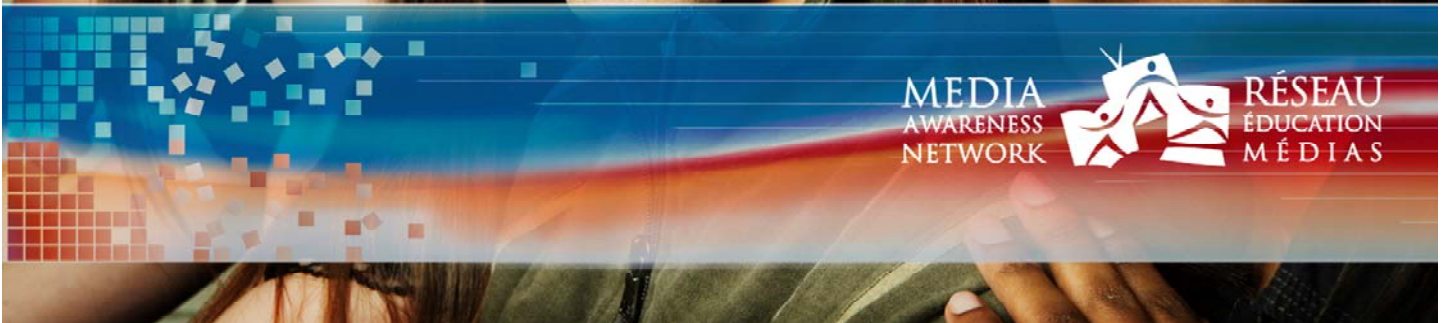
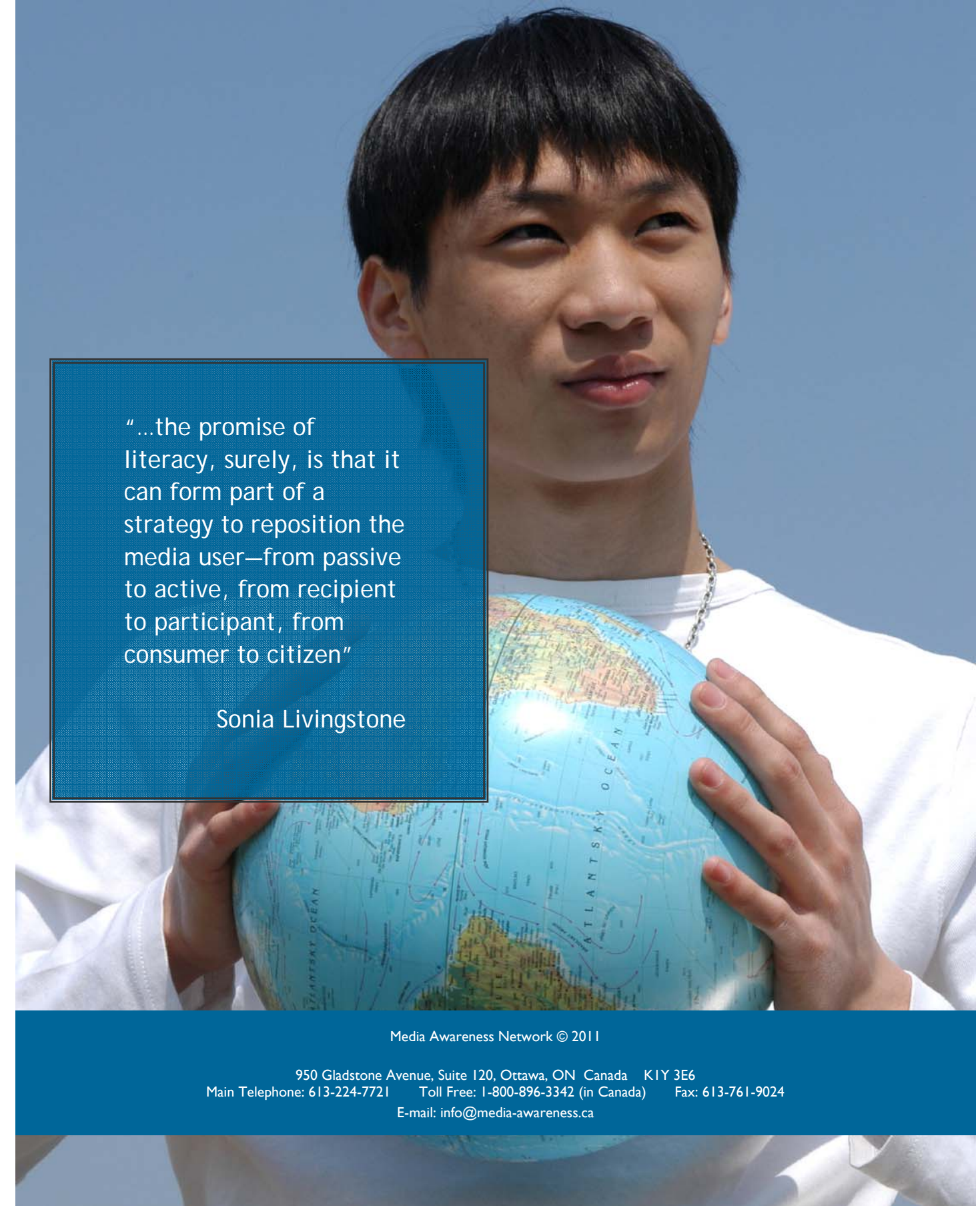


From Consumer to Citizen

Digital Media and
Youth Civic Engagement





"...the promise of literacy, surely, is that it can form part of a strategy to reposition the media user—from passive to active, from recipient to participant, from consumer to citizen"

Sonia Livingstone

Media Awareness Network © 2011

950 Gladstone Avenue, Suite 120, Ottawa, ON Canada K1Y 3E6
Main Telephone: 613-224-7721 Toll Free: 1-800-896-3342 (in Canada) Fax: 613-761-9024
E-mail: info@media-awareness.ca

Written by Anton van Hamel, University of Ottawa, for Media Awareness Network



Executive Summary

Digital media – and the Internet in particular – have fallen short as both a destroyer and saviour of civic life. Asking what effect any medium has had on civic engagement is a chicken and egg question; the truth is that people design technology to meet their needs and that technology in turn shapes people’s habits. Nonetheless, given that young people are the most avid users of digital media throughout their daily lives, we can also expect that digital media will be central to their civic lives. As well, civic organizations are so deeply enmeshed in the online world that basic participation now requires a certain amount of digital literacy. With civic life rapidly digitizing, a crucial component of teaching students the skills to engage as competent civic actors is teaching them how to engage in virtual spaces persuasively, critically, collectively, and before invisible audiences. Even children who have grown up in a world where the Internet has always existed do not have these requisite skills “built-in”: their affinity needs instruction, refinement and polishing for them to be truly effective in the civic arena.

This brief, prepared by Media Awareness Network, focuses on the impact of media – especially interactive technology – on civic and political engagement for children and youth. We consider the following questions which have come to the forefront of research, education, and politics: are media a distraction from civic and political life, or can media enhance young people’s involvement? What forms (television, e-mail, instant messaging, social networking systems, World-Wide Web, etc.) and uses (information, entertainment, socializing, etc.) of media engender which effects? Most importantly, since civic and political bodies are racing to establish a presence online and a great many civic and political actions now occur in virtual spaces, we wish to consider the importance of digital literacy skills development as a means for children and youth to be competent and engaged civic and political actors at all ages.

Key Findings

Youth and Civic Engagement

The youth vote

- Increased years of education are associated with higher rates of voting and civic engagement (Gidengil et al., 2003).
- Younger Canadians, who are the least likely to vote, report increasingly lower rates of discussing politics daily as a child. Thirty per cent of Canadians over 40 recall daily political talks as children, whereas only 18 per cent of 18-30-year-olds report this.¹
- Globally, access to more media at home increases children's desire to vote as adults.²
- Participating in more extra-curricular activities as a child predicts voting and civic engagement as an adult: extra-curricular participation at Grade 12 directly correlates 0.51 with civic engagement and 0.77 with political participation as an adult*.³
- Fostering civic engagement at younger ages is an effective way to encourage voting and political participation in later life.⁴
- Youth choose to not vote because of a lack of faith in the established political culture, not because of ignorance (Coleman, 2008; O'Neill, 2007). Even new immigrants to Canada quickly mainstream into this same style of thinking.⁵

The activation gap

- Youth are already socialized to want to contribute to their communities and are enthusiastic about the idea, but there is a gap between the will to engage in community service and making the commitment. Seventy per cent of teens surveyed believe it is very important to help the community, but only 19 per cent consider themselves 'very involved'.⁶
- In school, 70-75 per cent of 10-year-olds want to learn how to find and verify online information, but as they get older and more competent at this they increasingly wish to learn about legal and social issues.⁷ They also are increasingly more likely to turn to the Internet as their first source of

information as they get older: 62 per cent of 4th graders and 91 per cent of 11th graders choose the Internet over books for schoolwork.⁸

- Currently, most civics programs primarily transmit knowledge of party politics.⁹ Best practice indicates that debate and carrying out civic activities are better methods with more positive outcomes down the road.¹⁰

The generation gap

- Civic engagement for children as is taught in schools tends to be biased towards conformity and takes a dim view of opportunities that depart from traditional forms of party-based engagement (Coleman, 2008). Popular tactics for youth, like student walk-outs and political consumerism, tend to be dismissed by educators as deviant misbehaviour and frivolous lifestyle interests.¹¹
- Although the Canadian youth vote is significantly down,¹² youth participate in other civic (but not necessarily political) projects at the same rate as the national average across ages: 27 per cent of youth ages 15-24 participate in one community organization, nearly identical to the national average.¹³ The argument that youth are apathetic across the board is exaggerated.¹⁴
- Adults tend to have low expectations for youth in the civic sphere, which translates into menial assignments when youth do get involved.¹⁵
- Forty-seven per cent of youth ages 15-24 feel a strong sense of belonging to Canada compared to the average 58 per cent across ages. Youth also feel much less embedded in their local communities; only 13.7 per cent feel a strong sense of belonging at the community level versus 21 per cent on average. This life-stage effect may be a disincentive to transforming an interest in civics into action.¹⁶

*Correlations range between -1.00 where two factors have an opposing relationship and +1.00 where two factors rise and fall together. A correlation of 0 means there is no discernible relationship between 2 factors.

Key Findings

Engagement, Youth and Media

The move online

- Grassroots efforts, government bodies, corporate lobbying groups and nearly every other form of civic actor have migrated online.¹⁷
- Even though political organizations have rushed to create an online presence, in order to retain more control over their message many don't capitalize on the interactive features of the Web.¹⁸ This alienates younger civic actors who expect to participate more actively in these organizations.¹⁹
- Canada's strategy for a civic Web-space has shifted from providing access and an online commons to all to targeting only disadvantaged groups. Although market mechanisms have saturated the home market with access, the idea of an online "commons" has largely fallen by the wayside and is very patchy across the country.²⁰
- The Internet is overwhelmingly commercial as opposed to public, and civic causes are often forced to use (free) commercial platforms such as Twitter and Facebook for civic purposes.²¹

Media effects on civic engagement

- Civically engaged youth prefer to use a variety of media for information-seeking, especially the Internet, books and television.²²
- Even entertainment media like video games can spark civic engagement through tasks which resemble civic activities such as organizing collective action.²³
- A meta-analysis of the Internet's overall impact on political and civic behaviours shows a possibly neutral and biased-towards-positive effect.²⁴ This implies that simply spending time in the medium does not distract from civic life.
- Research indicates that Internet technology intensifies civic engagement for those who are already interested, but it is unclear if it enables less interested people to get involved.²⁵

- Although the Internet doesn't necessarily draw a lot of new blood into civic engagement, those involved in civic activities agree that networked technology like e-mail, listservs, social networking sites and Web sites have become indispensable for their daily tasks.²⁶
- Young Canadians who volunteer use the Internet more than those who don't. (This effect is also found in Canadian adults, though to a lesser degree.) This is likely a twofold effect since youth use the Internet to find volunteer opportunities and then remain engaged online as part of their volunteer work.²⁷

Real, virtual engagement

- Compared to traditional lecture-based learning, research has shown improved gains in civic knowledge, efficacy and interest when curriculum coincides with real civic events in the community,²⁸ with especially powerful gains from using current multi-media coverage as fuel for discussion.²⁹ Improvements from pertinent, media-rich teaching carry over into students' college lives as well. For example, effects from the Student Voices Program were still detectable by the time students were in university, mainly in the form of increased efficacy (the feeling that one is capable of making a difference) which indirectly increased the tendency to vote.³⁰
- Civic engagement is founded upon communication skills. In the US, much of the variation in young people's engagement is attributable to news consumption from varied sources, as well as opportunities to deliberate on that same material in a classroom setting. According to a nationally representative American study, "communication competence incrementally accounted for an impressive 58.3 per cent of explained variance in civic participation, 89.3 per cent in political participation and 77.1 per cent in political consumerism".³¹

Recommendations

Based on the research reviewed for this brief, we have compiled a series of recommendations and best practices to help educators better understand how to foster and support youth civic engagement in a digital world.

