INTERNET USE OF LINGUISTIC MINORITIES WITHIN A DOMINANT CULTURE: A CASE STUDY OF FRANCOPHONES IN NORTHWESTERN ONTARIO

by

Nicole Corbett

Department of Sociology Lakehead University Thunder Bay, Ontario

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Chapter 1: Introduction

Outside the province of Québec, Francophones are often marginalized with regard to availability of products in their language. The Internet, a growing phenomenon, is marketed as a tool, which provides information and products as well as being a method of bridging social and global gaps. The purpose of this thesis is to find out how the Internet impacts Francophone communities in Northwestern Ontario. Since the thesis is preliminary in nature with regards to the topic and relevance of the area, the focus of the thesis must concentrate on finding the impact of the mother tongue¹, education and social capital on both Internet use and French-language Internet use. As discussed in greater detail in the subsequent chapter, the literature indicates that education and annual income affect Internet use and that Internet use affects social capital – as measured by community participation. Thereby, through the literature, an understanding is put forth that individuals who have higher education and larger annual income are more inclined to use the Internet; in addition, when individuals use the Internet, they are more apt to become involved in various community organizations. Furthermore, the literature findings indicate that Francophones use the Internet less than those whose maternal language² is English. While the information available on the Internet can be found in many languages, it is written in English in much greater proportions. The literature regarding the Francophone population also suggests that Francophones tend to be less educated

¹ The use of mother tongue has different meaning depending on language. For the purpose of this study, the term 'mother tongue' will be used interchangeably with maternal language depending on the stylistic fit of the sentence. In the context of this study, both terms refer to the first language learned by the individual. Furthermore, since the survey was self-administered, its meaning was also subject to the individuals' interpretation of their own sociolinguistic identity.

² The term 'maternal language' in the context of this paper refers to the first language learned rather than the traditional meaning of the mother's language. The term maternal language is used interchangeably with mother tongue. See footnote 1.

than Anglophones, and are often illiterate. As such, if an individual's mother tongue is French, an assumption can be made that it would be linguistically difficult to access information online. While this thesis does not investigate the issues of literacy, the assumption based on the literature guides the methods used in answering the question of whether or not the Francophones use the Internet less than those whose first language is not solely French. In order to achieve the objective (the impact of the mother tongue, education and social capital on Internet use), the population must be surveyed in order to understand their Internet usage patterns, their socio-demographics and their community engagement patterns. Chapter Three will describe the methods used in finding our sample population and creating and distributing the questionnaire, as well as detailing the method used for data analysis. Chapter Four will describe the results found using the data collected, and will offer some analysis based on information found in the literature review.

The findings revealed by the variety of ANOVA's and Regressions show that

Francophones in Northwestern Ontario make limited use of the Internet, and therefore, it
is difficult to reach decisive conclusions about how the Internet affects the vitality of

Francophone communities in Northwestern Ontario. That being said, there remain a
number of interesting patterns or trends suggested by the findings that go hand in hand
with the findings of the literature. The study is able to confirm all of the hypotheses and
one can therefore conclude that the impact of social capital³, education, and language is
positive on both Internet use in general but more specifically in French. All hypotheses
are answered: the study finds that the higher the level of annual personal income, the

³ As measured by personal annual income and level of participation in community organisations.

higher the use of the Internet in French; the higher the level of education, the higher the Internet use; the higher the level of education for French the higher the use of French on Internet; the more a person uses French at home, the more they will use the Internet in French. In addition, those respondents' whose mother tongue is French separate themselves from those whose mother tongue is either English or those whose mother tongue is both French and English, by using the Internet less than their English or Bilingual⁴ counterparts. Finally, the last chapter will encompass a summary of the findings of the thesis as well as offer some insight into recommendations for future studies, such as the need for a longitudinal study on Internet use and its social dimension with regard to Northwestern Ontario's Francophone population.

The Internet in Contemporary Society

Globalization is the most powerful feature of our present era, manipulating and affecting the lives and cultures of billions of people all around the world. Our globalized world, wherein information is available and abundant, and wherein individuals can communicate with ease by utilising various methods of communicative technology, is also a world governed by capitalist systems. Thus, one must wonder if all aspects of this global communication are healthy and vibrant, or if they can potentially create hardships on certain populations.

The Internet has been around since 1969 and increasingly gaining in popularity since the late 1990's. While Manuel Castells (2000) notes that this is a move away from

⁴ There remain misunderstandings regarding the origin and the proper use of the term bilingual. For the purpose of this study, bilingual will be used to refer to those who have a fluent understanding of both French and English. When referring to the data and results regarding the variable 'Mother Tongue', the term 'bilinguals' shall mean an individuals who were raised as having both French and English as their first language and who have identified themselves in this capacity in the survey.

capitalism, and thus a positive aspect in regards to freedom of information, it is also, potentially, an ideal product of capitalism. The use of such temporary and disposable materials - which offer individuals global information - leads to a dependence on the product in order to function in the growing capitalist system, and, more importantly, to communicate with others in our personal and professional circles. In 2000, by publicly coining the term *Digital Divide*, Bill Clinton, the President of the United States, officially noted the disparities surrounding the use of technologies, but also inherently noted the importance of technologies for both the citizens and the corporate sectors (Nie, 2001, p. 421). Communicative technologies should be understood not only in the form of the Internet, but also in the form of cell phones and PDAs (personal digital assistant) – both items of communication which, today, are sold with the compatibility to connect, by wireless means, to the Internet.

In his article published in 2001, Norman Nie looks at four studies in order to understand the Internet and the sociability of its users. He found that the average percentage of households that have the Internet are in the mid to high 40th percentile (Nie, 2001, p. 420). Nie also notes that the studies arrived at different findings in terms of the potential consequences of the Internet on human interpersonal relationships. The findings address the digital divide and find that the impact rests on both sides of the spectrum, causing social isolation on one side, while on the other side enhancing relationships. Inthese studies, communicative technologies were found to be used more frequently by those who are educated, wealthier, and have a higher socioeconomic status. Interestingly, similar findings, prevalent in the 1960's, were found regarding television use and its potential implications on personal relationships and isolation. The debate

leads to questioning Internet use amongst linguistic minorities such as Francophones in Canada.

Francophone Minorities and Internet Usage

While Québec and New Brunswick are known for being the home of French-speaking Canadians, it is widely misunderstood that French speakers exist outside of these provinces in numbers large enough to form entire communities. Even though French is one of Canada's official languages, English has remained the dominant language in Canada.

Francophone Canadians are not necessarily choosing to loose their mother tongue. Rather, as suggested by Simon Laflamme and Christiane Bernier (1998), as well as Monica Heller (1994), the dominant language forces individuals to learn English in order to succeed. Furthermore, Francophones tend to think that it is easier to use English (Laflamme & Bernier, 1998, p. 126; Heller, 1994, p.157). Not only is English the official language of Canada but it is also dominant in communities, in the media⁵, and in the corporate sector as well as in the service industry. In most communities in Canada, one can live a life without understanding a second language with very little reprocussions; however, day to day communication can be very difficult for a unilingual Francophone. If Francophones can speak English, they often choose to do so to other Anglophones or they inadvertently choose to listen to English television and radio and even perform research in English. The phenomenon is easily linked to the information provided by the Office of Francophone Affairs (1999), which indicated that only 58.9% of Francophones speak French at home. In fact, according to the 1998 Statistical Profile of the

⁵ In Thunder Bay, the cable company offers 3 French channels out of 80; there is 1 radio station available (Radio-Canada) in French out of 18 radio stations available within the Thunder Bay region.

Francophone community in Ontario, the retention of French language in Northwestern Ontario has declined by 6.2%, a higher decline by at minimum 3.5% than any other region in the province.

The compulsion to use the dominant language does not necessarily indicate a deliberate act of personal coercion. Rather, it is almost unconscious and part of the reality of living in a minority situation with limited access to French services and French media. While the Internet offers many possibilities, such as the availability of information, the quick turnover of news and research, and the possibilities of global communication through various mediums (email, chat, audio and visual programming, forums, as well as the promotion of individualism through new social networks and virtual communities that are introduced regularly), there are some legitimate concerns regarding marginalisation and cultural singularity. First, the notion of the digital divide is a very real situation in which entire groups of people are left behind, technologically. While Castells initially describes areas (countries) that tend to be financially impoverished, he later turns his attention to what he refers to as the fourth world: areas within our countries that house individuals who are marginalised in some form or another, such as those who are less educated, are impoverished or are technologically isolated. To focus on cultural singularity⁶, in large part, since the Internet is heavily English based, the bilingual population can see it as a useful tool; however, there is a tendency to automatically switch their language in order to participate (Amrous, 2006; Clement et al., 2005; Welsh, 1993; Stebbins, 1994; Mougeon, 1982). In addition, the amount of cultural extinction which occurs throughout the world (Sterling, 2003; Ostler, 2000) leaves a fear for minority populations. The fear of cultural extinction becomes

⁶ Same context as assimilation, acculturization, uniformilization; to some level can be use interchangeably.

intensified when regional minority communities are located in regions that are geographically isolated.

The Regional Context

Northwestern Ontario is comprised of 50% of Ontario's land, but is home to only 2.2% of its citizens. According to Statistics Canada, in 1996, 3.9% of this population was Francophone (Statistic Canada, 1996; Southcott, 2002). While this population is small, it is significant enough to represent a culture of its own, and to have significant issues as the result of the regional disparities in Northwestern Ontario. In terms of media availability, printed, recorded, and televised media are available in English. Some communities have access to CBC French broadcast radio, but none havea French community radio. A few French channels exist on the cable / satellite systems. Some communities have schools and both academic and public libraries where individuals can get books, videos, and music in French, while other communities do not have such access. In the age of dwindling services and available resources, it is possible to imagine the impact on Francophones, particularly those living in partially isolated communities. The Internet can offer some wonderful resources to individuals, especially those living in isolated communities who may be geographically far from their family and friends, and, in the case of Francophones living in Northwestern Ontario, who are living within a minority context. Francophones can use the Internet to communicate with their peers as well as participate in online social networks with other like-minded francophones across the globe. They can use the Internet to find information and products that they would be accustomed to, but which are not available within their communities, and they can use the Internet to gain access to a number of entertainment facets, such as French films, movies,

television programs, and music, as well as reading material like books and magazines which are not available in the region. In a way, the Internet can become a tool to aid in reconnecting the Francophone to her or his culture. However, the concerns raised regarding the digital divide and cultural singularity are of importance to the key players among Francophones in Northwestern Ontario. With regard to the digital divide, the combination of the geographical size and the minimal total population, as well as the current lack of infrastructure, the lack of financial support and possible declining economic situation of the region, the concern is that Francophones in Northwestern Ontario could be left behind technologically, creating a situation where residents would have limited participation and where they could no longer compete in the global and local markets. In addition, when the technology's infrastructure is supported, the dominance of English computer products and the high content of Anglophone websites could have high linguistic cost for the Francophone population of the region. The dominance of English would not only create a situation where Francophones need to adapt to the products (ie: use of English keyboard, use of English software, English teaching as well as English terminology), but also where they inadvertently adhere to the existing Internet culture instead of developing an Internet culture that is uniquely theirs.

The Internet is not a medium that will become obsolete in the near future. As the literature on the social dimension of the Internet has gained credibility, it is reasonable to analyze the issues in terms of regional characteristics, and to initiate investigations on how the Internet impacts the Francophone population of Northwestern Ontario. Based on the literature, and because of the preliminary nature of this research, the focus must be concentrated on investigating whether Francophones in Northwestern Ontario are using

the medium linguistically, who amongst them is using it and whether an impact exists with education, personal annual income and social capital on both Internet use and French-language Internet use.

Two prominent studies have looked at the direct impact of the Internet on the vitality of communities. Keith Hampton and Barry Wellman's (2003) work in Neighbouring in Netville shows findings based on a creative study, which centred itself on an innovative wired suburb community near Toronto, Ontario. Manuel Castells' (2002) work on The Network Society in Catalonia addresses the use of Internet in Catalonian society and the social dynamics of the Catalonian community. While both studies offer insight into the vitality of communities with regard to the use of new communicative technologies, they are unable to address the issues that may arise in minority language communities. Castells (2002) addresses the issue of language, but it is within a context in which the dominant language is Spanish and the media (both printed and recorded) is well represented. These studies lead us to question in more depth the importance of new communicative technologies on the vitality of Francophone communities, and more precisely of those communities in Northwestern Ontario. This thesis examines the social dimension of the Internet, an issue raised in Castells and Wellman, but does so from the specific perspective of francophone minority communities in Northwestern Ontario. The methodology loosely follows the examples provided by both Hampton & Wellman (2003), as well as Castells (2002).

The Methodology and Results

The method decided upon was quantitative in nature, however; the larger scope of the project will have a qualitative component. For the purpose of this thesis, the focus will be on the quantitative component of the project. The self-administered survey, which thoroughly questions the media use of French speaking residents of the region, was designed in a collaborative effort with key players from *Lakehead University*, the *Association des Francophones du Nord-Ouest de l'Ontario (AFNOO)* and the *Conseil Scolaire de District Catholique des Aurores Boréales (CSDCAB)*. The intent of the group was to pull key components from existing successful surveys (Castells, 2002; Laflamme, 2005) in order to ensure future comparison qualities without neglecting the current project's statistical needs. The goal of the questionnaire was to identify the sociodemographics of the francophone population, the technology usage in French and English, the frequency of use, and its relation to community as well as aspects of individuals' community sociability.

In order to address the needs of the student population and to facilitate distribution through the school systems, a second questionnaire was created for students; the original questionnaire was reserved for use with individuals who were not enrolled in elementary or secondary school. For the purpose of this study, the original survey will be referred to as the non-student survey while the second survey created specifically for students within the school systems will be referred to as the student survey.

Respondants of the non-student survey were primarly adult, and it was the sole survey distributed through the *AFNOO*. The non-student survey posed 251 questions, producing a total of 276 variables which were analysed through descriptive indicators, two-way Analysis of Variance and regressions. All individuals who lived in Northwestern Ontario and who could understand French were asked to participate. The *AFNOO* distributed the non-student surveys only via various community groups, whereas, in order to reach a

broader, more diverse francophone population base, the separate and public Francophone school systems distributed both the non-student and the student questionnaires. In the end, the questionnaire was delivered to residents of Dryden, Greenstone, Kenora, Ignace, Longlac, Manitouwadge, Marathon, Red Lake, Terrace Bay and Thunder Bay. As a result of a low response rate after our first distribution (June 2006), another distribution period occurred in November 2006, yielding a total of 359 non-student and 350 student surveys. Our sample was over-representative of the eastern part of Northwestern Ontario, and under-representative of the western part of the region. Overall, and regardless of our attempts to reach a broad spectrum of respondants in the region, there exists an over-representation in terms of higher education.

While controlling the individuals' mother tongue, education, annual income and social capital, the study found that Francophones overall do not use the Internet significantly. As a result, the study remains incapable of explaining the difference in use by Francophones and Anglophones of the region. Nonetheless, it can be said that Francophones whose mother tongue is both French and English (Bilinguals) tend to use the Internet a little bit more than those whose mother tongue is solely French. In addition, the study demonstrated that overall, the more education a Francophone has, the more they will use the Internet; this is particularly true for the use of the Internet for non-recreational activities. The exception noted in this case is that the lower the education level, the more likely Francophones are to use the Internet for recreational activities such as chatting, surfing, playing electronic games, downloading audio and visual content, and sending electronic messages outside of work or study. Furthermore, Francophones whose mother tongue was both English and French had higher means recorded for

surfing the web, downloading music and finding weather information than did Francophones whose mother tongue is French.

The findings also indicate that the higher the amount of annual income, the more likely a Francophone is to use the Internet for informational or non-recreational purposes, such as at work and elsewhere than home and work, as well as using the Internet for purposes relating to finances; he or she is less likely to use the Internet for recreational purposes such as the use of the Internet at home, for the purposes of surfing, finding, downloading and listening to music, playing electronic games, finding health information, meeting new people, e-mailing with friends and family, sending and receiving electronic messages for purposes in and outside of studying and/or work, , and chatting. The findings also indicated that when income is greater, the use of the Internet to download French music and to chat in French is lower. Interesting trends were also found regarding social capital as measured by community engagement. While community participation is weak, the results indicate that those who use the Internet for recreational purposes are more likely to participate in Community Activity Organizations and those who use the Internet for informational or non-recreational purposes are more likely to participate in Community Development Organizations. The regression model used did not show any other trends demonstrating a consistent correlation with other independent variables.

The goal of this thesis is to identify the impact of social capital, education, and language on Internet use and more specifically, on French Internet use. The following chapters are in keeping with the main objective.

Chapter 2: Review of the Literature

The exploration of media usage amongst Francophones in Northwestern Ontario will begin with a review of the literature. Since the goal of the research is to identify the impact of social capital, education and language on Internet use and more specifically, on French Internet use, the literature review will be a multi-faceted exploration. The literature specific to Francophones' media use within the region of Northwestern Ontario is virtually non-existent, and therefore the review of literature will begin with an exploration into the particularities of the region, including its historical framework, and then turn to an exploration of the historical particularities of francophones in the area. The first section of the chapter will focus on the settlement of Northern Ontario and Northwestern Ontario and will show how Northwestern Ontario separates itself from Northeastern Ontario. The second section of the chapter will focus on Francophones: where they came from and how they arrived in the Northwestern Ontario region. The focus will then change from the historical discussion to issues that have arisen for Francophones throughout the years and that greatly impact who they are and how they behave currently. The third section of the literature review will focus on issues relating to language and and the impact of living in a minority situation, covering literature that stems from concerns of assimilation into the dominant culture. The following section will cover literature that stems from the realm of education, and issues regarding the quality of French, or the changing qualities of the French language. Finally, the fifth section will address literature specific to Francophones and media use.

Once a discussion of the existing literature regarding the issues impacting

Francophones has been completed, the focus will move to an exploration of the literature covering the social dimension of technology. Prior to identifying reputable research on communicative technologies and their impacts on society, it is imperative to gain a through understanding of the historical context within which technology has been developed, as well as some understanding of the positive attributes of the Internet, such as social networks. The sixth section of the literature review will focus on the history of technology. The primary goal is to set the stage for the introduction of technology, but also to understand the context of how it became such an important communication medium, and some of the issues that have arisen since its inception.

The seventh section further examines the most commonly discussed issue in literature about the social dimension of Internet, that of the Digital Divide. As positive attributes were discussed in the section dealing with social networks, the goal of this section is to discuss the negative attributes of the new communication technologies. In fact, the goal of introducing both the positive and negative attributes of the Internet is not only to gain insight into our central objective, but also to set the stage for two prominent studies, Castells' (2002) Catalonian Internet project and Hampton & Wellman's (2003) Netville study, which both shape the methods used for this paper and are discussed in the eighth section of the literature review. Finally, the last section will aid in conceptualizing the issues specific to Northwestern Ontario, with the goal of tying the technology issues to the region. The goal is also to learn about the existing literature in addition to gaining information regarding the impact of social capital, education and language on Internet use, and to apply the findings to French Internet use.

Northern Ontario & Northwestern Ontario

Northern Ontario as a whole is comprised of districts, namely greater Sudbury, Algoma, Cochrane, Manitoulin, Sudbury, Timmiskaming, Nipissing, Parry Sound, as well as Kenora, Rainy River and Thunder Bay. Covering approximately 800 000 square kilometres, the land mass represents 90% of the province (Bollman, Beshiri & Mitura, 2006, p. 7), yet the population is approximately eight percent of the total provincial population (Ministry of Northern Development and Mines, 2004). Much of the literature concerning Northern Ontario covers the above-mentioned districts. Each region brings its own unique history, culture, sense of identity, and set of demographics.

Northwestern Ontario is comprised of 50% land mass and covers the Kenora, Rainy River and Thunder Bay districts. While today, Northwestern Ontario is home to a number of resource dependent communities, aboriginal communities, and to the city of Thunder Bay, like most parts of Canada, Northwestern Ontario developed its economic structure based on the export of unprocessed natural resources (Canadian staples) and the international dependence on them. Further, since Southern and Eastern Ontario had already been settled and industrially developed, the railways were crucial in developing Northwestern Ontario, and as Mitchell (n.d.) noted, they also contributed to its use, primarly as a source of extraction.

At the time, the province had expected that the railway would open up the area to agriculture; however, due to poor soil, unfavourable climates, the large distance from the larger markets, and also because the intended and expected immigrant population were going to the United States instead of settling in Canada, the railway instead encouraged and met the needfor the exportation of natural resources (Mitchell, n.d., Wightman &

Wightman, 1997). For the most part, however, the government was able to achieve its goals in promoting Northern Ontario settlement and agriculture "without depopulating southern Ontario" in Northeastern Ontario (Mitchell, n.d., p.10).

