

# Sexuality and Romantic Relationships in the Digital Age

Young Canadians in a Wired World, Phase III MediaSmarts  $\textcircled{}^{\text{C}}$  2014



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Young Canadians in a Wired World, Phase III: SEXUALITY AND ROMANTIC RELATIONSHIPS IN THE DIGITAL AGE

### Introduction

Since we first started the *Young Canadians in a Wired World* research project in 2000, our research participants have consistently told us that networked media are an important way for them to connect with their peers and deepen their social relationships with family members and friends. When we launched Phase III of the research in 2011, the young people who participated in our focus group discussions told us that networked media have become an important way of learning about and participating in romantic relationships. The findings also revealed highly gendered patterns around behaviours like seeking out online pornography and sexting.

To probe these issues further, we included a number of questions addressing sexuality and romantic relationships in our 2013 national survey. A total of 5,436 students in grades 4-11 from all provinces and territories across the country completed the survey. Some of the questions (including the questions about pornography and sexting) were only asked of students in grades 7-11. This report summarizes our findings.

Sexuality and Romantic Relationships in the Digital Age is the fifth in a series of reports drawing on the rich data that we collected in our survey.

## **Executive Summary – Key Findings**

#### Exploring Sexuality and Relationships: The Internet as a Resource

In our *Young Canadians* focus groups, a number of youth alluded to the importance of the Internet as a resource for exploring and learning about sexuality and relationships. Findings from our national survey bear this out – although the role of the Internet in this regard may be a smaller one than one might imagine.

# Approximately one fifth of older students use the Internet as a resource for information about sexuality and relationships, and to seek out anonymous opportunities to experiment with flirtatious behaviour.

- Eight percent of students turn to the Internet to learn about sexuality:
  - Boys and French language students in Quebec are most likely to be looking for this information.
  - The trend grows over grades, from one percent of students in Grade 6 to 20 percent of students in Grade 11.
- Students are less likely to be looking online for information on sexuality than other sensitive topics such as physical health (18%) and mental health (11%).
- One in six students uses the Internet to find information about a variety of relationship problems that includes advice on dating:
  - Older students are more likely to do this (24% in Grade 11 versus 4% in Grade 4).
  - Girls (18%) are twice as likely as boys (9%) to seek out information about relationships online.
- A similar percentage of boys (14%) and girls (12%) report that they have pretended to be someone else online to flirt:
  - Older students are much more likely to flirt anonymously, rising from a low of four percent in Grade 5 to a high of 22 percent in Grade 10.

#### > Boyfriends, Girlfriends, Best Friends and Family: Managing Relationships Online

There's no doubt that networked technologies are firmly integrated into our relationships with others. This is especially true of youth, who must now navigate and negotiate social interactions in person *and* across a variety of platforms.

However, although networked media provide opportunities to enter into and maintain romantic relationships, *students interact more with friends and family online than with romantic partners.* 

- Over 90 percent of students in grades 7-11 think that their friends should be able to read their social media posts compared to 59 percent who think their boyfriend or girlfriend should be able to read those same posts:
  - The percentage for both friends and romantic partners reading social media posts rises across grades, but even in Grade 11 more students are open to friends doing this (95%) than boyfriends or girlfriends (70%).
- Boys and girls are equally likely to agree that boyfriends and girlfriends should be able to read each other's social networking posts.

# Young people also spend more time monitoring and managing their online relationships with friends and family than they do their online relationships with romantic partners.

- Students are more actively engaged in deleting posts from their social media accounts to avoid misunderstandings on the part of their family and friends than they are in keeping something from a romantic partner:
  - Fourteen to 16 percent of Grade 7 students delete comments or photos they have posted online to keep them from family, friends and parents, compared to four percent who do the same for boyfriends or girlfriends.
  - Although the percentages rise in all categories across high school, the trend remains the same: by Grade 11 students are still significantly more likely to delete content to keep it from family, friends and parents than from boyfriends or girlfriends (37% / 44% versus 14% for romantic partners).

# However, this does not mean that students are necessarily more open with romantic partners than with others.

- Students actively seek more privacy from romantic partners than they do from friends and family:
  - When asked who should be allowed to use geo-locational devices to check and see where they are, more students in grades 7-11 are comfortable sharing their locational information with friends (39%) than with romantic partners (27%).
  - Over three quarters (78%) of students in grades 7-11 feel that boyfriends and girlfriends should not be allowed to read each other's private messages without asking permission first.
  - Students in grades 7-11 are nearly twice as likely to share their passwords to their social networking account, email account or cell phone with their best friend (30%) than they are with their boy/girlfriend (16%):
    - However, both boys (17%) and girls (15%) share passwords with romantic partners at roughly the same rate.
  - Looking at gender differences, girls are more likely than boys to say romantic partners should not be able to track where they are (75% compared to 70% of boys) and are more likely than boys to think a romantic partner would need prior

permission before reading a partner's private messages (83% compared to 73% of boys).

#### Pornography

Since the mainstreaming of the Internet, concerns have been raised by parents, governments and health professionals about the potential impact of children and teens accessing explicit adult content online. To better understand the extent of this exposure, questions relating to online pornography have been included in all of the *Young Canadians* surveys.