1. Long term political attitudes which alter civic behaviour as an adult (both voting and other forms of engagement) are shaped from a young age. Youth apathy must be combated years ahead of time: interventions which try to engage youth when they reach voting age are too late.
2. Although civics education has traditionally focused on the transmission of knowledge of government mechanisms, such an approach is less effective for maintaining civic engagement over the long term. Experimental trials of civics programs have demonstrated that programs which encourage community-based civic activity lead to improved long-term engagement *in addition to* better gains in knowledge. This latter approach instils the feeling of efficacy needed to keep youth engaged later.
3. Since most civic organizations actively operate online, a vital part of civics education is the development of digital literacy skills that integrate organization, decision-making, rhetorical writing, research, and synthesis in mediated spaces such as online bulletin boards, mailing lists, and social networking sites. Youth are already highly engaged with and are enthusiastic about these technologies, so using them as a springboard to teach civics is an excellent opportunity.
4. Given that civic groups have largely migrated online, networked technology allows educators to more easily bring civic engagement with real organizations and issues into the classroom. Whereas collaborating with a civic organization would have been impractical before, it can now be integrated into the classroom setting by letting students work remotely and asynchronously at school. Participatory culture and Web 2.0 technology are a real blessing for civics educators.
5. Political and civic groups increasingly reach out to youth through channels like social networking sites, so educators must consider the potential downsides of limiting access to these online environments, especially for students who don't have alternative points of access outside school. Social networking is an effective way to circulate petitions, display affiliations, join causes, and invite others to get involved.
6. Educators should be open to incorporating those issues youth care about into the classroom and allow younger students to follow their own interests when choosing topics for civics projects. Much of the apathy towards politics on the part of youth has been attributed to adults dismissing youth issues as being less important than adult ones. Educators must also be willing to entertain points of view they see as radical, subversive or frivolous. The content of the activity is less important than the community-building and sense of efficacy it instils in the students.



7. Although information and communications technology provides a flexible networked space to rally, brick and mortar schools are still an important place for students to gather and work on civic projects. Since civic engagement usually takes place in blended virtual and physical spaces, schools need to provide classroom space as well as Internet access for student civic involvement.
8. One of the most common barriers to civic engagement identified by youth is a lack of time. Devoting some class time to civic projects may be an important consideration, especially for students who have extra responsibilities outside of school.
9. Youth who are civically engaged and/or politically active prefer to seek most of their information from a *combination* of the Internet, books, and television. Schools can facilitate this informal learning by increasing the levels of access to existing Internet terminals and reading materials
 10. Extracurricular programs help build social capital (reciprocal trust and goodwill) and self-efficacy in young teens, which translate into engagement later. Research suggests that it is the egalitarian, team-based nature of extracurricular activities that makes them beneficial for youth.
 11. Based on observations that the egalitarian structure of many extracurricular activities builds social capital and a sense of efficacy, civics educators may consider playing the role of moderator or facilitator instead of acting as an authority.
 12. Computer-mediated discussions and boards contribute to an egalitarian setting because they allow shy, ESL and disabled students to participate on a more equal footing with more confident and assertive peers. They also keep a baseline of activity running in-between face-to-face meetings.
 13. Discussions in networked spaces permit mentors from outside the class to participate, such as authors, politicians, and parents. Such networks can run on a range of accessibility depending on teachers' wishes. Semi-closed networks with invitation systems or teacher-moderation allow for more oversight than fully public forums.

Introduction

Youth Engagement: A Cause for Concern?



Despite their many differences in traditions and beliefs, industrialized Western nations appear to be facing a common malaise: youth apathy towards politics. The barometer which causes and confirms these fears is the reliably declining rate of voting amongst the youngest citizens. The same disconnect may also explain the difficulties experienced by political parties in replenishing their ranks with new members. Looking at these facts, there can be no denying that youth are pulling away from traditional party politics in startling numbers. But this focus on the youth vote may not paint an accurate picture. Indeed, if we more broadly consider political engagement by youth below voting age, which forces us to enlarge the scope of what counts as “political” or “civic” engagement, the picture is much less grim. Young people use a variety of avenues to engage with the larger community around them, including consumer activism, online petitions, organized protests, production of online content, and volunteer work. If one sets aside the bias against youth-focused interests – and especially if one looks into the online sphere – it becomes apparent that youth are indeed interested in improving their communities.

The problem is that many of youths’ efforts are misclassified or written off as being less legitimate than adult forms. The main reason for this insensitivity to youth engagement is that it is still being judged by criteria

developed for an older generation, as the expectation that youth be *dutiful citizens*.³² According to American scholar Lance Bennett, dutiful citizens take their civic responsibility seriously and adhere very strictly to the status quo system of party politics and elections to do so. Because they respond reliably to calls to act from government and are less inclined to initiate other ways to engage, dutiful citizens are easy to measure. Youth, on the other hand, fit better under the profile of *actualizing citizens*, who don’t see citizenship as an inherited, immutable duty to be followed to the letter. Rather, they pick and choose which causes they care about and are willing to pursue avenues they think will get the fastest results.³³ *Actualizing citizens* will circumvent party politics entirely if they think this will be more effective.³⁴ Similarly, they tend to quickly coalesce around issues and disband as soon as the problem has been resolved, making them harder to track than those who join ideologically-based groups over the long term.³⁵ Looking at engagement through the lens of actualizing citizenship, which was designed especially to capture the types of civic engagement which young people prefer, reveals far less youth apathy than previously thought.³⁶ The case of Michelle Ryan Lauto is a case in point: her *Facebook* page decrying cuts to New Jersey’s public education system eventually culminated in a huge walk-out which captured the attention of the national press (Hu, 2010).

Civic Engagement and Social Capital

A quick glance at the research on engagement with one's community can become confusing, since researchers often use overlapping definitions of certain terms.



Figure 1 - a telescoping definition of civic engagement which includes political engagement and voting as specialized forms

In this brief, we treat civic engagement as the broadest container for involvement in the public sphere.

In *Figure 1*, the outermost circle is the fringe of civic engagement, although in our analysis it is no less important than the more specific categories deeper inside; political engagement is a form of civic engagement, but the reverse is not necessarily true. In fact, the outer circle is substantially more important to civics education because youth have limited access to the partisan political activities inside the inner circle. The larger inner circle includes all of Canada's federal parties. This terrain is more familiar to civics educators because it is directly connected to codified systems of government which are usually taught as part of a civics curriculum in school. The smaller, dark blue circle which represents voting is singled out because of the importance policymakers place on it as a barometer of engagement. Note that although voting tends to be in the spotlight when talking about engagement with public life, it is really only the tip of the iceberg when considering the ways people try to solve problems in their communities, especially youth (who are barred from voting until they turn 18).

Civic engagement is any instance where someone works to solve a public problem at the local, regional, national or global level.



Figure 2 – How building social capital may overlap with civic engagement

Social capital is often mentioned in the same breath as civic engagement, to the point where they are sometimes confused. Social capital is built up *by groups* as their members build mutual confidence and trust, usually by giving time, help, advice or even material resources to one another. This extends beyond small circles of closely-knit friends and encompasses neighbours, acquaintances, and other community members. A community with dense networks of social capital is not necessarily one where every member is on intimate terms with one another, but there is a baseline level of trust and goodwill between them. In communities with high enough levels of social capital, even strangers are more inclined to help and trust one another.³⁷

A social capital-building activity is any instance where people help one another without expecting a direct return.

Clearly, this kind of social lubricant is useful when the need arises to mobilize the community into some kind of civic action. However, social capital does not instantly mobilize community members into civic engagement. In fact, most social capital-building activities are done purely for the enjoyment of the participants. By the same turn,

civic engagement doesn't always build social capital either. In theory, one can cast a ballot, the quintessential act of civic engagement, without consulting another human being. In the overlapping space between social capital-building and civic engagement go activities like planning a rally. Such activities usually require social capital to start up, and then reinforce it as a movement gains momentum.

Lastly, this brief mentions political efficacy. This term is used to describe not the real impact that someone is able to make in politics but rather the *belief* that they can. In other words, a sense of political efficacy is the polar opposite of a cynical, fatalist view of politics.

Political efficacy is the belief that one can successfully intervene in civic or political affairs and change them.

This type of attitude is important to develop since it correlates with participation in many civic activities. A lack of political efficacy may explain why informed citizens do not vote or otherwise try to tackle problems they know afflict their communities. Youth feel this lack most acutely, since they are excluded from many forms of political engagement.

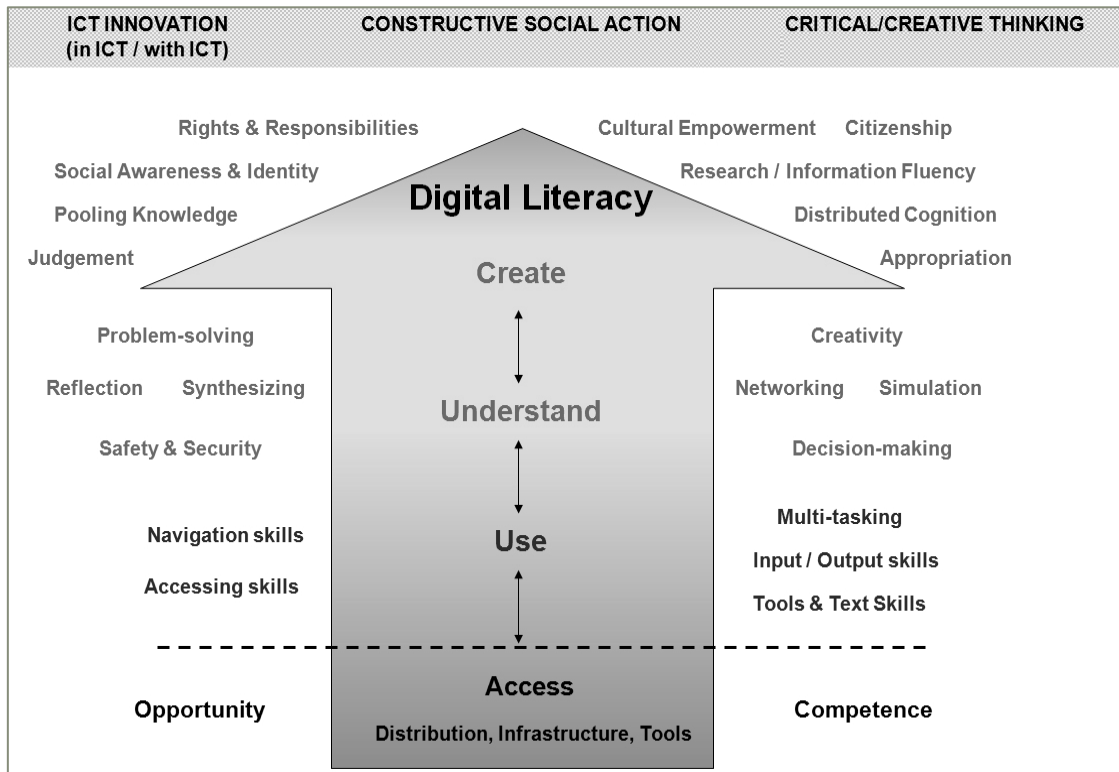
Digital Literacy

Most often the notion of a digital divide³⁸ highlights unequal access to infrastructure like computers and Internet connectivity. Although this remains a barrier for some Canadians, a second, complementary problem is emerging around unequal literacy skills to engage with the technology. This has implications for employment opportunities as more and more jobs demand at least some digital literacy (Chowhan, 2005). Yet the larger issue is the fact that participating as a citizen requires digital literacy as well. Whether or not one's job requires any ICT skills, the increasingly mediated civic world affects all Canadians.