As a result of the 1898 legislation which resulted in the wasteful exportation of natural resources, the area suffered through a number of economic bust and boom periods. Despite a decline in production during the Great Depression, the Ontario highways (Hwy 17 and 11) which link to the TransCanada highway (Hwy 17 and 11) were developed during this period. With major unemployment rates in the area, the construction of the trunk roads quickly became an employment program funded by both the federal and provincial governments. These highways allowed for the creation of more communities along the way as well as providing a method of linking the communities through road access.

During the mid 20th century, the economy in the region began to recover. Nearly all of the organisations/industries (lumber, sawmills, pulp and paper, mining, seaway, Trans-Canada highway and rail) experienced some growth. The growth continued to occur until the latter part of the 20th century (1970's). However, by the 1980's an economic decline became evident. While the 1990's provided some relief, it was short lived. Today, Northwestern Ontario is yet again experiencing high unemployment rates and out-migration, as well as a number of other social issues.⁷

Franco-Ontarians: Their History

As mentioned in the introduction of this paper, the basis of this study is to gain comparable insight based on an earlier study made by Manuel Castells (2002), while taking into consideration and focusing on Ontario's Northwest region and targeting

⁶ See Southcott's 2002 report series

Francophones as a minority population within the region. In this context, it is imperative to understand how the Francophone population arrived in the area and what the current situation tells us about French-speaking citizens of Northwestern Ontario.

The literature on Francophones in Ontario can be divided into two separate themes, namely, those associated with historical context and those associated with the debates about language and culture preservation. The discussion here will focus on the historical context first. There exists, however, little research in the area, and the literature specific to Northwestern Ontario is practically non-existent. To gain a better understanding of the minority situation in Northwestern Ontario, it is imperative to reach beyond regional context.

Roger Bernard (1990, 1996, 1998) constructs a historical discourse which is specific to Francophone settlement in Ontario. Bernard (1998) introduces three different waves of immigration into the province. The first wave affected southern and eastern Ontario during the 18th and the early 19th centuries, where francophones established themselves and colonized Southern and Eastern Ontario. Although Northern Ontario was colonized in the later 19th century, there are earlier accounts of Francophones in both the Northeastern and Nortwestern areas of the province (Jaenen, 1993). In fact, Jaenen's (1993) accounts start as early as the 17th century and expand into the mid 19th century when the fur trade finally collapsed. In fact, until the late 1800's, the dominant European language in the region was French.

While Francophones remained in parts of Northeastern Ontario, it is only with the construction of the Canadian-Pacific railway, which travels from Montreal towards western Canada, in the late 19th century that Northwestern Ontario began to see

francophones return to the region. Mitchell (n.d., p. 5) explains that while the province expected that the railway would open Northwestern Ontario to agriculture, it instead mainly fulfilled the needs of the grain and lumber industries.

The third wave of francophone immigration came in the 20th century with the development of the National Transcontinental railway, which runs from Québec City to Winnipeg, and later, the Canadian Northern railway, which runs from Vancouver to Montreal. The railway opened up economic opportunity for resource dependent industries. During this time, while economic and social difficulties were erupting in Québec⁸, Ontario was booming, both economically and socially, as it was profiting from its strong relationship with the US, its open door immigration policies, industrial and agricultural development and its growing employment rates in both the natural resources sector and the service sector. Consequently, while Québécois were looking for economic opportunities to survive, Ontario was in need of farmers and specialized workers.

As the country was expanding and developing, it was an era of chain migration, which inadvertently affected the Québecois. Cultural, political, economical and demographical concerns were expressed by out-migrating Québecois and Acadiens (Green, MacKinnon & Minns, 2004, p. 4). Green, MacKinnon, and Minns also report that during the 19th and early 20th century, francophones were often uneducated or even illiterate, were religious, married young and had large families. Not only was Ontario recruiting in the rails and primary resource industry, but the United States was also recruiting Francophone workers. According to Green, MacKinnon and Minns (2004), the US provided a better solution for Francophones looking to emigrate out of Québec or New Brunswick; the US had higher employment rates, provided higher income, required

⁸ Also see Welch (1993) and Séguin (1977) for more description of difficulties in Québec

no formal training, and allowed men and women to work regardless of whether they were bilingual or unilingual. In addition to these factors, the French Roman Catholic religion in New England provided some comfort for the emigrating Québécois. Moreover, and of significant importance, was the distance between the locations (Green, MacKinnon & Minns, 2004; Kirkconnell, 1921). The distance of migrating west as opposed to south had many weighted implications, but most important was the time and cost associated with travel between their home in Québec and the location of their work. For men who had not yet married, the high proportion of men, west of Québec was not appealing to their need to establish a family. Until the early 1920's, New England provided francophones a great alternative for migration, which has undoubtedly affected francophone communities in Northwestern Ontario (Green, MacKinnon & Minns, 2004, pp. 9, 11). This information regarding international emigration is relevant, as it offers insight into the differences in migrating patterns of Northeastern Ontario and Northwestern Ontario, the latter being geographically farther from Québec.

Because of the church's involvement and the moral beliefs of the francophone population, the growth (in the 2nd wave) sees francophone settlers establishing themselves in rural areas as farmers (Bernard, 1998, p. 51). However, by the 1860's the *good* lands were all taken and thus the francophone people were forced to turn to industry for work or to establish their families on poorer soil and rockier terrain – thereby creating a situation where they needed to begin subsidizing their economic means by turning to the industrial sector (mostly during the winter) in order to survive. The railway's arrival in Northwestern Ontario coincided perfectly with the lack of good lands and the need for families to subsidize their agricultural income. During this time, survival was the

Francophones' primary goal (Welsh, 1993, p. 73). Séguin (1977), Welsh (1993), and Bernard (1998) note the importance of agro-forestry as an economic supplement, a practice of working in both agriculture and the forestry sector that was well established in Québec⁹. At this point in the history of the Francophones, the colonization of Ontario's Northeast and Northwest begin to differ. The regional differences between Northern Ontario have often been ignored throughout the literature of the Francophone situation in Ontario.

The regional historical difference can, perhaps, be explained by a combination of changing economic situation and opportunities along with the landscape and the soil conditions of both areas. As the map below suggests, the Northwestern Ontario landscape is almost entirely covered by the Boreal Shield and the Hudson Bay Lowlands, both of which are landscapes that are not, for the most part, conducive to agriculture. In fact, Wightman and Wightman suggest that farmers in the region needed to have provisions shipped to them from Southern Ontario (Wightman and Wightman, 1997, p. 39), creating additional financial stress on settlers. The areas are covered with swampland and sand plains, and the soil tends to be rocky and lacking in nutrients. On the other hand, the Northeastern landscape of the province is home to the Claybelt and the Great Lakes-St. Lawrence, both of which have rich soils ideal for agriculture (Canadian Wildlife Service, 2005).

The development of the area became more important and more feasible as soon as

⁹ Agro-forestry was alive and well in Québec where the forestry sector was paying low wages to the workers until after the railway was constructed. According to Séguin, the industry was using the people's ability to farm as a subsidy for their wages. In fact, Séguin reports the earnings for one company in 1860, to be eight dollars per month. Once the railway was constructed, the earnings were adjusted and this same company paid their workers twenty dollars per month (For more information see: Séguin, 1977, pp. 46-48).

the railroad was finished. Opportunities in the natural resource industries allowed settlers and newly arrived Francophones to gain employment during the winter months and to farm with their families during the summer months. Welsh (1993, p. 73) notes that Francophones who accepted work solely in the industrial resource dependent work force saw their economic situation improve significantly.

Ontario Landscape Map¹⁰



Toward the end of the 19th century and with the arrival of the railway, the linguistic situation in the area began to change. The number of English-speaking and immigrant workers increased, which lowered the ratio of Francophones, consequently creating a minority situation for Francophones in the region. At this time, the French population in the area was 10.4% (Southcott, 2002a, p. 7). The construction of the railroad brought more people who sought work on the railways or in the multiple industries connected to natural resources, including mining and forestry. During this time, the Catholic Church encouraged the French to colonize in Eastern Québec and Northeastern Ontario (Bernard, 1996, pp. 40, 47). During the Depression period of the 30's and after intensive work searches, the Francophone population began to increase in

¹⁰ Map taken from: http://www.on.ec.gc.ca/wildlife/ehjv/priority_landscapes-e.html in January 2007.

Northwestern Ontario. The need for work and the expansion within resource industries were instrumental in pushing the Québécois people toward the communities of Beardmore, Longlac and Geraldton.

Most literature regarding the history of French Canadians, particularly residents of Québec, supports the traditional view that the Catholic Church played a role in colonization and that priests were the ones who rallied the people, selected the areas to be settled, and the work to be done (Séguin, 1977, p. 22). Furthermore, Bernard (1996) notes that the church also provided financial assistance in order to help the francophone settlers continue with agriculture, whereas the government provided no aid. While Séguin (1977) agrees that the church encouraged the movement from Québec to Ontario, he documents that much of the literature focuses too much attention on the movement of the church and not enough attention on the economic situations of the regions and the individuals within them. Interestingly, the literature documents that the Ontario governement made numerous decisions regarding provincial settlement planning based on the desire to keep Ontario free of religion and to distinguish itself as Anglophone dominated.¹¹

The difference between Northeastern and Northwestern Ontario is mainly due to the absence of a French-speaking colonialization movement and the emigration of the Québécois to Northwestern Ontario. In the Northeast, communities were influenced by agro-forestry, but this influence was not felt as strongly in Northwestern Ontario, where French-speaking workers who were established in the area came to work in the mining and forestry industries. Francophones who settled in Northwestern Ontario after the

¹¹ See Bernard re: rails & immigration, 1998, p. 54, 1996, p.34 re: highway 11; Heller, re: education; Bernard, 1996 p. 42,

inception of the rails came for economic reasons; anything was seen to be an improvement from their economic situation in Québec. Although these immigrants came from agro-forestry areas in Québec, the climate, the soil condition, and the geographical distance between their new and old communities contributed to reducing the influence of the moral ideology, felt strongly in the province of Québec. Furthermore, the wages in Québec forced individuals to practice agro-forestry in order to feed their large families. The situation in Northwestern Ontario, for those employed in the natural resource industry, was much more profitable.

Also important in understanding the current situation of francophones in Northwestern Ontario is the subject of literacy and the required education, or lack thereof, associated with work in the natural resource industry. In fact, one of the main reasons that people were able to supplement their income by working in the railway, mining, and forestry industries was that employers required neither an educated nor a specialized work force, a common theme raised by several researchers who have delved into issues relating to Franco-Ontarians (Jaenen, 1993; Welch, 1993; Bernard, 1990; 1996, 1998; Green, MacKinnon & Minns, 1994).

The Current Situation of Francophones in Northwestern Ontario

Today, according to the statistics from the Federal government (Statistics Canada, census 2001), the total population of the Francophone people in Ontario is 4.8%, of which 1.6% live in Northwestern Ontario (Office of Francophone Affairs, 2005).

According to Anne Gilbert (2002), the number decreases consistently for a few reasons, including the decline of spoken French in the home, exogamous relationships, and the widespread knowledge of the French language (Gilbert, 2002, p. 6). Although the

number declines in each census, the population in Northwestern Ontario has been relatively stable, having decreased by 0.1% from 1971 to 1996 (Ibid, p. 6). However, the situation has changed and there is currently a decrease of 10% from 1996 to 2001 (Office of Francophone Affairs, 2004). Also of interest is that the 2001 census data indicated that 30.8% of Francophones in Northwestern Ontario are originally from Québec (OFA, 1999, p.8). According to the Office of Francophone Affairs (1998, 2007), the retention rate for Francophones in Northwestern Ontario has declined by 6.2% from 1991 to 1996 and by 1.8% from 1996 to 2001. The decrease in the reduction of population retention rates in Northwestern Ontario is promising, and one wonders what has impacted the change in decrease. Regarding education levels, Francophones who have less than a grade 9 education account for 21.8% of the population, whereas 6.4% of Francophones in the region have a university degree. While the education levels continue to set Northwestern Ontario Francophones apart from the remainder of the province's population, education levels are consistently improving. In terms of annual income, the average income of Francophone men in the region is approximately \$41 000, and women approximately \$20 000, with only minor increases recorded since the 1996 census (Southcott, 2003e).

French Language and Lifestyles in a Minority Situation

Now that the regional historical context has been examined, the focus can move to the debate regarding linguistic and cultural resistance. First, this section of the literature review will focus on language and lifestyles in minority situations as in the case of Franco-Ontarians, according to the statistics. The focus will then shift to the specific topics of cultural considerations on education and then on the media.. The objective, again, is to understand what exists in the literature as well as to attempt to gain a better

understanding of the impact that mother tongue, education and social capital has on media, and more specifically, on the Internet. In the following pages, a review of literature critical to this thesis on media usage amongst the Francophone population, particularly those in Northwestern Ontario, will be presented.

Since the Quiet Revolution (1960-1966), there has been more effort and cultural assertiveness stemming from the Francophone community regarding understanding the situation of Francophones outside of Québec and aiding in the retention of language and culture. This effort has transformed itself into research on bilingual communities and the linguistic situation of Francophone people, particularly those residing outside of Québec.

One of the pioneering studies of linguistic minorities is Derrick Sharp's study of languages in bilingual communities in Wales. He noted that people used two separate languages in the normal course of their day (Sharp, 1973, p. 7). He was interested in the attitudes and motivations for learning both English and Welsh. Despite the fact that his study took place outside of the Canadian context, it is relevant to our study as it demonstrates language adaptation. Sharp found that his subjects would adjust their language use many times during any given day in order to complement the activity the were involved in at the time, whether it was socializing with others, learning, watching television, or listening to the radio. Sharp identified this behaviour as "code switching," when it occurred in the company of others, and "switch codes" if the language change occurred through experience. He believed that English was the easiest language to adopt and thus minority groups needed special treatment in education and in the media in order to preserve their maternal language (Sharp, 1973, p. 13). He was clear that changes would be slow and that political action would be necessary for the preservation of

language (Sharp, 1973, p.15). In his article, "Aspects de l'assimilation linguistique dans une communauté Francophone de l'Ontario," Raymond Mougeon (1975) finds that the aptitudes and the practices of subjects are influenced by age, gender, social class, and language or the habit. In a later article, Mougeon (1982) notes that the frequency with which young people use French depends on the language used by their parents, their level of education, and the language used in the student's community. He also finds a difference between socio-economic groups where working class youth are less proficient in their French skills than middle or upper middle class youth (Mougeon, 1982, p. 56). Mougeon concludes that the linguistic assimilation depends on factors external to the school system, such as the communication between parents, and a difference in the use of French by the students themselves. In fact, Mougeon notes that the first factor can work to influence the latter (Mougeon, 1982, pp. 88 – 89).

Thomas Maxwell (1977) draws attention to the Francophone minority situation in Toronto. He states that the French speaking percentage of the population is increasing, but notes that Francophones in the area represent diverse cultural, ethnic and religious backgrounds. Based on their differences, an assumption can be made that Toronto Francophones might also share a number of different dialects. The question then becomes: should all Francophones be lumped into one single cultural group based on their language or must their differences be recognized (Harold, 1978, p. 416)? It seems somewhat hypocritical to imply differences between two regions within the same province and not to acknowledge the difference between cultural groups who share a common language. The difference will be explored shortly when Stebbins (1994) also touches on the issue of similar interests between Francophones.

Monica Heller (1994) looks at sociolinguistics and education among Ontario's francophones. She finds two tendencies, one of resistance to the dominant culture, and one of concern regarding the quality of French. Her discussion of these tendencies is Heller's most important contribution to the literature, and they are concepts that iare important in Northwestern Ontario where francophones have immigrated from various areas in and out of the country.¹²

Heller (1994) notes that throughout history English has been heard in the halls of Francophone schools; this has historically been viewed in negative terms. However, Heller explains that there are a few different types of French: standard French stemming from Europe or Québec, "Vernaculaire" stemming from English, and regional French, which comprises dialects from different regions. Heller elaborates on her point regarding quality by using Mougeon's (1982) response to a 1989 article published in the Toronto newspaper, *Express*, which, based on a previous study, explained that Laurentian University students lacked French language ability. As Heller explains, Mougeon responded to the article by stating that it is unfair to look at the study results and conclude that students lack French language ability; rather, one should recognize that the students demonstrated a variety of French, which did not coincide with the language type that was valorized by the University (Heller, 1994). To reiterate the importance of Heller's article: it brings to light the differences within the French language itself and the attitudes

¹² Interestingly, at several points throughout the process of administering the survey, comments regarding language were made. The secretary of one school mentioned not wanting to participate in French organisations in the area as she felt they promoted Québécois not Franco-Ontarians. Several principals approached to help with the survey distribution commented about their students and parents ability to communicate in French, whereas the organising groups, Conseil Scolaire Catholique des Aurores Boréales, Association des Francophones du Nord-Ouest de l'Ontario and the research team worked to perfect the language. Some respondents also corrected the letters sent along with the questionnaires, while others stated that the language was not common to the area.

and failings of the educational system, as well as the professionals who shape it. Heller's work also compliments Mougeon and Maxwell's (1977) work on socio-economics and multiculturalism, as well as Stebbins' work regarding the strength-based model.

Robert Stebbins (1994) has also studied francophone linguistic minorities in a majority context. His longitudinal study took place in Calgary, Alberta between 1987 and 1992. His work starts with a re-examination of critical socio-linquistic concepts, namely Francophone, Francophile, Anglophone and francophonies. Unfortunately, Stebbins does not offer a Canadian usage definition of bilingualism – and it remains unclear to what degree individuals must understand both languages in order to consider themselves bilingual. The lack of definition is rather unfortunate as Stebbins (1994, pp. 100-112) spends a significant amount of time, in a discourse on bilingualism, listing a number of disadvantages, finally leaving readers with a sense that these disadvantages lead directly into assimilation.

Similar to Maxwell (1977), Stebbins (1994) notes the multicultural plurality of Francophones. He also notes that the majority of linguistic and cultural tensions experienced are due to *la grande chicane*, a disagreement, which occurred between Francophones from different parts of the world. He claims that this is when many Francophones chose to abandon their ties with others and hence faced assimilation into the majority (Stebbins, 1994, p. 28). He furthers this idea by stating the implication that Francophones are from Québec or that the Québecois are resented by Francophones who are from other provinces or other countries. Stebbins does, however note the importance of Québec in terms of influencing federal policies (Ibid, p. 11). He continues this argument by explaining that Francophones are keenly aware of assimilation, but also see

the benefits of assimilating into Anglophone society (Ibid, p.12). Unfortunately, Stebbins does not pursue this statement to offer further insight into its validity. Stebbins appears to be keenly interested in the lifestyles, attitudes and vitality of Francophones.

At the outset of his study, Stebbins (1994) finds that the household is influential in French lifestyle and participation. However, he describes a number of factors that influence the household, such as exogamous relationships, limited Francophone media, difficulties in finding French childcare, and the unintended use of the majority language. In terms of statistics, Stebbins cites Roger Bernard's 1991 longitudinal study, where in exogamous relationships he found that 45.1% of French children spoke French at the age of six yet by the age of 13 the percentile had dropped to nearly 10% (Stebbins, 1994, p. 41).

While he explains that the household is where the French lifestyle influences come from and provides helpful recommendations for parents, he also explains that school is the second main center of Francophone activities; as such, policies within the educational system can be quite fruitful (Ibid, pp. 30-51). Stebbins also notes community issues, such as the lack of French media, the time commitment in being involved in Francophone activities, inter-personal issues (Ibid, p. 64), consumerism issues (such as not being able to purchase greeting cards in French), and finally the assumption of similar interests as factors that inadvertently push people towards assimilation. Stebbins cites one of his subjects saying, "[i]t's a common mistake to think that because we all speak French, we all share the same interests" (Ibid, p. 70).

In delving into leisure activities, Stebbins (1994) finds that 50% of the respondents watched francophone television, but would watch English television between

70% and 80% of the time. He also notes that his subjects cherished listening to music, but only 57% listened to the radio regularly (Stebbins, 1994, pp. 60-61). In the area of community vitality, Stebbins finds that while it was uncommon among Francophones to be involved in numerous organization groups, 78% of respondents belonged to at least one Francophone group.