In 2013, the story is not only that more young people are actively seeking out pornography online (overall rates have increased by 7%) but also the frequency at which it is done by boys who report they look for pornography.

# As in previous surveys, questions relating to pornography were only asked of students in grades 7-11.

Although a significant majority of students in grades 7-11 (77%) report that they have never looked for pornography online, boys are much more likely to have done so (40% compared to 7% of girls). Moreover, boys who seek out pornography are more likely than girls to do so frequently.

- Eighty-eight percent of boys who report that they look for pornography do so at least once a month or more.
- Comparing overall percentages between the 2005 and 2013 *Young Canadians* surveys, the number of students who actively seek out pornography online has increased from 16 percent in 2005 to 23 percent in 2013.
- French language students in Quebec are more likely than English language students in the rest of Canada to report that they look for pornography daily or weekly (French 25%, English 12%).
- Students who report having a rule at home about sites they are not supposed to visit are more likely to say that they have never looked for pornography online (86% versus 72%).

#### Sexting

From the perspective of adults, one of the most fraught aspects of young people's online sexuality is sexting. Our data on sending, receiving and forwarding sexts – which we defined as sexy, nude or partially nude photos – *is restricted to those students in grades 7-11 who either had their own cell phone or had access to a shared cell phone*, so the percentages in this section are based on a subset of the full sample of students. However, since cell phone access reaches a high of 87 percent among older students, it seems safe to say that our findings capture most of the sexting activity happening among the youth in our survey.

# Questions were limited to students in grades 7-11 who had access to either their own cell phone or to a shared cell phone.

#### Sending a sext

- Eight percent of students in grades 7-11 with access to a cell phone have sent a sext of themselves to someone else:
  - Approximately the same number of boys and girls have sent a sext.
  - Older students are more likely to sext than younger students the percentage rises across the grades from a low of two percent in Grade 7 to 15 percent in Grade 11.

#### **Receiving a sext**

- Just under one quarter of students in grades 7-11 (24%) with access to a cell phone report that someone has sent them a sext of himself or herself.
  - Grade 11 students are three times more likely than Grade 7 students to receive a sext created by the sender (36% compared to 11% of Grade 7 students).
  - Boys are significantly more likely than girls to be sent a sext created for them (32% compared to 17% of girls).

#### Forwarding sexts

- Just under one quarter of the students with access to a cell phone who have sent a sext of themselves report that the person who received the sext forwarded it to someone else. This means that approximately three quarters of students who send sexts have never had one forwarded by the recipient.
- Although Grade 7 students are least likely to report that their sext was forwarded, the trend fluctuates across the grades, reaching 24 to 26 percent in grades 8-10 and then dropping to 17 percent in Grade 11.
- Receiving a forwarded sext also rises across the grades, tripling from nine percent in Grade 7 to 30 percent in Grade 11.
- Forwarding sexts is highly gendered:
  - Sexts of boys are more likely to be forwarded than sexts of girls (26% compared to 20% of girls).
  - Boys are also twice as likely to report having received a sext that was forwarded by someone other than the original creator of the sext (28% compared to 14% of girls).
  - Boys are somewhat more likely than girls to have forwarded a sext sent to them (16% compared to 12% of girls).
- Of the 24 percent of students in grades 7-11 with cell phones who have received a sext from its creator, only 15 percent forwarded it to someone else. *That means that 85 percent of grade 7-11 students with cell phones who have received a sext created for them have not forwarded the sext to someone else.*

- Although boys and girls are equally likely to create a sext, older students in general, and boys in particular, are more likely to receive them and to forward them to others.
- Having a household rule about treating people online with respect does not correlate with a lower likelihood of forwarding sexts.

# **Exploring Sexuality and Relationships: The Internet as a Resource**

There is no doubt that the Internet is an important source for a number of young people who are actively seeking out sexual information (Table 1).

The two groups that are the most likely to be looking for this are boys and French language students in Quebec. The contrasts are striking: 11 percent of boys compared to six percent of girls (Figure 1) use the Internet to find information about sexuality; as do 17 percent of French language students in Quebec compared to seven percent of English language students in the rest of Canada. The trend is also much more prevalent in older grades: whereas only one percent of students in Grade 6 use the Internet as a resource for sexual information, 20 percent of students in Grade 11 do so (Figure 2).

However, when comparing use of the Internet to learn about sexuality to seeking out information on other sensitive topics such as physical health issues and mental health issues, students are least likely to be searching for information on sexuality (8% versus 18% for physical health issues and 11% for mental health issues)<sup>1</sup>.

A number of students also use the Internet to find information about a variety of relationship problems, including (among other things) advice on dating (Table 1). Once again, older students are much more likely to do this, rising from a low of four percent in Grade 4 to a high of 24 percent in Grade 11 (Figure 2). However, when it comes to relationship advice, the gender dynamic is reversed; while boys are almost twice as likely as girls to look online for information about sexuality, girls are twice as likely as boys to seek out information about relationships (Figure 1). Interestingly, similar numbers of students in 2001 (12%)<sup>2</sup> and 2013 (14%) indicated that they used the Internet to look up information about relationships.