Digital literacy has been coined as a term to encompass the level of literacy that is needed to navigate an increasingly mediated world of information. Yet digital literacy is not some entirely new breed of skill to handle information; a major part of it is the confluence of many other skills with older media platforms. Although each form of literacy corresponds to the arrival of a new media form, newer literacies do not displace or undermine older ones. To be a fully literate individual in a media-saturated world places greater and greater learning demands on each new generation.³⁹ Mastering digital media requires high levels of print,

information, and media literacy since digital media have absorbed text, databases, and film content into a single category. The truly novel aspect of digital media is the networked component, which forces authors to produce texts for invisible, global audiences. Such texts can be hyperlinked to one another in a non-linear web of information, and furthermore are likely to be taken up by other peers in the network and repurposed or remixed into new hybrid forms and begin the process anew.

A Model of Digital Literacy



Although the definition of literacy is biased towards 'reading', it goes beyond merely being able to *decode* messages to include *critical appraisal* of them as well as the ability to *produce* them in various forms. Furthermore, literacy is not only a skill possessed by individuals but a cultural practice interwoven with producers of messages, and other resources needed to decode them. No matter how literate one is, if the producers of messages make them illegible or incomprehensible no exchange of meaning can take place. This places some of the onus to support digital literacy on institutions like schools, government, and even producers of messages.⁴¹ Contrary to popular belief,⁴² this literacy is not inborn, and if not cultivated can become a barrier to full participation in civic life – which increasingly takes place in mediated forms.

The third property, creating digital media, is the crucial difference between Canadian youth being simple consumers of civic information and active citizens with the power to intervene in a mediated civic world.



Digital literacy includes the ability to use, understand, and create digital media.

Research on Youth Media Habits which Impact Civic Life



Overall, Canadian youth are very connected to online technologies. Through a combination of industry partnerships with public schools and private market mechanisms, young people have a variety of access points and very few are cut off entirely from the World-Wide Web (although a disproportionate number of those with limited access live in rural and remote communities).⁴³ As of 2004, Canadian schools had achieved a national ratio averaging one computer per 5.5 children and high-speed Internet connections were nearly universal.⁴⁴ On the home front, children's rates of access from home have been climbing from 79 per cent in 2001 to 97 per cent in 2007.⁴⁵ As of 2009, 80 per cent of Canadian households had broadband access.⁴⁶ Simultaneously, with the ascent of affordable home-based connections, community hubs in Canada have faded in importance. These hubs were originally established to provide a virtual public commons with access to hardware and connectivity in addition to non-commercialized e-mail, Web-space, and bulletin boards. The role of providing hardware and Internet access has been taken up at the municipal level by public libraries⁴⁷ but the maintenance of public, *non-commercial* online spaces has since eroded due to lack of sustained support.⁴⁸

Given nearly universal access to the Internet, Canadian children can and do spend a great deal of time online. According to the 2007 Microsoft/Youthography Internet Safety survey, 9-12-year-olds used the Internet for

just under two hours a day while 13-17-year-olds used the Internet for three hours a day.⁴⁹ Social networking is particularly popular, with 76 per cent of online Canadian teens having social networking profiles.⁵⁰ A recent American study showed that the number of hours per day youth spend engaged with media rose from 6 hours and 21 minutes to 7 hours and 38 minutes daily,⁵¹ a feat made possible by increased media multitasking. Such high rates of media engagement arouse concern that time spent online displaces time children might otherwise spend being engaged in the civic arena.

There is a lack of empirical research which definitively shows the impact online engagement has on civic engagement, particularly for youth ages 15 and under, but there are numerous studies of adults and older adolescents which have explored the impact of time spent online on civic life. Using pooled data from 38 studies of Internet usage and civic engagement in the USA and Canada, it has been found that when taken as a whole, Internet use has a very small but mostly positive or neutral relationship with civic engagement on adults.⁵² At the very least, it can be said that Internet use *does not detract* from civic engagement. By the same turn, a more focused national study of Americans did not find Internet use a positive factor for civic participation. The most civically engaged subjects online resembled their offline counterparts and indeed, online and offline civic participation overlap a great deal, implying that engagement in civic life

both online and off is governed by one or more additional factors such as age, education, and socio-economic status (with older, better-educated, and wealthier participants generally more engaged). The main exception to this trend was the use of blogs and social networking sites for political purposes, where younger adults outstripped older users by a wide margin.⁵³ This latter trend has been confirmed in Canada.⁵⁴ In general, though, citizens who are engaged in civic life favour a blended approach where they combine online and face-to-face action.⁵⁵ Such findings mirror European studies of youth and young adult civic engagement which shows low overall rates of civic engagement (between 10-13 per cent of respondents) but a clear bias among the engaged for a mixed online/offline approach.⁵⁶

Examining the question of youth more precisely, a national survey of American 14-22-year-olds revealed the importance of separating intentions from strict usage of particular media. In a model considering demographics and a wide range of media habits, using the Internet to seek information correlated 0.13 with correctly answering questions about current politics. This is an effect similar in strength to reading newspapers, which has traditionally been seen as the gold standard for civically-oriented media (correlation 0.134). Among all mass media uses (including television, books, radio, magazines, and movies) the only negative influence on civic engagement was spending a large number of hours in casual TV viewing (correlation -0.08), as opposed to informational use of television.⁵⁷ (For example, watching national newscasts had a small positive impact on both political knowledge and participation in civic activities.)⁵⁸ What this tells us is that when it comes to TV, the motivation of viewers is more important than time spent viewing. Such findings echo older global surveys which found that in general, better and more diverse media resources in the home corresponded to children's interest in voting and political participation.⁵⁹ Canadian data also shows that among citizens who follow the news only 17 per cent rely exclusively on one source, but those who do usually turn to television.⁶⁰ Like television, the Internet has been absorbed into information-seeking uses of media for engaged users, and providing children with more media channels to more information may support this trend. The numbers of hours young people spend with media only tell part of the story, and paying attention to this metric alone ignores the different motivations viewers have when they consume media.

Even if the Internet and other media can facilitate knowledge and engagement, there are still fears that solitary media use erodes social capital. The best Canadian data has probed citizens as young as 15 in national studies carried out by Statistics Canada and as young as 12 in the Canadian Internet Project (CIP).

Countering fears that using the Internet is socially isolating, Statistics Canada found that Internet users do sacrifice a small amount of face-to-face time with family and friends, but are more likely to cut back on television or sleep first. More important, much of the time spent online by the youngest users (15-18 years old) is used for socializing: 39 minutes daily.⁶¹ These findings are confirmed by CIP which showed overall that heavy Internet users spend slightly more time with family and friends than other groups.⁶² Furthermore, for users ages 15-25, using the Internet does not negatively impact their personal feelings of belonging in their communities: in fact, Internet users are members of more clubs and organizations than non-users. Moderate users also volunteer more than non-users, and young users are the most likely to use the Internet to search for new volunteer opportunities.⁶³ Shifting from the civic to the political sphere, young Internet users are more likely to engage in public issues with the press and with each other in online spaces. Among home Internet users ages 18-24, 58 per cent had read about a political issue online, 35 per cent read the opinions of other Canadians online, and 21 per cent had corresponded with fellow citizens regarding an issue. These rates were the highest of any age group.⁶⁴ The Statistics Canada study concludes that Internet use has not had a very clear positive or negative overall effect on civic engagement but that it is reorganizing the terms of engagement, allowing new communities to arise, dispersed in space and time.⁶⁵

In summary, there is no strong, homogenous effect of Internet use on civic engagement. This is both good and bad news for educators. The good news is that digital media are not obstacles which must be overcome to enable engagement with one's larger community. The bad news is that they do not necessarily activate passive members of a community and transform them into engaged digital citizens. What we do know for certain is that engaged citizens have assimilated a range of media into their daily lives, both as sources of information and as tools to communicate and act. New media have not fully replaced older, more traditional forms of engagement but most civic engagement is now a blend of electronic and face-to-face interaction which exploits the strengths of each. Knowing this, educators should consider emphasizing the ability of students to assess, criticize and synthesize information from many different sources and in many different forms: the very definition of digital literacy. At the same time, taking an active role in a civic activity nowadays is highly likely to require skills like coordinating efforts in networked environments, producing multimedia texts for an invisible audience, and exerting "virtual" but very real pressure on leaders. This is the facet of digital literacy which focuses on production, skills integral to empowering young citizens.

Social networking / video gaming and civic engagement



Although heavy television use has been identified as a detriment to civic engagement, it doesn't necessarily follow that all entertainment media detracts from engagement. As discussed in the previous section, motivation is the key when considering the impact of media use. For example, in a sample of college students it was found that over time intensity of *Facebook* use increases levels of social capital.⁶⁶ Such findings bolster the idea that online tools have an important place in civic engagement and, more importantly, that media which look like 'fun and games' on the surface may serve multiple purposes. Both American and Canadian research confirms the importance of social networking to those who are seriously engaged. In the United States, the Pew Research Center found that "those under age 25 constitute just 10 per cent of our survey respondents but make up 40 per cent of those who make political use of social networking sites and 29 per cent of those who post comments or visual material about politics online."⁶⁷ As for Canada, the CIP reports that "overall, Internet engagement (frequency of Internet use) and social engagement (involvement with social networking sites) are better predictors of civic engagement than is information-seeking as a reason for going online."⁶⁸ Teenagers have made waves in the popular press by coordinating huge rallies that tap into the social capital

they have amassed online via social networking sites: Latino students staged massive demonstrations in California over immigration laws by harnessing their *MySpace* networks,⁶⁹ public school students coordinated *Facebook* invitations to organize a march to protest proposed cuts to education funding in New Jersey,⁷⁰ and in Canada a group of young drivers successfully used *Facebook* groups to counter proposed changes to Ontario driving laws in 2008.⁷¹ More generally, CIP finds that although youth primarily cite socializing as the number one reason they join social networking sites (44 per cent rank it as their main reason) there is a small segment (11%) which uses it primarily to obtain and circulate information; this segment increases with age. In fact, given that young users prefer the Internet and *interpersonal contacts* as sources of news, social networking sites are poised to rival search engines for finding news and information,⁷² which demonstrates that social networking sites are not narrow instruments but rather can be deployed for many different purposes depending on the user's goals. The difference between informational and entertainment use rests not as an immutable trait of the technology but on the user's needs.