Accordingly, regarding our understanding of social impact, education and mother tongue on Internet use, when keeping Stebbins' (1994) discourse in mind, it can be noted that a difference exists between Francophones, Anglophones and Bilinguals and that difference can translate itself in a difference in Internet use. Furthermore, without articulating it in terms of social capital, Stebbin notes that participation is influenced by occurences in the household and in the education system. Therefore, a conclusion can be made that participation in French language activities relies on mother tongue (which is cultivated in the household) and education (also a cultivator of language). The idea of education as a cultivator of language leads to an understanding that the impact of education might not necessarily mean that activities are impacted by academic material, but moreso by the cultivation of language and importance placed on culture throughout the education system. The higher the level of education, the larger the amount of time spent in the system.

Francophones & Media

Today, not only does literature regarding linguistic vitality exist, but specific studies regarding minority use of various forms of media are become more and more prominent. In fact, Naila Amrous (2006) also wonders about the Internet's effect on Francophone culture and language. She raises the difficulty that the Internet poses such

as the "uniformalization" into one culture and the exclusion of many languages and cultures. According to Amrous (2006), much of the information available on the Internet is English. Without substantiating it in the article, Amrous (2006) blames this misrepresentation on the population's literacy, and on the lack of equipment, infrastructure and technology competences. However, Amrous believes that the Internet is favourable to multiculturalism and provides readers with a framework to aid in cultural preservation on the Internet.

Clement, Baker, Josephson and Noels (2005) also contribute to the literature regarding media as a tool of assimilation by developing a longitudinal study for minority and majority groups in a bilingual institution. The study confirms that the media is "conceived as servicing potentially both assimilation and pluralism" (Clement, Baker, Josephson and Noels, 2005, p. 418). In the interest of understanding ethnolinguistic vitality and ethnic identity in a bilingual setting, Clement, Baker, Josephson and Noels found that minority groups identified with the dominant language much more than majority groups, but over time, both groups used the dominant language media (Ibid, pp. 406, 418). According to the researchers, the consequences of media usage perpetuate its use (Ibid, p. 418).

Clement, Baker, Josephson and Noels (2005) would therefore believe, according to the present study, that maternal language would have little impact on the use of the Internet in French, since, eventually, the Northwestern Ontario Francophone population would migrate their patterns of Internet use to the English language. In other words, Clement, Baker, Josephson and Noels(2005) would not initially discount findings on the impact of the mother tongue, but rather would say that in the grand scheme, the impact of

the mother tongue would not matter. Their thought process regarding language migration goes hand in hand with Lachappelle and Henripin (1982), who believe that population rates are the determining factor, and with Sharp (1973) Heller (1994), who state that English is intrinsically learned in society. This notion, however, directly contradicts the work of Naneiellen Davis' (1985) and Amrous (2006), who believe that individuals' persistence can be strong a factor in the retention of Francophone language use.

For more specific regional information, Simon Laflamme (1997, 1998, 2004) has been investigating the linguistic situation specific to media use of Francophone minorities in Northeastern Ontario for quite some time. Laflamme (2004) carried out a study on the media in Ontario, where he distributed 703 French questionnaires and 253 English questionnaires in the Sudbury area. Laflamme's goal was to understand the ownership and use of the media between the two linguistics groups. He asked questions relating to the radio, television, copiers, scanners, call display and cell phones. Laflamme found that 86% of English respondents own a computer, compared to 65% of their Francophone counterparts. Moreover, he explains that Anglophone respondents have an advantage on nine media, and proposes that this difference is due, in part, to the education level of Francophones. He does note that while Francophones tend to have inferior levels of education, they remain at the same economic level as their Anglophone counterparts (Laflamme, 2004, pp. 258-260). The study carried out by Bernier and Laflamme (1998) confirms the findings of the two studies already mentioned, although it precedes the 2002 study.

Internet and Telecommunication Technology

Technology has been helping us transform our society, both socially and

economically, for centuries, from the invention of the spinning wheel, to electricity, to telecommunication technologies such as the telegram and telephone service. Today, the Internet can be used by a number of electronic devices, and appears to be the backbone of our intelligence resource. Prior to moving on to the impact of technology offered by the Internet, a brief exploration of the history of technological development and telecommunication must occur in order to understand how the Internet evolved to where it is now, and how far it can continue to grow.

While it is important to understand that in the past half century technology has progressed very quickly, one must note that technological innovations were developed and introduced in clusters (Castells, 2000). The computer was born in the United States in 1946; it was used mostly by the American military and scientists until the late 70's (Ibid). In 1971, Intel released their microprocessor, allowing for commercial and personal computers, which were smaller and developed faster (Ibid, p. 40). Commercial and personal computers were introduced between 1976 and 1981; shortly thereafter, the lack of proprietary rights allowed the PC to be cloned (Ibid, p. 43), thus allowing for lower costs. Modems were invented in 1978, and allowed communication with others by linking computers over a regular telephone line (Ibid, p. 48). In fact, as Castells notes, "many of the applications of the Internet came from the unexpected inventions of its early users" (Ibid, p. 48). By the 1980's, with technological advances and the birth of the Internet, focus turned to telecommunication technologies; networks could be connected anywhere provided that they had access to a telephone line and a computer equipped with a modem (Ibid, p. 43 - 48).

With the focus on telecommunication technologies, the inception of various forms

of Internet language¹³, the growth of e-mail, mailing lists, and virtual communities as well as the advances in the cellular telephone and its diffusion in the 90's, private corporations began to take more interestin technology (Castells, 2000, p. 44). As Sterling reports, in 1992 the Internet had a growth rate of 20% monthly (Sterling, 1993, p. 4). With pressure from the commercial realm, private, non-profit, and cooperative networks, the Internet was fully privatized in 1995. As Castells (2000, p. 46) notes, "[o]nce privatized, the Internet did not have any actual overseeing authority." According to Castells, the Internet would not have survived had it not been funded by US government institutions, universities and research centers, and it was shaped by those individuals who used it. In fact, the corporate world was invited to participate early on, but the technology was too expensive, and a much too risky endeavour (Castells, 2001, p. 22 - 29).

Castells (2001) leaves his readers with hope by inferring that the Internet is theirs and as such, they can continue to shape it. While this might be accurate to a certain level, when applied to individuals living in a minority context, the emphasis needs to be on the question of which users can shape the Internet, and what resources these users could access. Individuals need to know how to use the technology prior to being able to change it. They must also understand that they *can* change it. The notion of shaping the Internet is particularly important when thinking of the bilingual person. If a bilingual person is new to the Internet, she or he might not know that they can perform searches in their maternal language and use French programs on their computers. Based on the review of literature produced by Sharp (1973), Maxwell (1977) Mougeon (1982) and Heller (1994),

¹³ World Wide Web (WWW), Hypertext transfer protocol (HTTP), universal resource locator (URL), and java.

it is anticipated that Francophones or bilinguals will automatically form the habits of searching for English information and using English based Internet related products.

Furthermore, it is important to note the infrastructure difficulties that are still prevelant in Northwestern Ontario, which further limits individual access; an important problem that was also generally raised by Heller (1994).

Castells' (1997, 1998, 2000, 2001) attempt to look at the new communication technologies through its complexities is remarkable. Nonetheless, his exerts do not necessarily offer any predictions into the future or for community vitality. There remains hope that as the Project Internet Catalonia comes to an end, Castells might have more insight to offer on the impact of the Internet for minority groups dealing with real fears of cultural singularity.

While Castells (1997, 1998, 2000, 2001) identifies the flexibility of the Internet and the potential of freedom within cyberspace, questions regarding the commercialization of the web, including the dominance of Anglophone culture, remain. In addition, while he raises the notion of 'networked individualism,' which is described as a social pattern where people have the opportunity to build social networks based on their own interests and values, his views on the social implications of individual use of the Internet is incomplete at best. Castells completely ignores making futuristic predictions about the social implications of the Internet. While there is no doubt that the Internet provides the freedom for individuals to find information on their personal interests and to form social networks based on those interests alone, this might be achieved to the detriment to their current cultural identity. The accessibility and ease of developing interests and social networks online does not necessarily mean that it would

be impossible to find such support within their linguistic or cultural identity. In fact, according to Rosemarie Ostler (2000), writer for *Whole Earth* magazine, "many linguists predict that at least half of the world's 6,000 or so languages will be dead or dying by the year 2050." (Ostler, 2000) While it seems that the French language is not in danger of extinction, it would be unwise to ignore the assimilative nature of the English language which has dominated online activities -without further research into the media usage of Francophones, particularly those living in a minority context. It is also important to expand our review to other works in the area of technology use on communities.

While Castells (1998, 2000, 2001), Wellman (2001), Hampton & Wellman (2003), and Tough (1995), to name a few, continue to promote the positive attributes of the Internet, especially as a mode of communication, none seem to be doing this blindly. In fact, all seem to address a caution of sorts respecting potential drawbacks of the Internet. Clearly, there are some negative affordances concerning the Internet, ranging from issues regarding privacy, surveillance, and vulnerability, to issues dealing with computerized crime and occasional breakdown. Nonetheless, the good might outweigh the bad (Wellman, 2001, p. 229).

As a result of broadband and wireless technologies, communication can be everywhere, anywhere and nowhere (Castells, 1998, 2000; Wellman, 2001, p. 230). As such, the Internet can also support individualism – not just communities. The notion of support for individualism is promising for Francophones, particularly those living in an Anglophone-dominated Northwestern Ontario. The Internet could possibly be perceived as a virtual community that fits their linguistic identity. The social networking available online could ensure that the individual in question remains in contact with others, such as

family and friends who live elsewhere. Moreover, social networks can also be a source of information and support that help francophone groups connect to each other within a community, as was the case described by Hampton and Wellman (2003) about the socialization that occurred between the wired and unwired groups.

As a method of understanding and becoming more able to make futuristic predictions of community vitality, Wellman (2001) introduces a framework which identifies an evolution in periods of social networks. Embedded within this evolution are different types of technologies that have affected communication and by extension, communities. Wellman begins by explaining 'door to door' networks, which translate to traditional neighbourhoods where there exists very little choice, in fact almost none, in the network to which the individual belongs (Wellman, 2001, p. 231 – 233). He then explains 'place to place' networks, which also present little choice in the network that the individual must belong,; however, they allow for technologies which can permit movement between localities, such as the telegraph, the telephone, and the postal system as well as transportation mediums (Wellman, 2001, p. 233 – 237).

In a later publication, Hampton and Wellman (2003, p. 278) note that individuals usually have more friends outside of their neighbourhood than within it. To assume that friendship and family ties remain regardless of the amount of migration and outmigration is logical. As our systems continue to become globalized, and workers continue to migrate to areas where they can find work, new technologies allow for the home to transform itself into a centre for communications, receiving information, obtaining good and services, and providing contact with others as well as providing diverse entertainment. While the world is changing, and potentially becoming

geographically challenged, the need to communicate with our loved ones, our colleagues and individuals within our varied networks remains and might become even more crucial.

Now that there is an understanding of the existence of social networks and some understanding of their importance and necessity for human interaction, attention can focus on what will happen in the future and how researchers perceive the Internet will impact individuals themselves as well as society as a whole.

The amount of research that fosters anti-technology sentiments or even a rejection of the new globalized world is tantalizing. Not only does Paul Tough's (1995) article provide a wonderful, though brief, look into the popular debate, but other works such as Robert Putnam's (2000) and Normand Nie's (2001) also lead readers to consider choosing a more organic method of interacting. There is no doubt that the Internet provides a medium which can support individualization as opposed to fostering community strength. As Wellman notes "personalization need not mean individual isolation" (Wellman, 2001, p. 231). However, while Castells and others also make this argument, to accept this notion as a purely positive point is not prudent. An idea can be put forth suggesting that freedom and the possibility of individualism are not always beneficial for the community's vitality. Personal interests can lead people to move towards unintentional use of the English method as opposed to strengthening French identity and cultural or linguistic retention.

According to Wellman, wireless technology is helping to shrink the digital divide by bringing technology to Castells' 4th world areas (Wellman, 2001, p. 230). Regardless of the digital divide and the strong health of social networks in cyberspace, physical space -everywhere, is thriving. Travel by air and by vehicle has increased and

electronics, regardless of the type, will always have components that break or are intrusive in some nature. Wellman asserts that cyberspace fills gaps and presents options (Ibid, pp. 246- 248).

Clearly, from the social network evolution, one can understand that neighbourhoods and communities are no longer one and the same (Hampton & Wellman, 2003, p. 284). Local ties remain important for both neighbourhoods and individuals, since they are physical in nature and are the only method of truly bringing support and aid to others. Whereas local institutions are on the decline, particularly in Northwestern Ontario where local institutions might not be locally accessible in every community or in the minority context, local interaction and thus community vitality / identity might not be promoted externally.

The concept that technology will destroy communication had been addressed numerous times in the past. Similar debates took place with the invention of the telegraph, the telephone, and more intensely with the television. Putnam's (2000) work on social capital is a good example of work that creates despair over the Internet's effect on privatism. There is no doubt that Putnam puts forth some good arguments, yet technology continues to evolve and social networks continue to develop and grow (Hampton & Wellman, 2003, p. 284). What is important is to address fears regarding technology's impact on our society. A clearer understanding of the direction of growth, including benefactors, users and losers, is imperative. When analysis is completed by looking at both the positive affordances and the consequences of technology, then a true understanding occurs and real progress can begin.

Inevitably, the Internet will continue to grow; however, the way in which society

intends to use the new communication technology could change. (Tough, 1995, p. 39). The Internet, or more specifically cyberspace, should not be viewed as an alternative space but mainly as an auxiliary space. (Tough, 1995, p.43).

While Putnam (2001) and Nie (2001) fear that social capital is threatened as a result of people being less involved in their communities, Castells (2001) and Wellman (2001) believe that the Internet supplements social capital. In fact, Castells believes that individuals are becoming much more involved online, and that social networks and virtual communities are on the increase, which for him translates into social capital for users. In his text, *Internet Galaxy*, Castells (2001) looks at the La Neta, Zapatistas, Seattle's, Digital City in Amsterdam, and France's Messageries Roses; he sees them as groups who have used the Internet to challenge their current realities and their identities (Castells, 2001, pp. 53-54). According to Castells, these virtual communities have been shaped in "social forms, processes, and uses" and function on the basis of "horizontal, free communication" and "self-directed networking" (Ibid, pp. 53-55). These communities were born only in part in technology, but more so out of the fast and often overwhelming societal changes affecting Internets users, such as the transformation of traditional institutions, networks and the many changes affecting employment such as joblessness and flex-time and the need for communication and human connection.

While Castells' (2001) argument is clear and could easily be extended to any minority group attempting to assert their collective interests such as gender inequality, sexual orientation or political oppression, it may not be as simple for language, particularly when the maternal language is the minority and is already supplemented by the dominant culture. In his writing, the reader gets the impression that Castells' view of

identity is limited to race and ethnicity without accounting for the importance of language (Castells, 2001, p. 52-57). One wonders if, in the absence of race and ethnicity, language can become the eminent inequality. While later, Castells (2002) does look at language, he does so in Catalonia, a setting where many Catalans reside and which offers access to a variety of Catalonian media. Ideally, Francophones in minority situations can use freedom of expression and self-directed networking in order to retain their culture and language. The question therefore becomes related to the way in which the bilingual (French and English) population adapts to the attributes offered by the new communicative technologies. Furthermore, when discussing identity, Castells notes that the Internet takes away from identity (language) as it makes the states' laws irrelevant¹⁴. The irrelavancy of laws on the Internet raises some concerns for Canadian francophones, particularly since the government has made an effort at ensuring bilingual access for francophones.

Digital Divide

The digital divide is an important concept when dealing with issues related to the information age and its network world. As noted in the introduction, it is a term that is broadly used. Simply, it relates to the division and the inequalities that are shaped by the system. These inequalities are across the board, touching most marginalized groups whether because of income, education, age, employment, ethnicity, family status, disability, or geography. While Castells (2001) and many other researchers report that the gap is closing, (Castells, 2001, pp. 252-254; Wellman and Haythornthwaite, 2002; Tough, 1995) there remain many difficulties for certain groups. In part, the gap appears

¹⁴ For additional information: see Castells (1997) discussion on legitimizing identity, resistance identity and project identity.

to be closing as the availability of personal computers, software, and other communication technologies are increasing, and since the costs of ownership and services have been significantly reduced. In addition, globally there are many more opportunities for use with the implementation of technology in various public areas, such as employment centres, libraries, and Internet cafés. Castells (2001) notes one caution about the closing gaps in the digital divide and the new technology as he acknowledges that it is possible that when the technology arrives to a marginalized group, the elites have moved on to newer technology (Castells, 2001, p. 256).

A large amount of literature indicates that these inequalities (especially income and education) also touch Franco-Ontarians and particularly Francophones from Northwestern Ontario. In the recent past, the data suggests that the francophone (educational and financial) situation is improving, it is improving at a much slower rate than the improvements found with the anglophone population. In terms of Canadian Internet use, Dryburgh (2001) reports "Francophones are less likely to use the Internet than Anglophones, and those living in rural Canada are less likely to use the Internet than urban dwellers" (Dryburgh, 2001, p. 4). Castells himself notes that "[s]tudies show that minorities [who have access to the Internet] tend to use the Internet mainly for practical matters related to job search, education, health information and the management of everyday life issues" (Castells, 2001, p. 254).

Also particularly important to note, as does Castells (2001), is that access to technology is not the only method of closing the gap. In fact, access to technology is only part of the problem (Castells, 2001, p. 248) within the digital divide. Also imperative regarding the issue of differentiation is the understanding that this digital

divide can occur both between different regions and within a particular region. While Castells does focus on the intra-country divide, he tends to focus on traditional inequalities such as age, education, and ethnicity. Nevertheless, what is interesting about the francophone population is that, primarily, what sets them apart as a culture is their linguistic difference from the dominant culture.

Regardless, in Internet Galaxy, while Castells (2001) acknowledges the overwhelming (87%) amount of English websites, he argues that the Internet should not be a source of inequality in language, as the Internet is global and can allow individuals to find information or communicate with others in the same language (Castells, 2001, p. 253-254). While at the first glance, this seems logical, once articulated in practical terms, it seems like a utopian ideology. There are a few problematic points in this regard. First, Castells seems to limit his rationale to unilingual minorities rather than fluently bilingual people as is the case in Northwestern Ontario. While in his Catalonian study Castells (2002) looks at language, the respondents reside in a mostly bilingual setting. In Canada, the federal government protects the francophone culture with language laws (Official Language Law Group, 2000); however, the Internet, as a global production, cannot offer individuals protection from the state. Even if Canada created language laws to preserve the culture and heritage of Canadian francophones, the language laws could not possibly be enforced. While assimilation levels cannot be measured in the scope of this thesis, one wonders if in this situation, the Internet inadvertently becomes a tool of cultural assimilation or at least a tool, which promotes and fosters cultural singularity.

Through reading Castells' work on the Internet, the idea that technology is used and is changed by the needs and desires of the individual user becomes clear. While the

concept of the digital divide holds many uncertainties, society has already established and moved into the information age with its very ingrained new economy. Castells warns that this process cannot be undone. However, he does offer hope that it can be modified through collective individual action (Castells, 2001, p. 270).

For this reason, it is difficult to predict the outcome in society, particularly in response to minority or marginalized groups who are currently unable to use such new communication technology. While the highest percentage of broadband access occurs in the lowest economic group, ¹⁵ other than a very basic understanding, knowledge about the use of the Internet is not taught in schools. As a result, others (such as family, friends other services or the corporate sector) must take the responsibility of sharing this knowledge (Castells, 2001, p. 259-260). This leads to many implications for families who may not be familiar with the usage of technology or who might not recognize the importance of using it. Furthermore, in the context of families living within a minority context – in our present case, the French population – they must be able to find information in French.

Netville and Catalonia

Two studies helped shape this particular research, and both seemed to fall within the context of the Internet as enhancing or forming new social capital. The first, a Canadian example, is discussed in Hampton and Wellman's 2003 report on the Netville experiment. The second, an international study, is derived from Castells' 2002 report on Catalayan Internet usage (Network Society in Catalonia).

Neighbouring in Netville, an Ontario report completed by Hampton and Wellman

¹⁵ Lowest economic group is listed as those making under \$5000 annually - accounts most likely for students, who need broadband for downloading, music, video, as well as participating in research endeavours (Castells, 2001, p. 257).

in 2003, was the result of a study on 109 suburban homes located approximately 45 minutes from Toronto, Ontario. The new development, labelled a *smart community*, was one of the few communities built from the mindset of ensuring full access to advanced communication technologies, which was an integral part of the research design. Sixty-four of the homes were equipped with high-speed Internet services at 10 Mbps; and 45 homes remained without domicile access. All homeowners who participated in the study were between the ages of 25 and 68, of middle class socio-economic status and held university degrees, and the average household income was \$81 000 (Hampton & Wellman, 2003, p. 289).

