SOCIAL NETWORKING SITES & ADULT LITERACY LEARNING

Raising the Issues

(Revised December 3, 2011)

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Introduction

At an adult literacy program in Edmonton's inner city, literacy learners and drop-in visitors use Facebook to stay connected to people near and far. These learners are not alone; 750 million people use Facebook, half of them daily (Facebook, 2011), and more than 20 million of these users are Canadian (comScore, 2011).

Although we might argue that Facebook (and other social networking sites, SNS) are ubiquitous and perhaps even necessary in the 21st century, this paper considers the issues and implications of this pervasive technology for adult literacy learners – i.e. learners that are marginalized on multiple levels.

This paper, commissioned by AlphaPlus, is a synthesis of the critical analysis of the issues that we uncovered from the literature, policy documents, web-based sources and, more importantly, from literacy learners and educators themselves. We asked:

- How are adult literacy learners using social networking sites (such as Facebook)?
- How might social networking sites (such as Facebook) be used to facilitate adult literacy learning?

Following boyd and Ellison (2008), we define SNS as web-based services that allow users to create profiles and articulate networks that they can share with others within the system. SNS are characterized by "persistency, searchability, replicability and invisible audiences" (boyd cited in Albrechtslund, 2008, ¶ 13). We also include other social media such as blogs and YouTube in our paper because these came up in connection with SNS.

Our understanding of literacy encompasses not only reading, writing and numeracy but also digital literacies, which are included among the so-called 21st century literacies. As Selwyn and Facer (2007) declare, basic and functional print literacy are foundational to developing competencies in digital communication but they are no longer enough. We use the educational technology standards developed by the International Society for Technology in Education (ISTE) (2007; 2008) to frame our analysis because they reflect the kinds of skills that adult literacy learners demonstrate in their use of SNS and other social media. The ISTE standards are designed to "help students prepare to work, live, and contribute to the social and civic fabric of their communities" (2011a, ¶ 1).

Findings

We organize our findings from diverse sources into four categories and look critically at the most salient issues that arose related to SNS and adult literacy learning and education. These categories are social purposes, digital citizenship, digital divide, and learning and literacy. Our discussion of these four categories reveals the complex and contested terrain upon which questions of SNS are waged.

1. Social Purposes

It is clear that the main purpose for using web-based social media and SNS is for social connections. Moreover, people connect with people they know in existing social networks of friends and family, whether nearby or at a distance. Blogging also serves a social purpose, often functioning as a tool for sharing personal thoughts and feelings with others. Particularly interesting for adult literacy learners is the potential of blogging to enhance opportunities to use their own voices to "speak" their stories in a public realm. While this is often done through print publishing in literacy programs, it comes with a cost and has limited reach. Blogging is a low-cost alternative with possible access to a much bigger audience.

The social functionality of SNS and other social media, however, can create problems for users – problems such as loss of privacy, difficulties with family or employers because of comments posted online, and loss of "human contact".

ISTE standards related to communication and collaboration clearly reflect these social purposes. But users will need guidance to leverage social technologies to their full potential.

2. Digital Citizenship

Digital citizenship is an important component of 21st century literacy. Our definition includes both digital behaviour and digital civic engagement.

Digital behaviour relates to the ethical and safe use of technology. It includes behaviours related to online security and privacy. Since the initiation of SNS, users and commentators have expressed concerns about the safety, security and privacy of this technology. Indeed these are important considerations and particular knowledge and skill is required to ensure that users are prepared and protected.

However, earlier concerns about unsafe Internet use may have been overblown. In general, users seem to understand that their information could be publicly accessible, even when they are targeting friends and family in their communications. Moreover, users employ a variety of strategies and technical manipulations to protect their privacy online.

Ethical concerns include threatening or nasty behaviour online as well as malicious or damaging use of personal information posted by the user. Subordinated groups are disproportionately attacked in cyberspace affecting their reputations, privacy, sense of self, and "ability to participate in online and offline society as equals" (Keats Citron, 2009, p. 64).

"Lateral" or social surveillance between peers in cyberspace, although common and partly a function of the social purpose of SNS, also raises concerns among users. SNS members or bloggers sometimes feel uncomfortable with strangers seeing their photos or other personal information. Also, this kind of increased visibility to others can result in a form of social pressure or social conformity that results in censoring or adapting one's online self-presentation.

State surveillance in cyberspace is becoming increasingly common. Information about peoples' behaviour, activities, opinions and associations is easily "harvested" from SNS due to the persistency and retrievability of information published online. Surveillance issues are particularly relevant for adult literacy learners using SNS because, historically, the poor and other marginalized groups (to which a large number of literacy learners belong) are subjected to more surveillance than others.

Very recently, the issue of "real names" policies on SNS prompted a vigorous debate. Those that argue for enforcing "real names" policies are aiming to increase users' accountability for their online behaviour. However, the

counter argument is that sometimes using alternate names is a form of protection. Often, people choose to use alternate names to protect themselves or their families from being targeted for their opinions, identities or lifestyles, or to avoid repercussions by maintaining a separation from their work or school and their private lives. As boyd (2011) asserts, "real names" policies "are an authoritarian assertion of power over vulnerable people".

In a reversal of these concerns, Albrechtslund (2008) proposes a more positive take on surveillance. He argues that SNS facilitates the voluntary and intentional sharing of information that brings people into these sites to begin with. For him, this demonstrates a participatory and potentially empowering use of the "surveillance" features of the medium.

Digital civic engagement includes "developing awareness of social and political issues and online participation in public life" (Greenhow & Robelia, 2009a, p. 126). Cyberspace has been effectively mobilized for a variety of advocacy, activism and political activities. This was particularly evident most recently with the political uprisings known as the "Arab Spring" in countries such as Tunisia, Egypt and Syria. SNS were particularly effective in mobilizing people, sharing information and broadcasting events. There is evidence that SNS users in the U.S. are more politically engaged than the general population (Hampton, Sessions Goulet, Rainie, & Purcell, 2011).

Adults with literacy challenges are less likely to be engaged as citizens and consequently have less political power. SNS and other social media offer an accessible and potentially powerful avenue for adult literacy learners to become more civically engaged and stronger advocates for themselves, their families, communities and society at

large. The websites of Canadian literacy organizations could more effectively exploit SNS for online advocacy and policy change (McGregor & Price, 2010). However, as already marginalized citizens, adding activism to their online behaviour may leave adult literacy learners especially vulnerable in cyberspace.

3. Digital Divide

The idea of the digital divide, referring to the lack of availability of a computer and the Internet based on social and economic factors, emerged in the 1990s. While some demographic factors such as age and gender have diminished in importance, inequality based on race/ethnicity, income and education persist, along with concerns about access for groups with low English language or literacy skills.

More recently, with the access gap narrowing, a more nuanced understanding of the digital divide focuses attention on the way people *use* digital technologies. Known as the participation gap, this too is stratified by social class, race, gender and other social factors. Simply providing computers will not bridge the gap. Inability to fully engage with digital technology leaves adult literacy learners on the margins of the information society. Bridging the participation gap requires socialization into the "technoculture" as well as technological "know how" that is often out of reach of marginalized citizens.

Like many authors, Selwyn (2004) turns to Pierre Bourdieu's concept of cultural capital to explain how the possession of "technological forms of cultural capital" makes the difference between owning a computer and meaningfully engaging with it. Technical capital is accrued through socialization into technologically rich environments. Adult literacy learners will need access to technical support and training to fully engage with the potential of the Internet and SNS to enhance their lives.

4. Learning and Literacy

People generally don't recognize the vast amount of informal learning that is going on in their daily lives. Informal learning from technology is no different. Neither learners nor teachers readily recognize the possibilities of SNS for learning. Among our research participants, opinions were polarized about whether using SNS would assist or detract from literacy learning.

Nonetheless, there is support for bridging informal digital learning with non-formal and formal educational contexts. In online environments, particularly with social media such as SNS, users learn technical skills, creativity and communication skills; they construct and co-construct knowledge and identities; and they gain confidence in themselves and their abilities. Much of this learning is gained through social connections, primarily with help from family and friends. Students using SNS at home often engage in educationally related conversations, including helping each other with assignments and setting up group projects. Social media, especially blogging, can be particularly useful for getting feedback on student writing.

There is no one-size-fits-all when it comes to technology. Learners have different learning needs, goals, styles and preferences that are equally important when using SNS or other social media. Furthermore, some learners may choose not to engage with digital technology at all. However, there is a difference between those who make choices from among a range of options, and those who must make choices that are limited or circumscribed by access to resources, information or opportunity.

Key Issues

To summarize the key issues, we return to the two research questions that directed our study.

1. How are adult literacy learners using SNS (such as Facebook)?

- Adult literacy learners are unequivocally using SNS for social purposes and are simultaneously informally learning literacy (in the broad sense) as well as technical and social skills. However, few are fully using the power of SNS and social media due to unequal access and lack of socio-technical capital, or know how.

2. How might SNS (such as Facebook) be used to facilitate adult literacy learning?

- First, the very nature of the sites promotes social learning across the range of 21st century literacies and practice with reading and writing, although our participants were divided about whether SNS helped or hindered text-based literacy development. A key contribution of literacy programs could be to help adult literacy learners safely and effectively use SNS *for their own purposes*.
- Second, the question must be asked whether SNS *should* be used for structured educational purposes in adult literacy programs.
- Third, if used for such purposes, considerations include the following:
  - maintain the social focus
  - sensitively build on existing skills, knowledge, and experiences
  - develop 21st century pedagogical skills that focus on two-way co-construction of social knowledge
  - attend to issues of conformity, self-censorship, safety and surveillance
  - address the digital divide by ensuring access to computers and the Internet in programs and in homes, by providing training and technical support, by modeling a culture of digital engagement, and by advocating for structural changes that address the root causes of marginalization
- Last, we are challenged to find ways to bridge the rich informal learning happening within SNS with non-formal and formal adult education settings.

Thus, SNS and adult literacy learning go hand in hand, in our opinion, yet the issues and questions we've raised require careful consideration if they are to be brought together in non-formal and formal educational contexts.

Introduction

If you visit the Learning Centre Literacy Association in downtown Edmonton, you will see people from the inner city dropping in to use Facebook on the Centre's computers. "Everyone uses Facebook here", says a volunteer tutor. It's a way to stay connected to people, especially for those who are transient or displaced. For one Aboriginal woman in this downtown literacy program, Facebook was life changing. While she was learning to write, using Facebook led to a family reunion years after her siblings were separated by the foster care system (Chovanec & Lange, 2009).

These learners are not alone. According to Facebook's (2011) statistics, as of August 27, 2011, there are more than 750 million active users worldwide and more than half of these users log into Facebook on any given day and the average user has 130 "friends".

In the U.S., the Pew Research Center reports, "the number of those using social networking sites has nearly doubled since 2008" (Hampton et al., 2011, p. 3). Today, nearly half (47%) of all adults in the U.S. are using SNS, 92% of whom are Facebook users and 52% of those are logging in to Facebook daily (Hampton et al., 2011).

According to recent Canadian statistics, Facebook had more than 20 million unique visitors from Canada in the last quarter of 2010 (comScore, 2011). In addition, Social bakers (2011) reports that 50% of the Canadian population and 64% of Canadian Internet users use Facebook.

Although these numbers represent a huge reach into the Canadian population, the Learning Centre volunteer reminds us that not everyone has the literacy skills to fully engage with this ubiquitous technology. His task is to provide technical as well as reading and writing assistance to literacy learners who want to use Facebook. However, he sometimes feels uncomfortable with the personal nature of the Facebook communications to which he is privy.

The Paper

The research reported here was conducted in response to a call from AlphaPlus for research papers that "explore topics related to the changing nature of technology and how it affects adult basic education" (AlphaPlus, personal communication, May 5, 2010).

AlphaPlus is a non-profit, provincially funded agency based in Toronto that aims to increase adult literacy skills by providing expertise to support adult educators across Canada in using innovative learning technologies through the dissemination of research, information and training. According to the **AlphaPlus website**, "We envision a Canada where all people have the literacy and digital skills to enable them to participate actively in the social, political, cultural and economic life of our country".

Aware that there is an insufficient amount of literature on the use of digital technologies in adult literacy, AlphaPlus invited an "open yet critical" approach to a set of topic areas that is intended to open up research-informed discussions about information and learning technologies in adult literacy learning (AlphaPlus, personal

communication, May 11, 2010). This is consistent with the assertions of scholars, such as Buckingham, who reports, (cited in Greenhow & Robelia, 2009b): "We need to move the discussion forwards, beyond the superficial fascination with technology for its own sake, towards a more critical engagement with questions of learning, communication and culture" (p. 1135).

From among the topics proposed by AlphaPlus, the one commissioned for this paper is *How social networking can contribute to adult education*. This paper is grounded in our understanding of both the agency's vision and the intent of the research commissioned by AlphaPlus. Thus, the paper is a synthesis of our critical analysis of the issues that we uncovered from the literature, from policy documents, from web-based sources and, more importantly, from literacy learners and educators themselves.

Before proceeding to address the topic, however, we must first clarify what we mean by "social networking" and "adult education".

Social Networking, Social Networking Sites and Social Media

Social networking is a verb that "implies that people use these networks to forge *new* networks" (Greenhow & Robelia, 2009a, p. 120). However, researchers overwhelmingly agree that people generally use social networking sites to maintain and enhance *existing* relationships (Greenhow & Robelia, 2009a). Boyd and Ellison (2008) concur that initiating new relationships with strangers is not the typical practice or the differentiating factor of how people use social networking sites.

Therefore, they and others maintain that social networking is an untenable term based on an ambiguous concept. Instead, they recommend using the more specific term social networking sites (SNS). Boyd and Ellison (2008) define SNS as:

> Web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system (p. 211).

The authors maintain that SNS are a new way of organizing online communities. Prior to SNS, online communities were groups organized around interests or topics, such as in newsgroups, discussion boards and chat rooms. In contrast, SNS are egocentrically organized around personal networks. Citing Wellman, SNS researchers boyd and Ellison (2008) claim that this more accurately reflects the offline world where we tend to associate with others in networks of people from different groups rather than in isolated topic-specific groups.

Thus, what makes SNS unique is their ability to articulate a network and to make it visible to others. Boyd and Ellison identify the first SNS as SixDegrees.com that was launched in 1997 and, by 1998, was the first to combine the three key features of SNS, i.e., creating profiles, listing friends and surfing friends' lists. MySpace was launched in 2003 followed by Facebook in 2004 at Harvard, which was later made available to other colleges, then to high schools, and eventually to the general public. Now, there are SNS all over the globe. Some are smaller but some are just as large as the popular North American sites. Most have broad audiences while others focus on an activity (couchsurfing.com), an identity (BlackPlanet) or affiliations (MyChurch). Ning.com allows people to set up their own SNS.

According to Albrechtslund (2008), "danah boyd has suggested that online social networking as a mediated public is characterized by four properties: persistency, searchability, replicability and invisible audiences" (¶ 13). We will return to some of these concepts in later sections.

For now, it is important to note that, to maintain consistency and clarity, we have chosen to follow boyd and Ellison's definition of SNS in this paper.

However, we have also incorporated information about other social media where they may intersect with or have implications for the use of SNS in adult literacy.

Social media is defined as "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content" (UGC) (Kaplan & Haenlein, 2010, p. 61).

In this definition, ideological foundations refer to content and applications that are modified by all users in a "participatory and collaborative fashion" (p. 61), and UGC refers to "the various forms of media content that are publicly available and created by end-users" (p. 61) using the functionalities of technological advances such as Adobe Flash, AJAX and RSS.

Kaplan & Haenlein (2010) use the field of media research to build a classification system along two dimensions. According to their classification, the authors argue that SNS have high self-presentation/self-disclosure and medium social presence/media richness.

Table 1: Classification of Social Media by social presence/media richness and self-presentation/ self-disclosure (Kaplan & Haenlein, 2010, p. 62)

		Social presence / Media richness		
		Low	Medium	High
Self-presentation Self-disclosure	High	Low	Social networking sites (e.g., Facebook)	Virtural social worlds (e.g., Second Life)
	Low	Collaborative projects (e.g., Wikipedia)	Content communities (e.g., YouTube)	Virtual game worlds (e.g., World of Warcraft)

Reynolds-Alpert (Gibson, Reynolds-Alpert, Doering, & Searson, 2009) distinguishes between social media forms (e.g., blogs), social media technologies (e.g., music sharing) and social media applications (e.g., SNS and YouTube). According to Lin and Michko (2010), YouTube is often regarded as an SNS even though users rarely use the social functions of the site. Following Kaplan and Haenlein (2010), we include blogs, YouTube and virtual games in our understanding of social media because these came up in our research in connection to SNS. Sometimes, we also mention other Internet-based tools that literacy learners found useful in their social worlds. [1]

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[1] Although Twitter is considered micro-blogging and/or an SNS, we don't include it in this paper because the literacy learners in the study weren't using it. Indeed, at least some literacy staff and tutors considered it a middle class phenomenon outside the reach of the adults they served. However, as it becomes more widespread, it may have similar implications for adult literacy learners to other SNS that we discuss in this paper.