Although academic research on social capital and social networking sites has mainly targeted university-aged

students, there is an emerging set of research on video gaming which looks specifically at teens. Little video game content is explicitly civic, but virtual communities that spring up around games provide examples of spontaneous interest-driven groups where civic skills are exercised. Although the research is cross-sectional in nature, findings show that many gamers prefer playing in groups both online and in person. Within that setting, many identify gaming experiences where players apply fundamental skills that are important in similar civic situations occurring “at least sometimes”. These include helping or guiding other players (76 %), thinking about moral or ethical issues (52%), learning about a problem in society (44%), learning about social issues (40%), helping make decisions about how a community should be run (43%), and organizing/ managing game groups (30%). In general, teens who endorsed experiencing more of these civic tasks in games were also more likely to be civically engaged in other communities away from the game. Comparing the 25 per cent of respondents who reported the most civic activities when game playing to the 25 per cent who reported the fewest: 70 per cent of the top quartile seek political information online versus 55 per cent of the lowest quartile; 70 per cent of the top quartile engage in fundraising, while only 51 per cent of the lowest quartile do so; 34 per cent (versus 17 per cent) had tried to persuade someone to vote a certain way in an election; and 15 per cent (versus 6 per cent) had marched in a protest. All these differences were larger than can be accounted for by chance.⁷³ Moreover, the subset of teens that write and contribute to online message boards about video games had even higher levels of civic engagement: 38 per cent had tried persuading someone to vote for a certain party and 18 per cent had marched in a protest.⁷⁴ As with the research on television and Internet usage, measures of time spent playing games did not affect civic engagement as much as the reported frequency of civic activities occurring within the game itself. For example, playing as part of a group did not correlate with civic engagement outside the game, but organizing or managing that group did.⁷⁵

All this demonstrates that civic education is not strictly about having a command of historical facts about the nation’s democracy or being enculturated with particular personal values. Games which ostensibly have no curricular content to teach may serve as a good training ground for skills to act in a civic environment -- especially those with both physical and virtual elements.⁷⁶ Whereas cafés and other semi-private spaces were once sites of community engagement, it could be that online games and social networking can serve a similar purpose to build real social capital in virtual space.⁷⁷ In Canada, online gaming is very popular, with 79 per cent of 12-17-year-olds playing



with others at least monthly.⁷⁸ As a pastime which reaches nearly all teens (including increasing numbers of girl gamers), it may be that many children’s first experiences in the civic realm will happen while playing a video game.

Although the most popular online gaming and social networking communities are commercial and built around diversion, there are parallel communities consciously built around civic engagement: *Zora*⁷⁹ is an experimental virtual world designed to encourage negotiation and cooperation among players⁸⁰ while *TakingITGlobal*⁸¹ is a collaborative social networking community for youth activists.⁸² These examples illustrate the civic purposes entertainment technology can serve.

When deciding on which media to promote or teach in school, it is crucial to consider the different uses students can derive from platforms which are stereotyped as time-wasters. Both social networking and video gaming have potential civic value and are pertinent subject matter insofar as they both engage the majority of youth, yet both are popular targets for filtering and banning by schools and parents.

The Present State of Civics Education



Although civics education takes many different forms across the provinces and territories, the task of teaching civics to Canadian students entails some common challenges. First and foremost is Canada's multicultural heritage. Considering the panoply of different attitudes, perspectives and experiences students bring to the civics classroom, to what extent is it appropriate to teach a single model of citizenship?⁸³ A recent study examining both Quebec and Ontario high school students found that although civic education slightly improved political knowledge, intent to engage and participation in social movements amongst the general student population, effects on minority students were marginal.⁸⁴ Additionally, the authors felt that white students in this study had a head start which the civics course did not remedy for their minority peers: an underlying cultural bias that made the course less interesting to minority students because it did not reflect their own personal experience.

At its most extreme, some civics educators back down from the question of teaching a democratic style of citizenship altogether and devote the majority of their civics instruction to inculcating tolerance of others in their students. This strategy is pertinent and timely to many students given the increasingly diverse face of Canadians, but teaching tolerance to the exclusion of civics risks splintering students into groups along the lines of existing differences such as ethnicity,

class and language.

In the same vein, some teachers choose to teach civics education in terms of moral or character education, stressing altruistic virtues like charity work and compassion for disadvantaged groups. Promoting this sort of goodwill is admirable, but as with teaching tolerance alone, it runs the risk of skirting around the central issue of teaching a style of citizenship that is particular to democracy. Joel Westheimer has observed that a civics curriculum which teaches individual altruism is compatible with an authoritarian government.⁸⁵ Picking up litter, donating blood, helping the elderly, and being patriotic are not *uniquely* democratic ideals. This approach foregrounds socializing students to be good all-around human beings but not necessarily engaged citizens. What is missing is the specific skills and will to effect change in a democratic state.

Although the compassion of the so-called *personally responsible citizen* is at the core of many styles of civic engagement, teaching exclusively to this style does not equip students to work effectively within any particular system of government. Programs which have had success getting students into the habit of volunteering are an excellent foundation,⁸⁶ but in the absence of higher-order goals these programs may go no further than instilling altruism: they don't necessarily teach civic skills.⁸⁷ Nonetheless, teaching tolerance and compassion as a civics curriculum remains

popular since they are uncontroversial and palatable. Both are, of course, important attitudes to develop, but they do not automatically translate into knowledge or skills which empower students to act on more difficult issues in the civic realm, especially when considering the importance of digital literacy for effective participation.

The second mainstream style of civic instruction focuses on knowledge of political mechanisms and the history of party politics in Canada. This approach teaches present-day citizenship by returning to the original struggles of colonists to claim independence from their European empires and establish a system of elected government. It is easily taught in a lecture-based format,⁸⁸ easy to evaluate through tests and assignments,⁸⁹ and generally treats citizenship as a gift which is inherited in a static form.⁹⁰ Such an approach simultaneously meets the requirements of a history or political science curriculum and delineates the basic rights Canadian citizens enjoy. Generally speaking, this style of teaching is most compatible with the *dutiful citizen* model of engagement⁹¹ insofar as it takes a conservative approach that emphasizes the value of the existing system.⁹² In theory, a corollary of this historical education equips students with a practical knowledge of their own personal rights and obligations as Canadian citizens to vote, engage with their MPs or even run for office. Put another way, this type of teaching aims at producing more citizens who engage in the civic sphere but only in the terms already set out for them.⁹³ From an educational perspective there is a risk of teaching the material without inviting students to exercise a critical perspective or incorporate contemporary issues which are relevant to them.⁹⁴ In practice, curriculum which is strictly knowledge-based shows fewer gains

in the long-term than do programs which combine activities like service-learning, debate, and interaction with civic actors.⁹⁵ Ironically, this is also true when it comes to improving knowledge of government.⁹⁶

The final approach in civics education is arguably the most difficult to organize and execute, and is the least common among educators.⁹⁷ This focuses on the skills, including digital literacy, which students need to participate in the public sphere by assigning simulated or real civic activities. These diverse exercises include: blended service-learning programs where students combine community volunteer work with classroom reflection;⁹⁸ mock-elections where students vote in parallel alongside federal or provincial elections;⁹⁹ model parliaments and debates in the classroom;¹⁰⁰ and direct collaboration with civic organizations. To the extent that these activities offer students a more active role in their learning as well as chances to exercise a critical perspective and skills to engage directly, they are more compatible with the *actualizing citizen* style of learning favoured by youth. The major difference between simulated and real civic activities is the sense of political efficacy¹⁰¹ and social capital¹⁰² that the latter instils. As a rule of thumb, the more classroom activities are related to real forms of engagement, the stronger the impact will be on learning and future engagement.¹⁰³ Across several studies, civics education with a focus on working on a real problem in the community improves learning outcomes and produces better long-term impact on future civic engagement. Yet the spectre of ceding more autonomy to students over their learning, especially where civics and new media are concerned, is a frightening prospect for many educators.¹⁰⁴ A student walk-out organized online is a valid example of

exercising civic skills,¹⁰⁵ but it is also a form of truancy which educators are forced to sanction.¹⁰⁶

The role of digital technology in this style of civic education is twofold. First, since students benefit most from working on meaningful civic projects with community leaders and organizations – and digital technologies act as a bridge between school and community – digital technology makes this kind of collaboration between classrooms and outside organizations viable. Second, civic and political organizations, as well as citizens who are already highly engaged, have taken up digital technologies with such enthusiasm that citizens who wish to participate need a minimum level of digital literacy and even greater skill if they want to excel in this field. These skills are not inborn and require guidance and practice to hone, making schools an important site for students to practice citizenship skills for both present and future needs.

Interestingly, extracurricular involvement has had consistently strong effects on subsequent civic engagement like volunteering and voting.¹⁰⁷ Breaking down the differences which set apart the opportunities presented in classroom-style learning and extracurricular activities,¹⁰⁸ it becomes clear that online affinity spaces support many of the same learning opportunities as extracurricular involvement but with lowered barriers for participation.¹⁰⁹ By harnessing ICT in the classroom, teachers can extend these benefits to more students while better equipping them to thrive in the public sphere.



New Directions for Digital Civics Education

New Directions for Digital Civics Education

Introducing new technology into the classroom can be a difficult choice for educators.¹¹⁰ On the one hand, there is the desire to continually keep education in step with the outside world to keep subjects relevant. On the other hand, educators are already charged with a heavy burden of instructing students in fundamental competencies like print literacy and numeracy in addition to a growing range of academic, moral, and life skills. If there's barely time to ensure students know how to read and add, what kind of priority does digital citizenship get? This is a complicated set of skills which is built upon a foundation of fluency using digital media coupled with civic skills and political knowledge.

At its very best, digital literacy is considered an extension of the basic literacies (like reading and writing) that are needed to function in a world where most information is electronically mediated. At worst, digital literacy is considered an irrelevant or transitory ornament on the underlying, supposedly static skill of decoding and composing texts. Why bother teaching kids to tweet (posting to *Twitter*, a micro-blog where entries are 140 characters or less) given that every new platform seems to have the lifespan of a gnat? Deployed without integration into the curriculum, technology in the classroom tends to contribute only to mastery of technology itself and not to other areas of study, as has been the case with laptop computers.¹¹¹ In the case of the Internet, the tie-breaker for this impasse tends to be the difficulty inherent in filtering the medium for use in schools.¹¹² The frustration of

students using the Internet as a distraction from class work, combined with the spectre of them encountering dangerous strangers, hateful manifestos, pornographic content, and cyberbullying, makes the Internet most often a *threat to be managed* in the context of the classroom¹¹³ and an even greater disincentive to teach digital literacy.

Civics education is also difficult to fit into a full schedule. Although it lacks the perceived risks associated with teaching Internet literacy, in terms of priority civics still ranks behind more testable subjects which have clear benchmarks and goals for students to achieve.

Where civics education is taught, there is a risk of it being taught without any concern for digital literacy. Yet how is it that most Canadians know anything about the decisions being made in parliament? How do most of them decide which MP to vote for without going to the trouble of meeting all the candidates in their riding? How do like-minded people separated by huge distances coordinate rallies and protests? Most importantly, how can anyone quickly address a large enough audience to create change? Sometimes we take for granted the fact that the entire world of politics and civics exists in an almost purely mediated form.¹¹⁴ Though much of our engagement may be virtual, it is no less real.

Although there is no magic bullet that will resolve these dilemmas, one possible solution is to recognize the substantial degree of *digital fluency* required to effectively engage youth in the *civic arena* and teach to both simultaneously. Digital media can and

should be integrated at each step of the civic learning process. In the preceding sections evidence has been presented which shows that although political knowledge can be evaluated using the same methods as other subjects,¹¹⁵ this knowledge doesn't meet its full potential unless paired with communication skills and political efficacy. Teaching to living, electronic texts in a civics curriculum is important not only because they are the best source of information for ongoing, contemporary issues but also because students as a population already depend on them as their primary source of news. Seventy-one per cent of youth ages 12-17 rank the Internet as an important or very important source of information, though only 32 per cent of those same youth trust most or all of the information available online.¹¹⁶ This finding dovetails with students' growing desire for instruction in school on how to evaluate the credibility of online information.¹¹⁷ Taking students' existing information-seeking habits into account can inform teaching practice to help enhance the skills they need to use most often and equip them with the necessary critical eye to successfully find and use credible information online.



Sites of Learning and their Features

Research has isolated a few sites of learning for civic knowledge and skills which are bound up in practices that may help or hinder civic outcomes. Interventions which take place as part of mandatory *classroom* learning have been used primarily because they reach the majority of students. Given that the decline in youth voting is mostly among youth who do not go to university,¹¹⁸ the high school classroom is the last effective place to reach potential voters. The learning which takes place there, however, is highly controlled and rarely strays outside the classroom to engage with the larger community.