A similar number of students (14% of boys and 12% of girls) report that they have pretended to be someone else online to flirt (Table 2 and Figure 3). (Interestingly, the overall number of young people who pretend to be someone else to flirt online has gone down considerably since 2005, when twice as many students (26%) reported doing this.<sup>3</sup>) Older students are much more likely to flirt anonymously, rising from a low of four percent in Grade 5 to a high of 22 percent in Grade 10 (Figure 4).

# Approximately one fifth of older students use the Internet as a resource for information about sexuality and relationships, and to seek out anonymous opportunities to experiment with flirtatious behaviour.

<sup>&</sup>lt;sup>1</sup> Steeves, V. (2014). Young Canadians in a Wired World, Phase III: Life Online. Ottawa: MediaSmarts, pp. 14-15. Available at: <u>http://mediasmarts.ca/ycww/life-online</u>

<sup>&</sup>lt;sup>2</sup> MediaSmarts. (2001). Young Canadians in a Wired World: The Students' View, p. 29.

<sup>&</sup>lt;sup>3</sup> MediaSmarts. (2005). Young Canadians in a Wired World – Phase II, p. 51.

#### Table 1: Finding information online about sexuality and relationships

Do you use the Internet to find information about these?	Percentage
Sexuality ∂°♀, <sup>Grade</sup>	8%
Relationship problems (for example, advice on dating, getting along with family or friends, dealing with bullies) ♂♀, <sup>Grade</sup>	14%

#### Figure 1: Finding information online about sexuality and relationships: Gender





Figure 2: Finding information online about sexuality and relationships: Grade

#### Table 2: Pretending to be someone else online to flirt

	ave you ever said you were someone else online to do any of these ings?	Percentage Yes
Fli	irt <sup>Grade</sup>	13%



#### Figure 3: Pretending to be someone else online to flirt: Gender

#### Figure 4: Pretending to be someone else online to flirt: Grade



## **Boyfriends, Girlfriends, Best Friends and Family: Managing Relationships Online**

Networked media also provide opportunities to enter into and maintain romantic relationships, especially for teenagers. *However, students interact more with friends and family online than with romantic partners.* 

For example, over 90 percent of students in grades 7-11 think that their friends should be able to read their social media posts (Figure 5, Table 3), while 59 percent think their boyfriend or girlfriend should be able to read those same posts (Table 4). Although the percentage rises from 43 percent in Grade 7 to 70 percent in Grade 11, even in Grade 11 the 70 percent who think a romantic partner should be able to read their social media posts is lower than the 95 percent of students in this grade who are open to friends on social media (Table 3).

This does not necessarily mean, however, that students are not connected with their girlfriends or boyfriends on social networks. Our previous report *Online Privacy, Online Publicity* established that many Canadian youth are skilled users of their social networks' tools for selectively blocking content so they can control *which* of their contacts will see a particular item they post.<sup>4</sup> This data suggests that they share substantially more content with friends than with romantic partners.

Interestingly, boys and girls are equally likely to agree that boyfriends and girlfriends should be able to read each other's social networking posts (Figure 6).

<sup>&</sup>lt;sup>4</sup> Steeves, V. (2014). Young Canadians in a Wired World, Phase III: Online Privacy, Online Publicity. Ottawa: MediaSmarts. Available at: <u>http://mediasmarts.ca/ycww/online-privacy-online-publicity</u>





#### Table 3: Who should be able to read your social network posts: Grade

Grade	Friends	Boyfriend / girlfriend	Parent(s) / people in my family
7	91%	43%	74%
8	93%	58%	67%
9	94%	64%	59%
10	95%	69%	56%
11	95%	70%	56%

#### Table 4: Who should be able to read your social network posts

Who do you think SHOULD be allowed to read what you p social networking page like Facebook?	ost on a Percentage
My boyfriend/girlfriend (Gr. 7-11 only) Grade	59%





Students are also more actively engaged in pruning their social media accounts to avoid any misunderstandings on the part of their family and friends than they are in keeping something from a romantic partner. For example, 14 to 16 percent of Grade 7 students delete comments or photos they have posted online to keep them from family, friends and parents (Figure 7 and Table 5) but only four percent do the same for boyfriends or girlfriends. Although the percentages rise in all categories across high school, the trend remains the same. By Grade 11, the 37 to 44 percent who delete content to keep it from family, friends and parents is still significantly higher than the 14 percent who prune content to keep it from boyfriends or girlfriends (Figure 7 and Table 5). Even employers rate higher in the concern category for the oldest students: 18 percent of students in Grade 11 delete content so a boss or future employer will not be able to see it, placing concerns about employers four percentage points above concerns about romantic partners.

# This suggests that young people spend more time focusing on their online relationships with friends and family than they do their online relationships with romantic partners.