The longitudinal study was administered through a combination of pre- and post-computer assisted and face-to-face interviews, as well as a number of surveys. The technology trial and the experiment ended, after two years, in 1999 after the loss of high speed Internet access provided by the developer. As part of the research, Hampton also lived in the community, and thereby was able to supplement the research with observations and anecdotal evidence (Hampton & Wellman, 2003, p. 291).

In the analysis, researchers were interested in primary information and controlled for education, gender, age and length of residence. Other than those who had technology in their homes, age was the only variable that was found to be significant when combined with respondents who recognised their neighbours by name. Hampton and Wellman (2003) found that the most popular usage amongst all participants was the neighbourhood email list as it was reported to be the easiest method to use. Contrary to their expectations, the videophone was rarely used other than for demonstrations (Hampton and Wellman, 2003, p. 294).

Hampton and Wellman (2003) found a number of interesting findings related to community involvement. First, they found that the community participation increased; it was noted that individuals preferred to put out chairs in their cramped front porches than on their large back decks. When asked the reasoning behind this particular use of a front lawn, people maintained that they were able to exchange greetings with their neighbours and other community members. Furthermore, more of the users would go for regular walks in the community, and people who met on the sidewalk automatically had something in common to talk about (Hampton & Wellman, 2003, pp. 299-301). Not only did the Internet provide space for people with specific interests, but the Internet alone could become a focal point in a conversation, thus providing an instant ice breaker. Also of interest is that the community control was organized online and appeared to be strong (Ibid, p.302) following a few break-ins. Community gatherings were organized online and collective action took place on a number of issues, particularly against the developer, such as housing repairs, Internet difficulties or the developers' refusal to deliver on promises made to the homeowners (Ibid, p. 303). Finally, regarding the difference between participants whowere wired and those who were not, contact between the groups emerged when wired participants started sharing information by printing it and posting it on community mailboxes (Ibid, p. 301).

In fact, and in direct contrast to Putnam (2000), based on these findings, Hampton and Wellman write that that they wonder if "the Internet provides a way for people to stop bowling alone" (Hampton & Wellman, 2003, pp. 303). The results of the study are clear, and suggest that global connection might lead to local involvement (Ibid, p. 306). Furthermore, Hampton and Wellman leave readers with less fear of Internet witchery and

community despair but morewondering about the future and, perhaps, instilling questions regarding the digital divide beinglooked at narrowly in terms of access when people should be more concerned about the problem of marginal technology skills.

In his 2002 study, Castells looks at the relationship between social structure, culture, social practices and Internet uses in Catalan society. He also delved into the social characteristics, daily practices and types of uses of the communication and information medium used by Catalonians. Using a survey method, Castells sampled 3005 people, where only 34.6% are Internet users (Castells, 2002, p. 9). Castells' results were interesting, and contradicted writings which suggest that the Internet decreases community.

Most important is that Castells found that the Internet was not a factor in decreasing sociability as Putnam (2000), Nie (2001) and others have suggested. (Castells, 2002, p. 411). In fact, Internet users were found to engage in more social activity than non-users, but the significance was marginal at best. In terms of human contact, Castells found that most participants met with family and friends through traditional modes such as face-to-face meetings or by using technology such as the telephone. However, respondents used the Internet to communicate with their friends living at a distance. Younger subjects participated in chats and other online programs in a similar fashion to personal interaction (Ibid, p. 411). In addition, when looking at the impact of other media, instead of affecting personal communication, Castells found that the television use was sacrificed for the Internet: 16.6% of people watched less television.

Also important in Castells' (2002) Catalonia study – and highly applicable to our present study - is language. While 97.6% Catalonians understand Catalan, the target

population was linguistically diverse and generally, most respondents were at least bilingual: they understood both Catalan and Spanish, and both languages were represented in the media. Castells does note that supply and individual choice are a factor in media use (Castells, 2002, p. 412).

According to Castells (2002), media consumption reflects the linguistic practices of the culture, which Castells is able to identify as Catalan. Of those with a strong Catalan identity, more than half write Catalan emails and visit Catalan websites, 76.9% and 50.7% respectively (Castells, 2002, p. 413). Interesting, though, is that while knowledge of Catalan language is higher for younger respondents (less literacy difficulties) than the older population, the Catalan use of the Internet was lower. The opposite was true for the older Catalan population; the recorded use of the language is higher even though the knowledge of it is lower than their younger counterparts (Ibid, p. 412). Castells also notes that respondents moved toward using Spanish more comfortably without necessarily abandoning their Catalan identity (Ibid, p. 414). Again, Castells does not make any future predictions, nor does he delve into the argument of cultural singularity or the media, particularly the Internet, as a tool of assimilation. While this argument might be extreme, as the Internet can clearly bring about information to help preserve and strengthen culture, it does not negate the need for further exploration of the consequences of the Internet on culture.

Technology in Northwestern Ontario

While information is sparse in terms of the availability and accessibility of technology in Northwestern Ontario, there is significant need to address this issue within the context of this thesis. At this point in the paper, it is imperative to reflect on the

Current situation regarding technology specific to the region. Any frequent driver between Northeastern and Northwestern Ontario will say that cellular access is not necessarily available for all residents, regardless of the claims made by cellular or wireless Internet providers. In 2001, on behalf of the Fast Forward Thunder Bay, a coalition whose mandate is to ensure the vitality of Northwestern Ontario, Margaret Wanlin (2001), introduced a report reviewing information technology in Northwestern Ontario.

Wanlin (2001) found that there were significant advances in cellular coverage within the area, with plans to increase the coverage by 2002 to some areas on the provincial highways, excepting the area between Geraldton and Longlac and some sections between Nipigon and Sault Ste Marie. Furthermore, High Speed Internet service was introduced in both Thunder Bay and Kenora in 2001; however, these services remain inaccessible to areas outside of these cities. Similar findings and solutions were identified in a report published by the Northwestern Ontario Municipal Association (NOMA) in January 2007.

Of significance for the entire region is that groups, such as the Northwestern Ontario Technology Centre and the Northwestern Ontario Technology Association, as well as some government programs, encourage connectivity (Wanlin, 2001, p. 6). As Wanlin (2001) notes, this is particularly important to Northwestern Ontario since the size and population within the area does not produce enough income for the private sector to drive the development and implementation of a proper infra-structure (Ibid, p. 5). The subsidizationis also inline with Castells' (2000, 2001) account of the history of the Internet; Northwestern Ontario may not have been privy to the government assistance provided to urban and more developed geographical areas. But more importantly,

Wanlin's work also indicates exceptions in technology use in areas that are populated with Francophones. While perhaps not intentional on the part of the technology planners for the region, by withholding services in the areas that are designated under the French Language Service Act, they are systematically continuing to marginalize Francophones and adding to the digital divide of the region.

While Wanlin (2001) remains positive about Northwestern Ontario's progress, she also notes gaps in service, as well as the fact that while the cost of bandwith has been reduced, it remains high in comparison to other areas (Wanlin, 2001, p. 8). Some new communication technologies do not function properly unless connected to the Internet. Without perhaps intending too, Wanlin might be supporting Castells's claims that the largest problem with Internet services is low bandwidth (Castells, 2000, p. 191). But most importantly, Wanlin addresses the amount of time that is taken in order to upgrade or implement necessary service, the downturn of the economy, and the shift in support based on federal, provincial, and municipal governments. Together, these issues can create incredible difficulties for users, but also for those individuals who are working diligently to ensure that Northwestern Ontario does not fall victim to the Digital Divide within the Canadian Context (Wanlin, 2001, p. 9, 12).

To move forward on Wanlin's (2001) argument and also as noted in other research, (Wellman & Haythornthwaite, 2002; Laflamme, 2004; NOMA, 2007) not only does infrastructure need to be available, but individuals need to know how to use new technologies. Furthermore, they need to know that in the process of using it, they can change it to suit their needs. For instance, in Northwestern Ontario, there may be a need to teach software programs to French minorities in their dialect of French, to tell them

how to convert their keyboard into French, how to search online in French, and where to find the information they want in their mother tongue. Based on Castells' (1999) and Altman's (n.d.) discussion papers regarding the digital divide, one wonders if it is possible that as a result of the lack of hope for the economy in Northwestern Ontario, businesses and the government are avoiding financially dealing with the infrastructure. Adding in the factor of a francophone population and its individual and collective needs, it is realistic to raise a similar question, especially when the francophone population is relatively limited in the area.

Wanlin's (2001) survey presented itself as a perfect opportunity to investigate what users would need in Northwestern Ontario; unfortunately, however, Wanlin did not identify the popular uses of new communication technologies in 2001 while building her report. In *The Rise of the Network Society*, Castells (2001) notes that individuals tend to use the Internet for reasons for which it was not initially intended, some of the most common being to download or view pornography, music, various audio and video streaming, video-games, news, books, journals, radio, and to participate in instant messaging (Castells, 2001, p. 192-200). Interestingly, these activities could fall under the realm of recreational activities. Heather Dryburgh (2001), in her study on Canadian use of the Internet, also reports that in 2000, Canadians use the Internet mainly (66%) for personal interests. Castells explains this best by stating that "the wonderful thing about technology is that people end up doing with it something different from what was originally intended" (Ibid, p. 195).

To conclude, the review of the literature has provided valuable information which helps inform the question of what the impact of social capital, education and mother

tongue is on Internet use and French Internet use. The important task of understanding the context which forms our sample population was achieved through a literature review which covered an introduction to new communicative technologies, a discussion of the issues regarding those technologies, a history of the region and the differences in the socio-historic conditions between Northeastern Ontario and Northwestern Ontario, and Francophone migration patterns. The task of investigating the impact of social capital, education and mother tongue was addressed in the later part of the review of literature. Some of the literature (Amrous, 2006; Clement, Baker, ; Lachapelle and Henripin, 1982) indicated that nothing can be done to change the course of the dominant language's assimilative nature, while other literature (Sharp, 1973; Stebbins, 1995; Mougeon, 1982; Maxwell; 1977;) offered insight into the methods by which minorities adapt their language to the dominant culture. While this information is mainly about cultural singualarity, it nonetheless informs us about the use of maternal language and its process, thereby making it important to the central topic of the research. Information was also provided, through the existing literature, on education (Mougeon, 1982; Heller, 1994; Laflamme, 2004; Bernier et Laflamme, 1998; Stebbins, 1995) and social capital (Hampton and Wellman, 2003; Stebbins, 1995).

Chapter 3: Methodology

The basis of this thesis stems from the idea of media use as promotion of community vitality versus media use as a tool which leads to cultural singularity. The literature is plagued with discourse regarding the possibilities that can be unleashed with new communicative technology, whether it be spun in a positive or negative manner. The framework of this thesis centers, in large part, on the work of both Castells (2002) and Hampton and Wellman (2003). Castells points to the benefits of the Internet in globalization while warning his readers of the dangers of the digital divide. Hampton and Wellman, on the other hand, focus on Internet use and communities, finding that usage goes hand in hand with social capital including personal income and education. More specifically, the goal of this thesis is to identify the impact of social capital, education, and language on Internet use, especially French Internet use. In order to achieve this objective, several hypotheses based on the literature are formulated. The study trusts that the higher the level of personal annual income, the higher the use of the Internet; the higher the level of French community commitment, the higher the use of the Internet in French; the higher the level of education, the higher the Internet use; the higher the level of education, the higher the use of French on Internet; and finally, the study expects that Francophones are less likely to use the Internet than Anglophones.

While the decision was made to explore these questions on a quantitative basis, other methods could have been chosen. In his Catalonian study, Castells (2002) used a structured interview process. For the purposes of his study, a questionnaire was answered through face to face interviews of 3005 individuals over the age of 15 years in

their individual homes. The survey in question focused on Internet usage as well as the participants' social characteristics and regular activities (Castells, 2002, p. 9). Importantly, the *Network Society in Catalonia* is part of a greater project, namely: the *Project Internet Catalonia*. On the other hand, Hampton and Wellman's (2003) Netville study used a combination of computer assisted personal interviewing and computerized interviewer-administered surveys in their Toronto suburb "smart community" in order to do a longitudinal study (three year) of adult residents. As a second portion of the study, Hampton himself was also able to provide his participant-observations as he resided in a basement apartment in the suburb.

Both examples yielded thorough results and were able to provide insight into the sample populations' media usage. There is no question that interviewer administered questionnaires and some level of ethnography would reduce the chance of response error and would enable further understanding of the issues surrounding media use. There is also a clear ability to understand what the researchers may have missed in the creation of the survey, and to possibly allow for clarification on the questions if not understood by the participants. That being said, however, both methods are quite expensive. Because of the vast geography of Northwestern Ontario and the scarcity of francophones within this area, conducting qualitative or interviewer-administered surveys would create excessive time-consumption and cost consumption difficulties. The limited resources of our project, combined with the grand scope of the area, disallowed the option of using these elaborate methods.

Simon Laflamme's various studies on media use by francophones in Northeastern

Ontario also used a combination of interviewer administered questionnaires and self-

administered questionnaires. Laflamme's studies (2004; 2005; in press; Bernier & Laflamme, 2005; Lafortune & Laflamme, 2006) using self-administered questionnaires in order to collect needed data from the sample populations in Northeastern Ontario yielded positive returns. In fact, using the school systems of the region as a method of distribution proved fruitful in a recent study (Laflamme, 2007). In collaboration with Laflamme, the method chosen is believed to be most beneficial in terms of collecting the most data possible from the sample population in the quickest and most cost effective method. The use of computerized self-administered questionnaires was ruled out, as it would inadvertently limit the sample to those who are already familiar and comfortable with technology and thus could grossly bias our results.

The results of Castells' (2005) study, Hampton and Wellman's (2003) study and Laflamme's (in press) study were noted, and as a result, the research team has ensured to (at a later date) supplement a qualitative component to the greater research project, by means of community focus groups. The qualitative component will enable verification of the findings and clarification of the ideas that have been found as well as those which were ignored.

The aim of this project is to understand media usage by francophone residents within a Northwestern Ontario context. The project is divided in two sections, one with a quantitative focus and the other with a qualitative focus. The decision to combine both methods of study was simply based on the research team's desire to ensure that the francophone population in the area was understood, and that the findings of this study could be used, if so desired, by community leaders in order to improve their linguistic situation. While both methods of research are effective, the combination of the two

methods leads to better results as each is able to circumvent the shortcomings of the other (Neuman, 1997, p. 15). The desired outcome is to conduct a study which will yield results as close to reality as possible. By using both quantitative and qualitative styles, an independent, un-biased study which focuses on both reliability and authenticity will be achieved (Neuman, 1997, p. 15).

The quantitative section of the study includes a survey, which allows a non-biased understanding of media use by French speaking citizens of Northwestern Ontario, while the qualitative section will be conducted via focus groups held in different communities within the region. The intent of the second part – the focus groups – is to share the results of the survey, to gain feedback on the accuracy of the results, and finally, to work with the feedback to help develop solutions and services to aid the Francophone community if need be. While the research, in its entirety, is applied, the first section is mostly descriptive in nature. For the purpose of this thesis, the focus will be limited to the data received from the quantitative part of the project.

The questionnaires have a two-fold purpose. First, the questionnaire addressed the preliminary proposal, which is a collaboration between *Lakehead University*, *AFNOO* and *CSDCAB*. The initial proposal had as its objective the evaluation of media use by Francophones in Northwestern Ontario. The survey needed to gather the data that the senior researchers and the collaborators would require for their studies. Second, the questionnaire needed to serve as the data source for this thesis.

The intent was to reproduce a similar version of Castells' (2002) project on the *Network Society in Catalonia*; however, it was also important to structure the data in order to compare the results to the findings in a similar project in Northeastern Ontario

(Laflamme, 2005). Therefore, the questionnaires were constructed in a manner that used questions addressing our population, and were comparable to the earlier works of both Castells and Laflamme. Both prior studies were conducted outside of the Northwestern Ontario region. Since Laflamme's study took place in Northeastern Ontario, it was imperative to utilize questions that would allow further study in the region, such as a comparative study of the regions based on the data sets collected in his early study as well as this study. As a result, Laflamme was involved throughout the construction of the questionnaire to ensure that the questions were addressed in a similar manner as those in his study.

The research team worked on the questionnaire on numerous occasions in order to ensure that the data would yield the required information. It was important to identify the socio-demographics of the francophone population, their media usage and its relation to their community. The comparison of media use and the frequency of usage in both official languages was imperative to this thesis in order to establish in which language Francophones tend to use the Internet. One problem with the study was apparent from the onset; in order to gain all pertinent information regarding the respondent, the survey would be lengthy.

The Questionnaire

A survey was created in order to establish participants' technology usage, language vitality and sociability, and to identify what the needs of the community were as seen by the members of the community themselves. The survey primarily addresses the use of the Internet, but also includes other types of media such as radio, television, personal data assistants, telephones, and computers. Included within the use of the

Internet is the ability to surf, download, stream, email, chat (either with software or through forums), as well as to use the Internet as a means of communicating via telephone. It was also important to verify wireless capabilities and browser language use in order to determine whether the Internet could serve as a tool for vitality, either as form of resisting assimilation into the Anglophone majority of the region, or as a form of ensuring Francophones' understanding of the technology. In order to ensure the possibility of future data comparison, many of the questions were adapted from Laflamme's earlier work in Northeastern Ontario (Laflamme, 2005; Bernier & Laflamme, 2005).

As mentioned above, the surveys were distributed by the two collaborating organisations, namely the *AFNOO* and the *CSDCAB*. Although Castells' Catalonia study (Castells, 2002) was prepared in two languages, the present survey was supplied solely in French, thus corresponding to Laflamme's earlier study in the Sudbury region (Laflamme, 2005). Due to long-standing issues (Laflamme, 1998; OFA, 1999) of literacy amongst Francophones in minority settings, researchers needed to ensure the use of simple language, as well as a hands-on approach as a method of delivery.

The survey went through a few testing phases through both of the collaborating agencies. As anticipated by the researchers, many of the changes were related to language, such as using an appropriate level and dialect of French. Also, the consensus amongst the groups was that the survey was too long and that there was some repetition among the questions. The questionnaire was revised once again, but it was evident that while some questions were similar, they were in no way the same question and for the

¹⁶ Unfortunately, as Internet use evolves quickly, some methods of use were left out of the questionnaires (ie: blogging), as they were an unknown phenomenon to the researchers at the time of the questionnaire's development.

purposes of our study needed to remain in the questionnaire.

Strategies to facilitate the reading of the document were also incorporated, including the use of hyphens to shorten the sentences in a grouping of questions. Several recommendations were made; however, certain suggestions could not be used, as they would negatively impact the study. An example of such recommendations was one to remove a question relating to annual income as it was felt to be intrusive. The annual income question was imperative as the data would allow us to see if patterns in income, media usage, and media access existed. The researchers made the decision to use the financial scale, which Laflamme (2005) used in his past study in order to compare the findings with his research in the Northeastern region. The students' financial scale was also changed in order to better reflect the income of students. The intent was to understand whether there was a difference in the students' income and the disposition and use of the new communicative technologies. Rather than posing the question only to those students who are employed, all students were asked the income question. For youth, the income question provides an opportunity for understanding whether parental influence, such as weekly financial allocations, influence the younger generation's technological use.

Finally, it was further recommended by the administration of the CSDCAB to remove the question relating to the use of erotic websites. As a result, the researchers agreed to remove the question from the questionnaire that would be distributed to the student body. Nonetheless, it was felt that asking adults about their use of the Internet in terms of accessing erotic websites would be important in determining the type and content of Internet use. In order to circumvent this issue, two separate questionnaires

were printed; one that would be distributed to the students within the school systems and one for adults distributed through the *AFNOO*. The separate questionnaires allowed us to remove questions from the students' survey, thereby shortening its length.

The survey hosted a combination of variables types as well as a number of Likert Scales in order to assess technology and language use. The survey yielded 276 variables and the anticipated method of analysis would be through descriptive indicators, comparison of means, and regressions.

The Sampling Section

Since Northwestern Ontario is vast and the francophone population is scattered throughout the region, the use of a self-administered questionnaire was the method most appropriate for the study. Our goal was to get a statistically representative sample of the French-speaking population in the area, as well as to reach both Internet and non-Internet users. In addition, for future study purposes, it was essential to collect data from both adults and student populations. The collection would enable future comparisons between the groups and could also enable comparisons with the studies in Northeastern Ontario. Laflamme (2006, in press) is not the only researcher to have considered the use of the younger population, as Castells'(2005) study sampled participants from the age of 15 years. In addition to the desire to get a good sample, the *AFNOO* could benefit from the youth sample as they have in recent years received funding and launched programming (Techno Nord-Ouest¹⁷) in order to help youth achieve through the use of technology in individual and community leadership as well as entrepreneurial and employment achievements.