On the other hand, extracurricular and service-learning programs are enmeshed between the settings of school and community. Activities like sports teams, clubs, and volunteer associations are animated and *sustained* by member participation. What's more, such organizations may forge links with the community at large depending on their purpose. Researchers speculate that this entails more of a personal investment on part of the members and more opportunities for personal development.¹¹⁹ This kind of learning is more informal, but allows for more practice in collaboration and leadership. Such activities tend to run on an opt-in basis, where students have to choose to participate. As such, it is hard to determine to what extent these programs change attitudes as opposed to reinforcing existing ones.

Lastly, youth have a strong presence in online participatory cultures,¹²⁰ which exist in a networked space that is not confined to any single location. Participatory cultures coalesce

around shared interests and are almost entirely driven by participants' interests in specific topics such as case-modding^Ω, anime subbing^Θ, or fan fiction^Ψ. These kinds of spaces operate on a voluntary basis, but unlike structured extracurricular or service-learning activities, the affordances of online technology lowers the barriers of time and space needed to commit to these groups. Just as an example, imagine the constraints and opportunities of a book club which is centrally organized as an after school activity versus one which exists online, in a public networked space. Although the former benefits from face to face meetings and the nuances that add to dialogue, it is limited in many ways. The club can only convene when members' schedules overlap and then only if they have access to a space which can accommodate them. There are certain time parameters for participation that are informally set by the meetings: the club might not be accommodating to members who only want to drop in for just 5 minutes or members who want to stay for 4 hours. The same club in a networked space, on the other hand, can handle a wider range of participation and adapts well to sliding scales of participation. An investment of 5 minutes in the online space can have actual value for other members. Furthermore, a major use of networked space is to organize and sustain real-life meetings and organizations, so members still benefit from both styles of participation. Some scholars forecast that thanks to networked technology, participation in groups will soon be measured by output rather than by

merely logging more hours in service.¹²¹

All three sites of learning (the classroom, extracurricular activities, and networked spaces) offer different opportunities to develop skills which are transferable to the civic realm. However, given the demonstrated track record of success for structured activities in promoting long term civic engagement,¹²² this area deserves extra attention. The important question is: what is it about activities outside of the classroom which encourage civic engagement over the long term, and how can classroom learning integrate more of those features? As outlined below, activities which depart from the classroom, as well as activities that provide rehearsals for later adult engagement (while still empowering students in the present) boast better outcomes. What's more, these groups have many of the same structural features as online affinity spaces that spontaneously form around common interests. With a little direction and planning, educators can build upon the already high engagement youth have with networked spaces and mobilize them for civic engagement.

The classroom and structured extracurricular activities can both be excellent sites of civic education, but the affordances of networked space subsume many of the same opportunities (or else provide them at a lower cost) as well as presenting some unique affordances. The field of possibilities opened by networked space for civics educators can be broken down into widened ranges of *contact* and *content*.

^Ω hobby based around building custom PC towers from new, recycled, and homemade parts

^Θ hobby based around adding subtitles to Japanese animation not commercially available in the Western world for online distribution

^Ψ hobby of writing new fiction based on existing canon characters and settings written and distributed by fans of the original work

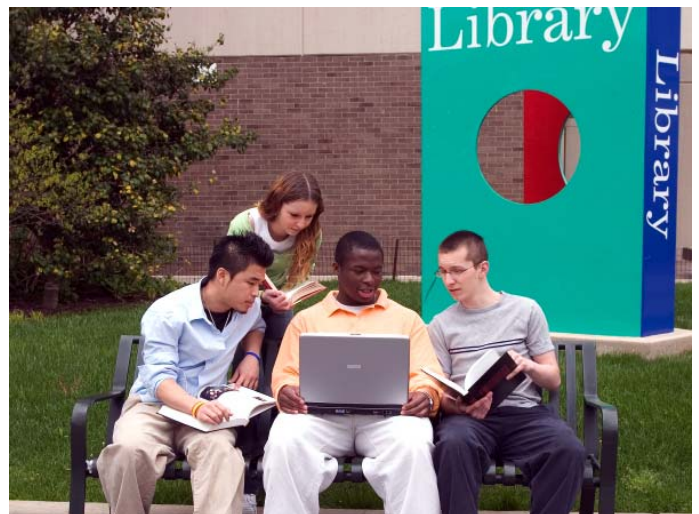
Contact

We sometimes forget that the classroom and the public school are a form of technology. The system of standardizing a curriculum and delivering it in stages to groups of age-stratified students is meant to speed up the transmission of knowledge while consuming fewer resources like teacher time and attention. The design of many classrooms bespeaks their reliance on broadcast styles of learning: rows of desks pointed forward at a blackboard, a teacher or a projector screen. The relationship favoured by this technology is one where the teacher is central and students orbit around him or her. Second, the classroom is a self-contained cell which is cordoned off from the surrounding community, even other classes in the same school. It is possible to work against this architecture, but it requires a concerted effort. One way of quickly and cheaply enriching the class with more linkages is to integrate networked technology to complement classroom instruction. A well-designed networked space unlocks communication between peers and a new dimension for learning and civic engagement. This is not just an aspiration: a Canadian study on civics education revealed that discussing politics with peers had a much larger effect than the actual classroom lessons.¹²³ Such findings are in parallel with American research on deliberating with peers and future engagement.¹²⁴ Peer-to-peer learning is at the heart of participatory cultures, and allows students to move back and forth between the roles of mentor and novice depending on the topic at hand or their partner in an activity. These kinds of exchanges capitalize on the untapped resource of students' existing knowledge and they are the norm in networked space.

Not only does a well-implemented network unlock more linkages between students within a single class, if made public such a network can benefit from participation by other members of the community. Compared to the investment of visiting a classroom, networked technology allows greater degrees of participation by more people like city councillors, parents, and activists who can enrich discussions online.

Content

Just like the school and the classroom, books are a technology which has become so commonplace that we no longer consider it to be technology at all. Yet books are a technology which prescribes a certain style of learning. Especially when ordered en masse, like when choosing textbooks for an entire school, the emphasis is on knowledge which will be broad and useful across many situations. The World Wide Web often lacks the depth and rigour of a good book but it is a “just-in-time” learning tool which adapts, keeps pace with current events and delivers new content cheaply and as needed. For the purposes of making a civics education relevant to particular students' interests, the Internet is indispensable. It can support a wider range of topics than a school library can provide resources for, it can support the most current issues and is more closely aligned with how the adult world consumes news. Overall, inclusion of web resources in civics education is not just a motivator for students but also an enhancement to learning.



The themes of contact and content re-emerge in the areas to follow.

The Participation Paradox

Although attempting to replicate the experience of self-chosen extracurricular activities in a classroom setting where participation is mandatory may sound like a contradiction, it is possible in degrees. 'Voluntary' and 'mandatory' are not black and white distinctions, especially in education. Motivation exists along a continuum and research focusing on autonomy has found that within this spectrum there are meaningful differences between the different shades of 'mandatory'. In general, using controlling measures sparingly and granting students more autonomy enhances the learning experience.¹²⁵ If the underlying goal of civics education is to foster enduring civic engagement (as opposed to simply passing the tests at the end of the course) then this kind of autonomous learning opportunity is paramount. Mandating a civics course is a controlling measure, but there are many ways to give students a larger stake in the process, especially with the supportive affordances of networked technology. Suggestions include:

- Allowing students to choose an issue in the community they want to act upon. Using different media resources like the Internet, students can research the nature of the issue and compile relevant bookmarks and citations to share among the class through social networking sites, blogs, or bulletin board systems.
- Evaluating the quality and source for each bookmark. Disputes over the legitimacy of a source can be resolved in classroom deliberations that may continue online after school. The archive of the computer-mediated discussion may be a valuable reference later.
- Assembling the best sources in a *wiki* for students to edit collaboratively over the course of the project. Proposed changes can also be discussed in class and online. The *wiki* will help students stay abreast of new developments.
- Using a variety of sources, especially the Internet, to encourage students to identify community leaders and agencies who are involved in the issue. If none exist, teachers may consider researching direct action taken by non-profits and community members.
- Helping students brainstorm what they want to do and assisting them in whatever form they choose. If students want to produce a persuasive text as their end project, encourage them to find examples across many different media (such as podcasts, informational Web sites, video blogs, press releases, and viral e-mail campaigns) and choose which one best suits their goal. If students want to act directly, encourage them to explore different tools to organize this (i.e. listservs, social networking sites, short message services) and experiment with different methods to find the best one to enlarge their pool of collaborators.
- As students have varying levels of proficiency with different technologies, teachers should encourage more skilled students to help their peers get up and running.
- Consider the benefits of making part or all of the class's output for the project publicly viewable online to invite participation from parents, students in other classes, and the community at large.

The parameters of the task set by the educator should be as broad as possible to allow students to set the agenda and keep the material personally relevant. Unless students are already veterans of civic action, there will be challenges and learning opportunities for educators to point out and frame no matter what course of action is decided on. In this model the educator is facilitating learning while students take a leading role in the content and structure of the activity.

Locating the issues for maximum impact

Granting students greater autonomy in civics education makes the experience more personally relevant. Despite popular beliefs to the contrary, before civic education even begins youth tend to have well-developed attitudes and opinions of how systems of government work – or how they don't.¹²⁶ In the case of minority students, whose experience of government may be vastly different from that of their mainstream peers, these preconceived attitudes can hinder learning goals if students perceive the curriculum to be written from a perspective that ignores their life experiences. Traditional civics education, entrenched in the distant past and dependent upon textbooks which have enshrined an incontestable historical narrative,¹²⁷ may be the reason minority students retain fewer benefits from such courses.¹²⁸ In terms of developing better civic attitudes, personally relevant curriculum has been proven to have a positive effect on students across the board.¹²⁹ Although knowledge of government offices and mechanisms is a foundation for civic engagement,¹³⁰ anchoring the curriculum too much in the past and in canonical texts speaks more to the *dutiful citizen* mindset than the *actualizing citizen* ethos preferred by students.¹³¹ Situating a civics curriculum in the present has been proven to better reach diverse students because they see it as being more personally relevant.¹³² When designing a civics curriculum around the present-day civic arena, educators have no choice but to depend heavily on new media to fuel activities in and out of class. On the other hand, since new media have fewer gatekeepers than print resources, media literacy must also figure prominently in lesson objectives as well. Although this represents a foray into slightly riskier, less predictable territory for teachers, the benefits of increased interest, knowledge and engagement are strong enough to warrant the risk.¹³³ Specifically, using online information in classroom discussions translates into significantly better retention of knowledge and more interest in following civic activity once the course concludes.¹³⁴ Moreover, students who use online news sources, discuss politics online and deliberate on such

material in class have increased rates of civic participation, political participation and political consumerism. Sadly, the highest-impact media-based activities are also the rarest reported experiences in student surveys.¹³⁵ Media which are “live” like blogs, television, newspapers and online forums are the only resources that keep pace with current civic issues. If an educator's goal is to cultivate student competence to act in a civic arena, textbook-based instruction is too far removed in time to translate into interest in contemporary issues. Furthermore, it shelters students from the real-life exercise of evaluating and deciphering mediated messages from producers with differing intent and levels of reliability. The skills needed to navigate the labyrinth of competing partisan and persuasive messages are arguably more pertinent in the long term than a rock-solid command of historical facts about Canadian government, but for reasons of convenience the latter remains more popular.¹³⁶



Crossing the threshold into the public arena

As a side-benefit, integrating networked technology into civics education also expands the breadth of potential topics and projects: the sheer volume of lobbying groups, non-government organizations, charities, and special interest groups that have an online presence makes civics education an ideal opportunity for interest-driven learning. Networked technologies not only enlarge the pool of civic causes students can take up as subject matter, but can also be used to gain greater access to important figures in the community and abroad. In a quasi-experimental study of the *CityWorks* program, it was found that visits from civic leaders had the strongest impact across learning outcomes.¹³⁷ Kahne describes the program below:

As citizens of a fictional city called Central Heights, students participated in six simulations of prototypical processes related to local government, learning about a variety of issues and the processes and people responsible for making decisions about these issues...Students also met with various community leaders from local government, including judges, elected officials, media representatives, and community activists who served as potential role models. Students also participated in a service - learning activity by researching and taking action to address a local issue of the students' choice...These curricular experiences were designed to foster students' motivation to learn, commitment to participate, and development of participatory skills (Kahne et al., 2006, pp. 391-392).