Adult Education and Adult Literacy

Adult education is a broad term encompassing a vast array of learning opportunities for adults. According to adult education scholars (see for example Spencer, 2006) this diversity can be categorized as follows:

Formal adult education is generally offered through educational institutions that deliver specific curricula designed to provide academic or vocational credentials, e.g., universities and community colleges.

Non-formal adult education is a vast arena wherein individuals or groups seek to meet social, recreational or personal objectives through part time, non-credit learning opportunities delivered by various types of educational organizations. This might include such diverse educational experiences as a series of learn-to-skate classes, an afternoon workshop on how to start your own business, multiple levels of classes in learning English as a Second Language, and a weekend seminar to study philosophy.

Informal adult education, or informal learning, is all around us, all the time. It is spontaneous and based on our individual and collective experiences. It could be understood as an iceberg in that it is mostly hidden but has a significant impact on our non-formal and formal educational experiences. [2]

AlphaPlus is primarily concerned with adult literacy. Adult literacy is encompassed in all three categories of adult education. However, adult literacy education generally falls within non-formal adult education. It typically occurs in community-based organizations, but even when it is delivered in community colleges, adult literacy education does not lead to a particular credential. Adults are always engaged in informal learning of literacy. Both informal adult literacy learning and non-formal adult literacy education are addressed in this paper.

UNESCO (2005) defines literacy as the ability to understand, interpret, and create printed and written materials to participate fully in society. Yet, according to the 2003 International Adult Literacy and Skills Survey, about 9 million Canadian adults aged 16 to 65 scored below the desired threshold for coping with the increasing skill demands of a knowledge society. That's 42% of adult Canadians without the reading and writing skills that many of us take for granted. What's worse, this picture has not changed since the previous survey conducted in 1994, a full decade earlier.

"Low literacy, poverty and exclusion are all part of the same problem. People from poor families as well as the long-term unemployed, seniors, native people, prisoners, people with disabilities, and racial and cultural minorities all have higher rates of both illiteracy and poverty" (Canadian Literacy and Learning Network, n.d., p. 1). Thus, as the Canadian Literacy and Learning Network reminds us, "Canada's high rate of illiteracy/undereducation is not simply an education problem; it is a symptom of deep and widespread social inequality" (p. 1).

The Network identifies key features of the relationship between adult literacy and poverty:

• Children from poor and disadvantaged families are at risk of illiteracy.
• People with literacy problems have only 2/3 of the income of other adults.
• Many barriers keep low-income adults out of literacy and job training programs.
• Information most needed by lower income people is often not accessible to them. Literacy is, itself, a defining characteristic of social class. (p. 1-2)

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[2] The iceberg metaphor is attributed to Canadian adult educator Allen Tough (cited in Hague & Logan, 2009).

These features are consistent with the findings from a recent study of the learning needs of low-income adults in the City of Edmonton, many of whom were engaged in some kind of non-formal adult learning opportunity such as a literacy program. According to the authors:

> These learners have experienced systematic marginalization in society based on their socio-economic position as well as a mix of other factors, such as race, ethnicity, gender and age. Most of their circumstances reflect the inequality of opportunity that is embedded in society's social structure. Frustration and despair frequently accompany their efforts to reach their educational goals as they run into numerous barriers that they cannot overcome. [Lack of] income is a particularly important element of marginalization (Chovanec & Lange, 2010, p. 4).

However, they are quick to add:

> Income is not the sole source of their marginalization… These populations not only have less economic power but they have less social status, cultural acceptance and political power… [They] have been excluded from the full social, economic and political benefits of citizenship in Alberta and Canada by the larger structural realities over which they have no control. They are the individuals who have been left behind in our society (Chovanec & Lange, 2009, p. 93).

Thus, when we are referring to adult literacy learners, we are generally referring to a group of adults marginalized on multiple levels.

Digital Literacies for the 21st Century

While concerns about reading and writing should rightly remain central to any discussion about adult literacy, there is an increasing emphasis on the "new literacies" that are deemed to be needed for the 21st century.

Literacy in its broadest sense could be defined as the ability to participate fully in a given society. Traditionally this has been understood to mean the three R's – reading, writing and arithmetic (as per the well-cited UNESCO definition). Until recently, this definition might have accurately reflected the text-based world within which we lived.

However, the world is shifting to a global knowledge-based economy where information, and specifically digital information, is a highly valuable commodity. In addition, the rapid pace of technological change contributes to a larger set of communication tools from which to choose. All this challenges us to expand the definition of literacy to include the wider variety of media and contexts within which people communicate and participate in a global society.

This technological transformation is relatively recent. The Internet only became publicly available some 20 years ago. SNS exploded after 1997 and YouTube was only recently launched in 2005. Given this short timeframe, we have not yet established a commonly accepted model or language to address the new skills required. Some of the labels that have been used include: multiliteracies, new literacies, information and communication technology (ICT) fluency, information literacy, digital literacy, 21st century literacy or 21st century skills. Each of these terms and their accompanying definitions reflect the particular orientation of the authors, whether that is economic, educational, sociological or psychological.

Governments around the world are recognizing the shift and identifying the need for all citizens to posses the digital skills required to effectively participate in a digital economy. "Digital skills development is currently the number one economic recovery policy in the great majority (15) of OECD Member States, and it also ranks number 6 in their long term economic policies" (Chinien & Boutin, 2011, p. 7). Human Resources and Skills Development Canada (HRSDC) has identified key "literacy and essential skills" that are considered necessary for most jobs and daily life. [3] One of the five essential skills is "computer use". In 2011, HSRDC commissioned a report that attempts to provide a comprehensive and accurate reflection of "essential digital skills" in the workplace (Chinien & Boutin, 2011).

Educators, who generally take a broader view of skills development beyond the economic needs of the country to individual and social needs, have been grappling with how to address the expanding digital needs of learners of all ages (Jenkins, Clinton, Purushotma, Robinson, & Weigel, 2006; Leu et al., 2007; The New London Group, 1996). Numerous provincial, national and international education ministries and other bodies have developed standards and frameworks for education, typically focusing on K-12. These frameworks start from different premises, either focusing simplistically on discreet computer/technology competencies or taking a more complex and integrative approach to literacies. [4]

However, there has been very little focus on the "digital literacy" of adult learners outside higher education. Along with text based literacy, just like everyone else, adult literacy learners are increasingly confronted with digital communications such as government websites, online applications, the information explosion on the Internet, and, of course, social media and SNS. "Literacy has now come to mean a rapid and continuous process of change in ways in which we read, write, view, listen, compose, and communicate information" (cited in Greenhow & Robelia, 2009b, p. 1136).

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[3] See **http://www.hrsdc.gc.ca/eng/workplaceskills/LES/index.shtml**

[4] See for example the International Society for Technology in Education (ISTE) (**http://www.iste.org/standards.aspx**), the Partnership for 21st Century Skills (**http://www.iste.org/standards.aspx**), Teachers of English as a Second or Other Language (TESOL) (**http://www.tesol.org/s_tesol/index.asp**), Alberta Education (**http://ideas.education.alberta.ca/engage/related-initiatives/inspiring-action**) and the Ontario Ministry of Training, Colleges and Universities (**http://www.tcu.gov.on.ca/eng/eopg/oalcf/index.html**)

But, as the Coordinator of the Learning Centre advises:

> Adult learners can easily be "left behind" when it comes to technological advances. Hence, it is important for practitioners to remain current of "pop" cultural developments if we are to be relevant to our learners. There is a need to integrate these advances into instructional strategies and to design intentional and meaningful learning activities.

Chovanec and Lange (2009; 2010) found that low-income adults in Edmonton, many of them literacy and English language learners, don't *want* to be left behind. They recognize the importance of learning these new literacies – computer and Internet skills – for employment, academic and personal reasons.

Accordingly, our understanding of literacy encompasses reading, writing and numeracy, but also digital literacies. As Selwyn and Facer (2007) declare in their report on digital inclusion for the 21st century, basic and functional print literacy are foundational to developing competencies in digital communication but they are no longer enough.

In this paper, we base our understanding of digital literacies on the standards developed by the International Society for Technology in Education (ISTE) (2007; 2008). Even though the ISTE's National Educational Technology Standards (NETS) are intended for K-12 curriculum development and enhancement, we have chosen to draw on these standards within this paper, first, because they have been used by others and, even more importantly, because we believe that they aptly represent the kinds of skills that adult literacy learners demonstrate in their use of SNS and other social media. According to ISTE (2011a):

> As foundational technology skills penetrate throughout our society, students will be expected to apply the basics in authentic, integrated ways to solve problems, complete projects, and creatively extend their abilities. ISTE's NETS for Students (2007) help students prepare to work, live, and contribute to the social and civic fabric of their communities. The new standards identify several higher-order thinking skills and digital citizenship as critical for students to learn effectively for a lifetime and live productively in our emerging global society. These areas include the ability to:
>
> • Demonstrate creativity and innovation
> • Communicate and collaborate
> • Conduct research and use information
> • Think critically, solve problems, and make decisions
> • Use technology effectively and productively (¶ 1-2)

Although these categories might appear in any discussion of digital competencies, the specific standards under each category fully demonstrate the kind of rich, robust and integrative understanding of digital skills that SNS and other social media demand and promote. In general, the standards – such as "create original works as a means of personal or group expression"; "interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media"; or "develop cultural understanding and global awareness by engaging with learners of other cultures" (International Society for Technology in Education, 2007) – demonstrate participatory, collaborative, creative possibilities that are the hallmark of SNS and other social media.

Conversely, we find the proposed Canadian digital skills framework (Chinien & Boutin, 2011) too narrowly focused on employment-related aspects of digital literacy without adequately addressing or reflecting the full range of 21st century literacies that the co-creative, user-generated capabilities of SNS and other social media make possible (Kaplan & Haenlein, 2010).

Summary

As a group, adult literacy learners are marginalized on multiple levels, reflecting the inequality of opportunity embedded in our social structures. Our understanding of literacy includes the foundational skills of reading, writing and numeracy as well as digital literacies, which are included among the so-called 21st century literacies. We use the educational technology standards developed by the ISTE (2007; 2008) to frame our analysis of SNS and adult literacy learning because they reflect the kinds of skills that adult literacy learners will need if they are not to be "left behind".

Research Questions

In this paper, we are looking specifically at the *issues related to SNS and adult literacy learnin*g through two questions:

- • How are adult literacy learners using SNS (such as Facebook)?
- • How might SNS be used to facilitate adult literacy learning?

Following this introductory section, we first review the methods we used to gather and analyze information related to the research questions, then discuss the findings in the section entitled "What's social networking got to do with adult literacy learning?" The findings are organized into four categories: social purposes, digital citizenship, digital divide and learning and literacy. In the final section, we provide a critical synthesis of the key issues through four interrogative statements before returning once again to our research questions.

Methods

Working within a project team that included academics and literacy program staff, we used a variety of methods to investigate issues related to the relationship between SNS and adult literacy learning, including fieldwork (interviews and observations), literature searches, and monitoring key blogs, websites and reports on the Internet.

Project Team

From the University of Alberta, Faculty of Education, the project team included a faculty member in Adult Education, an educational technology facilitator with a background in adult ESL and three research assistants who each provided assistance at different points during the research process. From the outset, we believed that including collaboration and consultation with local adult literacy organizations would significantly enhance the project. Hence, drawing upon our existing networks in the literacy community, we initiated a research collaboration with two local organizations: the Learning Centre Literacy Association (two sites) and the Edmonton John Howard Society's Adult Transition Learning Centre. [5] The coordinators from each of these three sites became active members of our project team. The full project team met four times throughout the year to review processes, questions and emerging analyses at each stage of the research project; the academic research team met regularly.

Fieldwork

From our preliminary foray into the literature, we knew that there was a substantial amount of information available about social networking in K-12 and in higher education but very little information specifically related to adult education. Yet, we also knew from experience that adult literacy learners were using SNS and other social media. Therefore, we proposed to engage in a more targeted search into the literature, equipped in advance with information about SNS obtained directly from adult literacy learners and adult literacy practitioners in Edmonton.

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[5] "The Learning Centre Literacy Association offers, reading, writing, math and other learning programs for adults in Edmonton [and] engages people in community-based learning and literacy development that further enables them to make positive changes for themselves and their communities" (**http://tlcla.org/**).
"The Adult Transition Learning Centre (ATLC) is a private accredited school that offers integrated educational opportunities in literacy development, academic upgrading, and personal development." (**http://www.johnhoward.org/educational-services/ adult-learning**)

To engage people in the research project, we required ethics approval from the University of Alberta. Because issues of trust are very important in reaching marginalized adults, we engaged the literacy program coordinators, who had already developed trust-based relationships with the learners, to act as intermediaries. We were especially careful to use clear language in the written recruitment materials and the consent letters, as well as in the scripts that the coordinators used to explain the research project in their programs. The consent letters clearly stated that the learners were under no obligation to participate, that their participation in the literacy program would not be affected by their participation in the research and that no information about them would be shared with the coordinators. Due to varied literacy levels among the potential participants, we read aloud the consent letter to everyone and documented their oral consent.

We conducted observations and group interviews (which were audio recorded) with learners, literacy staff and volunteers at all three sites as follows:

- November 2010: 26 hours of observation and informal conversations with learners both in drop-in and open learning situations as well as during formally organized class time
- January 2011: 4 group interviews with a total of 12 learners
- February 2011: 1 group interview with 4 literacy staff and 2 volunteers

Most of the learners who were observed or interviewed were attending various levels and types of adult literacy classes. However, at the Learning Centre in downtown Edmonton, learners also included people from the inner city who were dropping into the Centre to use the computers.

We explained that we would be observing and talking to learners about how they use Facebook (or other SNS) and we assured them that we did not need to see any personal details about them or their Facebook friends. Informal interviews during observation sessions included questions such as:

- What do you use it for?
- When and where do you use it?
- What do you like about it?
- What don't you like about it?
- Do you have any problems using it?

In addition to the questions above, in the group interviews, we focused particularly on:

- How did you learn to use it?
- How does it help (or not) with learning literacy?

Our two research questions guided our group interview with literacy staff and volunteer tutors:

- How do adult literacy learners use SNS such as Facebook and what issues arise when they use them?
- How can SNS such as Facebook be used as an educational tool (possibilities and issues)?

From the information obtained in the observations and interviews, we generated a list of diverse issues and questions that we reviewed with the project team and then used these to direct our literature search.

Literature Review

As has been reported, there is very little research that explores the relationship between SNS and education (boyd & Ellison, 2008; Burgess, 2009; Greenhow & Robelia, 2009a) and virtually none on adult education. Therefore, one of the most challenging aspects of the literature review was to identify useful search terms that would turn up articles specific to adult non-formal education (not K-12 or higher education) and SNS (not social media or other broader terms).

However, with almost nothing specific to non-formal adult education and SNS in the literature, we expanded our literature review to cover marginalized adults in diverse contexts using a variety of social media, always focusing on the learning and educational dimension and applications to SNS. We sometimes included information from higher education or K-12 when these offered useful insights. We also found that, to fully grasp implications for adult literacy learners and SNS, we had to understand some fundamental concerns about the digital world (e.g., the digital divide); therefore, this was included where relevant.

We first brainstormed many possible terms that might be used and then engaged the assistance of a librarian to devise a useful search strategy that entailed sorting the many terms into a table with five categories that were then matched in different combinations using a spreadsheet.

These categories were:

- social media generally (e.g., online community, social software, educational media)
- specific social media tools (e.g., Facebook, MySpace, YouTube)
- populations (e.g., disadvantaged, poverty, minorities, homeless)
- approaches (e.g., social capital, feminism, Freirian)
- learning (e.g., 21st century skills, informal adult education, digital divide, computer literacy).

We then constructed twenty different searches by systematically combining terms across the five categories, using Boolean operators within six different search engines, including some that picked up international publications. We limited our search to the previous five years. After scrolling through the many abstracts that these searches produced, we reviewed over fifty publications (journal articles, conference proceedings and news reports) that appeared relevant. These publications then led us to other useful references, netting close to a hundred articles for our review.

Web-based Information Sources

Simultaneously, we were monitoring key web-based sources where relevant and timely information for our paper was more readily available.

We first familiarized ourselves with the **AlphaPlus website** and explored many of the rich resources provided there. We noted that AlphaPlus maintains a Facebook presence that is geared to their target audience, literacy practitioners and service providers, but did not find any resources that led to SNS for literacy learners. Throughout the summer, a research assistant monitored the Twitter accounts of well-known authors on SNS such as

danah boyd, **Clay Shirky** and **Eszter Hargittai**. Although reading through many tweets was a time-consuming process, it was the most effective way to get up-to-the-minute information that, for the most part, wasn't covered in the traditional media. We also identified key bloggers to follow based on our literature search, as well as through Technorati and Google searches and through following connections in the blogosphere. These included **danah boyd**, **Marian Thatcher** and, of course, AlphaPlus.

