it (Arnott *et al*, Lehtinen *et al*).

Social Media and Health Information and Interventions

The considerable research interest in the potential for social media to further health goals is beyond the scope of this study but bears mentioning. Increasingly, health professionals see the information and interactive aspects of connectivity as a potential outreach tool for the aged, the isolated and the disabled. (Chu *et al*, 2009) As rates of chronic disease increase, researchers predict that

older adults will likely reach out for information and support, through blogging and participation in online health discussions (Madden). Such activity will not necessarily be restricted to the social media user profile outlined above; studies show that lower-income seniors experience positive health-related empowerment from computer use when they have technical and personal support (Chu *et al*). Chou suggests that online support groups may be replaced by more interactive, patient-directed social networking and blogging sites. Chou also observes a high prevalence of internet and social media use among individuals with family members who have cancer, suggesting an important secondary user group for health-related social networking. Many caregivers of the elderly are elderly themselves. Chou says that the penetration of social media in the senior population is not yet sufficient to use it in health communication, but tracking its growth remains a key health communication priority.

A number of studies have focused on depression in the elderly. Ford & Ford (2009) employed a dataset of over 7,000 elderly retired persons to evaluate the role of the internet on mental well being. Their findings showed a 20 per cent reduction in depression classification among users. The authors point to the economic payoffs of expanding internet use among the elderly.

Bringing Older Seniors on Board

Much of the research contradicts the stereotype that older people are afraid of technology and of trying something new (Mitzner *et al*, 2010). Research shows that seniors are receptive to computer and Internet training and that for those who are anxious, age-sensitive training can result in reduced anxiety about computers and increased self-confidence regarding computers (Chu *et al*, Ariyachandra, citing Temple [1990]; Shapira [2007]; Karavidas [2005]). Emerging technologies show great promise for augmenting faculties or substituting for impaired abilities (Charness *et al*, 2009).

The fact that seniors are slower to manipulate the mouse or to read online and less confident does not mean that they cannot be successfully trained. Recommendations in the literature include: longer training; seniors-only instruction; use of specific learning aids and assistive technologies; allowing time for self-paced practice; making suggestions for everyday computer usage (Jung *et al*), positive associations for motivation (Kim *et al* 2008, Charness *et al*), and the delivery of courses in the main language of the participants (Chu *et al*).

Lehtinen *et al* contend that current designs largely overlook older adults' needs which differ from those of the young adults for whom the social media sites were designed. For more senior-appropriate social networking sites, they recommend: clear online privacy management systems; privacy as the default setting rather than disclosure; an incremental approach to releasing personal

information, requiring more information about the other person before accepting them as a 'friend;' and a better match between the conceptions and patterns of 'real life' older adult social relationships and those that are encouraged online. They also recommend using real life events as a bridge to computer-mediated interaction.

Actions to Increase Seniors' Social Networking Activity

The majority of researchers deem social media to be an important communication boost to a group of people who are prone to isolation and losing social ties (Lewis *et al*). Many recommend that policies be changed to increase access to the internet and computer training for the elderly and to foster social networking within this population (Hodgboom *et al*). Regarding the aged, Sourbati (2009) suggests policy action for the support and training of support workers in the community and in seniors' residences, some of whom are older themselves, so that they are able to act as gatekeepers for the frail, older, institutionalized population. Several studies suggest that senior centres and elder care institutions be equipped to cater to the online needs and preferences of this growing demographic (Ariyachandra *et al*; Mitzner *et al*,). The Pew study (Madden) reports that the Federal Communications Commission's National Broadband Plan has requested additional funding from Congress to invest in computer literacy programs for older Americans, and that the plan includes a "National Digital Literacy Corps" which would pair tech-savvy individuals with seniors or other unconnected groups in the community in an attempt to bring the more resistant seniors on board.