#### Figure 7: Deleting content posted by self: Grades 7-11

#### Table 5: Deleting content posted by self: Grades 7-11

Grade	Friends	Parents	Other family	Boss / future employer (Gr. 7-11)	Boyfriend / girlfriend
7	16%	16%	14%	3%	4%
8	25%	26%	24%	7%	6%
9	31%	30%	29%	10%	10%
10	34%	38%	39%	14%	10%
11	37%	44%	42%	18%	14%

# However, this does not mean that students are necessarily more open with romantic partners than with others.

Indeed, students actively seek *more* privacy from romantic partners than they do from friends and family. For example, when asked who should be allowed to use geo-locational devices to check and see where they are, more than twice as many students in grades 7-11 are comfortable sharing their locational information with parents and friends than with romantic partners (Table 6 and Figure 8).



Figure 8: Who should be able to track your location: Grades 7-11

#### Table 6: Who should be able to track your location: Grades 7-11

Grade	Friends	Boyfriend / girlfriend	Parent(s) and family members
7	42%	20%	76%
8	42%	28%	67%
9	42%	31%	59%
10	41%	30%	58%
11	45%	30%	49%

There are other indications that also suggest that students have more intense or intimate relationships online with friends than they do with romantic partners.

For example, over three quarters (78%) of students in grades 7-11 feel that boyfriends and girlfriends should not be allowed to read each other's private messages without asking permission first (Table 7 and Figure 9).

Additionally, students are more likely to share their passwords to their social networking account, email account or cell phone with their best friend than they are with their boyfriend/girlfriend (Table 8). For students in grades 7-11, 16 percent of students would share their password with a romantic partner, compared to 30 percent who would share with their best friend (Table 8). And although the percentage who would share with a boyfriend/girlfriend rises to 24 percent in Grade 11, it is still below the 33 percent of Grade 11 students who would share with a best friend (Figure 10).

The importance of relationships with friends is particularly marked with girls, as is the desire for privacy from romantic partners. As identified in our previous report *Online Privacy, Online Publicity*, girls are substantially more likely to share passwords with their best friends or their parents than boys are, though boys and girls share with romantic partners at roughly the same rate (Figure 11). Girls are also more likely than boys to say that romantic partners should not share locational information with a romantic partner (75% compared to 70% of boys) (Figure 12), and are more likely than boys to think a romantic partner would need prior permission before reading a partner's private messages (83% compared to 73% of boys) (Figure 13).

#### Table 7: Reading private messages without permission

Do you	agree or disagree with the following statement?	Agree Percentage
-	ds and girlfriends should be able to read each other's private messages asking permission first. (grades 7-11 only) $\Im \heartsuit$	22%

#### Figure 9: Reading private messages without permission: Grade





Figure 10: Willingness to share passwords: Grade

#### Table 8: Willingness to share passwords

Grade	Best friend	Boyfriend / girlfriend (gr. 7-11)	Other friends	Parents	Other family members	Teacher / principal	Employer / potential employer (gr. 7-11)	Other	No one
7	25%	7%	3%	49%	12%	1%	1%	3%	37%
8	27%	11%	3%	35%	9%	1%	1%	2%	45%
9	31%	18%	3%	28%	6%	1%	1%	2%	45%
10	37%	23%	5%	23%	9%	1%	1%	3%	46%
11	33%	24%	3%	14%	7%	0%	1%	3%	52%











#### Figure 13: Reading private messages without permission: Gender

Students in grades 7-11 are also more likely to block a friend or family member than they are to block an ex-romantic partner (Table 9 and Figure 14). Although the tendency to block an ex triples from Grade 7 to Grade 11 (5 - 16%), it is still significantly less a concern than blocking ex-friends (19 - 30%), or even someone they know but are not friends with (18 - 30%). And it ranks well below the percentage who block family (6 - 32%) and friends (33 - 46%) (Figure 14 and Table 9).



Figure 14: Using privacy settings to stop someone from seeing your posts: Grades 7-11

#### Table 9: Using privacy settings to stop someone from seeing your posts: Grades 7-11

Grade	Friend	Parent(s) or people in my family	Strangers	Someone I stopped being friends with	Ex- boyfriend / girlfriend	Someone I know but not friends with
7	33%	6%	54%	19%	5%	18%
8	36%	14%	57%	21%	8%	21%
9	41%	21%	61%	26%	8%	28%
10	43%	28%	60%	27%	11%	26%
11	46%	32%	59%	30%	16%	30%

## Pornography

Not surprisingly, there are also gender differences when it comes to seeking out online pornography.

#### Although a significant majority of students in grades 7-11 (77%) report that they have never looked for pornography online, boys are much more likely to have done so (40% compared to 7% of girls) (Tables 10 and 11). Moreover, boys who do seek out pornography are more likely to do so frequently than girls who do this (Table 11).

Eighty-eight percent of boys who report that they look for pornography do so at least once a month or more. This suggests that not only are boys more likely to look for online pornography, but those boys who do consume quite a lot of it. Girls who seek out pornography, on the other hand, are roughly equally likely to do so once a year or less as they are to do so more often.