Regular monitoring of relevant subjects on the Internet also led us to breaking reports and news features from, for example, **the Pew Research Center**, *the Atlantic* magazine that frequently covers stories on social media and other digital technology and *First Monday,* the only online peer-reviewed journal solely devoted to the Internet. Government websites were helpful for locating relevant policy documents.

To investigate literacy learning resources for learners on Facebook, we searched for users and groups related to literacy. A search of Facebook users with the word "literacy" in their name generated a long list. However, upon investigation, most of these were accounts used by literacy providers with the targeted Friends being other providers. Because many groups were not public, it was difficult to determine whether a group was designed for learners or practitioners. We were unable to find any Facebook users or groups designed for or by literacy learners.[6]

Analysis

We conducted our analysis concurrently with the fieldwork and the literature search through a continuous engagement with the information that emerged and by checking with the project team at each meeting. We organized our analysis into a number of emerging themes and considered the relationships between them. We then input our summary notes and key quotes from each article and field source into a wiki with pages that we created for each emerging theme. Finally, the themes were consolidated into four analytical categories.

Summary

Working with a project team that included academics and literacy practitioners, we conducted fieldwork in the literacy organizations, accomplished an extensive literature search and monitored web-based sources. Our findings were first organized into emerging themes and then into four analytical categories.

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[6] Warschauer and Liaw (2010) came to the same conclusion in a report on emerging technologies for adult literacy and language education.

WHAT'S SOCIAL NETWORKING GOT TO DO WITH ADULT LITERACY LEARNING?

Introduction

In this, the largest section of our paper, we organize our collective findings from these diverse sources into four categories and look critically at the most salient issues that arose related to SNS and adult literacy learning and education. These categories are social purposes, digital citizenship, digital divide, and learning and literacy. Our discussion of these four categories reveals the complex and contested terrain upon which questions of SNS are waged.

Considering the "Social" in Social Networking Sites

By far, the most important use of SNS is for social purposes. This includes interpersonal communication and relationship-building as well as social expression through stories and voice. However, SNS and other social media also have a downside that requires careful attention.

Interpersonal Communication and Relationship-building

Summarizing the literature on Internet-based computer-mediated communication tools, Stefanone and Jang (2007) conclude that the main motivation for using such tools is "to fulfill social and interpersonal goals" and that there is growing evidence that these tools do indeed "facilitate and enhance relationships" (p. 124). Furthermore, people use SNS and other social media (such as blogs) in conjunction with face-to-face communication. In keeping with this intention, the authors note, "bloggers tend to present themselves accurately" to their intended audience (p. 126).

Certainly, there is strong evidence that the main purpose for using SNS is to communicate with already existing social networks of friends and family, near and far (Brandtzaeg, Lüders , & Skjetne, 2010; Ellison, Steinfeld, & Lampe, 2007; Greenhow & Robelia, 2009a). Not only was this evident in the literature, it was also clearly articulated

by adult learners. For immigrants, rural-urban migrants and transient adults, the ability to connect to family and friends at a distance without financial impact is a much-appreciated advantage of SNS. For example, young adult learners from low-income families, especially those from immigrant families, reported using MySpace to stay connected with existing networks of family and friends, both local and distant (Greenhow & Robelia, 2009a).

The literacy learners we interviewed were exclusively using Facebook as their preferred SNS. They also identified a variety of other social media, often used in conjunction with Facebook. Most common were YouTube, Yahoo Messenger, Skype, email and games. They overwhelmingly reported that the main use of Facebook, and the Internet in general, was for the purpose of sharing, communicating and relationship-building. These learners not only keep friends and family up to date on their lives, they also share photos, recipes, interesting information, and YouTube video clips.

In investigating the social networking potential of YouTube, Lange (2007) uses a concept she calls the "media circuit" to refer to the way that sites such as YouTube "support social networks by facilitating and technically mediating social interactions among people within a network" (p. 363). The sharing function of YouTube was confirmed in research reported by Lin and Michko (2010) in which "the authors speculated that many people received links from others… [and] that people seem to rely on their existing social network to send and receive video links" (p. 265). Of note for its consistency with the experiences of our learners:

- 73% between the age of 18 and 29 have watched an online video with others
- 53% of Internet users have shared a video link with others
- 75% of Internet users have received video links from others
- 47% of videos received views from other SNS such as Facebook and MySpace (p. 265)

A couple of literacy learners in our study mentioned staying tuned to their children's online presence through Facebook and even offering them (and their Friends) advice. "They'll say 'hey, it's [my friend's] mom; they ask for advice; they know they can come to me" in person and as Friends in Facebook. However, boyd (boyd & Jenkins, 2006) cautions that parental surveillance online can be damaging to relationships.

Although some reported connecting with friends and family who were far way, the learners we interviewed were equally connected with those that are nearby, even those whom they see regularly. Occasionally, learners reported using it to meet new people or "cross[ing] paths" with friends with whom they had lost contact. One reported contact with a family member whom she hadn't seen for 23 years, which she accomplished by scrolling through people with her last name in Facebook. Learners appreciate that, because "not everyone can travel the world", Facebook "makes the world a little bit smaller".

Literacy learners in our study also mentioned Skype as a valuable tool for staying connected with family and friends back home cheaply and with the added advantage of visual contact. As one said, "You feel like you're right there". An immigrant woman poignantly added. "Sometimes when I get homesick, I go to Google Earth and look at my country. It lets me see my country, which makes me feel comfortable and happy." Accessing news from one's home country is also a valuable use of the Internet for immigrants (Benítez, 2006; Chovanec & Lange, 2010).

From a social-emotional perspective, studies suggest that communication between social network members results in reduced stress and increased emotional support (Acar, 2008), provides low-income young adults with validation and peer support (Greenhow & Robelia, 2009a), and facilitates maintaining relationships when people move to new offline communities (Ellison et al., 2007).

Albrechtslund (2008) argues that "online social networking must be viewed as a mixed world relating to both online and offline activities". This crossing or mixing of worlds is evident in diverse examples from many studies, but it is not without complications and contradictions.

For example, Acar (2008) notes that only a small number of SNS friends can be a real source of help in times of need, and boyd (cited in Greenhow & Robelia, 2009b) makes distinctions between offline friends and online friends, the latter of which encompass a greater array of types of relationships. Even though a Facebook user may have many Friends (in Facebook parlance), it is their real-life friends on Facebook who act as a kind of audience that influences the behavioural norms within a SNS (boyd & Ellison, 2008). Similarily, from her survey of bloggers, Viégas (2005) reports numerous examples of adjusting blog practices and content based on repercussions from others, including family, friends and employers.

In the literature, we found a number of references to blogging that serve a social purpose and, at one of the literacy sites in our research project, the Writing Circle participants had recently taken it up. Therefore, we include blogs in this paper as a form of social media that interacts with SNS. A weblog (blog) "is a website that enables an individual (or a group of individuals) to post topics, photos, and other material for other interested readers. In return, bloggers may open up the topic for discussion and feedback, allowing readers to post comments" (de Perio Wittman, 2008, p. 1). According to Kahn and Kellner (2004), "people use [blogs] for new forms of journaling, self-publishing, and media/news-critique" (p. 94).

Stefanone and Jang (2007) argue that most blogs are public manifestations of private diaries, focusing largely on day-to-day lives and personal thoughts and feelings to share with close friends and family. They "propose that the reconfiguration of websites into interactive blogs is symptomatic of the recurring trend to adopt technology for interpersonal communication" (p. 125). Based on 154 completed surveys (a 25% response rate) mostly from the U.S. and Europe, the authors conclude that people employ blogging to maintain existing relationships, which are often referred to as "strong tie networks". The exchange that is initiated when family and friends respond to blog posts "serves to maintain the vitality of the relationship" (p. 131).

A few articles on blogs caught our attention because they picked up on the interpersonal implications of blogs for marginalized groups (Brock, Kvasny, & Hales, 2010; Greenhow & Robelia, 2009a; Mitra, 2004; Somolu, 2007). For example, low-income youth in a college access program used the blogging function in MySpace to "present themselves and get feedback" (Greenhow & Robelia, 2009a, p. 132). We will return to blogs in relation to stories, voice and audience in later sections of this paper.

Thus, SNS as well as other web-based media offer opportunities to maintain and enhance social connections within existing relationships and, although less frequently, to reconnect with lost friends or meet people online.

Stories and Voice

Somolu (2007) writing about African women blogging for social change, Mitra (2004) discussing the "discursive strategies" of the web portal of a South Asian women's organization, and McGregor and Price's (2010) study of two Canadian adult literacy websites all refer to the potential power of the Internet for groups that are typically excluded from communication channels. According to Mitra: "The Internet has transformed popular culture by providing a virtual forum in which different communities and groups can produce a 'presence' that might have been denied to them in the 'real world'" (p. 492).

Although not always specific to SNS, we reviewed these articles closely to find potential implications for SNS and marginalized adult literacy learners. In all cases, the authors are discussing the empowerment of marginalized groups through the communicative potential afforded by Internet-based technologies such as blogs and websites. In some articles, the authors contribute insight into how such technologies might interact with SNS. Here, we take note of Somolu's focus on sharing stories to be heard by others and Mitra's emphasis on speaking and voice. We return to the McGregor and Price article in a later section on civic engagement.

Although some suggest that SNS are informational rather than narrational media (Wittel cited in Bigge, 2006), the narrational quality of constructing identities (Somolu, 2007) and telling life's stories within digital social spaces belies the belief that new media, as representative of the information age, is based merely on exchanging information (Wittel cited in Bigge). Rather, the creation and co-creation of self and story are quintessentially narrational as the examples below attest.

In agreement with Stefanone (2007), Somolu (2007) found that, across the 92 blogs of African women living in Africa that were included in her analysis, 65% were similar to personal journals, and that bloggers tended to base their postings on personal experience, even when writing about specific topics such as politics. Many of the 21 women who completed a follow up survey reported that their main motivation for blogging was to "speak meaningfully to other women" (p. 482) such as sharing issues and facilitating discussion on issues or injustices that affect women.

Somolu (2007) concludes "It appears that the power of the blog as a tool for empowering women lies in its ability to provide an avenue for women to express themselves and connect with other women" (p. 483). In the absence of "real stories" of African women in the media, Somolu argues that women turn to blogging to be heard. However, the women in her sample were highly educated, which she reports is typical of other research that suggests that women in developing countries who use the Internet are "not representative of the women in the country as a whole". This raises issues about the digital divide that we will address in a subsequent section.

Mitra (2004) also recognizes that marginalized women, who are often denied voice and visibility in the public sphere, "might find a new discursive space where they can voice themselves and thus become visible and make their presence felt" (p. 493) via the new digital technologies. She analyzes a comprehensive website for women in South Asia (SAWNET) that acts as a web portal linking to multiple other sites. Many women use these sites as a "speaking forum". Ultimately, she argues, "on the Internet, where personal voices operate within the public sphere, it is possible to get beyond the desire of being 'heard' and focus on being 'able to speak'" (p. 502). In another article, she (cited in Benítez, 2006) argues that "for marginalized groups such as immigrants it is important to consider how the Internet can be used to voice the unspeakable stories" (p. 188). This has implications for literacy learners who are learning to engage in text-based communication as a form of "speaking" their stories.

Like many Internet-based social media, blogging is particularly appealing because it is an easy-to-use (McClimens & Gordon, 2009) free or low-cost alternative to other communication media (de Perio Wittman, 2008) that "provide[s] a forum for 'ordinary' people to share their own perspective and experiences with other Internet users" (Somolu, 2007, p. 478). Adult literacy programs frequently publish the written stories or poems of the learners as a way to increase confidence and share their writing with a wider audience. At the Learning Centre in Edmonton, this is accomplished through newsletters and an in-house publishing company called Learning at the Centre Press.

However, this comes with printing and distribution costs and reaches a limited audience. Advanced writers at the Centre are now experimenting with a blog to serve a similar purpose with the added feature of feedback from readers to help them improve their writing. We address this more fully in a later section devoted specifically to learning issues.

Thus, blogging offers unique opportunities for marginalized groups to have a voice in spaces typically denied to them.

The Downside of Social Networking Sites

Despite their widespread use of Facebook, literacy learners are acutely aware of the double-edged nature of the social function of SNS. "I have many people I don't know on Facebook because of games", complained one woman. "You have to have Friends for the games and there's so many people who know family things [that] I don't want them to know. It's cheaper [than phoning] to go on and post on Facebook so that they know what's going on, but then everyone on there knows, not just my family".

While some learners wanted their Facebook profile to be open in order to meet new people, others wanted it closed to keep people from finding them. Echoing the concerns expressed by learners, Brandtzaeg, Lunders and Skjetne (2010) note that in SNS, "too much information given and received by too many people may result in a problem for privacy" (p. 1021). In relation to blogging for purposes of interpersonal communication, Stefanone and Jang (2007) caution, "problems may surface from the practice of essentially broadcasting content that has been traditionally defined as personal or private, analogous to content found in a personal diary" (p. 136-137). Viégas (2005) reported

that 36% of her survey sample of bloggers had "gotten in trouble with family or friends because of content published on their blogs" (¶ 42).

Learners also objected to the impersonal nature of the technology of SNS and complained that using SNS wastes time or takes too much time, and that it discourages face-to-face conversation and "human contact".

> Truthfully, I don't like computers because there's no human contact between anybody. Yes, it is great for family and friends that are far away but everywhere you look… everybody talks on the Internet, not in person… My daughter can't sit down and have a conversation.

Literacy learners also complained about gossip, profanity and rudeness on Facebook. As one learner summed it up, "the Internet can be dangerous but at the same time it's very good".

Summary

The power of SNS and blogs as ways of connecting and sharing with others shows evidence of how users are already developing, at a basic level, the communication and collaboration skills referred to in the ISTE (2007) standards:

- Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.
- Communicate information and ideas effectively to multiple audiences using a variety of media and formats (p. 1).

Creating a blog to have a voice and to be heard, logging into Facebook to meet up with friends and adding YouTube links into these platforms are all ways of interacting, collaborating and communicating with multiple audiences using diverse digital media. Just by using blogs or SNS, people are developing, experimenting and expanding these skills.

However, without intentional guidance, they may not take it to the next level such as collaborating on a project or creating their own videos to upload on YouTube. Nonetheless, our discussion of the downside of these technologies reminds us to be cautious in considering integrating them into educational environments.

Digital Citizenship

Issues related to what is typically called "digital citizenship" came up in our interviews with literacy learners as well as in the literature. Often identified as one of the 21st century skills or "new" literacies, digital citizenship refers to the ability of an "informed and participatory citizenry" to participate in a responsible, ethical, legal and safe manner within digital environments (Greenhow & Robelia, 2009a, p. 125; International Society for Technology in Education, 2007). However, our understanding of digital citizenship not only refers to such online behaviour and participation, but also more broadly includes participating digitally in public life (Greenhow & Robelia, 2009a; Kahn & Kellner, 2004). Although not included in their definition of digital citizenship, a close look at the ISTE standards reveals that the express purpose of the entire set of standards is to "help students to work, live, and contribute to the social

and civic fabric of their communities" (¶ 1). This is echoed in AlphaPlus' vision that "all people have the literacy and digital skills to enable them to participate actively in the social, political, cultural and economic life of our country".

Based on our twofold understanding of digital citizenship, we group our findings into two categories: digital behaviour and digital civic engagement. Within the former category, we also address issues related to privacy and surveillance.

Digital Behaviour

Since the initiation of SNS, users and commentators have expressed concerns about online behavioural norms that affect the safety, security and privacy of the users of this technology.

Literacy learners in our study recognized that the Internet could sometimes be "dangerous". Some worried about people hacking into Facebook and at least one raised the spectre of "perverts". Parents expressed concern about protecting their children, even though one admitted setting up a Facebook account for her underage child. However, their concerns were vague and undefined and seemed to have little effect on their use of SNS. Most seemed to have strategies for protecting themselves online such as not posting on the "wall" in Facebook, "being careful what I say", using multiple email accounts, and setting privacy settings. Nonetheless, staff and volunteers at the literacy programs thought that learners were not as careful as they should be.

Investigations over the past few years suggest that earlier concerns about unsafe use of SNS, particularly in relation to online predators, may have been overblown. [7] Consistent with the strong tie networks already described, boyd and Jenkins (2006) report that youth do not typically interact with strangers online. Given the research that indicates adults tend to have less far reaching networks than youth (Pfeil, Arjan, & Zaphiris, 2009), it seems likely that what boyd and Jenkins say holds true for most adults as well. In general, users seem to understand that their information could be publicly accessed, even when they are targeting friends and family in their communications (Stefanone & Jang, 2007). Further, they use similar strategies online as they do offline to protect themselves, such as ignoring strangers who approach them online and deleting their messages immediately (boyd & Jenkins, 2006). The authors remind us that most people are at exponentially greater risk for abduction and abuse by people they are close to in the offline world than from strangers online.