Technology like teleconferencing makes student interaction with leaders increasingly easy, which is a real blessing since this appears to be an important touchstone for them to see civic leaders as approachable human beings. This is only one example of how networked technology not only streams important information for use in the classroom, but also how the classroom can become a laboratory for democracy which can cross over into the larger community.¹³⁸ Whereas much schoolwork is a rehearsal for real tasks students may undertake later as adults, combining networked technology and civics education gives students a chance to contribute their work to real projects in the civic arena and exercise political efficacy. There is a profound emotional difference between submitting an essay for grading by one's teacher and adding content to a wiki where that same essay will enter the public domain alongside the work of one's fellow citizens, including classmates, parents, journalists and community leaders. Such experiences encourage a sense of efficacy because they are authentic.

One of the most problematic but subtle aspects of lecture-based civic education is that it inadvertently solidifies the young person's status as a passive party in the political process. A civics education where student debate is discouraged or where students are not invited to raise issues which matter to them personally reproduces the same disconnect between the adult-sanctioned world of politics and young citizens. Even teachers who work hard to make their classrooms egalitarian and deliberative risk falling into the trap of simply lecturing to students.¹³⁹ In contrast, scholars speculate that the reason extracurricular activities encourage civic engagement so strongly is because they are a rare chance for youth to break out of that mould and feel a sense of empowerment.¹⁴⁰ In a U.S. study of experiences students had across domains, the extracurricular domain consistently offered more learning opportunities for personal and interpersonal development like skills, identity, social capital, leadership, and ties to the community. The comparison groups were opportunities found in class and spending time with friends.¹⁴¹ As mentioned before, networked affinity spaces have spontaneously encouraged similar styles of organization to develop, particularly among youth. Jenkins has written at length about how affinity spaces such as these have fluid hierarchies based on contributions and expertise, where members alternate freely between the role of mentor, peer, and learner depending on the situation.¹⁴² Whereas this sort of give-and-take relationship is common in extracurricular activities and affinity spaces, it can be easily sidelined in a classroom setting where authority and expertise is centralized around a teacher. Turning to research on computer-mediated communication (CMC), there is emerging evidence that networked spaces can be highly supportive of de-centred participatory discussion and learning. Most of this research has been conducted on university-aged students, so special consideration needs to be applied when translating this into practice at the high school level. An extensive review published in 2007 concludes that compared to face-to-face group work, networked collaboration has many notable advantages:

CMC groups tended to outperform face-to-face groups in critical thinking, personal perspective sharing, and task-focused interaction. Face-to-face participants rated group cohesion and group effectiveness higher than CMC participants did, while CMC participants revealed lower levels of evaluation apprehension and peer influence.¹⁴³

In the context of digital civics education, the above advantages mean that when conducting activities in a networked space, students tend to deliberate more carefully on the messages they are sending and receiving, a habit which is central to good digital citizenship.¹⁴⁴ What's more, students are more willing to voice opinions they might otherwise have kept to themselves when face-to-face and are less susceptible to being swayed from their views by dominant peers. All this contributes to the enrichment of the discussion and forces students to deal with diverse opinions in a civic forum. Some of this research specifically supports students taking a more active role in learning; for example, work by Hillman found that utterances were more balanced between teachers and students in a CMC class compared to face-to-face,¹⁴⁵ implying more give and take in discussions and less recitation. Within the digital realm, Cramer has further analysed how different degrees of adult moderation affects a long term CMC discussion by younger students.¹⁴⁶ Overall, adult moderators who impose more heavily into the discussion make themselves the axis around which comments circulate, while those who refrain from intervening encourage more peer to peer discussion.¹⁴⁷ Given limitations on classroom time, networked spaces also allow discussions to extend throughout the day¹⁴⁸ rather than limiting work away from class to be completely isolated and disengaged from peer feedback. Whereas many of these studies were conducted on networked spaces for distance learning courses, where comparisons were made between 100 per cent computer-delivered versus 100 per cent traditional lecture-style content, most high school programs can be a blend of both networked and face-to-face work.

All of CMC's benefits aside, whether or not educators are convinced of its ability to enhance learning, the fact remains that these technologies are at the heart of most civic institutions. Participation in the civic world will increasingly depend on how well students can express themselves in a digital environment, without recourse to verbal intonation and without being able to read an audience's reaction in real-time. By the same token, students will similarly need to read texts which are organized, at times sloppily, as hierarchal threads written by many users instead of linear texts with a single author. The changing reality outside school walls justifies preparing students to engage with these kinds of texts in school.

Skills for life, skills for work

Although the focus of this discussion has been mainly on equipping students to participate in the civic realm online, the skills which have been highlighted here are relevant in other domains as well. Indeed, the most attractive aspect of computers and the Internet is that they form a backbone which supports many varied uses. In particular, networked technology has become a staple in the workplace due to the competitive advantage it confers. A longitudinal study of Canadian manufacturing has demonstrated that firms which integrate ICT effectively in the workplace outpace their competitors, even after accounting for differences in firm size, investments in research, and innovation in other areas. In fact, *investments in communication technology increased productivity more than investments in machinery devoted to the manufacture of actual goods.*¹⁴⁹

Of course, investing in infrastructure is only half of the equation. Canadian firms are also recognizing that employee skills must be continually updated to best exploit networked technology. Medium and large firms in and outside the ICT sector devote focused instruction on computer software and hardware to their employees. Such training is the most common type offered, (61-77% of larger firms offer this)¹⁵⁰ underlining the value of ICT skills in day-to-day work operations.

Although ongoing innovation in ICT represents a challenge for workers to keep their skills current, the silver lining is that ICT itself has also enabled lifelong learning by making information so easy to access. In fact, 26 per cent of young users (aged 16-25) get formal education online and 72 per cent endorse that computers help them learn new skills not related to ICT.¹⁵¹



New Goals for Secondary Civics Curriculum

By the end of a civics curriculum that includes digital literacy skills development, students should be able to:

1. Deliberate with others similar to *and different from* themselves (e.g. peers vs. adults), face to face and in mediated forums
2. Assess the credibility of political and civics texts from a variety of sources (news agencies, watchdog organizations, government press releases, corporate lobbying groups, grassroots movements) and across a variety of media (Web pages, television, amateur video, micro-blog)
3. Produce mediated texts which are able to address multiple, invisible audiences
4. Use a variety of means to convert social capital into civic action if necessary
5. Identify which leaders are responsible for which issues and how to influence their decisions
6. Translate the motivation to act on a civic issue into action

Points to Remember When Planning Civics Curriculum

Digital media are an essential component of civics education because most information in the civic arena is mediated and action is increasingly mediated as well. Digital media are also a cheap, effective way to enhance all the points below:

- engaging youth in appreciating and better understanding historical underpinnings by first involving them in current, local issues that they find more relevant (As opposed to focusing on primarily on past national issues.)
- exercising critical thinking and deliberation by having students study living contestable texts such as Web pages, blogs, newscasts – skills that can then be applied to more than static, authoritative texts such as textbooks
- emphasizing that the ability to produce texts is as important as decoding them in order to be an active and not *just informed* citizen
- promoting engagement with the larger community (adult mentors, parents, civic leaders, experts) enables future engagement more than confinement to the classroom
- giving youth a larger stake in course content and structure respects youth interests and is more effective than teachers curating content
- teaching the specific skills to act *within Canada's democratic system* is as important as instilling moral aspects of citizenship



Conclusion

The kind of civic educational realignment proposed in this discussion paper may at first seem daunting for educators. Those educators who have taught civic education strictly "by the book" may have to reorient their teaching and possibly scrap many carefully planned lessons and activities which have served them for years. While this entails more work for educators, the end goal is to match up civics education with the style of civic engagement youth are spontaneously taking up. Many young people's habits are already deeply enmeshed with an always-on, mediated world. This cohort will certainly bring those same habits forward with them into their adult lives, and why shouldn't they? Adults who hold the reins in the civic arena have migrated en masse into online operations because of the many advantages in terms of cost and efficiency. Digital media are now a cornerstone of the political system, and youth are already eager to incorporate digital media into their daily lives. Refining that enthusiasm into skills to engage may seem like an extra burden for educators, but for the youth concerned it is the path of least resistance.

References

- Allan, C. (2009). 2008 General Social Survey: Selected Tables on Social Engagement. 1-88.
- Bachen, C., Raphael, C., Lynn, K., McKee, K., & Philippi, J. (2008). Civic Engagement, Pedagogy, and Information Technology on Web Sites for Youth. *Political Communication*, 25(3), 290-310.
- Baldwin, J., & Gellatly, G. (2007). Innovation Capabilities: Technology Use, Productivity Growth and Business Performance: Evidence from Canadian Technology Surveys. *Micro-economic Analysis Division (Statistics Canada)*, 11-622-MIE(16), 1-29.
- Banaji, S. (2008). The trouble with civic: a snapshot of young people's civic and political engagements in twenty-first-century democracies. *Journal of Youth Studies*, 11(5), 543-560.
- Bennett, W., Wells, C., & Freelon, D. (2009). Communicating Citizenship Online: Models of Civic Learning in the Youth Web Sphere. *Civic Learning Online Project Reports*. Retrieved September 18, 2009, from www.engagedyouth.org
- Bennett, W., Wells, C., & Rank, A. (2009). Young citizens and civic learning: two paradigms of citizenship in the digital age. *Citizenship Studies*, 13(2), 105-120.
- Bers, M. (2008). Civic Identities, Online Technologies: From Designing Civics Curriculum to Supporting Civic Experiences. In W. Bennett (Ed.), *Civic Life Online: How Media Can Engage Youth* (pp. 139-160). Cambridge, MA: The MIT Press.
- Bers, M., & Chau, C. (2006). Fostering civic engagement by building a virtual city [Electronic Version]. *Journal of Computer Mediated Communication [electronic edition]*, 11. Retrieved February 10 from http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&cmd=Retrieve&dopt=AbstractPlus&list_uids=11773957658120998084related:xMzK5BuAZaMJ.
- Boulianne, S. (2009). Does Internet Use Affect Engagement? A Meta-Analysis of Research. *Political Communication*, 26(2), 193-211.
- boyd, d. (2007). Why youth♥ social network sites: The role of networked publics in teenage social life. In D. Buckingham (Ed.), *Youth, Identity, and Digital Media*: M.I.T. Press.
- Camino, L., & Zeldin, S. (2002). From periphery to center: Pathways for youth civic engagement in the day-to-day life of communities. *Applied Developmental Science*, 6(4), 213-220.
- Carpini, M. X. D. (2000). Gen. com: Youth, civic engagement, and the new information environment. *Political Communication*, 17(4), 341-349.
- Chareka, O., & Sears, A. (2006). Civic Duty: Young People's Conceptions of Voting as a Means of Political Participation. *Canadian Journal of Education*, 29(2), 521-540.
- Chowhan, J. (2005). Who trains? High-tech industries or high-tech workplaces? *Micro-economic Analysis Division (Statistics Canada)*, 11-622-MIE(6), 1-63.
- Claes, E., Hooghe, M., & Stolle, D. (2009). The Political Socialization of Adolescents in Canada: Differential Effects of Civic Education on Visible Minorities. *Canadian Journal of Political Science*, 42(3), 613-636.
- Coleman, S. (2008). Doing IT for themselves: Management versus autonomy in youth e-citizenship. In W. Bennett (Ed.), *Civic Life Online: How Media Can Engage Youth* (pp. 189-206). Cambridge, MA: The MIT Press.
- Coles, R. (1986). *The political life of children*. Boston: Atlantic Monthly Press.
- Cramer, M., Zutty, D., Foucault, B., Huffaker, D., Derby, D., & Cassell, J. (2007). Everything in Moderation: The Effects of Adult Moderators in Online Youth Communities. *Proceedings of 3rd International Conference on Communities and Technologies*.
- Davies, I., & Issitt, J. (2005). Reflections on citizenship education in Australia, Canada and England. *Comparative education*, 41(4), 389-410.
- Deci, E. L., & Ryan, R. M. (2008). Facilitating optimal motivation and psychological well-being across life's domains. *Canadian Psychology/ Psychologie canadienne*, 49(1), 14-23.
- Doyle, M., Gunn, T., & Mazzucco, L. (2006). Student Vote 2006: Planting the Seeds of Citizenship. *Education Canada*, 46(3), 36-45.
- Electronic_Frontier_Foundation, & Online_Policy_Group. (2003, June 26). Internet blocking in public schools: A study on Internet access in educational institutions. Retrieved May 1, 2010, from <http://www.eff.org/>
- Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook" friends": social capital and college students' use of online social network sites [Electronic Version]. *Journal of Computer-Mediated Communication*, 12, article 1 from <http://jcmc.indiana.edu/vol12/issue4/ellison.html>.
- Evans, M. (2006). Educating for Citizenship: What Teachers Say and What Teachers Do. *Canadian Journal of Education*, 29(2), 410-435.
- Feldman, L., Pasek, J., Romer, D., & Jamieson, K. (2007). Identifying best practices in civic education: Lessons from the Student Voices Program. *American Journal of Education*, 114(1), 75-100.
- Fredricks, J., & Eccles, J. (2006). Is extracurricular participation associated with beneficial outcomes? Concurrent and longitudinal relations. *Developmental Psychology*, 42(4), 698-713.
- Galston, W. (2001). Political knowledge, political engagement, and civic education. *Annual Review of Political Science*, 4(1), 217-234.
- Gardner, M., Roth, J., & Brooks-Gunn, J. (2008). Adolescents' participation in organized activities and developmental success 2 and 8 years after high school: Do sponsorship, duration, and intensity matter?. *Developmental Psychology*, 44(3), 814-830.
- Garrett, R. (2006). Protest in an information society: A review of literature on social movements and new ICTs. *Information, Communication & Society*, 9(2), 202-224.
- Gidengil, E., Blais, A., Nevitte, N., & Nadeau, R. (2003). Turned off or tuned out? Youth participation in politics. *Electoral Insight*, July, 1-6.
- Grant, K. (2010, January 19). The new library: 'not just about books