Comparing overall percentages between the 2005 and 2013 *Young Canadians* surveys, the number of students who actively seek out pornography online has increased from 16 percent in 2005 versus 23 percent in 2013.<sup>5</sup>

French language students in Quebec are more likely than English language students in the rest of Canada to report that they look for pornography daily or weekly (French 25%, English 12%).

Do you do the following things online?	At least once a day	At least once a week	At least once a month	At least once a year	Less than once a year	Never
Look for pornography (grade 7-11 only) 것우 <sup>, Grade</sup>	8%	7%	4%	2%	2%	77%

#### Table 10: Looking for pornography

<sup>&</sup>lt;sup>5</sup> MediaSmarts (2005). Young Canadians in a Wired World – Phase II.

	Grad	e						
	Boys	Girls	7	8	9	10	11	
Look for pornography	At least once a day	14%	1%	2%	6%	7%	11%	12%
	At least once a week	14%	1%	1%	5%	8%	12%	11%
	At least once a month	7%	2%	1%	3%	6%	6%	7%
	At least once a year	2%	1%	1%	2%	1%	1%	2%
	Less than once a year	3%	1%	2%	1%	4%	3%	3%
	Never	60%	93%	93%	83%	75%	67%	65%

#### Table 11: Looking for pornography: Grade and gender

Household rules have an impact on whether or not students visit pornographic sites. Students who report that there is a rule at home about sites they are not supposed to visit are more likely to say that they have never looked for pornography online. They are also less likely to seek it out daily, weekly or monthly (Figure 15). However, as noted in our report *Life Online*, boys – who are most likely to seek out pornography – are less likely than girls to have a rule in the home on this topic.



#### Figure 15: Site rules and looking for pornography online

## Sexting

To explore student behaviours around sexting, we asked a series of questions about sending or receiving sexy, nude or partially nude photos. However, these questions were limited to students in grades 7-11 who had access to either their own cell phone or to a shared cell phone.

Sixty to 87 percent of students in grades 7-11 have access to a cell phone (Figure 16 and Table 12). *The percentages reported in this section do not refer to the full sample of students, but only to those in this subset of the full sample that are in grades 7-11 and have access to a cell phone.* 



Figure 16: Cell/Smartphone access: Grades 7-11

Grade	Own cell phone	Cell phone belonging to others	Cell phone access (Yes to own phone or using someone else's phone)
7	52%	12%	60%
8	68%	12%	75%
9	83%	9%	87%
10	87%	7%	88%
11	85%	5%	87%

#### Table 12: Access to cell phones: Grade

#### Sending a sext

Eight percent of students in grades 7-11 with access to a cell phone have sent a sext of themselves to someone else (Table 13). Approximately the same number of boys and girls have sent a sext (Figure 17). However, older students are more likely to sext than younger students – the percentage rises across the grades from a low of two percent in Grade 7 to 15 percent in Grade 11 (Figure 18 and Table 14).

Since the number of students who report receiving a sext directly from the person who made it is larger than the number of students who report sending sexts (see below), it may be that those students who have sent sexts have done so on more than one occasion or have sent them to more than one recipient.

#### **Receiving a sext**

Just under one quarter of students in grades 7-11 (24%) with access to a cell phone report that someone has sent them a sext of himself or herself (i.e. a sexy, nude, or partially nude photo of the sender of the sext) (Table 13). Again, the numbers rise across the grades – Grade 11 students are three times more likely than Grade 7 students to receive a sext created by the sender (36% compared to 11% of Grade 7 students) (Figure 18 and Table 14). Boys are significantly more likely than girls to be sent a sext created for them (32% compared to 17% of girls) (Figure 17).

#### **Forwarding sexts**

The aspect of sexting that is likely to cause the most concern is forwarding: while a sext that is only ever seen by the original recipient is unlikely to cause any harm, the risks caused by sexts that are forwarded to or shared with other recipients are obvious. Just under one quarter of the students who have sent a sext of themselves report that the person who received the sext forwarded it to someone else. *This means that approximately three quarters of students who send sexts have never had one forwarded by the recipient. (Table 13)*<sup>6</sup>

<sup>&</sup>lt;sup>6</sup> Although one-quarter of creators report that a sext they have sent was forwarded by the intended recipient, only 15 percent of students who have received a sext created for them report that they forwarded the sext to someone

Although Grade 7 students are least likely to report that their sext was forwarded, the trend fluctuates across the grades, reaching 24 to 26 percent in grades 8-10 and then dropping to 17 percent in Grade 11. Receiving a forwarded sext also rises across the grades, tripling from nine percent in Grade 7 to 30 percent in Grade 11 (Figure 18 and Table 14).

Forwarding sexts is highly gendered. *Interestingly, sexts of boys are more likely to be forwarded than sexts of girls (26% compared to 20% of girls).* Boys are also twice as likely to report that they have received a sext that was forwarded by someone other than the original creator of the sext (28% compared to 14% of girls). Boys are somewhat more likely than girls to have forwarded a sext sent to them (16% compared to 12% of girls) (Figure 17).