As discussed above, communicating through social networking is overwhelmingly dominated by private communications with personal connections. People talk about the everyday and the mundane to people they know. Content sharing is often dictated by the impulse towards social interaction within the private sphere of friends and family, despite concerns about privacy in the public sphere of cyberspace (Brandtzaeg et al., 2010; Stefanone & Jang, 2007). However, social networking is a "mediated public" which is "obviously not private" (Albrechtslund, 2008, ¶ 19).

We observed various strategies for dealing with the "public-private dichotomy" (Lange, 2007, p. 364) of the Internet among the literacy learners in our study, and, in the literature, there are references to the sophisticated symbolic and technical strategies that users employ to manage privacy.

In an example from the research literature, users of YouTube set their videos to "public" so that their family and friends are able to see their videos without having a YouTube account. But they use obscure tags so that only someone looking for them is likely to find them. Lange (2007) refers to this technique for managing content access as "publicly private" behaviour – more nuanced than the traditional dichotomy would suggest. In another example, high school students from low-income families using MySpace demonstrated aspects of digital citizenship, particularly in the areas of safety and responsibility, but they were less aware of the legal and ethical aspects (Greenhow & Robelia, 2009a, p. 135).

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[7] See for example PBS news reports based on an expert panel (**http://www.pbs.org/mediashift/2007/06/dangers-overblown-for-teens-using-social-media155.htm**l) and on a government report (**http://www.pbs.org/now/shows/508/internet-predators.html**)

Within the public spaces of the Internet, as mentioned earlier, the literacy learners that we interviewed expressed concerns about the ethical use of SNS, citing threats, nastiness, "bad mouthing", and profanity as behaviours of concern. "People talk in sick ways", said one. Others worried that information might be used maliciously, for example, "your past comes to haunt you" or "once you put information out there, it's out there" and it could "get you in trouble".

In her online survey, Viégas (2005) found that a third of bloggers had "gotten into trouble" as a result of their blog posts, with 6% identifying frequent occurrences. Furthermore, the more personal the nature of the postings, the more likely the blogger was to get into trouble. In addition to issues with family and friends, respondents also reported a number of repercussions with employers as a result of what they wrote in their blogs.

In a lengthy article in the *Boston University Law Review*, Keats Citron (2009) systematically creates a case for the development of a cyber civil rights agenda rooted in U.S. law. Most importantly for this paper is her argument that subordinated groups are disproportionately attacked in cyberspace. "Social networking sites and blogs have increasingly become breeding grounds for anonymous online groups that attack women, people of color, and members of other traditionally disadvantaged classes" (p. 62), she warns, including groups such as religious minorities and gays and lesbians (p. 64). Attacks take the form of threats of violence, posting sensitive personal information, doctoring photographs, "flood[ing] websites with violent sexual pictures", and manipulating search engines.

In discussing the "hidden dangers" of SNS for women, Burgess (2009) cautions that even in "women-only" cyberspaces, women should not assume that they are protected from being "frightened and silenced in online environments" (p. 66).

The alarming result: "These assaults terrorize victims, destroy reputations, corrode privacy and impair victim's ability to participate in online and offline society as equals" (p. 64). Common responses are for those attacked to use pseudonyms to protect themselves or to go offline entirely by, for example, discontinuing their blogs. However, Keats Citron (2009) reminds us that, once forced offline, there are no other means of electronic communication available to the user, and she advises that cyber attacks marginalize and cause "deep psychological harm" including isolation, inferiority and shame (p. 89).

These cautions remind us once again of the downside of SNS use. Although online predatory behaviour might be overblown in the media, cyber attacks on marginalized groups are not. Users have responded by developing sophisticated strategies for protecting themselves online. Nonetheless, this requires ongoing attention.

Cyber Surveillance

The French root of the word surveillance is translated as "to watch over" (Albrechtslund, 2008) and is often interpreted as a kind of monitoring. The uncomfortable feeling of "having people looking over your shoulder" while using Facebook was voiced by one of the learners interviewed in our study. Associated in popular consciousness to Orwell's Big Brother and Foucault's panopticon (Albrechtslund; Kahn & Kellner, 2004),Albrechtslund posits, "it is a prevalent view that everything related to [surveillance] should be avoided if possible…. but the problem is that [this does] not seem to adequately describe the actual practice of online social networking" (¶ 38). He points to the complexity of the issue by adding that the activities that might be construed as surveillance in social networking might also be considered participatory and empowering, an idea that we will review later in the section.

Nonetheless, issues of surveillance point out the dynamic interplay between visibility and invisibility in SNS. Not only is there an interaction between revealing and concealing being conducted by the individual user as she adjusts her profile and security settings, there is also a relationship between the author who is *visible* to her audience and the audience who is *invisible* to the author (boyd cited in Albrechtslund, 2008).

Because the issue connects to concerns about safety and privacy, especially for marginalized groups, we include a discussion of cyber surveillance in this paper. First, we look at the more subtle social surveillance that operates in SNS, discuss concerns about surveillance by the state and recap the debate on "real names" policies before taking a brief look at a potentially positive side of SNS surveillance. Although monitoring of SNS for the purpose of mining data for marketing purposes is also critiqued in the literature as a form of commodification of culture (Bigge, 2006), we don't address it in this paper.

Social Surveillance

Andrejevic (cited in Albrechtslund, 2008) introduces the concept of "lateral surveillance" to refer to peers monitoring and keeping track of peers' "romantic interests, family, and friends or acquaintances" through the use of digital "surveillance tools", of which, Albrechtslund might argue, Facebook is one (¶ 47). While learners expressed concern about this somewhat innocuous form of surveillance within their close networks, they also worried about the more anonymous social curiosity manifested by people they didn't know. Echoing the learners in our study who expressed concern that "other people can see your pictures and stuff", Brandtzaeg, Lüders and Skjetne (2010) report from their study of Facebook users that several "felt uncomfortable with the idea that others may have looked at their photographs" and other personal information (p. 1022).

The authors combine conformity theory and social capital theory to investigate the tension between the high sociability of SNS and the low privacy; "Social conformity often occurs when an individual's actions are exposed to increased visibility or surveillance by other members of a group (e.g., "followers" on Twitter and "friends" on Facebook)" (p. 2011), but "the conformity effect decreases when participants respond in private" (p. 1012). Based on their findings, they suggest that the high visibility of having many Friends on Facebook can turn into a type of "social surveillance and social control", which triggers strategies to mitigate loss of privacy.

One such strategy is to be careful about how much one reveals online. In contrast to others who report diary-like personal sharing online (Somolu, 2007; Stefanone & Jang, 2007), their study revealed that "people on Facebook share only a part of themselves, without becoming too private and personal" (p. 1023), thereby submitting to a kind of social pressure within SNS. Greenhow and Robelia (2009a) also found that the adolescents in their study generally presented information about themselves on MySpace that was "only slightly embellished" (p. 129) but that they were selective in that presentation, in that they chose "to depict physical, relational, and educational aspects of themselves but declined to reveal, or only hinted at, their sexual, ethnic, or occupational dimensions" (p. 130).

In Gemelli's (2009) research with homeless mothers' representations of self on their own websites, she found that women self-censored their identities to conform to their perceptions of the expectations of the dominant audience. Rather than giving voice to their own marginalized realities as poor and homeless women living in a transitional shelter (as was imagined in the design of the project), they dissociated in an attempt to escape class and to distance themselves from their current realities. The resulting image presented on their websites was one of ideals and dreams that conformed to a conservative, middle class reality. Gemelli speculates:

> [The women's] emphasis on material objects… provide[s] a sense of belonging to American culture despite the marginalization of the participants… They were able to create a space full of aspirations that keep them anchored in American culture and what it means to be a citizen of that culture, particularly one of white, middle class success (p. 21).

Yet, they did so by censoring their original ideas for their websites and creating a new version of self – one perceived to be more acceptable to the world beyond.

Self-censorship may also have been operating in the blogging experience of a group of postsecondary EFL students in Lithuania who "were aware that their [English writing] weblogs could be viewed by any Internet browser or member of the public. Therefore, students did their best to make their blogs presentable" (Kavaliauskiene, Anusiene, & Mazeikiene, 2007, p. 50). Similarly, Kitzman (cited in Arslan & Sahin-Kizil, 2010) observes that the online audience "influences and structures the very manner in which the writer articulates, composes and distributes the self document" (p. 185).

The kinds of conformity-inducing self- and peer-monitoring described here might well work against the sort of writing that adult literacy learners in our community are well known for – the gritty, honest, sometimes "unspeakable" (Mitra cited in Benítez, 2006) narratives of hardship, marginalization and perseverance that remind us that the world is unfair and that we ought to do something about it. If it were safe to do so, however, having a larger audience might enable literacy development – we will come back to this in the section on learning.

State Surveillance

It is well known that we live in a society that is increasingly capable of surveillance, and we recognize that, "since the terrorist attacks of September 11, 2001, government surveillance has increased especially in the "U.S". (Albrechtslund, 2008). This includes an increasing interest in "harvesting" information from easily accessible digital communications such as SNS.

> Government interest in online social networking is easy to understand. To profile potential criminals and terrorists, it is necessary to combine a wide range of information about people. This information includes social relations, such as shared activities and circles of friends, as well as personal data about political views, religious beliefs, sexual orientation, and preferences regarding everyday life activities. It is exactly this sort of information that can be found when studying online social networking. Most social networking sites ask their users to provide these sorts of details; in part this information appears in casual digital conversations within given social networking communication platforms. Consequently, the needed information to profile people is not something hidden that must be uncovered or retrieved using exotic technologies, human agents or advanced bugging equipment. People themselves are publishing this information in question, free for all to see and collect. (Albrechtslund, ¶ 21-22)

Surveillance issues are particularly relevant for adult literacy learners using SNS because, historically, marginalized groups (to which a large number of literacy learners belong) are subjected to more surveillance than others (S. C. Boyd, 2007; Swift & Parada, 2004). "Policing the poor" has been accomplished through police action, welfare state policies such as public housing and child welfare, immigration and corrections policies, charitable and non-profit organizations and now the ever-increasing prospect of the use of digital technologies to engage in surveillance.

Only one focus group participant, a drop-in centre visitor, referred to such surveillance, citing Facebook as an "intelligence gathering tool for the CIA". In our discussions with the literacy coordinators in the project team, however, concerns about a recent Canadian example arose wherein Facebook pages were set up specifically for digital photos and videos taken by bystanders during a "riot" in Vancouver to shame perpetrators and aid police in prosecution attempts. [8] Albrechtslund (2008) observes the example of police in Canada and the U.S. using YouTube to encourage users to identify people who appear in surveillance footage of crimes. One could easily imagine similar motivations for people turning in their Facebook friends.

Drawing on Lyon's metaphor of a "leaky container" to refer to this mixing of official and social functions, Albrechtslund cautions, "social communication becomes a tool for the police, and criminal investigation becomes part of social interaction" (¶ 24). Andrejevic (cited in Albrechtslund) goes a step further, "In an era in which everyone is considered potentially suspect, we are invited to become spies – for our own good" (¶ 47).

"Real Names" Policies

The current debate in SNS circles about Google Plus' recent move to insist upon "real" user names raises questions in this context.

In the summer of 2011, a new social networking site, Google Plus, was released in beta form for user feedback. When Google Plus began vigourously suspending accounts of users who had apparently contravened its "real names" policy (mostly techies who commonly use "alternate" names), a debate erupted about the use of real names on the Internet that had particular consequences for other SNS, such as Facebook.

According to boyd (2011), although Facebook has always had a "real names" policy, it wasn't really an issue in the early days because the networks were comprised of college students who knew each other. As the networks exploded, however, the "real names" policy was not diligently enforced. Celebrities were signing on with stage names, Black and Latino youth (who, according to boyd, no one pays attention to online) were creating accounts with "handles" and non-North American users were using non-Anglophone names that were not obviously real or false to those that monitor compliance to the policy. Privileged white Americans, those that originally signed up through their college networks, tended to continue to follow the norm of using their real names even though they too were beginning to feel more vulnerable online.

Those that argue for enforcing "real names" policies online are aiming to increase users' accountability for their online behaviour. They claim that when users can hide behind anonymity, behaviours like flaming (online attacks) are more prevalent. Conversely, when people use their real names, they tend to engage with others online more ethically and meaningfully (Szoka, 2011; Windley, 2011). Facebook's Zuckerman is quoted as saying, "I think anonymity on the Internet has to go away. People behave a lot better when they have their real names down. I think people hide behind anonymity and they feel like they can say whatever they want behind closed doors" (Galperin, 2011).

Boyd (2011) and others (Galperin, 2011; Madrigal, 2011) counter that this argument is too simplistic. First, boyd maintains, some people don't use their real names for legitimate reasons, and this group tends to be among the most marginalized – women, youth, activists, racialized groups, sexual minorities.

Even though their comments are persistent and public on SNS, pseudonyms don't attach users' comments to their "real" identities (Madrigal, 2011). Blogging anonymously "is regarded as an important factor in enabling [African] women to share their experiences and opinions honestly and openly" (Somolu, 2007, p. 483) and in enabling "safe places for women [to] … express themselves authentically, free from social cues and the hierarchy and domination of male-centered spaces" (Burgess, 2009, p. 65).

[8] See for example **http://www.straight.com/article-399798/vancouver/social-media-expert-concerned-online-identification-rioters-could-set-precedent-internet-surveillance**

Sometimes, people choose to use alternate names to protect themselves or their families from being targeted for their opinions, identities or lifestyles, or to avoid repercussions by maintaining a separation from their work or school and private lives. As boyd asserts, "'real names' policies aren't empowering; they're an authoritarian assertion of power over vulnerable people". Galperin (2011) agrees.

> The problem with the civility argument is that it doesn't tell the whole story. Not only is uncivil discourse alive and well in venues with real name policies (such as Facebook), the argument willfully ignores the many voices that are silenced in the name of shutting up trolls: activists living under authoritarian regimes, whistleblowers, victims of violence, abuse, and harassment, and anyone with an unpopular or dissenting point of view that can legitimately expect to be imprisoned, beat-up, or harassed for speaking out.

Second, how people interact online with multiple names and identities is little different than how people interact offline, choosing how and when to reveal what and how much to others in different social contexts (boyd, 2011). Ironically, according to Madrigal (2011), Google and Facebook argue that they are simply mimicking the offline world with this policy. But, Madrigal professes that they are not. Instead, "they are creating tighter links between people's behavior and their identities than has previously existed in the modern world" (¶ 11).

Meantime, while the argument rages, Government surveillance in Canada is poised to increase as the Canadian government has indicated that it plans to re-introduce its "lawful access" legislation (CBC News, 2011). Critics claim that Bill C-51, *Investigative Powers for the 21st Century Act*, will "fundamentally alter our society and comes with serious risks to privacy, democracy, civil liberties and the open internet" (*(Un)Lawful access*, 2011).

Participatory Surveillance

Albrechtslund (2008) argues that not all surveillance is based on power hierarchies. While not diminishing the potential dangers of online surveillance, he argues that it doesn't give the whole picture, particularly when it comes to SNS. He insists, "we should not be 'lured' into only seeing the dangers in things. Rather, online social networking is an opportunity to rethink the concept of surveillance" (¶ 60). Based on the ultimate purpose of SNS sites as a vehicle for sharing oneself with others, he argues that SNS facilitates the voluntary and intentional sharing of information that brings people into these sites to begin with. The information available to others who use SNS is "part of the socializing in mediated publics" (¶ 58) that emerges as information from profiles and other tools in SNS is actively and voluntarily shared through the process of constructing identity and subjectivity. For him, this demonstrates a participatory and potentially empowering use of the "surveillance" features of the medium.

Summary

Like most other issues related to digital technology, questions about surveillance are complex and far from straightforward.

Issues related to social surveillance have the potential to result in conformity and self-censorship. State surveillance has potentially dangerous implications for marginalized populations, and the contentious "real names" policies raise important questions about privacy, vulnerability and safety if SNS are to be employed for educational purposes.

On the other hand, as boyd and Ellison (2008) point out, one of the defining characteristics of SNS is that one can see and traverse another's connections. The point of this, as we've stated previously, is to socialize and to make connections with others. So, because SNS are designed to facilitate sharing and networking, there is a real tension between the ideology of SNS and people's desire for privacy. Albrechtslund (2008) picks up on this in making the

case for a more positive take on surveillance as a built-in function of the sociality of SNS. Furthermore, as Lange (2007) discovered in her ethnography of YouTube users, over time users become more adept at manipulating systems to "carve out privacy" and negotiate the public/private spaces of social media and SNS.