- anymore'. *The Globe and Mail*. Retrieved May 10, 2010, from <http://www.theglobeandmail.com/news/national/toronto/the-new-library-not-just-about-books-anymore/article1436999/>
- Hansen, D., Larson, R., & Dworkin, J. (2003). What adolescents learn in organized youth activities: A survey of self-reported developmental experiences. *Journal of Research on Adolescence*, 13(1), 25-55.
- Heath, J. (2002). Citizenship Education and Diversity. *Education Canada*, 42(3), 4-7.
- Henderson, A., Brown, S. D., Pancer, S. M., & Ellis-Hale, K. (2007). *Mandated Community Service in High School and Subsequent Civic Engagement: The Case of the Double Cohort in Ontario, Canada*.
- Hillman, D. (1999). A new method for analyzing patterns of interaction. *American Journal of Distance Education*, 13(2), 37-47.
- Hodas, S. (1993). Technology refusal and the organizational culture of schools [Electronic Version]. *Education policy analysis archives*, 1. Retrieved May 1, 2010 from <http://epaa.asu.edu/epaa/v1n10.html>.
- Hu, W. (2010, April 27). In New Jersey, a civics lesson in the Internet age. *New York Times*. Retrieved April 28, 2010, from <http://www.nytimes.com/2010/04/28/nyregion/28jersey.html>
- Ipsos-Reid. (2010). The Ipsos Canadian Inter@ctive Reid Report. Retrieved May 12, 2010, from <http://www.ipsos.ca/reid/interactive/>
- Ito, M. (2010). *Hanging out, messing around, and geeking out: kids living and learning with new media*. Cambridge, Mass.: MIT Press.
- Jablon, R. (2006, March 27). School walkouts continue in California to protest immigration law. *SFGate*.
- Jenkins, H. (2006). *Convergence culture: where old and new media collide*. New York: New York University Press.
- Kahne, J., Chi, B., & Middaugh, E. (2006). Building social capital for civic and political engagement: The potential of high-school civics courses. *Canadian Journal of Education*, 29(2), 387(322)-409.
- Kahne, J., Middaugh, E., & Evans, C. (2008). The civic potential of video games (White paper for The John D. and Catherine T. McArthur Foundation). Retrieved November 10, 2009, from http://www.civicsurvey.org/White_paper_link_text.pdf
- Kean, L. G. (2008). Teens, video games, and civics. *Pew internet and American life project*, 1-76.
- Levine, P. (2008). A public voice for youth: The audience problem in digital media and civic education. In W. Bennett (Ed.), *Civic Life Online: How Media Can Engage Youth* (pp. 119-138). Cambridge, MA: The MIT Press.
- Livingstone, S. M. (2003). The changing nature and uses of media literacy. *europa-mediaculture.org*.
- Livingstone, S. M. (2007). The challenge of engaging youth online: contrasting producers' and teenagers' interpretations of web-sites. *European Journal of Communication*, 22(2), 165.
- Livingstone, S. M. (2008a). Engaging With Media-A Matter of Literacy? *Communication*, 1, 51-62.
- Livingstone, S. M. (2008b). Internet literacy: young people's negotiation of new online opportunities. In T. McPherson (Ed.), *Digital youth, innovation, and the unexpected* (pp. 101-122). Cambridge, MA: The MIT Press.
- Livingstone, S. M., & Helsper, E. (2007). Gradations in digital inclusion: children, young people and the digital divide. *New Media & Society*, 9(4), 671-696.
- Longford, G. (2005). Community networking and civic participation in Canada: A background paper (working paper no. 2 prepared for Canadian Research Alliance for Community Innovation and Networking). Retrieved November 7, 2009, from www.cracin.ca
- Luppini, R. (2007). Review of computer mediated communication research for education. *Instructional Science*, 35(2), 141-185.
- MacKinnon, M., Pitre, S., & Watling, J. (2007). Lost in Translation:(Mis) Understanding Youth Engagement - synthesis report. *Charting the Course for Youth Civic and Political Participation Series*. Retrieved September 15, 2009, from www.cprn.org
- Marlow, I. (2010). Companies urged to help Ottawa bridge 'digital divide'. *The Globe and Mail*. Retrieved May 10, 2010, from <http://www.theglobeandmail.com/news/technology/companies-urged-to-help-ottawa-bridge-digital-divide/article1533810/>
- McCaughey, M., & Ayers, M. D. (2003). *Cyberactivism: online activism in theory and practice*. New York: Routledge.
- Media_Awareness_Network. (2005). Phase II Student Survey. *Young Canadians in a Wired World*. Retrieved March 5, 2008, from www.media-awareness.ca
- Micheletti, M., & Stolle, D. (2008). Fashioning social justice through political consumerism, capitalism, and the internet. *Cultural Studies*, 22(5), 749-769.
- Michelsen, E., Zaff, J., & Hair, E. (2001). Civic engagement programs and youth development: A synthesis. Prepared for the Edna McConnell Clark Foundation. Washington, DC: Child Trends.
- Montgomery, K., Gottlieb-Robles, B., & Larson, G. (2004). Youth as e-citizens: Engaging the digital generation - full report. *The Center for Social Media Research Report*. Retrieved October 14, 2009, from <http://www.centerforsocialmedia.org/ecitizens/youthreport.pdf>
- O'Brien, J. (2008). Are We Preparing Young People for 21st-Century Citizenship With 20th-Century Thinking? A Case for a Virtual Laboratory of Democracy. *Contemporary Issues in Technology and Teacher Education*, 125-157.
- O'Neill, B. (2007). Indifferent or just different? The political and civic engagement of young people in Canada. *Charting the Course for Youth Civic and Political Participation Series*. Retrieved September 15, 2009, from www.cprn.org
- Olsson, T. (2008). For activists, for potential voters, for consumers: three modes of producing the civic web. *Journal of Youth Studies*, 11(5), 497-512.
- Pasek, J., Feldman, L., Romer, D., & Jamieson, K. (2008). Schools as incubators of democratic participation: building long-term political efficacy with civic education. *Applied Developmental Science*, 12(1), 26-37.
- Pasek, J., Kenski, K., Romer, D., & Jamieson, K. (2006). America's youth and community engagement: How use of mass media is related to civic activity and political awareness in 14-to 22-year-olds. *Communication Research*, 33(3), 115.

- Pettingill, L. (2008). Engagement 2.0? How the New Digital Media can Invigorate Civic Engagement [Electronic Version]. *gnovis*, 8. Retrieved February 10, 2010 from www.gnovisjournal.org.
- Prensky, M. (2001a). Digital natives, digital immigrants. *On the Horizon*, 9(5), 1-6.
- Prensky, M. (2001b). Digital natives, digital immigrants, part 2: Do they really think differently? *On the Horizon*, 9(6), 1-9.
- Putnam, R. D. (2000). *Bowling alone : the collapse and revival of American community*. New York: Simon & Schuster.
- Quintelier, E. (2008). Who is Politically Active: The Athlete, the Scout Member or the Environmental Activist?: Young People, Voluntary Engagement and Political Participation. *Acta Sociologica*, 51(4), 355-370.
- Raynes-Goldie, K., & Walker, L. (2008). Our space: Online civic engagement tools for youth. In W. Bennett (Ed.), *Civic Life Online: How Media Can Engage Youth* (pp. 161-188). Cambridge, MA: The MIT Press.
- Rheingold, H. (2008). Using participatory media and public voice to encourage civic engagement. In W. Bennett (Ed.), *Civic Life Online: How Media Can Engage Youth* (pp. 97-118). Cambridge, MA: The MIT Press.
- Rideout, V. J., Foehr, U. G., & Roberts, D. F. (2009). Generation M2: Media in the Lives of 8- to 18-Year-Olds. *Report by the Kaiser Family Foundation*, 1-85.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78.
- Shah, D., McLeod, J. M., & Lee, N. (2009). Communication Competence as a Foundation for Civic Competence: Processes of Socialization into Citizenship. *Political Communication*, 26(1), 102-117.
- Sharples, M., Graber, R., Harrison, C., & Logan, K. (2009). E-safety and Web 2.0 for children aged 11-16. *Journal of Computer Assisted Learning*, 25(1), 70-84.
- Silverstone, R. (2007). *Media and morality : on the rise of the mediapolis*. Cambridge, UK; Malden, MA: Polity Press.
- Smith, A., Schlozman, K. L., Verba, S., & Brady, H. (2009). The Internet and Civic Engagement. *Pew internet and American life project*, 1-66.
- Smith, E. S. (1999). The Effects of Investments in the Social Capital of Youth on Political and Civic Behavior in Young Adulthood: A Longitudinal Analysis. *Political Psychology*, 20(3), 553-580.
- Steinfeld, C., Ellison, N. B., & Lampe, C. (2008). Social capital, self-esteem, and use of online social network sites: A longitudinal analysis. *Journal of Applied Developmental Psychology*, 29(6), 434-445.
- Steinkuehler, C., & Williams, D. (2006). Where Everybody Knows Your (Screen) Name: Online Games as "Third Places". *Journal of Computer-Mediated Communication*, 11(4).
- The_Canadian_Press. (2008, November 25). McGuinty will reach out to young drivers on facebook. *Toronto Star* Retrieved May 12, 2010, from <http://www.thestar.com/article/543011>
- Thibault, A., Albertus, P., & Fortier, J. (2007). *Rendre compte et soutenir l'action bénévole des jeunes [Understanding and supporting volunteering of youth]*. *Charting the Course for Youth Civic and Political Participation Series* Retrieved September 15, 2009, from www.cprn.org
- Thomas, D., & Brown, J. S. (2009). Why Virtual Worlds Can Matter. *International Journal of Learning and Media*, 1(1), 37-49.
- Torney-Purta, J. (2002). The School's Role in Developing Civic Engagement: A Study of Adolescents in Twenty-Eight Countries. *Applied Developmental Science*, 6(4), 203-212.
- Torney-Purta, J., Lehman, R., Oswald, H., & Schulz, W. (2001). *Citizenship and Education in Twenty-Eight Countries: Civic Knowledge and Engagement at Age Fourteen. Report.*
- Turcotte, A. (2007). 'What Do You Mean I Can't Have a Say?' Young Canadians And Their Government. *Charting the Course for Youth Civic and Political Participation Series* Retrieved September 15, 2009, from www.cprn.org
- Veenhof, B., Clermont, Y., & Sciadras, G. (2005). Literacy and digital technologies: Linkages and outcomes. *Science, innovation and electronic information division (Statistics Canada)*, 56F0004MIE (12), 1-34.
- Veenhof, B., Wellman, B., Quell, C., & Hogan, B. (2008). How Canadians' Use of the Internet Affects Social Life and Civic Participation. *Statistics Canada Connectedness Series*(December).
- Vician, C., & Brown, S. (2000). Unraveling the message quilt: A case-study examination of student interaction in computer-based communication assignments. *Computers and Composition*, 17(2), 211-229.
- Ward, J. (2008). The online citizen-consumer: addressing young people's political consumption through technology. *Journal of Youth Studies*, 11(5), 513-526.
- Warschauer, M. (2002). Reconceptualizing the digital divide [Electronic Version]. *First Monday*, 7. Retrieved May 20, 2010 from <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/rt/printerFriendly/967/888>.
- Westheimer, J. (2008). What Kind of Citizen? Democratic Dialogues in Education. *Education Canada*, 48(3), 6-10.
- Whye, C. (2006). Just Cause: today's activism. *MTV Think! Research series* Retrieved November 25, 2009, from www.research.mtv.com
- Xenos, M., & Foot, K. (2008). Not Your Father's Internet: The Generation Gap in Online Politics. In W. Bennett (Ed.), *Civic Life Online: How Media Can Engage Youth* (pp. 51-70). Cambridge, MA: The MIT Press.
- Zaff, J., Moore, K., Papillo, A., & Williams, S. (2003). Implications of extracurricular activity participation during adolescence on positive outcomes. *Journal of Adolescent Research*, 18(6), 599-628.
- Zamaria, C., & Fletcher, F. (2007). Canada Online! The Internet, media and emerging technologies: Uses, attitudes, trends and international comparisons -- year two report. *Report by the Canadian Internet Project* Retrieved May 13, 2010, from <http://ciponline.ca/en/publications.htm>
- Zucker, A. A., & Light, D. (2009). Laptop Programs for Students. *Science*, 323(69), 82-85.