Of the 24 percent of students in grades 7-11 with cell phones who have received a sext from its creator, only 15 percent forwarded it to someone else. *That means that only 4 percent of grade 7-11 students with cell phones report that they have forwarded a sext created for them to someone else (Table 13).* 

Accordingly, although boys and girls are equally likely to create a sext, older students in general, and boys in particular, are more likely to receive them and to forward them to others.

Table 13: Sexting (grades 7 – 11 only)

	Percentage Yes
Have you ever sent a sext of yourself to someone? Grade	8%
If you answered yes, did they forward it to anyone else? Grade	24%
Has someone ever sent you a sexy, nude or partially nude photo (a sext) of themselves? ♂♀, <sup>Grade</sup>	24%
If you answered yes, did you forward it to anyone else? ♂♀ <sup>, Grade</sup>	15%
Have you ever received a sext that was forwarded to you by someone else?♀♂ <sup>Grade</sup>	21%

else. Accordingly, it may be that even more recipients choose to keep the sext private. See also *Limitations: Interpretive and Inferential Caution is Recommended* in *Methodology* at p. 31 below.



#### Figure 17: Sexting (Grades 7-11 only): Gender

#### Figure 18: Sexting (grades 7-11 only): Grade



Grade	Sent sext of self to someone	Sext of self was forwarded by recipient	Received sext created by sender	Forwarded sender- created sext	Received sext forwarded by someone else
7	2%	10%	11%	14%	9%
8	4%	26%	17%	10%	13%
9	8%	24%	26%	11%	21%
10	11%	25%	28%	17%	27%
11	15%	17%	36%	15%	30%



And despite the positive correlation overall between household rules and online activities that are considered by adults to be risky, having a household rule about treating people online with respect does not correlate with a lower likelihood of forwarding sexts (Figure 19).



Figure 19: Having a rule about respecting others online and forwarding of sexts

## Methodology

This report is based on the findings of a survey that was administered in 2013 to 5,436 Canadian students in grades 4 through 11. The purpose of the survey was to explore the benefits and challenges children experience when they use networked devices such as computers, tablets, cell phones and iPods. The survey explored the social codes young people develop with respect to their online social interactions and their attitudes about online issues such as privacy, cyberbullying, sexting and offensive and hateful content. It also explored the ways young people use online media to support their learning (both in and out of school) and to create new content.

The survey instrument, consent documents, recruitment text, instructions and method of analysis were approved by the University of Ottawa Research Ethics Board.

#### Recruitment

Students were recruited through school boards and schools in all 10 provinces and three territories.

MediaSmarts contacted school boards that had participated in its 2005 survey. Additional school boards were also contacted. In total, 51 school boards (44 English and 7 French) agreed to assist in recruitment and all requisite board approvals were then obtained. In Nunavut and the Northwest Territories approval was also obtained from territorial research institutes and the school boards' district education councils.

MediaSmarts then contacted principals of schools within participating school boards. The principals of schools that had participated in the 2005 survey were asked to provide access to the same number of classes and grade levels for the 2013 survey. Principals of new schools were asked to provide access to classes with teachers who were willing and able to assist with recruitment. In total, 140 schools (126 English and 14 French) agreed to assist with recruitment. The schools included a representative selection of urban and rural and public and Catholic schools.

Principals then approached teachers and asked them to assist with student recruitment. Teachers who agreed to do so received the survey documents from Directions Evidence and Policy Research Group (*Directions*). Survey documents included: student information letters; detailed parental consent forms; instructions for teachers; and (where applicable) paper copies of the survey. Teachers distributed the student information letters and parental consent forms to students in specific classes approved by the principal. Students interested in participating were asked to take the information home to their parents. Parental consent forms for all participating students were signed and returned to the teacher by the students.

#### Administration of the Survey

The survey instrument was developed by Valerie Steeves, with input from MediaSmarts and an advisory committee of experts in the field of children and technology, including Jacquelyn Burkell (Faculty of Information & Media Studies, University of Western Ontario), Wendy Craig (Department of Psychology, Queen's University), Bernard Froese-Germain (Researcher, Canadian Teachers' Federation), Sara Grimes (Faculty of Information, University of Toronto), Phillip McRae (Executive Staff Officer, Alberta Teachers' Association, University of Alberta, Faculty of Education) and Leslie Regan Shade (Faculty of Information, University of Toronto).

The survey was open from February to June of 2013. Students in grades 7 through 11 responded to 57 questions in total. However, since some of the questions dealt with agesensitive content – including sexting, sexism, racism, romantic relationships, gambling, pornography, future employers and more complex digital tools (e.g. advanced search functions) — a shorter version of the survey without these questions was created for students in grades 4 through 6 . Accordingly, those students responded to 52 questions in total.

Students in schools where the language of instruction was English completed the survey in English. Students in schools where the language of instruction was French completed the survey in French.

The surveys were completed during class time and administered by the classroom teacher, teacher-librarian, vice-principal or the principal. Participating students either completed the survey electronically or filled out a paper version, depending on the availability of Internet access and the preference of the teacher. Students were advised that: neither the teacher nor the school would see their responses; their answers would be kept anonymous; they could skip any question they did not want to answer; and they could stop filling out the survey at any time. Surveys completed on paper were placed in an envelope and sealed in the students' presence. The envelope was then mailed to Directions by express post. Surveys completed electronically were administered by Directions using Fluidsurveys online survey software.