Digital Civic Engagement

Civic engagement is defined as:

> Acting upon a heightened sense of responsibility to one's communities. This includes a wide range of activities, including developing civic sensitivity, participation in building civil society, and benefiting the common good. Civic engagement encompasses the notions of global citizenship and interdependence. Through civic engagement, individuals – as citizens of their communities, their nations, and the world – are empowered as agents of positive social change for a more democratic world (Adams-Gaston, Jacoby, & Peres, 2005, p. 2).

As Byrne (2008) reminds us, the definition emphasizes individual or collective "action" on "issues of public concern" (p. 337). Although not often mentioned, some authors recognize digital civic engagement as a 21st century literacy skill (boyd & Jenkins, 2006; Greenhow & Robelia, 2009a; Kahn & Kellner, 2004). Noting the potential for blogging and SNS to promote civic engagement among users, Greenhow and Robelia argue that the "ability to practice digital citizenship [includes] their developing awareness of social and political issues and online participation in public life" (p. 126). In this section, we include issues related to advocacy, activism and politics.

Speaking specifically about women but likely equally true for others as well, Burgess (2009) states, "The Internet fosters various social opportunities for women to speak loudly as individuals, groups, or coalitions in advocacy for social, political, and economic interests, or place their histories as central to the conversation" (p. 65).

Among the twelve literacy learners who participated in the focus groups, two men reported actively using the Internet and SNS as a way to connect with people of similar political-mindedness and to become more knowledgeable about their own political philosophies.

Increasingly, the Internet, and SNS in particular, have demonstrated their success as activist tools. The EZLN Zapatista movement in the Chiapas in the 1990s is typically cited as an early success story in this regard (Kahn & Kellner, 2004, p. 87). A growing scholarship on the question of activism and SNS, while not without controversy, suggests that "contemporary social movements are using advanced forms of technology and mass communication as a mobilizing tool and a conduit to alternative forms of media. These… have played a critical role in the organization and success of internal political mobilizing" (Carty & Onyett, 2006, p. 229).

Kahn and Kellner (2004) argue that, since September 11, 2001, "a tide of political activism has risen, with the internet playing an increasingly central role" (p. 88). Most recently, SNS have been positively associated with the "Arab spring", the wave of pro-democracy protests and demonstrations that started in the spring of 2011 in countries such as Tunisia, Egypt and Syria. There is burgeoning public and media attention to the significant role that SNS such as Facebook played in bringing people together during these movements and in broadcasting and dialoguing on the issues. According to a recent report, "social media played a central role in shaping political debates in the Arab Spring. A spike in online revolutionary conversations often preceded major events on the ground. Social media helped spread democratic ideas across international borders" (Howard, Duffy, Freelon, Mari, & Mazaid, 2011, p. 2). Although in 2008, boyd was cynical about political action in SNS, in a 2011 article, she, along with multiple co-authors (Gilad et al.), present findings that reveal the vital "symbiotic" relationship that occurred during these protests between bloggers, activists and journalists through the medium of Twitter (p. 1400). Kahn and Kellner (2004) dramatically characterize the Internet deployed in this way "as a living, historical force" (p. 88) that "make[s] possible a reconfiguring of politics and culture" (p. 93).

However, there is nothing inevitable about this trajectory. Despite daily discussion threads about issues of concern on an African-American SNS in 2006, Byrne (2008) observes, "meaningful action beyond the discussions has yet to emerge" (p. 336). [9] Based on her analysis combined with studies of online social movements, she concludes, "the connective power of SNS will not translate easily or automatically into civic engagement without this purpose being clearly articulated" (p. 336). This appears to be so even though offline social networks in the Black community have historically "serviced members' social as well as civic interests" (p. 337).

From another angle, there is encouraging news from a breaking report produced by the Pew Research Center in June 2011: SNS users in the U.S. demonstrate more political engagement than the general population.

> Internet users in general were over twice as likely to attend a political meeting, 78% more likely to try and influence someone's vote, and 53% more likely to have voted or intended to vote. Compared with other internet users, and users of other SNS platforms, a Facebook user who uses the site multiple times per day was an additional two and half times more likely to attend a political rally or meeting, 57% more likely to persuade someone on their vote, and an additional 43% more likely to have said they would vote. (Hampton et al., 2011, p. 4)

However, this may be connected to the higher educational and income levels of both SNS users and politically engaged citizens.

ComScore (2011) reports a related finding. While far behind in popularity to just about everything else people search on the Internet (e.g., news, resources, entertainment), "political news sites saw the strongest growth" in unique visitors, increasing by 47% since 2009 (p. 13).

What does this have to do with adult literacy learners?

First, as Chovanec and Lange (2009) suggest, "there is strong evidence of a link between literacy levels and social and civic engagement" (p. 40). The marginalized learners who typically populate adult literacy programs are also less engaged as citizens and have less political power. They echo UNESCO (2005) in invoking the globally recognized critical adult educator Paulo Freire.

> Literacy goes beyond capacity with written text to, as Freire (2003/1973) describes it, capacity in "reading the word and the world" wherein citizens can use information effectively, understand and name their social context, act as advocates for themselves and engage in the political system (p. 39).

Indeed, their research uncovered a thirst for learning related to politics and advocacy among low-income adult learners. Approximately one-fifth of survey respondents had been motivated to engage in adult education to be better able to stand up for their rights, and many interview participants wanted to learn more about government, law, history and sociology to understand "the way things work around me" (p. 50).

Thus, the authors contend, community-based adult literacy programs must play a role in supporting adult learners to be engaged citizens. They recommend providing more "political/civic education that empowers learners through a critical understanding of the systems that govern their lives and develops skills in advocacy and activism for political participation to improve the conditions of their lives" (p. 103).

Second, in the context of this paper, SNS and other social media offer an accessible and potentially powerful avenue for adult literacy learners to become more engaged citizens, stronger advocates for themselves, their families, communities and society at large through dialogue with each other regarding literacy, by sharing their stories with a broader audience (as discussed above) and by engaging directly in online advocacy efforts.

Hyperlinks embedded in the websites of adult literacy organizations offer the possibility for SNS to become an advocacy tool for adult literacy, although this is little realized at the moment (McGregor & Price, 2010, p. 38).

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[9] However, the author did not perceive posts that challenged racist comments on the site as "action." In fact, she left this thread out of her analysis because it was "not connected to Hurricane Katrina," the political issue that she was following on the site (p. 328).

Through these means, adult literacy learners could contribute to what Kahn and Kellner (2004) called "refocusing politics on everyday life" (p. 93), bringing real-life attention to the highly political issue of literacy levels in Canada.

McGregor and Price (2010) investigated the websites of ABC Canada and Movement for Canadian Literacy (MCL) for the "ways in which a website and new media and social networking tools might either enable or constrain the work of an advocacy-based organization in its effort to influence or shape public policy in adult literacy" (p. 28). At the time of publication of their report, ABC Canada had a Facebook page and a YouTube portal. (Today, MCL has a link to Twitter but still none to Facebook or YouTube.)

The authors conclude that neither organization was fully using the potential of the Internet but that, by wisely using the "persuasive" capacity of the narratives and images used in social networking, ABC Canada engages in more open, two-way policy advocacy based in a civic action model. Building on the idea that "the new social networking tools offer valuable means through which to extend support of and advocacy for literacy work" (p. 43), it is possible to imagine using SNS to increase adult literacy learners' civic engagement in literacy issues, perhaps using SNS linked within the websites of advocacy organizations.

Third, as exciting as technology may be for civic engagement, it also brings us back to questions of cyber abuse and cyber surveillance. Attacks in cyberspace suppress civic engagement and deprive vulnerable members of our society of their equal right to participate in social, economic and political life (Keats Citron, 2009). As noted earlier, cyber attacks are more frequently directed at marginalized groups (Keats Citron, 2009). Further, it is well known that advocates and activists as well as citizens associated with political parties that are working against the prevailing system are subject to surveillance, especially post-September 11, and that SNS offer an especially fruitful opening to do so (Albrechtslund, 2008). Combining these two – marginalization and activism – for adult literacy learners may leave them especially vulnerable in cyberspace.

Summary

Digital citizenship is an important component of 21st century literacy. It is explicitly identified in the ISTE standards in relation to digital behaviour. Students are expected to "advocate and practice safe, legal, and responsible use of information and technology" (International Society for Technology in Education, 2007, p. 1). Moreover, the underlying purpose of the standards – that students "contribute to the social and civic fabric of their communities" – implicitly recognizes digital civic engagement as well (International Society for Technology in Education, 2011a, ¶ 1).

Digital behaviour relates to the ethical and safe use of technology. It includes behaviours related to online security and privacy. Since the initiation of SNS, users and commentators have expressed concerns about the safety, security and privacy of the users of this technology. Indeed these are important considerations and particular knowledge and skill is required to ensure that users are protected.

Adults with low literacy levels are less likely to be engaged as citizens and consequently have less political power. SNS and other social media offer an accessible and potentially powerful avenue for adult literacy learners to become more civically engaged and stronger advocates for themselves, their families, communities and society at large. However, as already marginalized citizens, adding activism to their online behaviour may leave adult literacy learners especially vulnerable in cyberspace.

Digital Divide

As mentioned earlier, adult literacy learners are often among the most marginalized adults in society; many have had limited opportunity to obtain education or have been failed by a system that generally reproduces social inequalities (Chovanec & Lange, 2009; Chovanec & Lange, 2010). To use SNS or any other social media, the adult literacy learner needs access to a computer, an Internet connection and the necessary skills and support (DiMaggio, Hargittai, Celeste, & Shafer, 2004; Kalichman et al., 2006; Kontos, Bennett, & Viswanath, 2007) – tools that are not easily available to them. Therefore, in considering the potential relationship between adult literacy learning and SNS, we must take into account the "digital divide".

According to DiMaggio et al. (2004), concern about a digital divide emerged in the mid 1990s when the expected equalizing effect of the Internet as a low cost information technology did not materialize and indeed researchers began to see evidence of technology "exacerbating inequality rather than ameliorating it" (p. 359), thereby raising concerns about the gap between the technology haves and have-nots (Selwyn & Facer, 2007; Sipior, Ward, & Connolly, 2010). In 2000, commentators warned, "the Digital Divide is the largest segregating force in the world today" (cited in Sipior et al., p. 22). According to Sipior, Ward and Connolly.

> The advent of the Internet and the ways in which it exacerbates existing social divides is unique to this period of history. As the Internet becomes more embedded in our ways of interacting with government and other social service bodies, those without access to the Internet are likely to become increasingly marginalized while those with such access will become increasingly advantaged (p. 21).

The digital divide originally referred to the lack of availability of a computer and/or the Internet based on age, gender, economic, geographic or other forms of disadvantage.

DiMaggio et al. (2004) reports that age, gender and geographic disparities in Internet access leveled out in the late 1990s. This is reflected in the most recent statistics regarding the use of SNS across North America. In the U.S., more than half all SNS users are older than 35 years of age and more than half (56%) are women (Hampton et al., 2011). In Canada, "a similar proportion of men (81%) and women (80%) used the Internet in 2009" (Statistics Canada, 2010).

Specific to Facebook, of all adult Facebook users in Canada, half are now older than 34 years of age (Socialbakers, 2011), and the largest growing age group is above 55 years of age (comScore, 2011). Similarly, 60% of *new* Internet users between 2007 and 2009 were aged 45 or older (Statistics Canada, 2010). Of the Canadian Facebook users, 46% are male and 54% are female (Socialbakers, 2011). Also in Canada, 73% of people in smaller communities (population less than 10,000) are using the Internet compared to 83% of those in larger communities (Statistics Canada, 2010).

However, various forms of socioeconomic inequality in Internet use persist. "Americans with few years of education and low incomes were still less likely to be online in 2001" (DiMaggio et al., 2004, p. 369). Referencing other studies, Sipior et al. (2010) report that socioeconomic disadvantage (low-income, low educational level and employment status) remains a strong predictor of Internet use in 2010 (p. 23). Statistics Canada (2010) reports that, while Internet use increased between 2007 and 2009 among the lowest income levels (households earning $30,000 or less) and for those with no post-secondary education, it increased by almost the same percentage for those at the highest income levels (households earning $85,000 or more) and with post-secondary education who already had significantly higher levels of use. Selwyn (Selwyn et al., 2004; Selwyn & Facer, 2007) statistically predicts these entrenched stratifications so clearly that they appear to represent a kind of demographic determinism.

However, the correlation between socioeconomic status and Internet use is not a straightforward one, and it is not based solely on economic means (Selwyn, 2004). The availability of computers and the Internet is increasing

throughout the world. [10] Literacy learners interviewed in Edmonton often reported that they had computers at home. But even those who did not have home computers knew how and where to find them, mainly citing the public library and the Learning Centre downtown. One, pointing out that the Internet and Facebook are free, said "Poor people should have access too".

There have been a number of initiatives to put computers into community centres, service agencies and public libraries in economically disadvantaged neighbourhoods (DiMaggio et al., 2004; Kalichman et al., 2006; Kontos et al., 2007; Selwyn et al., 2004; Selwyn, 2004; Sipior et al., 2010). Nonetheless, *perceptions* about access issues, such as cost and availability, may also affect the use of the Internet, especially for marginalized groups (Sipior et al.).

Although some have been tempted to consider the digital divide as a dead issue or a 20th century relic (Selwyn & Facer, 2007), the question of access requires a deeper analysis from which evidence of more complex access issues emerges and which raises questions about inequalities by race/ethnicity, literacy levels, socio-economic status and other social signifiers of marginalization.

Studies continue to find relationships between Internet use and race/ethnicity. For example, recent research indicates that Latinos and Blacks "lag behind" whites in Internet use in the U.S. but the difference disappears after controlling for socio-economic status (Livingston, 2011). In an earlier study, Fox and Livingston (2007) found that levels of English language proficiency and of education accounted for the lower levels of Internet use among Latinos in the United States. Benítez (2006) considers that, while 87% of global websites are in English, Latino immigrants' attempts to use the Internet will be thwarted by their level of English language skills. Lu (2010) also identifies a disconnect between the number of non-English speakers and the number of non-English websites.

We had considerable difficulty finding anything specific to Internet or Facebook use among Aboriginal Canadians. In a 2009 article, Pirbhai-Illich, Turner and Austin (2009) recap the most recent statistics from 2001: only 7% of Aboriginal communities in western and northern Canada have access to high speed Internet. Issues include lack of literacy, culturally relevant material, access on reserves, computer skills and training (p. 147-148).

Nielsen (cited in Moore, Bias, Prentice, Fletcher, & Vaughn, 2009) observed, "lower-literacy online behavior was very different from that of higher-literacy users" (p. 120), including skipping text and not scanning. Kontos et al. (2007) note that few health websites are designed with low-income and low-literacy users in mind, suggesting that website design makes access difficult for disadvantaged populations. McClimens and Gordon (2009) found that blogging with adults with intellectual disabilities of varying literacy levels required mediation by student volunteers and may have been restricted by low computer literacy skills. Yet, in a report by the National Institute for Literacy in the U.S., Warschauer and Liaw (2010) report, "We are not aware of any social network sites that have been set up specifically for use by adults with low literacy levels" (p. 15).

Pfeil, Arjan and Zaphiris (2009) note variations in how different age groups use social media such as SNS and blogs (p. 643). Somolu (2007) points out, "in the African context, [the] potential of ICTs is limited by poverty illiteracy, lack of computer literacy and language barriers" (p. 477).

According to Brock et al. (2010), studies such as these indicate that ICT use "is reflective and constitutive of the broader economic, social and cultural contexts" in society (p. 1043). Selwyn (2004) was among the first to systematically question the "political and popular understandings of the digital divide". In an article in New Media and Society, he claims that basing arguments on access is appealing for policy makers and government agencies because "packaging complex social issues [as] a form of social exclusion" gives the impression that something can be done about the issue by simply turning technological have-nots into technological haves (p. 357). But, he argues, "there needs to be political recognition that the crucial issues of the digital divide are not just technological – they are social, economic, cultural and political" (p. 357). Similarly, Yu (cited in Selwyn, 2004), calls for governments to intervene in what she calls the "deep rooted" causal factors of the digital divide.

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[10] According to Internet World Stats (2011), the total number of Internet users as of Dec 31, 2000 was 361 million. As of March 31, 2011 the latest data showed a total of 2.1 billion users – a 480.4% increase. For Canada, latest figures show that the Internet is used by 79% of the population; the growth between 2000 and 2011 was 112.3%.

Speaking specifically about SNS, boyd (forthcoming) agrees. A teenager's comment, "MySpace is now more like a ghetto", alerted her to a possible connection to race and class in her ethnographic study of teenagers' use of SNS in the U.S. Based on her subsequent analysis, she concludes that using MySpace or Facebook isn't simply "consumer choice" but rather reproduces existing social categories based on race, ethnicity and socio-economic status (p. 2). Hargittai (2008) echoes boyd's findings, citing a preference for MySpace over Facebook among Hispanic college students and those whose parents had lower levels of education, and vice versa. Zhao (2009) found a similar divide comparing inner city MySpace users and suburban users of Instant Messaging. [11] Boyd (forthcoming) and Hargittai (2008) point out that such findings challenge the mythology surrounding the idea that the Internet erases social boundaries.