¹⁷ For more information on Techno Nord-Ouest visit the Association des Francophones du Nord-Ouest de l'Ontario's website. Retrieved on July 23, 2007 : http://www.afnoo.org/techno/techno.htm

Furthermore, the survey had to be distributed through a variety of methods in order to ensure that the population sample would be varied. It was clear to all parties involved in the project that if the *AFNOO* was the sole distributor, unfair representation would be given to Francophones by who are involved in their French culture. If, on the other hand, the *CSDCAB* was the sole distributor, the return rate would be positive but the sample population would be more representative of parents of elementary and secondary school aged children rather than the entire francophone population of Northwestern Ontario. For these reasons, the questionnaires would be distributed through both collaborators and the sample population would be gained by the returned questionnaires. Not only would this allow researchers to access a larger Francophone population base, but using both collaborators in order to distribute the questionnaire was a cost effective alternative to dealing with the large geographical area of Northwestern Ontario, and a ready-made marketing strategy for the questionnaires and the research as a whole.

The decision to send questionnaires home with parents would allow for only those respondents with children to be represented in the study. In order to reach a wider population, students were asked to take home a questionnaire for their relatives or family acquaintances whom might not have otherwise received it. The intent was to creat a snowball sample effect. The distribution method had been attempted in the Sudbury region and was successful in yielding results (Laflamme, in press). In further consultation with the administration, a distribution date of June 16th, 2006 was proposed in order to avoid the provincial education testing phase, and also to ensure that the questionnaires were collected prior to the end of the school year. An incentive plan of

paying a pizza lunch for classrooms that could collect a 90% return rate was also put in place. The grade 12 class at *École Secondaire Cité-Supérieure* in Longlac was the only group who profited from the pizza lunch incentive.

Since Dryden does not yet have a French school, the *CSDCAB* accepted the responsibility of distributing the questionnaire to the French-speaking people of Dryden by agreeing to distribute it at an open door meeting, which was to take place June 17th, 2006, in Ignace. In order to facilitate the return of the questionnaires, stamped envelopes addressed to Lakehead University were delivered with the questionnaires. However, according to the organizers, attendance at the meeting was low. Unfortunately, there were no Dryden residents at the meeting and therefore the questionnaires could not be distributed.

In order to circumvent any bias from the data collection, arrangements for the same distribution were made in the French public schools through contacts with the principals of each school. The questionnaires were mailed directly to them at the same time as distribution in the French separate school board took place. The public sector included the École Secondaire Cité-Supérieure in Marathon, École Secondaire Château-Jeunesse in Longlac and École Secondaire Manitouwadge in Manitouwadge.

While the tool used would be a self-administered survey, the collaborators were encouraged to provide support to groups who may have needed help to fill out the survey. The non-student questionnaire was sent to homes through the students, and pupils from grade 6 to 12 were encouraged to complete the youth surveys themselves. The schools would explain the distribution to their students and encourage them to help their parents and other family members who could comprehend the French language who would be

filling out the questionnaires. The *AFNOO* would distribute the surveys via each community group as opposed to a simple mail distribution. The distribution through the association provided a means of contact, as well as support if it was necessary. The issue of providing an English version and an online electronic survey was also discussed, however, due to high illiteracy rates, lack of potential technology access and use issues, as well as the potential security risks and respondent eligibility concerns, these ideas were abandoned. Based on prior research (OFA, 1999; Statistics Canada, 2001; Laflamme, 1998) and the experiential knowledge of the collaborators, the key researchers were able to anticipate low literacy amongst the francophone population.

While for reasons of cost benefit and efficiency (Bekkers, 2005) the study was not advertised in local newspapers, an advertisement for participants and information on the study was posted on the *AFNOO* website and was displayed in the community paper, *Le Relais* (AFNOO, 2006).

The questionnaire was complex, and included in total 251 questions and space for additional observations. The adult questionnaire is included in the appendix. The survey was presented as university research by a research team from Lakehead University in collaboration with Laurentian University, *Association des Francophones du Nord-Ouest de l'Ontario* and *Conseil Scolaire de district Catholique des Aurores Boréales*. The research team recognized that the sample would be limited if the survey was distributed only through the *AFNOO*. Its distribution within the French school boards was to ensure that people other than educated and community involved members were surveyed. In addition, recognition of the population that is not affiliated with any community group or knows anyone with children has occurred. In an attempt to ensure that this population as

well as Francophiles¹⁸ were part of the sample, students and staff were instructed to give questionnaires to any person who could understand the French language.

Distributions

By the end of the first distribution, 88 questionnaires were returned to the *AFNOO*, while the distribution through the French school systems yielded 181 adult questionnaires and 349 student questionnaires. While the number of questionnaires received by the student population appeared adequate, the researchers were concerned about the number of adults who had participated in the study. The researchers in this study were anticipating the participation of five percent of the total francophone population. In order to understand if certain communities needed to be targeted for further distribution, a breakdown of the initial adult collection was needed. It was established that, from the school boards, 48 questionnaires were received from Marathon, 61 from Thunder Bay, 56 from Greenstone, 3 from Terrace Bay, 1 from Schreiber and 11 were received but not identified by community. It was further established – from the distribution that took place through the *AFNOO* – that three questionnaires were received from Marathon, one from Marathon, 44 from Thunder Bay, 32 from Greenstone, three from Marathon, one from Terrace Bay, one from Dryden, and six were received but the communities were not identified.

A second distribution was arranged through the auspices of both collaborating agencies. While the *CSDCAB* had concerns about the redistribution amongst the same groups and the kindergarten classes, they did agree to participate in the redistribution, focusing on the parents of students registered in grades one to five. The administration of the *CSDCAB* was also receptive to our participation in a meeting, which was

¹⁸ Term clarified in Stebbins, 1994, p. 8

scheduled for all of the directors. Our participation in this meeting allowed us to gain some valuable feedback on the distribution process and perhaps alter the course of distribution to reach the largest number of French speaking citizens of Northwestern Ontario. The main comments concerned the length of the survey, as well as the ability of their populations to comprehend the document.

According to the directors, most of their students' parents are anglicized, and therefore uncomfortable with filling out information in French. A redistribution date was set for November 2006. Discussion arose about methods of encouraging the population to fill in the questionnaire; for instance, the suggestion was made that students could claim their volunteering hours by helping adults fill out their surveys. Regardless of the myriad of incentive suggestions, a decision was made to send the questionnaire home with children from kindergarten to grade six in order to reach the population with younger children. As an incentive for higher participation, a draw was organised for the end of the distribution period. The schools were provided with tickets in order to facilitate a draw for the prizes. Every questionnaire returned completed to the school would receive a ticket toward winning one of three \$10 gift certificates, and, for the schools with larger distributions, an MP3 player.

In terms of the French public system, Red Lake also distributed the questionnaire to students in grades six to eight since they were unable to participate in the first distribution. The principal of both French schools in Manitouwadge felt that the second distribution would not work, as all francophones had been already reached in the first distribution and subsequently decided not to participate. The public French schools in the Greenstone area were not targeted, since it was felt that the numbers reached were an

adequate representation of the francophone population in these areas.

While the team also met with the *AFNOO* personnel to address the survey distribution and to plan a second distribution, only seven questionnaires were returned. All completed questionnaires were received by both agencies in January 2007. In total, the second distribution yielded 75 questionnaires, 66 of which were adult questionnaires. As a result of the distribution efforts, 359 adult questionnaires and 350 youth questionnaires were returned.

Several diffficuties in the sampling and distribution methods chosen affect the quality of the study findings. In retrospect, while the attempt to use children in the schools as a basis for a snowballing technique was well intentioned, the efficiency with which the surveys reached individuals who do not participate in community organisations or do not have children is questionable. In addition, some reasearchers might suggest that our student population is not a sample of the student population, but rather a census, while our non-student sample was collected as a sort of convenience sampling. In order to reach the excluded population group, participation request signs or ads ought to have been considered further, regardless of the high cost of newspaper ad printing. The survey itself was long, encompassing 15 pages and while the intent was to gain as much information as possible, it nevertheless likely remained intimidating. Also important to note is that while the questionnaire was undoubtedly long, the survey lacked questions regarding the amount of time spent in online activities which would have allowed comparison of time spent in french online activities and english online activities. This information would have been helpful in identifying whether code switching behaviour exists for the Francophones in Northwestern Ontario. In additon, while the survey

addressed mother tongue, it lacked information regarding the current status of the individual's self-described language.

Furthermore, the dialect used in the survey was questionable. While collaborators tended to be educated individuals, the level of French used might have been appropriate, but for a working class person who uses a particular Norhwestern dialect, the language might have been too complex and even intimidating. In fact, a comment made by several principals and office administrators when called for an update was that most parents and community members were 'anglicized' and would not not be bothered to answer the questionnaires regardless of any attempt that would be made, suggesting apathy for the cultural situation. The apathy and anglosization leads to questionning if a disconnect exists between the Francophone community actors and the general Francophone population in Northwestern Ontario. Nonetheless, to circumvent the low response that may have resulted from potential language barriors, the survey should have been bilingual. Additionally, for those who do access the Internet, the ability to fill in the questionnaire electronically might have been less intimidating, as an electronic version might have answered some of the questions for the respondant; for example, all questions that were not applicable based on an earlier answer would have been skipped.

As for the distribution efforts through the AFNOO, the efforts by the student who was to coordinate survey distribution throughout the region appear to be questionable for several reasons. In both distribution efforts, several attempts were made to receive feedback and updates regarding the distribution processes. Each attempt was met with vague positive feedback, yet out of approximately 500 questionnaires delivered to the organisation, the first distribution yielded only 88 surveys and the second distribution

yielded only seven. While the anticipated response rate by the organisation coordinators was low, the effort put into distribution remains questionable. As a result, when project responsibility was passed on to a student who was hired for accounting assistance purposes, the project coordinator (myself) could have insisted on having direct contact with the community groups. The eventual direct contact with the principals and the office administrators within the French public schools led to a stronger sense of project responsibility and allowed for both feedback and regular updates of the distribution process. Again, in retrospect, similar contact would have been heplful with community organisations who were asked to distribute the questionnaires by the head office of the *AFNOO*.

The Data

In January 2007, an undergraduate student was hired to aid with the process of data entry for the project which was completed by March 18th, 2007. During data preparation work, a number of issues were addressed. First, the attributes of differentiating between the distribution agency and the time of distribution were not all recorded in the data set. While certain assumptions can be made about the distribution (some were recorded and others can be assumed by the community of residence), for the purposes of this thesis the differences that might have surfaced with two distributions were not expected to have significant impact on the data set, and although interesting, the observation of any potential differences is not necessary for the purpose of this thesis.

Second, answers were changed during data cleaning, based on other answers within the same questionnaire, or by the pattern of the participant answers. There were several examples of value changes that occurred, namely: some participants answered

'not applicable' instead of 'never' for areas that were clearly applicable to their situation, whereas some other participants did not answer questions that were felt to be 'not applicable' instead of answering 'never,' and still other participants answered using two values per variable. In most cases, the answer was inferred, but for those answers that could not be, variable values were added to the value list and thus a 'not applicable' value (98) and a 'multiple responses' value (88) were added to the dataset.

Third, the time sensitive values were entered in the data set according to month. Through a conversion calculation, a new value was created, which allowed the time values to be read annually. Fourth, the 'nominal' questions (municipality, parental occupations, individual occupations, and religion) were interpreted and associated numerical data was imputed into the dataset. The answers to occupation questions were changed to a scale used by Statistics Canada's 1991 standard occupation classification index and finally to a six value scale used in Laflamme's earlier studies in Northeastern Ontario. For accuracy, the values were crossed checked with the participant's level of education.

The data was entirely cleaned and ready for analysis by May 13th, 2007. The data was analyzed with the use of SPSS 16 through variance and regression analysis. The focus of this thesis is based on the quantitative data collected and as such is analytical and explanatory.

Despite attempts to ensure the representative nature of the sample, certain weaknesses can be noted as far as the adult population is concerned. The surveys received from the student population represent a high percentile of Francophone students in the region between grades six and twelve. As a result, the data is in-line with the

representation of this population. However, the 359 non-students represent less than 4.5% of the Francophone population in Northwestern Ontario¹⁹. Moreover, it is necessary to note other aspects of the non-student respondents, which are not representative. In terms of community of residence, according to the 2001 census, 34% of the Francophones in Northwestern Ontario live in the town of Thunder Bay, 21% live in the communities of Greenstone, 16% live in the northern²⁰ communities of the region, and 22% live in the Rainy River and Kenora districts. Regard to the survey, the percentage of the respondents in Thunder Bay is very representative at 36%, but the populations of Greenstone and the northern communities of the region are over-represented at 35% and 20% respectively, and the population in the west of the region is under-represented at only 7%. Also, important differences between the level of education of the Francophone population in the area and the adults who answered the survey can be seen. According to the 2001 census, 18.2% of the Francophone population of Northwestern Ontario has a level of schooling lower than the 9th grade. The data from the current survey indicated that only 3.7% of the adult respondents had a level of education lower than grade 9. According to the census, only 6.4 % of the Francophone population of the area had a university degree; however, with regard to the respondents of this study, 28.5 % had achieved a university degree.

The goal for the methodology in this project was to create a database of information that could be used by the collaborating agencies at a later time, as well as to ensure the best possible response rate and a representative sample. Despite the initial difficulties with the questionnaire, its distribution, and some under- and over-

¹⁹ The 2001 census recorded 8,010 Francophones aged 19 years and over.

²⁰ Red Rock, Nipigon, Schreiber, Terrace Bay, Marathon, and Manitouwadge.

representation of groups, the process ran smoothly. The database now includes 276 variables, which includes our sample population's demography, identity, traditional media usage, technology usage, new communicative media usage, language use, perception of language ability as well as perception of physical and emotional health.

The following chapter will address the variables relating to the main objective that has guided the research and the hypotheses that have arisen based on the information provided by the review of the literature. The independent variables will be the respondents' mother tongue, the respondent's level of education, the respondents' annual income as well as the respondents' level of participation in community organizations. The dependent variables will cover all variables within the range of media usage, from traditional use such as reading a magazine or watching television to new online forms of use such as finding, downloading, and watching films on the Internet or sending electronic messages to friends.

Chapter 4: Results

The information regarding technology's positive attributes combined with the fears of losing social capital and the literature regarding linguistic minorities, leads the author to wonder if Internet can become a tool that promotes community vitality or cultural singularity. However, since preliminary studies do not yet exist in Northwestern Ontario, the focus of this thesis is on the impact of social capital²¹, level of education, and language on Internet use and French Internet use. In order to gain a better understanding of this research question, the study needed to look at the mother tongue of the sample population, the level of education of participants, their personal income and community participation along with their Internet use, the language in which they use it, and the relation of language use on other activities. Based on the literature review, the following hypotheses will be tested: the higher the level of personal annual income, the higher the use of the Internet; the higher the level of French community commitment, the higher the use of the Internet in French; the higher the level of education, the higher the Internet use; the higher the level of education in French, the higher the use of French on Internet; the more a person uses French at home, the more they will use the Internet in French and; finally, Francophones use the Internet less than Anglophones.

Relationship of French Internet Use by Mother Tongue and Level of Education
The results of the Analysis of Variance, displayed in Table 1, allow for the verification of whether a difference exists between respondents' French Internet usage and respondents' mother tongue and levels of education.

²¹ For the purposes of this study social capital is addressed by the variables relating to personal income as well as the level of participation in community organisations.

Table 1

Mean (x) of the Variables Relating to the French Use of the Internet According to the Mother Tongue and the Education Levels Two-way Analysis of Variance

If p < .05, the answer is yes.

(1 = never and 6 = very often)

Critical Values at the 0.05 level of significance = 3.00; Critical Values at the 0.01 level of significance = 4.61

			Language	;		Educ	ation		ä
Variables		French	English	French and English	High School Not Completed	High School	College	University	Interaction term
the state of the s	x s	3.22 (2.12)	1.43 (1.34)	2.53 (1.93)	2.69 (2.04)	2.46 (1.98)	2.85 (2.08)	3.73 (2.05)	
When I use the Internet, I use a French browser	N*	243	14	57	39	59	124	92	No
	test	F _(2;303) =	4.93 ; p <	0.01	F _(3;303) =	1.89 ; p	= 0.13		
When I use the Internet, I surf the web in	⊼ s	2.95 (1.94) 227	1.67 (1.59)	2.24 (1.53) 58	2.56 (1.96) 36	2.24 (1.75) 60	2.51 (1.79) 115	3.53 (1.83) 89	No
French.	test		3.18; p <			= 3.60 ; p			
	₹	2.04	1.33	2.17	1.70	1.98	2.00	2.23	
I use the Internet to find, download or listen to	s N	(1.70)	(0.72)	(1.39)	(1.45)	(1.71)	(1.60)	(1.63)	No
French music.	test		$\frac{1}{2.75}$; p =			= 0.53 ; p	1		
	×	1.27	1.00	1.55	1.34	1.29	1.28	1.35	
I use the Internet to find, download or listen to	s N	(0.90)	(0.00)	(0.98)	(0.94)	(0.90)	(0.86)	(0.95)	No
French-speaking television programs or films.	test	226	16 4.38; p <	55	38	55 = 0.22; p =	117	87	110
	× ×	1.88	1.13	1.66	2.24	2.17	1.74	1.73	
	s	(1.67)	(0.34)	(1.00)	(1.98)	(1.50)	(1.43)	(1.44)	
I use the Internet to chat in French.	N	229	16	58	38	58	117	90	No
	test	L	1.88; p =	0.16	$F_{(3;291)} =$	= 0.03 ; p	= 0.99		
<u> </u>	x s	3.78	1.94	2.91	3.24	2.68	3.41	4.36	
I use the Internet to send e-mail in French.	$\frac{3}{N}$	(2.06)	(1.73)	(1.77)	(2.27)	(1.96)	(1.99)	(1.81)	No
	test		6.47;p<			= 4.03 ; p	1		1
	×	1.66	1.25	1.61	1.56	1.38	1.80	1.59	
I use the Internet for telephone communication	s N	(1.46)	(0.78)	(1.26)	(1.49)	(1.06)	(1.51)	(1.38)	No
purposes and I do so in French.	test		0.56; p =			= 0.58 ; p	I	00	1.0
	×	1.31	1.06	1.13	1.22	1.27	1.30	1.24	
I use the Internet to intervene discussion forums	S	(0.96)	(0.25)	(0.44)	(0.89)	(0.90)	(1.00)	(0.62)	1
or blogs and I do so in French.	N	221	16	54	37	51	114	89	No
	test	F _(2;279) =	0.56 ; p =	0.57	F _(3;279) =	= 0.07 ; p	= 0.98		

^{*}N = might be slightly inconsistent due to truncated data (missing and 'not-applicable data has been removed).

Regarding the various uses of Internet characterized linguistically, respondents'

answers are on a scale from 1 to 6; accordingly, they can be treated as interval variables. Eight dependent variables were tested. The variable 'Mother Tongue' is nominal and is made up of three groups, namely: French, English and French and English. The 'Education²²' variable is ordinal and four groups distinguish it, namely: High School non-completed, High school, College and University. For each of the variables a *variance analysis* with two factors can be completed and two things can be observed: first, whether there are significant differences between the values and second, if there exists an interaction between the factors. In all eight analyses and between the two factors, no interaction effects are observed. As a result, the analysis will concentrate on the main effects.

In the case of the independent variable 'Mother Tongue,' there are differences between means in 4 out of the 8 independent variables tested. These differences appear with the use of a French browser ($F_{(2,303)} = 4.93$; p < 0.01), surfing in French ($F_{(2,289)} = 3.18$; p < 0.05), downloading programs movies and films ($F_{(2,285)} = 4.38$; p < 0.05), and sending emails in the French language ($F_{(2,300)} = 6.47$; p < 0.01). If the test *a posteriori* and Scheffé is used and relied upon, in order to remain cautious with the results, then the distinction found in the analysis of variance for the variable downloading of films is suspect: The *post hoc* does not allow significant inequalities between the groups to be observed. The remainder of the mean differences observed is always due to the highest mean of francophone individuals.