In total, 5,776 surveys were received in paper and electronic formats. Data cleaning left 5,436 surveys (1,721 paper and 3,715 electronic) for analysis. Some students skipped questions and/or did not complete the entire survey. Accordingly, to minimize the loss of data, the analysis was conducted on a question by question basis. The results reported are therefore based on the number of students who completed each question and not on the number of students who completed the survey as a whole.

#### Notes on Statistical Analysis<sup>7</sup>

Statistical analysis was conducted by Directions and the tables and graphs included in this report were prepared by Directions.

Chi-squared tests were used to identify statistically significant differences in responses by gender, grade, primary language of instruction (French, English) or affluence. To compensate for the possibility that errors may be correlated with one another in some way when making multiple comparisons from the same data set, it is often helpful to establish a more stringent significance level. Thus, instead of the commonly used significance/alpha level of .05, it is sometimes recommended that one perform a Bonferroni Correction by dividing the alpha level (.05) by the number of items being compared, therefore establishing a higher and more stringent threshold for significance. For the current analysis, for each factor of gender or grade, 400 tests were run, thus, the significance/alpha level was calculated as = .05/400 = 0.000125 and applied to all of the tests.

In the results presented in this report, statistically significant differences by gender are indicated next to the question by Q and statistically significant differences by grade are indicated next to the question by <sup>Grade</sup>.

#### Comparing French language Students in Quebec and English language Students in the Rest of Canada

Throughout the report, we compare the responses of French language and English language students in the sample. Because the number of students in English language schools in Quebec (124) and the number of French language students outside of Quebec (204) was very low, comparisons between students on the basis of language of instruction alone would have made statistical comparisons difficult. To explore any differences between French language students in Quebec whose primary language of instruction was French with the responses of students in the rest of Canada whose primary language of instruction was English.

There were statistically significant differences between the two groups regarding access to technologies, privacy-related behaviours, the role of adults in students' online lives, cyberbullying and racism/sexism. However, interpretative and inferential caution is warranted, because there were approximately eight times more English language students than French language students in the sample. Even though the analysis applied very stringent criteria (significance level of 0.000125), making strong inferences about the differences observed or generalizing the findings beyond the sample is not warranted.

<sup>&</sup>lt;sup>7</sup> The paragraphs on Chi-squared tests and on interpretive and inferential caution were written by Directions and were included with the permission of the author.

#### **Comparing High Affluence Students and Medium Affluence Students**

A modified version of the Family Affluence Scale<sup>8</sup> was used to measure students' socioeconomic status. The scale is widely used in research with children because it enables researchers to solicit information about socioeconomic status directly from the children themselves and the scale shows some construct validity<sup>9</sup>. Although reports in regard to reliability are mixed, we opted to use the scale instead of relying on postal codes as a proxy for socioeconomic status because of the number of rural schools with large catchment areas in the recruitment pool and the variability of socioeconomic status within individual Canadian schools.

The scale is based on responses to the following four questions:

- Does your family own a car, van or truck? (No, we don't own a car, van or truck = 0; Yes, one car, van or truck = 1; Yes, more than one car, van or truck =2)
- During the past 12 months, how many times did you travel away with your family? (Not at all = 0; Once = 1; Twice = 2; More than twice = 3)
- How many computers does your family have? (None = 0; One = 1; Two = 2; More than two = 3)
- 4. How well off do you think your family is?
  (Very well off = 4; Quite well off = 3; Average = 2; Not very well off = 1; Not at all well off = 0)

We created a composite score for each student who responded to all four questions. The composite scores were then divided into categories of low affluence (including composite scores of 0, 1, 2 and 3), medium affluence (including composite scores of 4, 5, 6 and 7) and high affluence (including composite scores of 8, 9, 10, 11 and 12).

Only two percent of the sample fell into the low affluence category. Because the numbers of students (65) in this category was so low, statistical comparison between the low affluence group and the medium and high affluence groups was not possible. Accordingly, students on the low affluence category were not included in the analysis of socioeconomic status, and the results reported in this report are based on a comparison of the medium and high affluence groups only.

#### > Limitations: Interpretive and Inferential Caution is Recommended

As with all survey data, readers should be cautious about the interpretations or inferences they draw from these findings. Regardless of the age of the respondents, answers from self-reports are typically less reliable than direct observation of a behaviour. All respondents manage the impression that they convey with their answers. Answers may represent what the respondent wants us to know or think about their behaviour, rather than how they actually behaved. In

<sup>&</sup>lt;sup>8</sup> Currie, Candace E., Rob A. Elton, Joanna Todd and Stephen Platt. (1997). Indicators of socioeconomic status for adolescents: The WHO health behavior in school-aged survey. *Health Education Research*. 12(3), 385.
<sup>9</sup> Kehoe, Susan and Liam O'Hare. (2010). The reliability and validity of the Family Affluence Scale. *Effective Education*. 2(2), 155-164

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addition, differences in the percentage reporting behaviour between groups may reflect differences in how comfortable each group is in reporting the behaviour, rather than differences in how much each group actually engages in the behaviour.