> Neither social media nor its users are colorblind simply because technology is present. The internet mirrors and magnifies everyday life, making visible many of the issues we hoped would disappear, including race and class-based social divisions in American society (boyd, forthcoming, p. 37)

Further, as some point out, there is a distinct difference between access and unlimited and immediately available access (DiMaggio et al., 2004; Kontos et al., 2007; Selwyn et al., 2004), such as that enjoyed by persons with multiple personal computers and Internet service plans in their homes and/or workplaces. Overwhelmingly, computers are used at home (Hague & Logan, 2009; Selwyn et al.), secondarily in workplaces, homes of family or friends, and rarely in public spaces such as libraries and community centres (Selwyn et al., 2004). This raises questions about where technological resources should be located and suggestions for some kind of borrowing system instead (Koblik, Kidd, Goldberg, & Losier, 2009; Selwyn et al., 2004). Issues related to availability also include space and furniture as well as time limitations due to other responsibilities and time-sharing conflicts at home, concerns that are particularly relevant for people with fewer resources (Greenhow & Robelia, 2009b; Kontos et al.).

Literacy learners in our study who had a computer at home had to limit their use to evening hours after work or school when no one else was at home or using the computer. Literacy practitioners reported that learners often had a computer at home but only the children used it. One, whose learners had started using a blog for writing, noted that those without computers at home were not able to comment as often. In her literacy program, the learners were becoming more comfortable with computers only because of a fortuitous donation of some laptops and the support of a volunteer tutor.

Simply providing computers will not bridge the gap. As these and many other examples of differential access demonstrate, there is overwhelming evidence of the digital divide based upon social class and other forms of marginalization that goes well beyond physical access (Selwyn & Facer, 2007). [12]

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[11] Each of these studies was conducted approximately 5 years ago; since then, Facebook usage has risen dramatically across all income groups. However, the point they make about online social signifiers still holds relevance.

[12] Selwyn and Facer (2007) also claim that many people that are not socially excluded (e.g., by income or education) may not be meaningfully engaged with ICT and could therefore be considered to be digitally disadvantaged. In an apparent twist, Tufekci, Cotten and Flow-Delwiche (2008) highlight the complexity of the digital divide by reporting that lower socio-economic and African-American middle school children in Maryland were more likely to use computers and the Internet. However, upon further analysis, the authors conclude that this increased use is largely for entertainment purposes (i.e., playing games or watching videos) akin to earlier findings related to television watching. They, too, recommend a "more nuanced understanding" of the digital divide (p. 16).

Digital Engagement

More nuanced understandings of the digital divide look beyond the standard binary definitions based upon haves/ have-nots and users/non-users to investigate the dynamics of inequality that emerges once they get online, i.e., "What are people doing and what are they *able* to do when they go online?" (DiMaggio et al., 2004, p. 375). This is referred to as the "second" or "second level" digital divide and it refers to "the inequalities in *Internet use* due to class, race, gender, and other social characteristics" (Zhao, 2009, p. 55, emphasis in the original), which may, in some cases, be increasing rather than decreasing (Selwyn & Facer, 2007). In other words, not paying so much attention to unequal access but to "the unequal ways that computers are used" (Warschauer cited in Selwyn & Facer, 2007). This is also referred to as the "participation gap" (boyd & Jenkins, 2006).

Drawing on Bourdieu's notions of cultural capital which we explicate below, in 2004, DiMaggio et al. anticipated that, as more users went online, new kinds of inequality would emerge "among internet users that affect the extent to which they reap benefits from going online" (p. 375). Differences related to level of education and socioeconomic advantage result in a "knowledge gap", demonstrating that "'access' is never enough to ensure productive use" (p. 376). They consider five forms of digital inequality that are dynamically related – technical means, autonomy of use (including location and availability), skill, social support and scope of use – each of which will shape users' experiences and their outcomes (e.g., in earnings or political efficacy) (p. 376). Accordingly, an array of resources is necessary to ensure engagement including material, temporal, mental, social and cultural resources (Selwyn & Facer, 2007).

Similarly, Selwyn (2004) also criticizes the dichotomy of haves and have-nots based on digital access as too simplistic. He contrasts "access" with "use" and use with "meaningful use" which he refers to as "engagement" (p. 349). A user is engaged when he demonstrates some degree of control and choice over the technology, leading to significant utility to the user.

However, perceptions about users' choice and control over technology can adversely affect engagement. For example, Sipior et al. (2010) found that low income and Black/Hispanic individuals *perceived* the Internet to be more expensive, leading the authors to hypothesize that perceptions of the Internet as costly and hard to use negatively impacted visitation to e-government websites. The stereotypical perception that "technology is a male preserve", propped up by the inaccessible technical jargon, discourages women in Africa from blogging (Somolu, 2007, p. 486). Similarly, Selwyn and Facer (2007) point out that qualitative studies have revealed that the apparent closing of the gender gap in technology use doesn't account for the gendered nature of engagement with technology.

Fear about "wrecking" the computer or contracting computer viruses and lack of knowledge about "the basics" leave literacy learners uncomfortable and reticent around computers. "I find the computers very scary", admitted one literacy learner, "it's very high tech". Another finds the Internet "scary" because there is an over abundance of information. In 2010, of the 21% of Canadian households that reported not having Internet access at home, 12% reported a lack of confidence, knowledge, or skills as the reason (Statistics Canada, 2011). Salvadoran immigrants, mainly manual workers in Washington DC, recognized that having a computer at home didn't necessarily mean they knew how to use it (Benítez, 2006).

Therefore, a more nuanced understanding of the digital divide includes access to technological savvy. In a study involving low-income African-American men with advanced HIV disease, Kalichman et al. (2006) found that, while access to computers in an AIDS service centre enhanced users' online engagement, "bridging the digital divide in HIV/AIDS care will require interventions to build information technology consumer skills" (p. 335), skills such as how to navigate the plethora of sites and information to determine relevant, quality information.

In another study, Kontos et al. (2007) put computer systems with high speed Internet access into the homes of twelve low-income urban novice computer users (the majority were women and African-American). They found that training classes, 24-hour technical support and in-home support were fundamental facilitators for these users who were otherwise challenged by limited skills, confidence and time to engage with the technology.

Studying adults with intellectual disabilities, McClimens and Gordon (2009) provided six sessions to their participants, including a training session on Internet safety, and assigned student volunteers to partner with each participant to help them compose and post their blogs by providing assistance with spelling, wordprocessing and logging on. However, the participants soon recognized that this kind of support would not be available to them in cyberspace. Koblick et al. (2009) describe an intensive computer training program for adults hospitalized with severe mental illness. The program was conducted by an instructor in the hospital setting and then by one-to-one volunteer tutors upon return to community-based rehabilitation. Although they initially reported moderate levels of computer skills, these learners agreed that the individualized instruction and gradual exposure to new materials were essential to their learning.

In a long-term grassroots project within an underserved, low-income, transient Latino community, a community health media organization offered free weekly Spanish-language computer classes to increase access to health information (Ginossar & Nelson, 2010). From these classes, they then recruited community members to become health and technology leaders and to develop a community-designed website that would use "fotonovelas" [13] to teach health related concepts. Each week, the classes included one hour of basic or more advanced computer training and one hour of participatory interaction with the health website.

Thus, all of these authors point to something that the coordinator of an Edmonton literacy program observed the moment that a set of laptops were donated to her site: adult literacy learners will need far more than physical access to a computer to fully avail themselves of the potential of the Internet and SNS to increase their literacy levels and enhance their lives.

When adult literacy learners lack computer "basics", are fearful around computers, overwhelmed by the amount of information on the Internet and unsure how to safely engage with Facebook – not to mention lacking functional literacy skills – they lack the technical cultural capital that is enjoyed by more privileged people. "People like us missed out", lamented one of the literacy learners, "it doesn't just come to you and it's frustrating for people who don't know". "I don't get it", said an immigrant learning English literacy, "you want to find one thing but it gives you ten pages; what do you pick?"

This should be no surprise given research such as that conducted by Kalichman et al. (2006) who reported: "A majority of persons who resist using technology experience anxiety and intimidation when afforded opportunities to access computers, and these experiences are greatest for lower income ethnic minorities"(p. 35). Having access to ICTs and the skills to use them is necessary for adults with intellectual disabilities so as not "to be at risk for further social exclusion if they are not part of the wider social community in general and the 'information society' in particular" (McClimens & Gordon, 2009, p. 27). Adults with psychiatric disabilities recognized "the role that computers play in mainstream society", a society from which they felt excluded and to which they felt they had greater access by learning how to use the computer (Koblik et al., 2009, p. 307-308).

This issue is reflected in the comment of one of the literacy program coordinators who, from the beginning of this study, expressed concern about adult literacy learners – adults who are among the most marginalized in our society – being technologically "left behind". Marginalized learners, he said, "lead compartmentalized lives; there is no integrated understanding that [SNS] is part of something else". Encouraging learners to engage with the ubiquitous Facebook allows them entry into something that everyone else is doing, into being a part of something everyone else has the skills and the privilege to use (at least in North America), because "the more parts you feel not a part of, the less motivated you are to read and write".

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[13] Fotonovelas are created with photographs and conversation bubbles similar to a comic book format.

Technical, Cultural and Social Capital

Pierre Bourdieu, a French philosopher who studied the reproduction of social relations through education, talks about the kind of savvy, or "know how", that we need to be "part of" society; he calls this "cultural capital". And he calls the social networks that we need to deploy it, "social capital". His theory of capital has been employed by a number of scholars investigating and analyzing the digital divide.

> In Bourdieu's original analysis, cultural capital denotes the extent to which individuals have absorbed (often unconsciously) or have been socialized into the dominant culture over time. Therefore, cultural capital can be embodied (in the form of knowledge), objectified (in the form of books, paintings, instruments and other artefacts) and institutionalized (in the form of qualifications) (Selwyn, 2004, p. 353).

According to Brock, Kvasny and Hales (2010), Bourdieu later recognized an additional form of capital that accumulates as people engage with computers, and that explains, in part, the kinds of variations that are revealed in the literature on the digital divide such as those related to social class. This is referred to as "technical capital".

> Technical capital serves as a power resource as certain groups mobilize around their technical expertise to gain resources and position. This form of capital accrues through education, economic means, and social networks that include others knowledgeable about ICT, and unfettered access to ICT… Command of this cultural capital confers a higher degree of autonomy and digital skills, and would also help to explain variations in use. (p. 1043)

Because "economic capital cannot account for all stages and levels of engagement to ICT" (Selwyn, 2004, p. 353), Selwyn also turns to Bourdieu's theory of social and cultural capital to reconsider understandings of the digital divide. It is the possession of "technological forms of cultural capital" that makes the difference between owning a computer and meaningfully engaging with it. This includes "technological skills, 'know how' and socialization into the technoculture via family and the household" (p. 353).

Social capital includes the technologically based social connections and networks – such as the expertise of friends, family and organizations – that help us to mobilize and leverage the other forms of capital to our advantage. Resnick (cited in Bigge, 2006) defines this "sociotechnical" capital as "productive resources that inhere in patterns of social relations that are maintained with the support of information and communication technologies" (¶ 20).

Although Brock et al. (2010) recognize the digital divide, they suggest that the concept is overly aligned with deficit models that position the "lack" on the shoulders of minority groups who, it is assumed, don't possess the right mix of material, skill and values to be technologically proficient. Instead, based on their research with mostly Black women of diverse ages and social classes using weblogs, Brock et al. conclude.
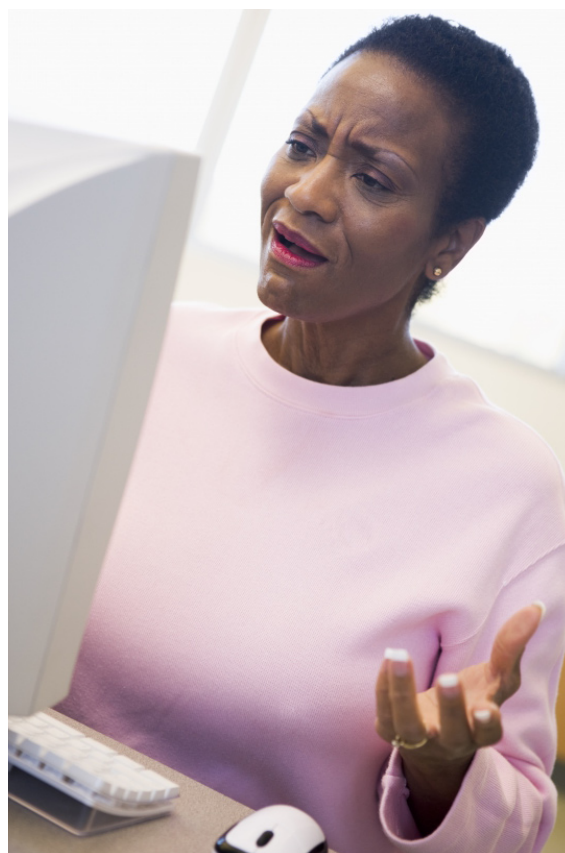
> Our commenters' participation in the discourses about Black womanhood illustrate their command of the cultural and social capital necessary to interact with other like-minded commenters, while their command of technical capital is illustrated by their participation as audience, author, and editor on the weblogs we examined… The command of technical capital, then, revolves around elicitations of cultural appropriations of technology alongside the social behaviors necessary to participate within increasingly technological milieus. (p. 1055-1056)

In an implicit reference to social capital, Mendoza (2009) maintains that updating Friend status and interacting with members on Facebook through the functionalities of links, photos, videos and online games "increases ones [sic] social sphere through leveraging existing network contacts" (p. 3557). Likewise, boyd's (cited in Bigge, 2006) analysis of young MySpace users illustrates that the "digital publics" created on MySpace "provide the framework for building cultural knowledge" (¶ 9) and "comments are a form of social capital" (¶ 20); boyd believes that these are critical for today's youth. Greenhow and Robelia (2009a) recognize the potential of SNS for online professional networking for those from low-income families and for online support during major transitions for those who lack confidence, self-esteem or social belonging. Even the "weak ties" typical of vast SNS networks of Friends to whom one is not closely connected have strong potential for amassing cultural capital through access to a wide range of information (Donath, 2007; Ellison et al., 2007).

Thus, following Selwyn (2004), Brock et al. (2010) imply that the impact and consequences of engagement with information technology is paramount. Rather than concentrating on the means over the ends (Selwyn), Castells (cited in Sciadas, 2002) counsels, "the fundamental digital divide is not measured by the number of connections to the Internet, but by the consequences of both connection and lack of connection" (p. 5).

Selwyn (2004) proposes a framework that considers the impact of ICT on social quality and social inclusion based on "the extent to which technology use enables individuals to participate and be *part of society*" – a comment reminiscent of the concerns expressed by the adult literacy coordinator quoted earlier – including in production activity (i.e., work), political activity, social activity, consumption activity and savings activities (e.g., income, property) (p. 350-351, emphasis added). This far-reaching and multi-faceted vision of social life is also represented in the purpose of the ISTE (2011a) standards, i.e., to "help students prepare to work, live, and contribute to the social and civic fabric of their communities" (¶ 1).

Summary

While some demographic factors such as age and gender have diminished in importance, inequality based on race/ethnicity, income, and education persist, along with concerns about meaningful access for groups with low English language or literacy skills. However, a more nuanced understanding of the digital divide focuses attention on the way that people *use* digital technologies. Known as the participation gap, this too is stratified by social class, race, gender and other social factors. Simply providing computers will not bridge the gap. What one actually *does* with the technology on the table is the crucial question these days.

Inability to fully engage with digital technology leaves adult literacy learners on the margins of the information society. Bridging the participation gap requires socialization into the technoculture as well as technological know how that is often out of reach of marginalized citizens. Thus, meaningful use, which Selwyn (2004) calls engagement, of digital technology in general and SNS in particular, requires attention.

Like many, Selwyn (2004) turns to Pierre Bourdieu's concept of cultural capital to explain how the possession of "technological forms of cultural capital" makes the difference between owning a computer and meaningfully engaging with it. Technical capital is accrued through socialization into technologically rich environments. Adult literacy learners will need access to technical support and training to fully engage with the potential of the Internet and SNS to enhance their lives.

Engagement is exactly the point of the ISTE standards for students, and we argue that they are equally relevant for and applicable to youngsters and adults.