The French-speaking individuals, indeed, differentiate themselves from the English-speaking individuals by using a French browser, and by surfing the web and

²² The original variable (Q14 – in the appendix) contained eight levels of education. The categories were combined in order to provide stronger analysis.

sending emails in the French language. Francophones also distinguish themselves from bilingual individuals in two of the cases, namely: surfing the web and sending emails. Furthermore, it is noted that individuals whose mother tongue is both French and English are always comparable to those who are maternally English. The most noticeable variations (deviations) occur between French-speaking and English-speaking individuals and tend to occur in the categories of sending emails in French (1.84 = 3.78-1.94) and using a French browser to navigate the web (1.79=3.22-1.43). These differences are important to note, but it is also necessary to insist on the proximity of the means between all of the groups. In the four significant ANOVAs, Anglophones and bilinguals present means that are left explained through chance. In the three other cases, the differences, although real, between Francophone and Anglophone show that the linguistic behaviors of the Francophones are nevertheless similar to those of the Anglophones. When analyzing the use of a French web browser, the mean of Francophone respondents is 3.22 while that of the Anglophones is 1.43. The low means indicate that the Francophones only use French browsers a little more than the Anglophone respondents.

In terms of respondents' level of education, there is a significant difference in the case of French surfing [the web] and sending emails in French. The Scheffé *post hoc* test indicates that the mean differences observed are due to the higher mean of university-educated individuals in the sample population, namely: those who have not completed high school, as well as high school and college-educated pupils. The university-educated respondents in both cases distinguish themselves from all other levels of education.

The largest variations occur in both cases between the university educated and high school educated individuals. The mean of university educated persons for surfing

the Internet in French is 3.73 and for sending emails in French is 4.36, whereas, the means of respondents who hold a secondary education diploma for surfing and sending messages in French are 2.24 and 2.68 respectively. It appears that the higher the education level (with the exception of people who have achieved less than a high school education), the more the respondent will surf in French and will send emails in French. However, the difference in means for surfing in French is relatively minor on a nominal 6-point scale. At this time, the reasons for the lower mean values for both surfing in French and sending emails in French for respondents with less than high school education remain unclear.

Relationship of French Use of Various Media Sources by Mother Tongue

and Level of Education

The results of the Analysis of Variance displayed in Table 2 allow for the verification of whether a difference exists between respondents' traditional media usage in French and the respondents' mother tongue and levels of education. Six dependent variables were tested. The same method and independent variables were used as described for Table 1. In all six analyses, and between both factors, there were no interaction effects observed. As a result, the analysis will concentrate on the main effects.

In the case of the independent variable 'Mother Tongue' there are significant differences between means in all of the independent variables tested, namely, the use of computer software, television, radio, music, newspapers, journals and magazines and literary work in French. If the test *a posteriori* with Scheffé is relied upon, then all of the mean differences observed are always due to the highest mean of francophone

individuals.

French-speaking individuals in all cases distinguish themselves from Bilingual individuals, while also distinguishing themselves from English-speaking individuals in 4 cases: watching television ($F_{(2;306)} = 8.52$; p < 0.001), listening to pre-recorded music ($F_{(2;313)} = 6.70$; p < 0.001), reading newspapers, journals and magazines ($F_{(2;307)} = 8.78$; p < 0.001), and reading various literary works ($F_{(2;313)} = 6.02$; p < 0.01). Furthermore, it is noted that individuals whose mother tongue is English are usually comparable to those individuals who have a dual mother tongue.

Table 2

Mean (♥) of the Variables Relating to the French Use of Various Media Sources

According to the Mother Tongue and the Education Levels

Two-way Analysis of Variance

If p < .05, the answer is yes.

(1 = never and 6 = very often)

Critical Values at the 0.05 level of significance = 3.00; Critical Values at the 0.01 level of significance = 4.61

			Language	:		Educ	ation		п
Variables		French	English	French and English	High School Not Completed	High School	College	University	Interaction Term
	×	3.70	2.63	2.62	2.95	2.52	3.28	4.47	
When I use my computer, I use French software	S N*	(2.23)	(2.13)	(2.02)	(2.24)	(1.99) 61	123	(1.99)	No
(Windows, Word, etc,)	test	$F_{(2;303)} = 3.74$; p < 0.05			$F_{(3;303)} = 4.57$; p < 0.01				
	×	3.54	1.93	2.66	4.17	3.17	3.06	3.29	<u> </u>
	s	(1.67)	(0.80)	(1.50)	(1.80)	(1.86)	(1.60)	(1.46)	
I watch French television	N	241	15	62	42	59	125	92	No
	test	$F_{(2;306)} = 8.52 ; p < 0.001$			$F_{(3;306)} = 1.21 ; p = 0.31$				
	×	3.00	1.50	2.08	3.45	2.41	2.49	2.97	
71'	S	(1.90)	(0.76)	(1.63)	(2.19)	(1.88)	(1.78)	(1.70)	,,,
I listen to French radio	N	233	14	61	42	58	117	91	No
	test	F _(2;297) =	7.92 ; p <	0.001	F _(3;297) =	0.69 ; p	= 0.56	· · · · · · · · · · · · · · · · · · ·	
	×	3.55	1.87	2.81	3.75	2.86	3.14	3.66	
	S	(1.74)	(1.30)	(1.53)	(2.04)	(1.85)	(1.60)	(1.57)	
I listen to French recorded music	N	246	15	64	48	59	125	93	No
	test	F _(2;313) =	6.70 ; p <	0.001	F _(3;313) =	= 1.22 ; p	= 0.30		

Table 2, continued

			Language	:		Educ	ation		Е
Variables	Variables						College	University	Interaction Term
I read French newspapers and magazines.	⊼ s	3.62 (1.77)	1.73 (1.10)	2.56 (1.56)	4.00 (1.93)	3.07 (1.95)	3.02 (1.70)	3.55 (1.62)	
Tread French newspapers and magazines.	N	242	15	62	45	59	123	92	No
	test	F _(2;307) =	8.78;p<	0.001	F _(3;307) =	1.33 ; p	= 0.27	·	
I read French literature (novels, poetry, theatre,		3.53 (1.95)	1.86 (1.17)	2.57 (1.65)	3.66 (2.17)	2.41 (1.80)	3.07 (1.89)	3.94 (1.67)	
biographies)	N	249	14	61	44	61	126	93	No
	test	$F_{(2;313)} =$	6.02 ; p <	0.01	F _(3;313) =	= 2.10 ; p	= 0.10		

^{*}N = might be slightly inconsistent due to truncated data (missing and 'not-applicable data has been removed).

The largest variations occur in all cases between the French-speaking and the English-speaking individuals. However, these variations are not very significant because of the proximity between all of the groups. There does not appear to be any explanation for the similarities in the means and therefore the explanations are left to chance. While again (as in the case of Table 1), differences between Francophones and Anglophones do exist, they show that the linguistic behaviors of the Francophones are nevertheless similar to those of the Anglophones.

For instance, while looking at the variable for watching television, the mean of Francophone respondents is 3.54 and that of the Anglophones is 1.93. The low means indicate that the Francophones only watch French television a little more often than their Anglophone counterparts do. The same is true for all other dependent variables tested.

Regarding level of education, it is noted that there is a significant difference in only one case, that of using French computer software. The Scheffé *a posteriori* indicated that the mean differences observed are due to the high mean of university-

educated respondents. In fact, the university-educated respondents differentiate themselves from the respondents who hold less than a secondary education as well as from those who have a secondary education and those who have a college education.

The largest variations (deviations) occur between university educated individuals and those with a high school education. The variations, however, remain minimal; a comparison of the means between education levels indicates that while university educated respondents tend to use French computer software (4.47) more often than individuals with High School education (2.52), the standard deviations (1.99 each) indicate that the variations are not significant.

Relationship of General Internet Usage by Mother Tongue and Level of Education

In order to gain an understanding into the relationship of usage by primary language and level of education, a two-way ANOVA was performed on 16 of the dependent variables for generic Internet usage. The uses were constituted in statements where the respondents answered on a scale from 1 to 6, and, as such, they can be treated as interval variables. The following information concerns the individual and interaction effects for the dependents mother tongue and level of education on the respondents' level of Internet use for the purposes of surfing the web, listening to music or radio, watching movies, videos and television programming, searching for travel, cultural, sports and weather related information, doing online banking, finding news information, and reading news and journals online, as well as participating in discussion forums, chatting, or using the Internet for telephonic means and for playing electronic games. The nominal variable of 'Mother Tongue' distinguishes its groups as French, English and French and English, while the ordinal variable 'Education' distinguishes its groups as High School non-

completed, High school, College and University. The analysis will allow for the observation of the existence of significant differences and interactions between the factors.

An Analysis of Variance by the respondents' mother tongue and level of education on using the Internet for telephonic purposes, to participate in online forums and to read newspapers online was applied; there were no individual effects and interactions found in these dependant variables. In addition, the use of Internet in order to listen to the radio, find news information and perform banking duties had no individual effects and there were no overall interactions with both mother tongue and education factors. In all three cases, however, francophone participants showed a trend toward an effect with increasing use of Internet for banking purposes with increasing level of education. While the means are low and thus the findings rather insignificant, when you are francophone, you are more likely to use Internet for banking when you have a post secondary education. In addition, the higher your education, the more likely you are to use Internet for the use of radio and news.

Prior to discussing the results of the Interaction Effects observed, the dependent variables which did not observe an interaction effect but did observe a main effect - those dealing with travel, cultural, sports information as well as those dealing with videos, electronic games and chatting - will be addressed. Unfortunately, while some commonalities exist, they are difficult to place in a thematic result.

Table 3

Individual and Interaction Effects for Mother Tongue and Education Levels on the Respondents Level of Use of the Internet to Surf the Web.

Two-way ANOVA If p < .05, the answer is yes. (1 = never and 6 = very often)

		I us	e the Internet	to surf the we	b.		
		French	English	French and English			Main Effect
Mother Tongue	×	3.15	3.69	3.66			Yes
	S	(1.88)	(2.06)	(2.04)			168
	N	218	14	55			
		< High School	High School	College	University		
Education	×	2.69	2.65	3.51	3.62		No
Education	S	(2.09)	(1.84)	(1.97)	(1.74)		NO
	N	40	49	113	85		
	T		Mot	her Tongue			
Education		French	English	French and English		< .05	Interaction Effect
< High School	x s	2.36 (1.91)	1.00	5.60 (0.89)		Yes	Yes
High School	× s	2.71 (1.90)	3.33 (2.52)	2.33 (1.59)		No	
College	₹ s	3.31 (1.89)	3.80 (2.59)	4.07 (2.05)		No	
University	× s	3.60 (1.69)	4.14 (1.57)	3.45 (1.97)		No	
< .05		Yes	No	Yes			

Non directional F-test of differences between means.

N = might be slightly inconsistent due to truncated data (missing and 'not-applicable data has been removed).

Table 4
Individual and Interaction Effects for Mother Tongue and Education Levels on the Respondents
Level of Use of the Internet to Find, Download and Listen to Music.

Two-way ANOVA If p < .05, the answer is yes. (1 = never and 6 = very often)

		I use Interne	t to find, dow	nload and liste	n to music.	
		French	English	French and English		Main Effect
Mother Tongue	× s	2.36 (1.83)	1.00	3.51 (2.06)		Yes
	N	218	14	55		
		< High School	High School	College	University	
Education	x s	2.22 (1.96)	2.47 (1.98)	2.84 (1.94)	2.37 (1.77)	No
	N	40	49	113	85	

Table 4, continued

	Mother Tongue							
Education		French	English	French and English	< .05	Interaction Effect		
< High School	S	1.82 (1.65)	1.00	5.60 (0.55)	Yes	Yes		
High School	x s	2.63 (2.08)	2.67 (2.89)	1.93 (1.49)	No			
College	x s	2.52 (1.86)	2.50 (1.29)	3.87 (1.94)	Yes			
University	x s	2.27 (1.68)	1.29 (0.49)	3.73 (2.24)	Yes			
< .05		No	No	Yes				

Non directional F-test of differences between means.

N = might be slightly inconsistent due to truncated data (missing and 'not-applicable data has been removed).

In terms of main effects, the tables treating the use of the Internet for the purposes of surfing (Table 3), music (Table 4), video (Table 5), film (Table 6), chat (Table 7), and sports (Table 8) indicate a main effect due to respondents' mother tongue. While the trend in all cases is that Francophones are less likely to use the Internet for the purposes of surfing $(F_{(2;311)} = 3.77; p \le 0.05)$, music $(F_{(2;313)} = 12.03; p \le 0.001)$, video $(F_{(2;315)} = 7.20; p < 0.001)$, film $(F_{(2;312)} = 10.96; p \le 0.001)$ and sports information $(F_{(2;311)} = 4.06; p < 0.05)$ than their bilingual and Anglophone counterparts, the differences are minimal. The most noticeable disparity occurs between French and Bilinguals' use of Internet to find, download and listen to music (1.15 = 3.51 - 2.36), as indicated in Table 4. A main effect due to level of education was not found for any of these dependent variables with the exception of Use of Internet to chat, which indicated similar means amongst all levels of education with a variance of 0.47 between respondents holding a secondary school diploma (2.15) versus university educated respondents (1.68). Essentially, while the likelihood of using the Internet to chat is low, the likelihood is higher for those with a high school education or those with a college education than those with less than a high school education or those with a university education.

Table 5

Individual and Interaction Effects for Mother Tongue and Education Levels on the Respondents
Level of Use of the Internet to Watch Videos

Two-way ANOVA If p < .05, the answer is yes. (1 = never and 6 = very often)

		I us	e the Internet	to watch video	os.		
		French	English	French and English			Main Effect
Mother Tongue	×	1.74	1.88	2.48			Yes
, and the second	S	(1.31)	(1.31)	(1.82)			168
	N	218	14	55			
******		< High School	High School	College	University		•
Telmostian	×	1.69	1.53	2.17	1.82		Na
Education	s	(1.28)	(1.17)	(1.67)	(1.31)		No
	N	40	49	113	85		
			Mot	her Tongue			
Education		French	English	French and English		< .05	Interaction Effect
< High School	⊼ s	1.41 (0.85)	3.00	3.60 (2.30)		Yes	No
High School	⊼ s	1.55 (1.21)	1.67 (1.16)	1.47 (1.13)		No	
College	⊼ S	1.96 (1.53)	2.20 (1.79)	2.81 (1.92)		Yes	
University	⊼ S	1.76 (1.27)	1.88 (1.31)	2.40 (1.65)		No	
< .05		No	No	Yes			

Non directional F-test of differences between means.

N = might be slightly inconsistent due to truncated data (missing and 'not-applicable data has been removed).

Table 6
Individual and Interaction Effects for Mother Tongue and Education Levels on the Respondents
Level of Use of the Internet to Find, Download
and Watch Movies and Films.

Two-way ANOVA If p < .05, the answer is yes. (1 = never and 6 = very often)

	I use	the Internet to	o find, downlo	ad and watch	movies and films.	
		French	English	French and English		Main Effect
Mother Tongue	× s	1.42 (1.02)	1.38 (1.26)	2.13 (1.83)		Yes
	N	218	14	55		
		< High School	High School	College	University	
Education	⊼ s	1.40 (1.14)	1.40 (1.06)	1.70 (1.42)	1.52 (1.14)	No
	N	40	49	113	85	

			Table 6,	continued		
			Mo	ther Tongue		
Education		French	English	French and English	< .05	Interaction Effect
< High School	⊼ s	1.15 (0.49)	1.00	3.40 (2.51)	Yes	Yes
High School	×s	1.25 (0.72)	2.67 (2.89)	1.62 (1.33)	No	
College	× s	1.59 (1.28)	1.20 (0.45)	2.13 (1.80)	No	
University	Ž S	1.47 (0.98)	1.00 (0.00)	2.18 (2.04)	No	
< .05		No	No	Yes		

Non directional F-test of differences between means.

N = might be slightly inconsistent due to truncated data (missing and 'not-applicable data has been removed).

Table 7
Individual and Interaction Effects for Mother Tongue and Education Levels on the Respondents
Level of Use of the Internet to Chat.

Two-way ANOVA

If p < .05, the answer is yes.
(1 = never and 6 = very often)

			I use the Inte	rnet to chat.			
		French	English	French and English			Main Effect
Mother Tongue	×	1.81	2.38	2.55			Yes
	S N	(1.47) 218	(2.06)	(1.93)			
	- 1	< High School	High School	College	University		
Education	x	1.93	2.15	2.12	1.68	· · · · · · · · · · · · · · · · · · ·	Yes
	S N	(1.76)	(1.74)	(1.72)	(1.26)		
		1000	Mot	ther Tongue			
Education		French	English	French and English		< .05	Interaction Effect
< High School	x s	1.76 (1.67)	1.00	3.20 (2.28)		No	No
High School	× s	1.98 (1.60)	3.00 (2.65)	2.54 (2.03)		No	
College	⊼ s	1.87 (1.49)	3.80 (2.59)	2.58 (1.98)		Yes	
University	Ž S	1.64 (1.24)	1.29 (0.49)	2.18 (1.66)		No	
< .05		No	Yes	No			

Non directional F-test of differences between means.

N = might be slightly inconsistent due to truncated data (missing and 'not-applicable data has been removed).

Table 8
Individual and Interaction Effects for Mother Tongue and Education Levels on the Respondents
Level of Use of the Internet for Sport Information.

Two-way ANOVA If p < .05, the answer is yes. (1 = never and 6 = very often)

		I use th		r sport informa	ation.	· - · · · · · · · · · · · · · · · · · ·	<u> </u>
		French	English	French and English			Main Effect
Mother Tongue	x s	1.77 (1.37)	1.50 (0.97)	2.15 (1.45)	***************************************		Yes
	N	218	14	55			
		< High School	High School	College	University		L
Education	∑ S	1.58 (1.32)	1.58 (1.10)	1.91 (1.45)	1.98 (1.42)		No
	N	40	49	113	85		
			Mot	her Tongue			
Education		French	English	French and English		< .05	Interaction Effect
< High School	× s	1.36 (0.99)	1.00	3.40 (2.30)		Yes	No
High School	⊼ s	1.57 (1.11)	2.00 (1.73)	1.50 (1.00)	***************************************	No	
College	⊼ s	1.87 (1.51)	1.20 (0.45)	2.16 (1.34)		No	
University	⊼ s	1.97 (1.45)	1.57 (0.98)	2.27 (1.49)		No	
< .05		No	No	No			

Non directional F-test of differences between means.

N = might be slightly inconsistent due to truncated data (missing and 'not-applicable data has been removed).

The tables treating the use of Internet for the purpose of travel (Table 9), electronic games (Table 10), cultural information (Table 11) and weather related information (Table 12) did not indicate a main effect with the respondents' mother tongue. However, there was a significance in the main effect with the respondents' level of education [Travel ($F_{(3;317)} = 8.30$; $p \le 0.01$), Electronic Games ($F_{(3;314)} = 3.59$; $p \le 0.01$), Cultural Information ($F_{(3;313)} = 2.64$; $p \le 0.05$), and Weather Related Information ($F_{(3;314)} = 4.70$; $p \le 0.01$).] Again, in all but one case the trend is clear but weak; individuals who have achieved less than a secondary education are less likely to use the Internet for the purposes of finding travel (1.61 = 3.28 – 1.67), cultural (0.95 = 2.77 – 1.82) and weather related information (1.36 = 3.43 – 2.07) than their university educated counterparts. However, in the case of

utilizing Internet to play electronic games, similar means are found with a difference of 0.76 between the highest mean found in the college level and the lowest mean found in the university level (0.76 = 2.33 - 1.57). What is important is that the standard deviation for the university level indicates a higher concentration of answers in the range of 1 and 2 on the Likert scale; university educated individuals are less likely to use the Internet to play electronic games than are those who have less education. Despite these findings, the overall sample population in all levels of education did not use Internet for the purpose of playing electronic games.

Table 9
Individual and Interaction Effects for Mother Tongue and Education Levels on the Respondents
Level of Use of the Internet for Travel.

Two-way ANOVA

If p < .05, the answer is yes. (1 = never and 6 = very often)

		Ι	use the Inter	net for travel.			
		French	English	French and English			Main Effect
Mother Tongue	Ÿ	2.48	3.13	2.60			No
	S	(1.73)	(1.93)	(1.86)			NO
	N	218	14	55			
		< High School	High School	College	University		
Education	×	1.67	1.95	2.58	3.28		Yes
Education	S	(1.40)	(1.49)	(1.74)	(1.82)		1 63
	N	40	49	113	85		
		•	Mot	her Tongue	•		
Education		French	English	French and English		< .05	Interaction Effect
< High School	x s	1.46 (1.12)	1.00	3.40 (2.30)		Yes	No
High School	⊼ S	2.07 (1.53)	1.33 (0.58)	1.73 (1.49)		No	
College	⊼ s	2.62 (1.78)	2.60 (2.07)	2.48 (1.65)		No	
University	⊼ s	3.09 (1.77)	4.57 (1.13)	3.73 (2.20)		No	
< .05		Yes	Yes	Yes			

Non directional F-test of differences between means.