When data are collected from different age groups in the same survey, it is tempting to want to interpret the differences in the percentages as increases or decreases from one age group to another. These data do not support such claims. The most that can be said is that a larger or smaller percentage of respondents in one or another age group said this or that. Moreover, when there are differences between age groups it is also tempting to infer that the differences are attributable to maturity when they might simply reflect differences in the frame of reference or experiences that younger and older students have about the object of the question.

One should be cautious about comparing the findings from this survey to the findings in previous surveys for several reasons. First, technology has changed dramatically; online accessibility and content in 2013 is very different from that of 2005 or 2001. Second, in addition to the technological changes that have occurred the rapid nature of social and cultural changes occurring in the eight years since the last survey may mean that the Grade 4 students today are different from the Grade 4 students surveyed eight or 12 years ago.

## **Demographics of Survey Participants**

Forty-one percent of survey participants were boys and 46 percent were girls. An additional 13 percent did not report a gender. The number of students per grade ranged from 424 for Grade 11 to 745 for Grade 7.

Grade										
Gender	4	5	6	7	8	9	10	11	Not provided / other <sup>10</sup>	Total
Воу	226	213	271	356	322	249	304	194	96	2231 (41%)
Girl	272	296	288	368	376	252	347	229	73	2501 (46%)
Not Provided	13	12	24	21	14	17	8	1	594	704 (13%)
Total	511 (9%)	521 (10%)	583 (11%)	745 (14%)	712 (13%)	518 (10%)	659 (12%)	424 (8%)	763 (14%)	5436

#### Table 15: Demographics: Number of survey responses by gender and grade

Survey participants were drawn from all 10 provinces and three territories. Eighty-six percent of students were enrolled in schools in which English was the primary language of instruction. The remaining 14 percent of students were enrolled in schools where the primary language of instruction was French. Seventy-three percent of the students enrolled in French schools were from Quebec; the remaining students enrolled in French schools were from Manitoba (20%), Ontario (3%), Prince Edward Island (2%) and New Brunswick (2%).

<sup>&</sup>lt;sup>10</sup> 16 students from Grade 3 participated and 44 students from Grade 12 participated. This is likely because some classes are split Grade 3/4 and 11/12 and these classes participated as a whole.

P	rimary Language	of Instruction		
	English	French	Total	
British Columbia	513		513	(9%)
Alberta	560		560	(10%)
Saskatchewan	382		382	(7%)
Manitoba	171	152	323	(6%)
Ontario	1992	24	2016	(37%)
Québec	124 <sup>11</sup>	557	681	(13%)
Newfoundland and Labrador	162		162	(3%)
Prince Edward Island	106	16	122	(2%)
New Brunswick	373	12	385	(7%)
Nova Scotia	180		180	(3%)
Yukon	32		32	(1%)
Northwest Territories	24		24	(<1%)
Nunavut	29		29	(1%)
Unknown	26	1	27	(<1%)
Total	4674 (86%)	762 (14%)	5436	

## Table 16: Demographics: Number of responses by language of instruction and province

The survey asked students to indicate what languages they spoke at home. Ninety-one percent spoke English at home and 28 percent spoke French at home. Two percent to 6 percent also reported speaking a language at home other than French or English.

<sup>&</sup>lt;sup>11</sup> Eight students in an English language school took the survey in French as the survey was administered in their French Second Language class.

What languages do you speak at home? <sup>12</sup>	% Speaking
English	91%
French	28%
Arabic	3%
Chinese (Cantonese, Mandarin, other dialect)	6%
German	3%
Greek	2%
Italian	5%
Korean	2%
Panjabi (Punjabi)	3%
Persian (Farsi)	1%
Polish	2%
Portuguese	2%
Russian	2%
Spanish	4%
Tagalog (Pilipino, Filipino)	3%
Tamil	2%
Urdu	2%
Vietnamese	2%
Other	11%

Table 17: Demographics: Languages spoken at home

A large majority of the students who completed the survey in one of the official languages reported that they spoke that language at home (96% English and 92% French).

Table 18: Demographics: Languages spoken at home by students taking survey in English or French

What languages do you speak at home?	English survey	French survey
English	96%	57%
French	19%	92%

Students were asked a series of questions to determine their socioeconomic status based on the Family Affluence Scale<sup>13</sup>. Only two percent of the sample scored in the low affluence category. Approximately two-thirds self-reported as being high affluence.

<sup>&</sup>lt;sup>12</sup> Twelve percent of respondents did not provide language information. In addition, some students reported an improbable number of languages spoken at home; however, these numbers were very low and these students' responses were included in the analysis.

<sup>&</sup>lt;sup>13</sup> See <u>Methodology</u> for more information about the Family Affluence Scale.

#### Table 19: Demographics: Affluence

Affluence Level	Percent Respondents
Low	2%
Medium	32%
High	66%

Figure 20: Demographics: Frequency distribution of composite affluence scores