Footnotes

1. (Turcotte, 2007)
2. (Torney-Purta, 2002; Torney-Purta, Lehman, Oswald, & Schulz, 2001)
3. (Gardner, Roth, & Brooks-Gunn, 2008; E. S. Smith, 1999)
4. (Feldman, Pasek, Romer, & Jamieson, 2007; Galston, 2001)
5. (Chareka & Sears, 2006)
6. (Rheingold, 2008; Whye, 2006)
7. (Media_Awareness_Network, 2005)
8. (Media_Awareness_Network, 2005; Zamaria & Fletcher, 2007)
9. (Davies & Issitt, 2005; Evans, 2006)
10. (Claes, Hooghe, & Stolle, 2009; Feldman et al., 2007; Henderson, Brown, Pancer, & Ellis-Hale, 2007; Kahne, Chi, & Middaugh, 2006; Michelsen, Zaff, & Hair, 2001)
11. (Banaji, 2008)
12. (Gidengil et al., 2003)
13. (Allan, 2009)
14. (MacKinnon, Pitre, & Watling, 2007)
15. (Camino & Zeldin, 2002; Thibault, Albertus, & Fortier, 2007)
16. (Allan, 2009)
17. (Garrett, 2006; McCaughey & Ayers, 2003; Montgomery, Gottlieb-Robles, & Larson, 2004)
18. (Livingstone, 2007; Xenos & Foot, 2008)
19. (Bachen, Raphael, Lynn, McKee, & Philippi, 2008; Bennett, Wells, & Freelon, 2009; Livingstone, 2007; Xenos & Foot, 2008)
20. (Longford, 2005)
21. (O'Brien, 2008)
22. (Pasek, Kenski, Romer, & Jamieson, 2006)
23. (Kean, 2008)
24. (Boulianne, 2009)
25. (Boulianne, 2009; A. Smith, Schlozman, Verba, & Brady, 2009; Zamaria & Fletcher, 2007)
26. (Olsson, 2008; Ward, 2008; Zamaria & Fletcher, 2007)
27. (Veenhof, Wellman, Quell, & Hogan, 2008)
28. (Michelsen et al., 2001)
29. In experimental trials of the *Student Voices* civics curriculum in the USA, deliberating on political media texts for just one semester correlated +0.12 with gains in following news and +0.223 with increased political knowledge (Feldman et al., 2007).
30. (Pasek, Feldman, Romer, & Jamieson, 2008)
31. (Shah, McLeod, & Lee, 2009, p. 114)
32. (Bennett, Wells, & Rank, 2009)
33. Ibid.
34. (Coleman, 2008)
35. (Micheletti & Stolle, 2008; Pettingill, 2008)
36. (Coleman, 2008; MacKinnon et al., 2007)
37. (Putnam, 2000)
38. (Livingstone & Helsper, 2007; Warschauer, 2002)
39. (Livingstone, 2003, 2008a, 2008b)
40. This figure was developed by Media Awareness Network and is based on models from the Report of the Digital Britain Media Literacy Working Group. (March 2009), DigEuLit – a European Framework for Digital Literacy (2005), and Jenkins et al., (2006) *Confronting the Challenges of Participatory Culture: Media Education for the 21st Century*. <http://www.newmedialiteracies.org/files/working/NMLWhitePaper.pdf>
41. (Livingstone, 2008b)
42. (Prensky, 2001a, 2001b)
43. (Marlow, 2010; Zamaria & Fletcher, 2007)
44. (Plante & Beattie, 2004)
45. (Zamaria & Fletcher, 2007)
46. (Ipsos-Reid, 2010)
47. (Grant, 2010)
48. (Bell, 2005; Longford, 2005)
49. Microsoft/Youthography Internet Safety Survey, 2009
50. (Ipsos-Reid, 2010)
51. (Rideout, Foehr, & Roberts, 2009)
52. (Boulianne, 2009)
53. (A. Smith et al., 2009)
54. (Zamaria & Fletcher, 2007)
55. (A. Smith et al., 2009)
56. (Banaji, 2008)
57. (Pasek et al., 2006)
58. Ibid.
59. (Torney-Purta et al., 2001)
60. (Veenhof et al., 2008)
61. Ibid
62. (Zamaria & Fletcher, 2007)
63. (Veenhof et al., 2008)
64. Ibid
65. Ibid
66. (Ellison, Steinfield, & Lampe, 2007; Steinfield, Ellison, & Lampe, 2008)
67. (A. Smith et al., 2009, p. 51)
68. (Zamaria & Fletcher, 2007, p. 230)
69. (Jablon, 2006)
70. (Hu, 2010)
71. (The_Canadian_Press, 2008)
72. (Zamaria & Fletcher, 2007)
73. (Kean, 2008)
74. (Kean, 2008)
75. (Kahne, Middaugh, & Evans, 2008)
76. (Thomas & Brown, 2009)
77. (boyd, 2007; Steinkuehler & Williams, 2006)
78. (Zamaria & Fletcher, 2007)
79. A wiki detailing some of Zora's development is available at <http://wikis.uit.tufts.edu/confluence/display/ZoraHelp/Home>
80. (Bers, 2008; Bers & Chau, 2006)
81. TakingITGlobal can be accessed online at <http://www.tigweb.org/>
82. (Raynes-Goldie & Walker, 2008)
83. (Heath, 2002)
84. (Claes et al., 2009)
85. (Westheimer, 2008)
86. (Henderson et al., 2007)
87. (Camino & Zeldin, 2002; Carpini, 2000; Thibault et al., 2007)
88. (Davies & Issitt, 2005)
89. (Evans, 2006)
90. (Coleman, 2008)
91. (Bennett, Wells, & Rank, 2009)
92. (Coleman, 2008)
93. (Westheimer, 2008)
94. (Coleman, 2008; Kahne et al., 2006)
95. (Feldman et al., 2007; Kahne et al., 2006; Michelsen et al., 2001; Pasek et al., 2008; Shah et al., 2009)
96. (Feldman et al., 2007)
97. (Evans, 2006)
98. (Claes et al., 2009; Kahne et al., 2006; Michelsen et al., 2001)
99. (Doyle, Gunn, & Mazzucco, 2006)
100. (Feldman et al., 2007; Kahne et al., 2006; Shah et al., 2009)
101. (Pasek et al., 2008)

102. (Kahne et al., 2006)
103. (Galston, 2001; Henderson et al., 2007; Kahne et al., 2006; Michelsen et al., 2001)
104. (Coleman, 2008)
105. (Hu, 2010; Jablon, 2006)
106. (Coleman, 2008)
107. (Fredricks & Eccles, 2006; Gardner et al., 2008; Hansen, Larson, & Dworkin, 2003; E. S. Smith, 1999; Zaff, Moore, Papillo, & Williams, 2003)
108. (Hansen et al., 2003)
109. (Bachen et al., 2008; Garrett, 2006; Jenkins, 2006; McCaughey & Ayers, 2003; Montgomery et al., 2004; Pettingill, 2008)
110. (Hodas, 1993)
111. (Zucker & Light, 2009)
112. (Electronic_Frontier_Foundation & Online_Policy_Group, 2003)
113. (Sharples, Graber, Harrison, & Logan, 2009)
114. (Silverstone, 2007)
115. (Davies & Issitt, 2005; Evans, 2006; O'Brien, 2008)
116. (Zamaria & Fletcher, 2007)
117. (Media_Awareness_Network, 2005)
118. (Gidengil et al., 2003)
119. (Hansen et al., 2003; E. S. Smith, 1999)
120. (Ito, 2010; Jenkins, 2006)
121. (Pettingill, 2008; Quintelier, 2008)
122. (Fredricks & Eccles, 2006; Gardner et al., 2008; E. S. Smith, 1999; Zaff et al., 2003)
123. (Claes et al., 2009)
124. (Feldman et al., 2007; Pasek et al., 2008)
125. (Deci & Ryan, 2008; Ryan & Deci, 2000)
126. (Chareka & Sears, 2006; Coles, 1986)
127. (Davies & Issitt, 2005)
128. (Claes et al., 2009)
129. (Kahne et al., 2006)
130. (Galston, 2001)
131. (Bennett, Wells, & Rank, 2009; Coleman, 2008)
132. (Feldman et al., 2007; Kahne et al., 2006)
133. (Feldman et al., 2007; Shah et al., 2009)
134. (Feldman et al., 2007)
135. (Shah et al., 2009)
136. (Davies & Issitt, 2005; Evans, 2006)
137. (Kahne et al., 2006)
138. (Levine, 2008; O'Brien, 2008)
139. (Evans, 2006)
140. (E. S. Smith, 1999)
141. (Hansen et al., 2003)
142. (Jenkins, 2006)
143. (Luppicini, p. 169)
144. (Shah et al., 2009)
145. (Hillman, 1999)
146. (Cramer et al., 2007)
147. Ibid
148. (Vician & Brown, 2000)
149. (Baldwin & Gellatly, 2007)
150. (Chowhan, 2005)
151. (Veenhof, Clermont, & Sciadas, 2005)



Media Awareness Network © [2011](#)

950 Gladstone Avenue, Suite 120, Ottawa, ON Canada K1Y 3E6
Main Telephone: 613-224-7721 Toll Free: 1-800-896-3342 (in Canada) Fax: 613-761-9024
E-mail: info@media-awareness.ca