Let's start with the category of "technology operations and concepts". These standards demand that users have the basic knowledge and skills to get going with technology, including understanding, using and troubleshooting different technological systems and applications, and then transferring this learning to new technologies. From knowing how to turn on the computer, to manipulating commands in applications, to figuring out what to do when something doesn't work – these are the fundamental skills that adult literacy learners need to move forward. This was clearly evident from the literature as well as from our fieldwork. The ability to engage with Facebook is a long way off if the learner doesn't know how to get to the site to begin with.

Moving forward from there, engagement includes developing "research and information fluency" and "critical thinking, problem solving, and decision making skills". These skills give us the tools we need to fully engage with the technology productively and meaningfully. Otherwise, as literacy learners reported, the Internet is just an overwhelming jumble of meaningless information. Knowing how to get relevant and diverse information, how to evaluate and analyze it and then how to use it ethically and meaningfully is equally important if an adult literacy learner is searching for information on HIV, for example, from medical sites, personal blogs or from her Friends on Facebook.

If we add to these examples from the remaining standards such as knowing how to be safe and responsible online, communicating and collaborating with others and thinking creatively or constructing knowledge, then we have a fairly complete list of skills that are needed for digital engagement (International Society for Technology in Education, 2007). However, we aren't born with these skills – we have to learn them.

This complex set of skills and knowledge represents forms of cultural and technical capital, or the digital "know how" that we need nowadays to participate fully in society. However, as Bourdieu reminds us, not everyone has the same access to capital or the ability to leverage existing capital to get it. Bourdieu particularly highlights education as a critical form of cultural and social capital in modern day capitalism. Thus, adult literacy learners, who have less of the kind of capital that accrues through schooling and postsecondary education and who are overrepresented in the ranks of the poor, already start from a disadvantaged position that makes it increasingly difficult for them to "catch up" or "join in", leaving them further behind. While it's true that even those with greater access don't automatically develop all these skills, adult literacy learners are even less likely to have the opportunity to do so.

Learning and Literacy

In this next section, we turn our attention to issues related to learning the skills and gaining the technical cultural capital needed for adult literacy learners' meaningful engagement with SNS.

The idea of using SNS as a tool for literacy learning was a hotly contested topic in all our focus groups. Yet, there is a complete absence of literature on this topic. For this section, we drew on our findings from the learners and some related literature to piece together some of the issues. The length of the report necessitates only a cursory look at some of the kinds of learning that we uncovered. These are: informal learning, bridging informal, non-formal and formal learning, identity development, skills and confidence, social support, learning literacy and learner differences.

The Digital Iceberg: Informal Learning in Social Networking Sites

From a survey conducted in the U.K. almost 10 years ago, Selwyn et al. (2004) deduced that adults were only minimally using ICTs for education and learning, and when they were, the learning tended to be informal rather than formal.

Adult literacy learners in our study are learning the basics of what they need to know about computers informally, mostly from family members (mainly their children) and sometimes from fellow learners. Only recently have the two sites of the Learning Centre in Edmonton added volunteer tutors specifically for the purpose of assisting learners with computers. At the downtown site, folks usually drop in to use the computers for writing resumes, searching the Internet, emailing, checking out YouTube and music, and, very often, connecting on Facebook. At the northeast Edmonton site, the focus is more on writing with some of the learners who have higher-level literacy skills. One such learner was optimistic, "I would love to learn to copy and paste and other things useful for writing. If I can get the groove down for using the computer for my writing, that would be good!"

Beyond basic computer skills, some literacy learners recognized other learning. They identified "looking up information they didn't know", "researching", and "reading articles". Specific to SNS, one said, "on Facebook, there are groups you can join and learn from, learn about social life, or doctors give advice,and [you] learn about the world around you".

Despite evidence of "learning" in their examples, the adult literacy learners in our focus groups rejected the idea that SNS could be useful in a learning or educational context. Our questions about this raised strong opinions, mostly in opposition to considering SNS, such as Facebook, as valuable learning tools. One woman who emphatically stated, "School is not the place for social networking!" voiced a typical perspective. More specifically, agreed another, "Facebook doesn't have anything to do with learning; it's about learning how to play games and chatting".

Thus, it was evident that literacy learners had a tendency to view "learning" as a formal activity that occurs in classrooms, dismissing the informal learning that might be occurring while using SNS. Even though 95% of Canadians are engaged in informal learning (Livingstone cited in Selwyn et al., 2004), it is not uncommon for most of us to be unaware of our informal learning unless probed.

Nonetheless, learning is often evident with very little probing. For example, even though the learner who voiced the quote above could not see Facebook as a learning tool, by referring to games and chatting, she implicitly recognized that at least some kind of learning was happening. What is also not apparent to literacy learners is how SNS, both including and going beyond playing games and chatting, presents opportunities for developing digital literacy skills.

In a rare mention of adult learning and SNS, Mendoza (2009) draws upon adult learning theories to argue for a positive connection between Facebook and informal learning. For example, he references the learning opportunities presented through Facebook activities such as the *47 Questions* or the *We all have needs* lists (p. 3558). Mendoza concludes that these tools allow us to experience ourselves as lifelong learners, to exchange shared knowledge and to build communities of practice, "As part of this unique community of individuals assembled by each Facebook user, the informal learning that occurs through posts, readings, images, videos, etc. plays an important part in our desire to learn and interact with each other" (p. 3558).

In writing about SNS/blogging and informal learning, authors frequently refer to the spontaneous, co-creative and collaborative processes of knowledge construction that emerge via the technology. The process of blogging, wherein bloggers present their own perspectives and then engage with conversations about them "makes the blogger the center of knowledge" (Burgess, 2009, p. 68). DeGennaro and Kressar (2010) uniquely draw upon cultural sociology and critical pedagogy to promote pedagogical processes where "teachers and students engage in community knowledge construction activities" using SNS (p. 2361). While their intent is to make connections to schooling, their inspiration is drawn from grassroots social action, specifically, SNS in Obama's presidential campaign and in Iranian election protests as well as blogging in Cuba. Their analysis of how the knowledge production capacities of SNS and blogging can be parlayed into classrooms appears to have relevance for literacy programs as well. For example,

> Social networks for learning can inspire students to be actively involved in their learning. As one example, via social network sites, students could be connected to multiple groups in the endeavor to explore and examine historical research; youth can begin to cross social and cultural boundaries, which evokes potential for awareness of self and other. Students engaged in socially organized learning communities begin to see that there are many forms of the "truth", multiple realities, multiple histories of the same events, and ultimately that problems are complex social constructions that have implications for our world (Kincheloe, 2001). They can connect critical reflections and lesson objectives to real world action. (p. 2360)

From their study of blogging with adults with intellectual disabilities, McClimens and Gordon (2009) make a simple observation that summarizes the informal learning that is continuously occurring when learners are engaged with social media, "All of the participants felt they had learned things, both about the process and about themselves" (p. 22).

Bridging Informal, Non-formal and Formal Learning Experiences

Greenhow and Robelia (2009a) made a similar observation to ours in their study of MySpace users.

> The low-income students in our study felt they learned technology skills, creativity, and communication skills in using MySpace (Greenhow et al., 2008); however, they saw little connection between their use of this social software and the knowledge and skills they believed their teachers valued in school (p. 128).

In fact, SNS are often actively banned in schools (Facebook was banned at one of our literacy sites). The students in the Greenhow and Robelia (2009a) study perceived that parents and teachers alike view their time on SNS as a waste of time. Yet, the students also reported using the SNS to work on homework and school projects by asking for help, by seeking encouragement and clarification, and even by setting up projects or study groups online. The authors add that the results of a survey of 9-17 year olds in the U.S. found that "60% of students surveyed reported using their SNS to talk about education topics and 50% used their SNS to talk specifically about schoolwork" (p. 121). They infer that students may not recognize how these informal learning processes in MySpace contribute to their formal learning experiences.

Greenhow and Robelia (2009a) use a "learning ecology perspective" to conceptualize the dynamic bridging of informal and formal learning that takes place "across the spaces of home, school, work and community" through SNS (p. 122). Also referring to schooling, Gibson et al. (2009) advocate a two-way bridging through "participatory media" (i.e., social media) between informal learning and formal use in schools.

This view is supported in a 2009 Futurelab report (Hague & Logan, 2009) in which the authors highlight the following from a large national survey of adults:

- 94% engage in informal learning activities
- 79% use technology for learning in their leisure time for an average of 8.5 hours/week and 94% of those do so at home
- 75% identify at least one benefit for using technology for informal learning (convenience and flexibility), but almost half (44%) identify barriers preventing them from doing so (time, access and cost)

They recommend that this rich learning environment be used to support connections between informal adult learning and the non-formal adult education that takes place in community contexts. Among others, they identify SNS and blogs as potential tools for informal learning.

However, DeGennaro and Kress (2010) state, "rarely do students engage in technology-mediated learning environments that foster mutually constituted ideas, knowledge, meaning, and goals that reflect what we see in the real world examples" (p. 2357) – a comment that is echoed by many who recognize the rich creativity and knowledge production happening outside classroom walls through social media and in SNS.

Still, there are considerable challenges to combining the informal learning of SNS with the more formalized learning in literacy programs and school classrooms, challenges such as restrictive school policies (e.g., blocking SNS) (Greenhow & Robelia, 2009a), "classical" understandings of knowledge and learning (Greenhow & Robelia, 2009a), technological limitations of settings and instructors (Gibson et al., 2009; Hague & Logan, 2009), authoritative institutional structures (DeGennaro & Kress, 2010; Gibson et al., 2009), and loss of control of content and participation (DeGennaro & Kress, 2010).

Educational researchers caution that this bridging to the formal must happen "without destroying the hallmarks of personalized creation of content and fluid social relevance" (Gibson et al., 2009, p. 1456).

Who am I? Identity Development in SNS

Another aspect of informal learning that is evident in the literature relates to identity development. For low-income young adults, Greenhow and Robelia (2009a) suggest SNS affords opportunities to safely self-disclose, to creatively explore, discover, develop, express and reinforce identities, and to learn about different aspects of themselves. The authors found that how the youth used, not only text, but also music and photos and other "socio-technical" features in the SNS "[were] important to identity development and sociality" (p. 133).

In another article focusing on social learning in SNS, these authors (2009b) are explicit about the particular benefits for marginalized youth:

The various processes of reading, writing, and appropriating digital materials to craft one's online self presentation may allow young people who have felt marginalized the opportunity not only to reflect and transform the way they think of themselves, but also to communicate who they want to be to a mass audience, an opportunity previously afforded only to the privileged, and so extend the reach of their own influence (p. 1155).

However, the experience of identity development online may be different for youth than for adults. Further, as we've discussed previously, the unique features of SNS (boyd & Ellison, 2008) make them both potentially enriching for identity development and potentially risky. For example Greenhow and Robelia (2009a) remark that electronic texts are indefinitely available, easily searched, and can be understood and used in ways that were not intended by the originator. It may be such concerns that, in part, prompted homeless women in Gemelli's (2009) study to "perform" online in ways that conformed to the dominant view.

In a contrasting example reminiscent of Albrechtslund's idea of participatory surveillance, Koskela (cited in Albrechtslund, 2008) surmises that the "exhibitionism" that can be facilitated by some technologies (she was specifically looking at webcams and mobile phones) may be empowering and liberating because people can "claim 'copyright' to their own lives as they engage in the self-construction of identity" (¶ 53). Llke Greenhow and Robelia (2009a), Albrechtslund believes that the monitoring and registering functionalities of SNS help to build subjectivity and "facilitate new ways of constructing identity" (¶ 54). Social technologies can also assist migrant communities as they attempt to reproduce and negotiate collective identities across borders (Benítez, 2006).

Because identity is socially constructed, the social properties of SNS and other social media are ideally situated to facilitate the construction, co-construction and reconstruction of identity in public spaces that may have not previously been available to the less privileged.

Look what I can do! Gaining Skills and Confidence

Another kind of informal learning happens as users gain technical skills along with confidence in their abilities.

"Facebook use may be helping to overcome barriers faced by students who have low satisfaction and low self-esteem", report Ellison et al. (2007) of college students in 2006. This appears to hold true for more marginalized users as well. Low-income students demonstrated a range of technological proficiencies with increased use of MySpace alongside improved competence, confidence and conceptual knowledge (Greenhow & Robelia, 2009a). Adults with intellectual disabilities expressed pride when they successfully posted to their blogs and could boast that they produced their own websites (McClimens & Gordon, 2009). Adults with psychiatric disabilities reported increased confidence and self-esteem along with the newfound recognition "that they are capable of learning a new skill" (Koblik et al., 2009, p. 308). Specific to women learners, Burgess (2009) observes, "women who engage in social networking and who use the Internet to help solve daily challenges develop as autonomous learners and learn through others' experiences how to handle similar situations" (p. 69).

Low-income Latino/a immigrants gained both computer skills and access to the health care system through an innovative community program that included Internet training sessions and "culturally appropriate, low literacy level, bilingual [health] information" presented on a community-designed website. At another level, the project was also successful in providing opportunities for community members to develop leadership in both technology and health advocacy (Ginossar & Nelson, 2010).

Connecting theirs to the examples above, Kontos et al. (2007) point out the importance of training sessions, technical support and group social support in promoting confidence and increasing skills for marginalized users of the Internet. In addition to getting help and support from friends to develop their technical skills, as we discuss in the next section, learners also need to be able to go further afield. In their study, Kontos et al. identified one participant who, by the end of the year, was able to contact the site directly to get help rather than rely on the technical support provided in the study. This is a sign of developing the kind of skill that will sustain the learner's engagement with the technology into the future.

With a Little Help from my Friends and Family

Our discussion of learning is reminiscent of our earlier points about the social aspects of SNS. Many learning examples above reveal the highly social nature of learning experiences online. Some would argue that "FB [is] an excellent space for learning complex social interactions" (Mendoza, 2009, p. 3557).

One of the most apparent of these skills is how people learn to use digital technology – including the computer, the Internet and SNS – in what might be called "over the shoulder learning" which Twidale (2005; 2004) has applied to learning technology in the workplace and to distance education. We believe that it is an apt metaphor for the way that people learn to meaningfully use technology such as SNS.

The literacy learners we interviewed consistently reported that they learned, and continue to learn, how to use Facebook, and technology in general, from others. Most frequently identified were friends and family (mainly their children) as their go-to people for assistance and to learn new things. One woman explained, "I plug my laptop into the TV and my kids help me, we sit together and look for things".

Another example that demonstrates social support for learning is from a student in Greenhow and Robelia's (2009a) study of low-income young adults: "It's really easy to get access to help… You can go to MySpace and see what other people are doing and maybe they're doing the same thing and you guys can discuss it and switch around ideas" (p. 129). They report learning informally from family and MySpace Friends in a kind of apprenticeship with more experienced users.

In a study with low-income adult novice users, Kontos et al. (2007) were surprised by the important role of social support in facilitating Internet use. Training sessions that were provided in the design of the project had the unintended consequence of setting up opportunities for learning from the instructor and from other students with whom they exchanged email addresses and advice. Additionally, even though technical support was available, the participants would typically seek help from family members before contacting the support number.
Ryberg and Christiansen (2008) used a complex array of learning theories (Vygotsky's zone of proximal development, Wenger's communities of practice and Engeström's expansive learning) to explore informal learning on a Scandinavian SNS. In a two-step process of "entering by learning" and "transcending by developing", they "argue that a development happens when the learner has the opportunity to present the outcome of learning to others, to teach back and explain the rules… and figure out ways for things to be different" (p. 209).

They investigated this argument through online observation and "a qualitatively oriented" questionnaire that targeted learning through help-seeking and help-giving behaviours. Many examples reveal multiple modes of learning being enacted through various social processes online. These include: getting help from other more experienced users (individual-vertical), using the new information to help others (individual-horizontal), seeking information from others outside the community (collective-horizontal) and developing shared community knowledge (collective-vertical). They conclude that "the [online SNS] community affords the opportunity to develop new skills" in a "social, friendly and safe environment" (p. 217).

Learning Literacy

Most of the learners we interviewed could perceive no benefit of Facebook in literacy learning. On the contrary, they cited chat/text speak as a distinct deterrent to learning "proper" English literacy skills. One woman remarked that her boyfriend and her daughter "can't read and write because of computers", specifically because of the abbreviated and slang writing style often used in texting and SNS. Another added that "people get lazy" and don't want to write out the words.

However, others thought that spell check and writing short stories through email was helpful, and they appreciated that they didn't need a high level of reading and writing to get started on Facebook. One person had an interesting visual strategy for compensating: she searched Google images when she didn't understand a word. Most importantly, some said, "going on Facebook makes you read".

This same polarization of opinion, along with the complexity of the issue, was highly evident in the focus group with literacy program staff and volunteer tutors. The very lively discussion vacillated between concern about learning literacy the "wrong way" through text speak, on the one hand, and critical questions about "what is proper English?" and "whose English are we privileging?", on the other hand.