N = might be slightly inconsistent due to truncated data (missing and 'not-applicable data has been removed).

Table 10 Individual and Interaction Effects for Mother Tongue and Education Levels on the Respondents Level of Use of the Internet to Play Electronic Games.

Two-way ANOVA

If p < .05, the answer is yes.
(1 = never and 6 = very often)

·		I use the	Internet to	play electronic	games		
		French	English	French and English			Main Effect
Mother Tongue	× s	1.90 (1.44)	1.69 (1.54)	2.60 (1.73)			No
	$\frac{3}{N}$	218	14	55			
		< High School	High School	College	University		
Education	x s	2.09 (1.75)	2.00 (1.37)	2.33 (1.69)	1.57 (1.16)		Yes
	N	40	49	113	85		
			Mot	ther Tongue			
Education		French	English	French and English		< .05	Interaction Effect
< High School	× s	2.03 (1.72)	1.00	2.80 (2.17)		No	No
High School	× s	2.04 (1.49)	1.67 (0.58)	1.92 (1.04)		No	
College	x s	2.04 (1.54)	2.80 (2.49)	3.06 (1.71)		Yes	
University	₹ S	1.57 (1.04)	1.00 (0.00)	2.00 (2.00)		No	
< .05		No	No	No			

Non directional F-test of differences between means.

N = might be slightly inconsistent due to truncated data (missing and 'not-applicable data has been removed).

Finally, an interaction effect was observed in only four of the 16 cases, namely: using the Internet to surf, to find, download and listen to music, to find, download and watch films and to find weather related information. Table 3 explains that the individual effect on using the Internet to surf the web due to the mother tongue ($F_{(2;311)} = 3.77$; $p \le 0.05$), difference is English and Bilinguals showed slightly higher means and slightly higher standard deviations. The minor differences in the means in both populations explain similar usage of Internet. In this case, there were no differences for education levels.

The two-way ANOVA test shows that the interaction effect was significant ($F_{(6;311)}$ = 2.53; $p \le 0.05$) between education level and mother tongue for individuals who had

achieved less than high school level education. The means, in terms of mother tongue, are significant in this case, particularly when looking at those whose mother tongue is both French and English (5.60), compared with the French population sampled (2.36) and the English population sampled (1.00). The standard deviation for this variable in the less than high school bilingual population (.89) is indicative of the high concentration of answers in the 'often' area of the scale. According to the interaction effect, if your mother tongue is considered to be bilingual and you have achieved less than a high school education, you are more likely to use the Internet to surf the web than those respondents who are French (3.24 = 5.60 - 2.36) or English.

Table 11
Individual and Interaction Effects for Mother Tongue and Education Levels on the Respondents
Level of Use of the Internet for Cultural Information.

Two-way ANOVA

If p < .05, the answer is yes. (1 = never and 6 = very often)

		I use the	Internet for	cultural inforn	nation.		
		French	English	French and English			Main Effect
Mother Tongue	×	2.45	2.19	2.68			No
	S	(1.60)	(1.38)	(1.48)			110
	N	218	14	55			
		< High School	High School	College	University	*******	
Education	×	1.82	2.08	2.70	2.77		Yes
Education	S	(1.40)	(1.20)	(1.67)	(1.60)		1 68
	N	40	49	113	85		
			Mot	ther Tongue			
Education		French	English	French and English		< .05	Interaction Effect
< High School	⊼ S	1.84 (1.46)	1.00	1.80 (1.10)		No	No
High School	Ž S	2.02 (1.23)	1.33 (0.58)	2.46 (1.13)		No	
College	⊼ s	2.71 (1.73)	1.80 (0.84)	2.81 (1.56)		No	
University	× s	2.71 (1.60)	3.00 (1.63)	3.00 (1.73)		No	
< .05		Yes	No	No			

Non directional F-test of differences between means.

N = might be slightly inconsistent due to truncated data (missing and 'not-applicable data has been removed).

There were also significant interactions within the French population sampled and the French / English population sampled with respect to the level of education. While the means of the French population, for example, are fairly similar and near the center - when you are French, the higher your level of education, the more you are likely to use the Internet to surf the web - however, when you are Bilingual - the means are much higher for those with less than high school, where the remainder of the means center around the less decisive answers with much higher deviations.

Table 4, regarding the use of Internet in order to find, download and listen to music, indicates a significant interaction term between mother tongue and education $(F_{(6;313)} = 3.98; p \le 0.01)$. In fact, with regard to education, the two-way ANOVA test shows that the interaction effect is significant between education and mother tongue for individuals who have less than high school and for those who have completed a college and university education. Interestingly, and in all cases except one, the means are similar, and while statistically significant, they remain in the lower scores of the spectrum. The only case that shows a significantly promising answer is for those who have achieved less than a high school education and whose mother tongue is both French/English. The mean in this scenario is 5.60 compared with the French population sampled, which has a mean of 2.36; the standard deviations are 0.55 and 1.65 respectively. As a result, if your mother tongue is both French and English and you have achieved less than a high school education, you are more likely to use the Internet to find, download and listen to music than if you are French, as French respondents' answers centered around the 'almost never' answer of the scale. While somewhat unimportant in the grand scheme, if you have completed a college education or a university education,

you will not tend to use the Internet for the purpose of finding, downloading and listening to music; but when you do, you are more likely to do so if you are bilingual.

Table 4 also shows a significant interaction with the French / English population sampled with respect to the level of education. Although there is not a clear pattern that can explain the interaction, the means for bilingual college educated and university educated people remains in the middle of the spectrum with large variances (1.94 and 2.24), while bilingual individuals who have achieved less than a high school education tend to score on the higher end of the scale with much less variance in their answers (0.55).

The interaction between the dependant variable "I use the Internet to find, download and view movies and films" and the independent variables for mother tongue and for education level are identified in Table 6. The two-way ANOVA test, at p <.05, shows that the interaction effect was significant between education level and mother tongue $(F_{(6;312)} = 2.39; p \le 0.05)$ for individuals who have achieved less than high school level education. In fact, those within this education level and who have a French/English mother tongue are 2.25 (3.40 - 1.15) more likely to use the Internet to find, download and view movies and films than those whose mother tongue is French.

An interaction was also found between the French/English population sampled and the various education levels. The highest score (3.40), while still low, is for those who have completed less than high school education. For the bilingual population, with the exception of the less than high school education level, the means indicate that the higher the education, the more likely a bilingual person is to use Internet for the purposes of finding, downloading and watching movies, films or television programming. Other

than the mean for the variable less than high school education, the highest mean is 2.18, a rather small figure indicating "almost never" on the Likert Scale.

Table 12, regarding the use of Internet in order to find information regarding the weather, indicates an interaction term between mother tongue and education ($F_{(6.314)} = 4.00$; $p \le 0.01$). In this case, all education levels, with the exception of university educated level, were significant at p<0.05. However, according to the two-way ANOVA test, a clear pattern cannot be distinguished from the means reported. Individuals who have achieved less than a high school education and are bilingual scored higher (4.20) than those sampled whose mother tongue was French only (1.82). Both standard deviations indicated a wide range of answers. Individuals who had achieved a high school education and whose mother tongue was French tended to score higher (3.02) than individuals whose mother tongue was English (1.67) or French/English (1.77). What is interesting here is that the deviance indicated for Francophones is quite large (2.02), while the deviation for Bilinguals is much more concentrated (0.77). Finally, the means of individuals who were college educated and whose first language was French were slightly lower (3.14) than those whose first language was both French and English (3.58). The deviations in both French and Bilinguals were large and similar. In terms of the overall picture, the means generated do not account for significant importance in and of themselves.

Respecting the interaction found in the two-way ANOVA test between the sampled population's mother tongue and their level of education, clearer patterns in the means are found, but overall, very large variances in deviance. Accordingly, if an individual's mother tongue is French and he or she has a high level of education, he or

she is more likely to uses the Internet for the purposes of finding weather related information. (1.51 = 3.33 - 1.82) The same appears to be true of the English population

Table 12
Individual and Interaction Effects for Mother Tongue and Education Levels on the Respondents
Level of Use of the Internet Find Information Regarding the Weather.

Two-way ANOVA If p < .05, the answer is yes. (1 = never and 6 = very often)

	Ιu	ise the Internet	to find infor	mation regardi	ng the weath	er.	
		French	English	French and English			Main Effect
Mother Tongue	Ä	2.97	2.56	3.23		×=	No
J	S	(1.82)	(1.97)	(1.85)			NO
	N	218	14	55			
		< High School	High School	College	University		
Education	×	2.07	2.69	3.17	3.43		Yes
Education	S	(1.59)	(1.88)	(1.77)	(1.83)		1 65
	N	40	49	113	85		
			Mot	ther Tongue			
Education		French	English	French and English		< .05	Interaction Effect
< High School	× s	1.82 (1.32)	1.00	4.20 (2.17)		Yes	Yes
High School	x s	3.02 (2.02)	1.67 (1.16)	1.77 (0.93)		Yes	
College	⊼ S	3.14 (1.78)	1.00 (0.00)	3.58 (1.65)		Yes	
University	× s	3.33 (1.77)	4.29 (1.70)	3.55 (2.30)		No	
< .05		Yes	Yes	Yes			

Non directional F-test of differences between means.

N = might be slightly inconsistent due to truncated data (missing and 'not-applicable data has been removed).

sampled (3.29 = 4.29 – 1.00). However, the differences are likely a result of the low numbers of respondents with English mother tongue cases that were linked for analysis. As for the Bilingual population sampled, with the exception of the higher mean for respondents with less than high school education (4.20), the trend of the impact of higher education continues. While the means differ slightly (and opposite to the trend) between the college-educated level (3.58) and the university-educated level, the variance explained is much higher for the university-educated respondents (2.30 for university

versus 1.65 for college).

While interaction by mother tongue and education has been established for the dependent variable 'I use Internet to find information regarding the weather', the overall indication of the means show that the Internet is not used often by the sampled population. The exceptions are noted for Bilingual people who hold less than a high school education in three cases, the use of Internet to surf (5.60), to find, download and listen to music (5.60) as well as to find weather related information (4.29).

Relationship of Social Capital and Education on Internet Use

In order to evaluate if language patterns in media use are related to social capital, regression analyses were performed with the stepwise method. The analyses will permit understanding of whether community commitment, level of education and annual income significantly influence (p < 0.05) the variables relating to media and more specifically to French media. Furthermore, the regressions will allow for understanding any correlations that may exist.

Forty-six tests were performed with the possibility of relating eight dependent variables, namely the respondents' personal income, education level, and their implication levels in their communities. The variables, which represent the level of community implication, are I participate in community development, I participate in community development for Francophones in Northwestern Ontario, I participate in Community Activity Organizations, I participate in Community Activity Organizations for Francophones in Northwestern Ontario, I volunteer in organizations, and I volunteer in organizations for francophones in Northwestern Ontario.

Out of these 46 tests, the stepwise model found 42 significant regressions.

Education level was chosen in 29 of the tests while the respondents' personal annual income was chosen in only 17 cases. Interestingly, in 11 of the 17 cases, which revealed income, the variable of education was also included. Regarding variables relating to implication level in the community, 21 of the tests were revealed; nonetheless, only 11 of these variables directly tied to implication in organizations affecting Francophones in Northwestern Ontario. In the end, the regressions contained between one and four variables where 36 tests contained two or less variables. The explained variance ranges from 2% to 71%. From the tests, the independent variables can be grouped into themes in order to see if the correlations exist.

Table 13 deals with the location of Internet use and even though the explained variable for each of the correlations is under 28%, all cases outline a positive association with the level of education. The positive association signifies that the more education an individual has, the more likely they are to use the Internet at home $(R^2 = 0.06)$, at work $(R^2 = 0.06)$, elsewhere than at home and at work $(R^2 = 0.08)$ and at their place of study $(R^2 = 0.11)$. Two of the dependent variables related to the location theme (work and elsewhere than home and work) are also positively correlated with personal annual income, while the use of the Internet at home is negatively associated, suggesting that the more income a person has, the less likely they are to use the Internet at home. The variance in this case, however, is only six percent. The regression model for the use of the Internet at the place of study also raises a weak but positive correlation with the level of implication in community activity organizations. While it is somewhat surprising that the variance explained is low in all of these cases, the results are not at all surprising, as the literature already suggests that education and income are correlated with Internet use.

Location

Table 13

Multiple Regression Of All Variables That Have A Significant Influence
On The Dependent Variables Related To Location Of Use
Sample Of Non-Students Respondents Only
Explained variance (R²) and Standardized Coefficient (β)

Dependant Variables	Independent Variables	β	F	R ² total	p < 0.05
I use the Internet at home.	Highest level of education achieved by the respondent	0.26	9.36	0.06	yes
	Approximation of annual personal income	-0.18			
I use the Internet at my place of work.	Highest level of education achieved by the respondent	0.45	55.44	0.28	yes
	Approximation of annual personal income	0.15			
I use the Internet elsewhere other than at	Level of participation in community activity organizations.	0.23	11.63	0.08	yes
home or at my place of work.	Highest level of education achieved by the respondent	0.15			
I use the Internet at the place where I study.	Highest level of education achieved by the respondent	0.244	14.42	0.11	yes
-	Level of participation in community activity organizations.	0.23			

Purpose / Activity: Entertainment

Table 14

Multiple Regression Of All Variables That Have A Significant Influence
On The Dependent Variables Related To Online Entertainment Activities.

Sample Of Non-Students Respondents Only

Explained variance (R²) and Standardized Coefficient (β)

Dependant Variables	Independent Variables	β	F	R ² total	p < 0.05
I use the Internet to surf the web.	Highest level of education achieved by the respondent	0.27	9.16	0.06	yes
	Approximation of annual personal income	-0.15			
I use the Internet to find, download or listen to	Approximation of annual personal income	-0.17	7.82	0.05	yes
music.	Level of volunteering implication in organizations for Francophones in Northwestern Ontario	-0.16			
I use the Internet to listen to the radio.	Level of participation in community activity organizations for Francophones in Northwestern Ontario	0.12	4.54	0.02	yes
I use the Internet to play electronic games.	Approximation of annual personal income	-0.22	14.55	0.05	yes

Table 14, continued

Dependant Variables	Independent Variables	β	F	R ² total	p < 0.05
I use the Internet in order to chat.	Approximation of annual personal income	-0.22	14.79	0.5	yes
I use the Internet to meet new people.	Approximation of annual personal income	-0.14	5.65	0.02	yes
I use the Internet to answer personal ads or have access to personal services.	Level of implication in community development organizations	0.17	8.58	0.03	yes
I use the Internet in order to access discussion forums.	Level of implication in community development organizations	0.20	11.97	0.04	yes

Table 14 addresses the purposes of Internet use, or more specifically, the variables in the table deal with online enjoyment activities. Variables, which address online information activities, will be addressed later. To begin, five of the cases report a negative correlation with respondents' personal annual income. The negative correlation suggests that the more income a person has, the less likely they are to use the Internet to surf ($R^2 = 0.06$), to find, download and listen to music ($R^2 = 0.05$), to play electronic games ($R^2 = 0.05$), to chat ($R^2 = 0.50$) or to meet new people ($R^2 = 0.02$). While the variance explained is quite low in all online activities that serve to entertain the individual, the variance explained in the case of using the Internet for the purpose of chatting is of significance (50%). A positive correlation was also found between using the Internet to surf and the respondents' level of Education. However, it is not surprising to find that the more a person is educated, the more likely he or she is to surf the World Wide Web. In terms of social capital, the stepwise did indicate that the more a person participated in community activity organizations, the more likely he or she was to use the Internet for the purpose of listening to the radio. Also within this theme are the dependent variables for answering to personal advertisements and services, as well as

participation in discussion forums. Both these variables were positively correlated with participation in community development organizations. With the exception of the dependent variable of using the Internet for the purposes of chatting, the variance fell below six percent in all cases, which indicates that while the correlations did exist, they are weak. Also important to note is that the three variables that were removed by stepwise fell within the theme of Internet usage for an entertainment purpose, namely the use of the Internet relating to culture, sports and erotic websites. The use of the Internet in order to plan trips, to watch videos and to find, download and watch movies online were not tested in the regression model. There was no particular reason for their exclusion.

Purpose / Activity - Information

The group of tables relating to the purpose of Internet usage could be subdivided in order to offer insight between using the Internet for entertainment value as well as using it for information purposes. Table 15 explains the correlations on Internet usages for information purposes with variables indicative of social capital.

Table 15

Multiple Regression Of All Variables That Have A Significant Influence On The Dependent Variables Related To Online Information Activities.

Sample Of Non-Students Respondents Only

Explained variance (R^2) and Standardized Coefficient (β)

Dependant Variables	Independent Variables	β	F	R ² total	p < 0.05
I use the Internet for banking activities.	Highest level of education achieved by the respondent	0.21	12.80	0.04	yes
I use the Internet to read newspapers.	Highest level of education achieved by the respondent	0.20	11.52	0.04	yes
I use the Internet for the information or news.	Highest level of education achieved by the respondent	0.25	18.29	0.06	yes
I use the Internet to find health information.	Highest level of education achieved by the respondent	0.27	10.25	0.07	yes
	Approximation of annual personal income	-0.20			

Table 15, continued

Dependant Variables	Independent Variables	β	F	R ² total	p < 0.05
I use the Internet to find information on grants,	Approximation of annual personal income	0.14	5.31	0.04	yes
bursaries or finances.	Level of implication in community development organizations	0.12			
I use the Internet for weather information.	Highest level of education achieved by the respondent	0.21	13.61	0.05	yes
I use the Internet to do research, in a similar way that I would use an encyclopedia.	Highest level of education achieved by the respondent	0.34	36.93	0.12	yes
I use the Internet for studying purposes.	Highest level of education achieved by the respondent	0.37	44.44	0.14	yes
I use the Internet for work purposes.	Highest level of education achieved by the respondent	0.51	97.06	0.26	yes

All tables within this section contain only one variable, with the exception of the tables for the dependent variables 'I use the Internet to find health information' ($R^2 = 0.07$) and 'I use the Internet to find information on grants, bursaries or finances' ($R^2 = 0.04$). In addition, each of the variables that are related to using the Internet for informational purposes were positively correlated to levels of education (with the exception of the variable 'I use the Internet to find health information'), which indicates that the more individuals are educated, the more they are likely to use the Internet for informational activities. An exception is noted for the use of the Internet to find health information. Whereas the data indicates that the description of the variable for health information ($R^2 = 0.07$) is also negatively correlated with annual personal income, indicating that the more income an individual has, the less likely he or she is to use the Internet to search for health information. While this information may be real, it is important to note that the variance explained is minimal (7 %). Finally, Table 15 also describes the correlations associated with finances ($R^2 = 0.04$), which is the only variable in this series that is not correlated with education; however, a positive correlation with

annual personal income as well as participation in a community development organization was found.

Communication

The following table (table 16) is descriptive of the participants' use of the Internet for the purposes of communication, including both e-mail and other forms of electronic messaging. The scope of using the Internet as a communication device encompasses who the respondents' communicate with, as well as the purpose of their electronic messaging patterns.

Table 16

Multiple Regression Of All Variables That Have A Significant Influence
On The Dependent Variables Related To Online Communication.

Sample Of Non-Students Respondents Only

Explained variance (R²) and Standardized Coefficient (β)

Dependant Variables	Independent Variables	β	F	R ² total	p < 0.05
I use e-mail to communicate with my	Highest level of education achieved by the respondent	0.31	12.39	0.08	yes
friends.	Approximation of annual personal income	-0.19			
I use e-mail to communicate with	Highest level of education achieved by the respondent	0.34	16.20	0.10	yes
members of my family.	Approximation of annual personal income	-0.19			
I use e-mail to communicate with work colleagues and/or clients.	Highest level of education achieved by the respondent	0.38	44.61	0.14	yes
I send electronic messages for studying	Highest level of education achieved by the respondent	0.47	20.32	0.23	yes
purposes.	Level of implication in community development organizations for francophones in Northwestern Ontario	0.19			
	Approximation of annual personal income	-0.20			
I send electronic messages outside of	Highest level of education achieved by the respondent	0.38	14.48	0.12	yes
studying purposes.	Approximation of annual personal income	-0.21			
I send electronic messages for work	Highest level of education achieved by the respondent	0.48	45.19	0.25	yes
purposes.	Level of implication in community development organizations	0.12			

Table 16, continued

Dependant Variables	Independent Variables	β	F	R ² total	p < 0.05
I send electronic messages outside of work	Highest level of education achieved by the respondent	0.45	24.63	0.16	yes
purposes.	Approximation of annual personal income	-0.19			
I receive electronic messages for study	Highest level of education achieved by the respondent	0.49	20.61	0.31	yes
purposes.	Level of participation in community activity organizations.	0.15			
	Approximation of annual personal income	-0.17			
	Level of implication in organizations related to Northwestern Ontario Francophones	0.16			
I receive electronic messages outside of	Highest level of education achieved by the respondent	0.385	14.35	0.18	yes
study purposes.	Level of participation in community activity organizations.	0.21			
	Approximation of annual personal income	-0.16			
I receive electronic messages for work	Highest level of education achieved by the respondent	0.46	24.03	0.26	yes
purposes.	Level of implication in organizations related to Northwestern Ontario Francophones	0.20			
	Level of participation in community activity organizations for Francophones in Northwestern Ontario	-0.23			
	Level of implication in community development organizations	0.15			
I receive electronic messages outside of work purposes.	Highest level of education achieved by the respondent	0.44	23.90	0.15	yes
	Approximation of annual personal income	-0.15			

What is interesting in Table 16 is that each is positively correlated with the level of education achieved by the respondent. While the highest variance explained is 31%, it nonetheless indicates that the more education the individual has, the more likely he or she will be to correspond with others by using the Internet. The remainder of the variables should be further explained.