As the dialogue continued, a number of comments on the side of the potential usefulness of SNS for literacy learning emerged. Some argued that writing simple sentences about what learners are doing in their lives (as would occur in a Facebook conversation) *is* literacy, that Facebook content is more authentic because it's connected to the students' own interests and tasks and that reading and writing are not taught as "subjects" anyway but rather, immersed in other subjects. Furthermore, they speculated, perhaps it isn't text speak that literacy learners are using but rather they may just be using any means to get their message across to communicate. Perhaps this could be akin to the way that literacy and language teachers might ignore spelling and grammatical mistakes so as not to interfere with the flow of ideas and communication.

One practitioner added, "Text speak *is* being used, it's like slang – it's a different kind of diction". He reiterated his concern that waiting for these learners to learn basic literacy (reading and writing) first, will leave them too far behind the rest of us. By the end of the session, the group wondered if the two kinds of literacy could support each other and could be learned at the same time.

Echoing this controversy, Greenhow and Robelia (2009b) report, "most young people we interviewed perceived these as entirely separate literacy practices", although one perceived that writing on SNS helped "school writing" and another thought that it "ruined" school writing (p. 1153). Yet, literacy practices are clearly evident among these young adults from low-income families.

> Students use MySpace as more than a play space. In many ways, their literacy practices within this SNS— proofreading, continuous revision and updating, and consideration of word choice, tone, audience inter- ests, and style—aligned with writing practices valued in school. However, they also assembled multimodal "texts" characteristic of "new literacy" practices and well suited to the dynamic, interactive features of the MySpace social world (p. 1152).

More systematically getting feedback on writing is also sometimes mentioned in the literature. For example, Greenhow and Robelia (2009a) observed the students in their study posting parts of their writing assignments on MySpace to help each other "figure out the assignments" and for "peer editing".

In two articles on teaching English as a foreign language in postsecondary contexts (one from Turkey, the other from Lithuania), the authors argue the benefits of blogging for learning literacy. Kavaliauskiene et al. (2007) itemize the benefits of using blogs in language classes – benefits that are easily recognizable as benefits for literacy learners. These are "instant publishing online, having a readership, additional reading practice, and creating an online portfolio of student written work" (p. 43).

In the example from an EFL class in a Turkish university, Arslan and Sahin-Kizil (2010) observed "blog integrated writing instruction" to positively affect writing content and organization when used as a supplement to face-to-face writing instruction.

Blogs can be instructor driven, learner driven or a collaborative class project (Kavaliauskiene et al., 2007). They provide an avenue for maintaining a process approach to writing instruction despite the limitations of classroom settings (Arslan & Sahin-Kizil, 2010): "Through integrating blogs into the class, the teacher can extend the instruction beyond the school walls" (p. 194). Responses to blogging for English learning vary across students who

cite both good and bad features of using blogs (Kavaliauskiene et al., 2007).

However, one of the most important benefits that are explored in these articles is the role of a "real audience" for developing writing skills. In the Lithuanian study, students obtained feedback from the instructor, from other students and from the general public. In the Turkish study, students purposefully went beyond their classmates to seek feedback from family and friends and consequently received more comments than they would have been able to get in the classroom. Students gained writing practice equally through their initiating posts and through their responses to each other. What's more, according to these articles, blogging stimulated cognitive reflection on their learning.

Arslan and Sahin-Kizil (2010) conclude that their findings "empirically support the theoretical assumption that blogging enhances writing performance… [and] should be utilized in all settings where students have no audience other than the teacher" (p. 194). In her discussion about women learners and SNS, Burgess (2009) concludes "Online social networks show the same promise as face-to-face social networks in supporting women to persist in learning activities" (p. 69).

Pirbhai-Illich, Turner and Austin (2009) report some success in keeping Aboriginal students motivated and engaged in an alternative school setting by incorporating critical digital literacies into the language arts curriculum. While not specific to SNS, we include it here because so little is written on Aboriginal students' use of digital technologies, and because it demonstrates the relationship of digital literacy to print literacy. The authors describe the project as follows.

> The students went through a planning stage where they simultaneously learned to read and write both procedural and informational texts, skim and scan information on the internet on their chosen topics, engage in discussions about Aboriginal representations in the media, and learned how to use video equipment. Additionally, they learned how to collect data from various sources…They practiced, performed, recorded, edited and produced their own version of a two-scene script with original music and sound effects (p. 151-152).

Thus, it appears that there may be benefits of using SNS and other social media for literacy learning although this has been little studied and raises strong objections among adult literacy learners and practitioners.

We're all Unique

Just as with any pedagogical tools, incorporating SNS into a learning environment requires sensitivity to different learning needs, goals, styles and preferences. Mendoza (2009) advocates a combination of social technologies to enhance learning because the needs of individuals and communities differ. He advocates "the trinity" of Google, Facebook and Twitter used in various combinations because together they "provide individuals [who have different needs and technical skills] the socio-contextual learning opportunities that create a sense of convergence from the virtual to the real world" (p. 3556).

In an exploratory study of individual differences among undergraduate college students in the northeastern U.S. who use Facebook, Acar (2008) found that extroverted users have larger online social networks and spend more time on SNS than introverted users but that users with higher self esteem are less likely to have strangers in their network than those with lower self-esteem. Also, his survey indicated that women have larger networks and spend more time in SNS than men.

Statistics Canada (2011) reports that 21% of Canadians don't have access to the Internet in their homes. However, of those, 50% don't want it. This reminds us that not all adult literacy learners will want to engage with digital technology, the Internet or SNS. As educators know, different learners will be interested in and respond to different pedagogical tools and processes differently. An "empowered 'digital choice'" to opt out may be just the

right outcome for some learners (Selwyn & Facer, 2007, p. 14).
Also, that a sizable minority don't want to be online, suggests that we should be cautious about the "technological determinism" (Bigge, 2006) that is implied in common assumptions that everyone should be a soldier in the digital revolution. Bigge wonders when and why it came to be assumed that it was "necessary" to participate in SNS. But, he also raises an interesting question: "Is there any difference between those excluded from [SNS] and those who choose not to participate?" (¶ 27).

We would argue that there is a difference between those who make choices from among a range of options, and those who must make choices that are limited or circumscribed by access to resources, information or opportunity. Moreover, if adult literacy learners don't see themselves as participants in this vast arena, as our literacy coordinator suggests, then they may not see the implications of not participating – implications that may be larger for them than for others who don't participate.

Summary

People generally don't recognize the vast amount of informal learning that is going on day-to-day. Informal learning from technology is no different. Neither learners nor teachers readily acknowledge the possibilities of SNS for learning. Among our research participants, opinions were polarized about whether using SNS would assist or detract from literacy learning.

Nonetheless, there is support for bridging informal learning with non-formal and formal education contexts. In online environments, particularly with social media such as SNS, users learn technical skills, creativity and communication skills, they construct and co-construct knowledge and identities, and they gain confidence in themselves and their abilities. Much of this learning is gained through social connections, primarily with help from family and friends. Students using SNS at home often engage in educationally-related conversations, including helping each other with assignments and setting up group projects. Social media, especially blogging, can be particularly useful for getting feedback on student writing.

There is no one-size-fits-all when it comes to technology. Learners have different learning needs, goals, styles and preferences that are equally important when using SNS or other social media. Furthermore, some learners may choose not to engage with digital technology. However, when that choice is limited by access to resources, information or opportunity, it's not much of a choice. We must be cautious that "the use of technology for adult informal learning transforms rather than entrenches already existing patterns of engagement and disengagement with learning" (Hague & Logan, 2009, p. 11).

In relation to the ISTE standards, if we consider literacy in its broader sense, certainly all the skills that are identified reflect informal literacy learning, including the technological proficiency, social competence and personal confidence that we have addressed here. Underlying the standards may be recognition of the importance of bridging informal and formal learning through technology.

Summary of Key Issues

Although not a requirement for *surviving* in the digital age, Selwyn and Facer (2007) maintain that ICT use is "an integral element for *thriving* in the 21st century society" (p. 10).

Yet, in a brief newsletter piece on digital/virtual tools for continuing education, De Perio (2008) reminds readers that "these technologies are never meant to replace print or in-person contact, they are designed to enhance the continuing education experiences that we have today" (p. 4). Hague and Logan (2009) concur, "Technology does not replace the benefit that some learners will gain from interacting on a face to face basis with adult learning providers" (p. 16). This is equally so for SNS.

However, if digital technologies such as Facebook and other SNS are to be used in adult literacy learning, what are the issues that need to be considered and addressed?

In this section, we present a provocative summary of the key issues and our responses to them through four interrogatory statements.

Should adult literacy programs provide support for learners to use SNS for their own purposes?

Adult literacy learners, just like everyone else, use SNS for social purposes. They go to their Facebook pages to connect with friends they just saw in class, to share family news with their sister who lives in another province, and maybe to say hello to family "back home" – wherever in the world that may be. Sometimes they cross paths with people that they haven't seen for years and occasionally, they "friend" someone new.

SNS are undeniably rich learning sites whether recognized as such or not. Users learn social and technical skills, craft identities, co-construct knowledge, tell their stories and create artefacts - not to mention that, while on the site, they are in constant engagement with reading and writing – all of this without any intervention from the outside (with the possible exception of friends or family over the shoulder to help out). SNS are incredible vehicles for informal learning, and learners are doing just that every time they log on. In fancy terms, they are acquiring 21st century literacies.

However, not everyone is using Facebook and, if they aren't, are they missing out on something that everyone else is doing and that can potentially enrich their social lives, keeping them connected to others near and far? Are they being left out of yet another part of the social fabric of our society?

But are those that *are* logging onto Facebook fully engaged with its potential as a social medium? The research overwhelmingly suggests that, by virtue of their existing social marginalization, they are not. Not only do many not have the convenience of home computers or Internet connections (or if they do, it's shared and not always

available), they typically don't have the socio-technical capital of more affluent adults with more education. Thus, not only are they victims of the digital divide, they may well be falling into the participation gap.

Does using SNS aid with literacy learning? In relation to text-based literacies, it is not known. We found no research to help us answer this question and opinions among our study participants were divided.
Does it help with learning the broader range of literacies that are required in our information rich, communication-based society? Absolutely! And, while there is no question that basic reading and writing are foundational skills for authentic engagement, there seems no reason to wait for learners to "catch up", and many reasons not to, because, in the waiting, they will fall further behind.

Nonetheless, they will need foundational, basic skills to get started. From turning on the computer to wordprocessing to troubleshooting to managing privacy settings to extending their use of the sites into new possibilities, our findings suggest that it would be a worthy contribution of adult literacy programs to establish mechanisms to *facilitate* learner's full engagement with SNS *for their own purposes*.

And, as we've already said, those purposes are highly educational – *all by themselves*.

Should we add structured educational purposes to adult literacy learners' use of SNS?

If learners can learn a range of skills from Facebook by doing what they are already doing, we are prompted to ask why it would be necessary to add an additional layer of a defined "educational purpose" to this already vibrant learning environment. And, further, should we?

The literature gives us no clear direction on either of these questions. In defending SNS as spaces that today's youth can hang out with little interference from adults – doing what teenagers have always done in community spaces – danah boyd (boyd & Jenkins, 2006) prompts us to wonder if educators have any business invading the spaces and exploiting the motivations of SNS users in non-formal or formal adult education settings.

If we add structured educational purposes, what are the issues?

Without a doubt, SNS present remarkable pedagogical openings. The full potential of SNS, especially in combination with other social media, is staggering in the opportunities it presents for literacy learners to interact, collaborate, and publish with peers, to communicate information and ideas effectively to multiple audiences using a variety of media and formats, and to develop cultural understanding and global awareness (International Society for Technology in Education, 2011a).

Therefore, if we proceed to engage in this powerful medium, what are the issues that must be addressed? What do we need to grapple with before we download *101 Ways to Use Facebook in the Classroom*?

Keeping the social purpose at the core

First, in our zeal for the "educational" possibilities, it would be easy to forget that the quintessential purpose of SNS is social connectivity. It stands to reason, then, that this purpose must be central to any educational use of the technology. As stated above, this could mean simply helping users to safely and effectively use SNS for their own purposes. However, even if a more formalized educational purpose is layered on, the underlying social purposes are paramount to their relevance for learners and their effectiveness for learning. Facebook is only meaningful for learning and education if it helps keep people connected to their existing networks. Second, the educational space is already there, it does not have to be manufactured. The task is to intentionally, sensitively and cautiously expand on what exists already, to facilitate the next level of learning from what many learners are already doing on SNS.

Facilitating digital learning

The next critical consideration then is how do we pedagogically engage with this powerful digital technology "without destroying the hallmarks of personalized creation of content and fluid social relevance", as Gibson cautions (2009, p. 1456). Are there ways that literacy practitioners can help to direct and facilitate more meaningful learning and engagement in SNS?

If literacy learners need 21st century skills, then literacy practitioners need 21st century pedagogical strategies to facilitate that learning. ISTE provides "a framework for educators to use as they transition schools from Industrial Age to Digital Age places of learning" (International Society for Technology in Education, 2011b, ¶ 1). The standards do not address teachers' technical skills directly; they assume them. Instead, the standards provide guidance for *facilitating* the development of 21st century skills in their learners. Among other standards, teachers are asked to facilitate collaborative knowledge construction by engaging in learning with students, to engage students in exploring real-world issues and solving authentic problems using digital tools and resources, and to address the diverse needs of all learners by using learner-centered strategies and by providing equitable access to appropriate digital tools and resources (International Society for Technology in Education, 2008, p. 1).

Literacy practitioners will need support in developing their own 21st century literacies to model and promote and facilitate these in their classrooms and with their learners. Industrial Age teaching strategies will not develop Digital Age skills. If used inappropriately, Facebook as an educational tool would be pointless at best and detrimental to the learner at worst.

Learning with social media is quintessentially a community experience; it builds on the experiences and knowledge of the whole community of learners. Thus, learning and teaching in the social media environment is a two-way, co-construction of knowledge. Literacy learners and literacy practitioners are learning and teaching "over the shoulder" simultaneously.

While there is little direction from the literature on using SNS, such as Facebook, in structured learning environments, blogging shows great potential as a medium for voice, audience and feedback for literacy learners as they experiment with their writing. However, tendencies for social conformity, self-censorship and surveillance online may detract from the kind of self-expressive writing that adult literacy learners are currently publishing.

Addressing the digital divide

If SNS are to be used as educational tools, adult literacy programs will have to address the digital divide. Literacy learners will first need access to computers and the Internet in their programs *and* in their homes. They will need exposure to a culture of engagement and they will need technical support and step-by-step basic computer skills training before they will be able to meaningfully engage with the potential of SNS. The old adage of starting where the learners are comes to mind here. In the drop-in and open environments of some literacy programs, this is done as learners define their practical needs moment-by-moment. Learners don't drop in to learn how to use particular software, they drop in to prepare a resume or to check in with their friends on Facebook.

As students gain socio-technical capital, they may be able to push back against the digital divide. Of course, none of this will address the root causes and structural conditions that perpetuate the kinds of marginalization experienced by most adult literacy learners. That requires advocacy for system-level changes.

How do we bridge informal, non-formal and formal adult literacy learning spaces?

The daunting challenge we are facing is to figure out how to bring together the informal learning that is happening already in SNS with learning in non-formal or formal settings, and to do this without reproducing the social exclusions that adult literacy learners already face.

While there is some support in the literature for the idea of bridging across learning sites, it provides little practical guidance.

Summary

To summarize the key issues, we return to the two research questions that directed our study.

How are adult literacy learners using SNS (such as Facebook)?

- Adult literacy learners are unequivocally using SNS for social purposes and, in the process, they are informally learning literacy (in the broad sense) as well as technical and social skills. However, few are fully using the power of SNS and social media due to persistently unequal access and lack of socio-technical capital, or know how.

How might SNS (such as Facebook) be used to facilitate adult literacy learning?

- First, the very nature of the sites promotes social learning across the range of 21st century literacies and practice with reading and writing, although our participants were divided about whether SNS helped or hindered text-based literacy development. A key contribution of literacy programs could be to help adult literacy learners safely and effectively use SNS *for their own purposes*.

- Second, the question must be asked whether SNS *should* be used for structured educational purposes in adult literacy programs.

- Third, if used for such purposes, considerations include the following:

  - maintain the social focus
  - sensitively build on existing skills, knowledge, and experiences
  - develop 21st century pedagogical skills that focus on two-way co-construction of social knowledge
  - attend to issues of conformity, self-censorship, safety and surveillance
  - address the digital divide
    - ensuring access to computers and the Internet in programs and in homes
    - providing training and technical support
    - modeling a culture of digital engagement, and
    - advocating for structural changes that address the root causes of marginalization

- Last, we are challenged to find ways to bridge the rich informal learning happening within SNS with non-formal and formal adult education settings.

In our opinion, SNS and adult literacy learning go hand in hand, yet the issues and questions we've raised require careful consideration if they are to be brought together in non-formal and formal educational contexts.

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