First, let us begin with a description of the recipients of the communication prior

to turning our attention to the purpose of sending and receiving communication online. The independent variable 'I use the Internet to email with work colleagues and clients' $(R^2 = 0.14)$ was the only variable associated only with education. Both emailing to friends $(R^2 = 0.08)$ and emailing to family members $(R^2 = 0.10)$ were correlated with two dependent variables, education level and annual personal income. Education was positively associated. Annual personal income, however, is negatively correlated with both variables, showing that while the more education a person has the more likely that they are to email their friends and family, the more income that they earn on an annual basis, the less likely they are to use the Internet to email friends and family members.

When focusing on the purpose of electronic messaging, it is noted again that all variables are correlated positively with education and negatively with personal annual income. The negative association applies to the following variables: sending electronic messages for the purpose of studying ($R^2 = 0.23$), sending electronic messages outside the purpose of studying ($R^2 = 0.12$), sending electronic messages outside of the purpose of work ($R^2 = 0.16$), receiving electronic messages for the purpose of studying ($R^2 = 0.31$), receiving electronic messages outside of the purpose of studying ($R^2 = 0.18$), and receiving electronic messages outside of the purpose of work ($R^2 = 0.18$). For all of these variables, the more money made by the individual, the less likely he or she is to use the Internet for sending or receiving messages for purposes relating to his/her study and outside of purposes relating to his/her study or work.

Only one negative correlation is found in the section, which addresses the impact of social capital on electronic communication. The results of the correlation model indicate that the more individuals participate in community activity organizations for

francophones in Northwestern Ontario, the less likely they are to receive electronic messages for work related purposes ($R^2 = 0.26$). The remainder of the social capital correlations is positive. For instance, a positive correlation is found between sending electronic messages for study purposes and participation in community development organizations for Francophones in Northwestern Ontario ($R^2 = 0.23$). A positive correlation between sending electronic messages for work purposes and participation in community development organizations ($R^2 = 0.25$) is also found. A similar correlation is found for receiving electronic messages for purposes outside of work, indicating that the more a person participates in community development organizations, the more likely he or she is to send electronic messages ($R^2 = 0.26$). The results regarding the variable 'I receive electronic messages for purposes outside of work' identify a positive link to participation in community activity organizations for Francophones in Northwestern Ontario. The positive relationship between communication, community involvement, and education is interesting, but it is still important to note that the highest variance explained (for the variable 'I receive electronic messages for study purposes') is 31%, indicative of positive but weak correlations.

Language use

Since computer programs are supported in many different languages, it seems logical to question the correlations associated with the use of French computer software, including French browser use. Table 17 shows positive correlations with two variables, namely the higher the participation in community development organizations for Francophones in Northwestern Ontario, the higher the usage of software in French ($R^2 = 0.12$), including the French language browser ($R^2 = 0.68$). In addition, the higher the

education level, the more likely the person is to use French computer software and a French browser. The variance explained for usage of French computer software is 12%, and 68% is explained for the usage of a French browser while using the Internet; this variance suggests a strong positive association.

Table 17

Multiple Regression Of All Variables That Have A Significant Influence
On The Dependent Variables Associated With Language Use
Sample Of Non-Students Respondents Only
Explained variance (R²) and Standardized Coefficient (β)

Dependant Variables	Independant Variables	β	F	R ² total	p < 0.05
When I use my computer, I use French software (Windows, Word, etc.).	Level of implication in community development organizations relating to Francophones in Northwestern Ontario	0.25	19.23	0.12	yes
	Highest level of education achieved by the respondent	0.22			
When I use Internet, I use a French browser.	Level of implication in community development organizations relating to Francophones in Northwestern Ontario	0.19	10.12	0.68	yes
	Highest level of education achieved by the respondent	0.16			

Language of activity

Regardless of the language of software use, it is important to understand in what language respondents are using the Internet. The chosen language of Internet activity will be addressed in the in the following table (Table 18). Within this theme, stepwise indicates two variables that correlate with surfing in French and finding, downloading and listening to French music and one variable for finding, downloading and viewing French programming and films. The latter shows a positive correlation in social capital; that is to say, the more a person participates in community activity organizations, the more likely he or she is to find, download and watch French programming and French films ($R^2 = 0.07$). While something similar can be said regarding the independent

variable related to finding, downloading and listening to French music ($R^2 = 0.05$), the difference is the addition of the negative correlation with annual personal income. Again, similarly to what was presented in table 14, the more annual income a person has, the less likely he or she is to find, download and listen to music online. Finally, two positive, though weak, correlations with using the Internet to surf the World Wide Web in French ($R^2 = 0.11$) are indicated in the results. In fact, the model indicates that the more involvement in community development organizations for Francophones in Northwestern Ontario, the more likely a person is to surf the Internet in French. The same can be said for level of education; the more education a person has achieved, the more likely they are to surf the web in French.

Table 18

Multiple Regression Of All Variables That Have A Significant Influence
On The Dependent Variables Associated With Online Language Of Activity
Sample Of Non-Students Respondents Only
Explained variance (R²) and Standardized Coefficient (β)

Dependant Variables	Independant Variables	β	F	R ² total	p < 0.05
When I use Internet, I surf the web in French.	Level of implication in community development organizations relating to Francophones in Northwestern Ontario	0.26	16.01	0.11	yes
	Highest level of education achieved by the respondent	0.18			
I use the Internet to find, download or listen to	Level of participation in community activity organizations.	0.166	6.68	0.05	yes
French music.	Approximation of annual personal income	-0.13			
I use the Internet to find, download or watch French programs or movies.	Level of participation in community activity organizations.	0.26	18.47	0.07	yes

Language of Communication

Having now explored the language of software usage and the language of use in online activities, the focus can move to the language used in online communications. For

the purpose of comparison and grouping, the independent variable 'I use the Internet to chat in French' will be addressed in this section as it can be viewed as both an entertaining activity and a communication method. Table 19, in relation to the dependent variable using the Internet to chat in French, indicates a negative association with annual personal income, meaning that the more annual income a person has, the less likely they are to chat in French ($R^2 = 0.05$). Interestingly, this coincides with the findings on activity usage for chatting described in Table 14. Also noted is the positive association with level of participation in community activity organizations for Francophones in Northwestern Ontario; therefore, the more a person participates in these types of organizations, the more likely he or she is to chat online in French. The same is found with sending emails in French ($R^2 = 0.12$) and using the Internet for telephonic means ($R^2 = 0.71$). In fact, the level of participation in community activity organizations for Francophones in Northwestern Ontario is the only correlation with the independent variable of using the Internet for telephonic means, and the variance explained indicates that this correlation is quite strong (71%).

Also correlated with sending emails in French is education level. The more education a person has, the more likely he or she emails in French. However, according to the regression model, participating in a forum and / or blogging in French is correlated only with participation in community activity organizations. Thereby, the more a person participates in a community activity organization, the more likely it is that he or she uses discussion forums or blogs in French ($R^2 = .07$).

Table 19
Multiple Regression Of All Variables That Have A Significant Influence
On The Dependent Variables Associated With The Language Of Online Communication
Sample Of Non-Students Respondents Only
Explained variance (\mathbb{R}^2) and Standardized Coefficient (β)

Dependant Variables	Independant Variables	β	F	R ² total	p < 0.05
I use the Internet to chat in French.	Approximation of annual personal income	-0.16	7.01	0.05	yes
	Level of participation in community activity organizations for Francophones in Northwestern Ontario	0.15			
I use the send e-mails in French.	Level of participation in community activity organizations for Francophones in Northwestern Ontario	0.24	19.20	0.12	yes
	Highest level of education achieved by the respondent	0.23			
I use the Internet for telephone purposes and when I do so, I speak French.	Level of participation in community activity organizations for Francophones in Northwestern Ontario	0.27	19.98	0.71	yes
I use the Internet to access French discussion forums or blogs.	Level of participation in community activity organizations.	0.265	19.58	0.07	yes

Analysis of the Results

For the purposes of answering the main thesis question: What is the impact of social capital, level of education, language on Internet and Internet Use in French, the results of the data and aspects of the literature review will be discussed in the following chapter. Since the two-way ANOVA's, for the most part (with the exception of the 2-way ANOVA test for the impact of Mother Tongue and Education on (general) Internet use) did not present any interactions, the discussion will be divided into the three main goals of the research question, namely: the impact of language and level of Education, the impact of social capital on variables regarding Internet use, and French use of both Internet and various other mediums, excluding the Internet. The trends suggested by the results will be addressed and linked to the information that was collected through the

literature review. The focus will remain on the discussion of the hypotheses and as such, they will either be accepted or refuted.

Prior to moving on to the discussion, it is important to highlight a few issues that were raised with the data based on the analysis. The questionnaire was sent out with the instruction that any person who could understand French was permitted to answer it. The goal was to reach as many people who could understand French as possible in order to assess their demographics as well as their current technological needs. The questionnaire focused on mother tongue, and thus this is the variable that was used to distinguish the respondents' difference in language. However, it is important to note that this particular variable or any other variable in the questionnaire does not address how that person currently sees him or herself linguistically, or into which category he or she fits; for instance, an individual whose mother tongue is French could in fact be fluent in both languages, or only in French. Yet – and importantly - mother tongue is used as an independent variable in all of the two-way ANOVA tests. Furthermore, as described in the review of literature section, an individual might choose or have a tendency to do certain tasks in certain languages. The tendency goes hand in hand with Sharp's (1973) notion of 'code switching' and Stebbins' (1994) findings of shared linguistic television viewing, as well as what is suggested by Heller (1994), Maxwell (1977) and Mougeon (1982).

Frequencies

Prior to discussing the results, it is imperative to understand who makes up the sample population. As was pointed out in the previous chapter, our sample was problematic in terms of its population representation. Our sample population was made

up of 67% women and 33% men. In terms of Mother Tongue, the study found that 55% were French, 34% were Bilingual and only 11% were English. Five percent of our respondents did not complete high school, whereas 29% attained a university degree. For the purposes of this study, only the non-student population was investigated. Yet, in terms of age, the frequency results showed that 33.9% were under the age of 14, and 16.1% were between the ages of 15 and 19. Only 1.7% were between the ages of 20 and 24, 9.4% were between the ages of 25 and 34 years, 16.4% were between the ages of 35 and 44 years, 15.2% were between the ages of 45 and 54 years and 3.8% were between the ages of 55 and 64. Only 3.4% were over the age of 65 years. Nine percent of our sample population made less than \$5000.00 per year, 23% made between \$10 000.00 and \$30 000.00 per year and 17.8% made more than \$70 000.00 per year. In terms of access to technology, 93% had a computer; 88% had Internet access and 69% had high speed Internet access. Sixty-five percent of our sampled population had access to the Internet at their place of work.

Impact of Language

While Castells (2001) and Tough (1995) claim that the Internet is a tool that belongs to humans and is continuously shaped by them, they admit, along with Amrous (2006) and Ostler (2000), that websites found on the Internet are overwhelmingly English. In addition, Sharp (1973), Stebbins' (1994), Heller (1994), Maxwell (1977) and Mougeon (1975) have all noted the complexity of French dialects throughout the world, again limiting the linguistic nature of website availability. In terms of bilingual use, Stebbins (1994) also noted an unintended use of the majority language, and while looking at television use, he found a higher use of English television by Francophones,

accounting for 70% and 80% of the television viewing time. Specifically regarding the francophone population in the Sudbury region, Laflamme (2004) found that 86% of English respondents own a computer compared to 65% of their French counterparts; an indicator that Francophones are at least, 19% less likely to have access to the Internet than Anglophones. The information leads us to hypothesize that Francophones use the Internet less than their Anglophone counterparts and to test our data against this measure. Overall, our results were weak, but nonetheless offered trends and interesting insight into the future for Francophones and Internet usage.

With respect to Mother Tongue, according to the two-way ANOVA described in Table 1^{23} , some significant impact is visible on French use of the Internet; however, the differences between the respondent's mother tongue on browser use $(F_{(2;303)} = 4.93; p < 0.01)$, surfing $(F_{(2;289)} = 3.18; p < 0.05)$, downloading visual programs $(F_{(2;285)} = 4.38; p < 0.05)$, sending emails $(F_{(2;300)} = 6.47; p < 0.01)$.) are closely related and therefore the differences are minimal.

According to the second two-way ANOVA described in Table 2^{24} , language had an impact on some of the variables. In fact, individuals with a French mother tongue are slightly more likely than others to use French computer software $(F_{(2;303)}=3.74$; p < 0.05), television $(F_{(2;306)}=8.52$; p < 0.001), radio $(F_{(2;297)}=7.92$; p < 0.001), music $(F_{(2;313)}=6.70$; p < 0.001), newspapers, journals and magazines $(F_{(2;307)}=8.78$; p < 0.001), and literary works $(F_{(2;313)}=6.02$; p < 0.01).

Finally, according to the results pertaining to the third two-way ANOVA test displayed in Tables 3 through 12²⁵, while Internet usage is low, those respondents who

²³ The impact of the mother tongue and Education on French use of the Internet

²⁴ The impact of the mother tongue and Education on French use of various media sources, excluding the Internet

²⁵ The impact of the mother tongue and Education on (general) Internet use

have a French Mother Tongue are less likely to use the Internet to surf ($F_{(2;311)} = 3.778$; p < 0.05), to find, download and listen to music ($F_{(2;313)} = 12.03$; p < 0.001), to watch videos ($F_{(2;315)} = 7.20$; p < 0.001), to find, download and listen to movies ($F_{(2;312)} = 10.97$; p < 0.001), to chat ($F_{(2;315)} = 4.55$; p < 0.01) and to find sports information ($F_{(2;311)} = 4.06$; p = 0.05) than their Bilingual and English counterparts; however, the differences are minimal.

Thus, not surprisingly, those individuals who indicated a French Mother Tongue on the questionnaire are more like likely to use French software and to access various forms of *offline* French media than their Bilingual or English counterparts. While they are minimally more likely to use the Internet for Informational purposes, they are less likely to access the Internet for recreational purposes than their Bilingual or English counterparts.

Impact of Education

The literature is filled with issues relating to the low literacy levels of Francophones and to the digital divide hitting those individuals that are socially oppressed. Within the review of literature, both Mougeon's (1982) Laflamme's (2004) findings on education and language claim that, while the trend is shrinking, Anglophones are historically more educated that Francophones. Education is particularly important as both a factor in reducing the social digital divide and as a method of increasing one's socio-economic position. In fact, according to Statistic Canada's 2005 Canadian Internet Use Survey (CIUS), education is one of that factors helping to diminish the digital divide in Canada. Furthermore, it has been suggested that communicative technologies are used more often by the educated population (Nie, 2001, p. 2). As such, it remains an integral part of the project in understanding the effect of education on Internet use for

Francophones in Northwestern Ontario. The following hypotheses were put forth and tested; the higher the level of education, the higher the use of the Internet, and the higher the level of education, the higher the French use of the Internet.

According to the two-way ANOVA described in Table 1, education had a significant impact on some of the variables relating to the French use of the Internet. The higher the education level achieved, the higher the French Internet use. Again, the difference in usage is minimal between the groups. There was, however, a surprising factor: those who had achieved less than a secondary education were more prone to use the Internet in French. The probability of using the Internet in French could potentially be associated with the literacy of those individuals in the English language.

According to the second two-way ANOVA described in Table 2, a difference in use only in the case of French computer software ($F_{(3;303)} = 4.57$; p < 0.01) was noted, meaning that in terms of various media sources, university educated individuals are slightly more likely to use French computer software on their computers than those with less education.

With the results of the third and final two-way ANOVA, displayed in Tables 3 through 12 the study found, again, that usage was fairly low, with the highest mean presenting at 3.43 ($F_{(3,314)} = 4.70$; p < 0.005). Based on the results, individuals who have a university education are more likely to use the Internet for the purposes of finding travel ($F_{(3,317)} = 8.30$; p < 0.001), cultural ($F_{(3,313)} = 2.64$; p < 0.05) and weather related information ($F_{(3,314)} = 4.70$; p < 0.005) than their counterparts who have completed less than a secondary education. In addition, regardless of the sample populations' overall lack of interest in using the Internet to play electronic games, university educated individuals are less likely to use the

Internet to play electronic games ($F_{(3;314)} = 3.59$; p < 0.05) than those with less education. Finally, in terms of using the Internet to chat, while the chat usage is low, the likelihood of it occurring is higher for those with a high school education or those with a college education than those with less than a high school education or those with a university education ($F_{(3;315)} = 2.90$; p < 0.05).

Finally, and with respect to the Regression tests on the impact of Education on Internet use, a number of variables showed significant correlations. First, in terms of location, Education was positively correlated with using the Internet at home ($R^2 = .06$), at work ($R^2 = .06$), elsewhere than at home and at work ($R^2 = .08$) and at their place of study ($R^2 = .11$). The level of education was also positively correlated to using the Internet for banking activities ($R^2 = .04$), information or news ($R^2 = .06$), health information ($R^2 = .07$), weather information ($R^2 = .05$), studying purposes ($R^2 = .14$), and work purposes ($R^2 = .26$), as well as to surf ($R^2 = .06$), read newspapers ($R^2 = .04$), and do research in a similar manner as using an encyclopedia ($R^2 = .12$).

Furthermore, in terms of communication, Education was positively associated with e-mailing work colleagues and clients (R^2 = .14), friends (R^2 = .08), and family members (R^2 = .10). It was also positively correlated to other communication factors: sending electronic messages for purposes in (R^2 = .23) and outside of studying (R^2 = .12), in (R^2 = 0.25) and outside of work (R^2 = .16), and receiving electronic messages for purposes in (R^2 = .31) and outside of studying (R^2 = .18), and in (R^2 = .26) and outside of work (R^2 = .15). However, the highest variance explained is 31%, indicating that the more education an individual has, the more likely he or she is to use the Internet with the variables described above. Considering the highest variance, though, the association is

relatively weak. In terms of French use, education was positively correlated with using the Internet to surf the web ($R^2 = .11$), sending emails ($R^2 = .12$), using French software ($R^2 = .12$) and using a French browser ($R^2 = .68$) in order to surf. However, the only significant correlation, which holds significant strength (68%), is using a French browser in order to surf the web.

From the analyses, it is understood that while the means, and hence the usage, remains low, the higher the education level, the higher the French use of the Internet, the higher the use of French software and the higher the use of Internet for informational activities such as finding information regarding the weather, travel and culture.

Interestingly, the exception is in relation to the French use of the Internet and the individuals who hold less than a secondary education. For those individuals, the French Internet use is higher. While the specific reasons are not certain, an assumption can be made that the high use of the French while using the Internet is based on their lack of ability in the English language. Also interesting is that the results show that the higher the education, the lower the likelihood of the population to use the Internet for recreational activities such as playing electronic games and chatting online. However, and as mentioned above, the difference between Education levels and Internet use, regardless of language and regardless of type of activity, remains minimal.

While running a two-way ANOVA in order to determine the impact of Mother Tongue and Education on general Internet use, an interaction in four of the 16 cases was tested: using Internet to surf ($F_{(6;311)} = 2.53$; p < 0.05), to find, download and listen to music ($F_{(6;313)} = 3.98$; p < 0.001), to find, download and watch films ($F_{(6;312)} = 2.39$; p < 0.05) as well as to

Impact of Mother Tongue and Education

find weather related information ($F_{(6:314)} = 4.00$; p < 0.001).

In terms of surfing the web, while Francophones are not prone to using the Internet to surf the web (highest mean: 3.60), the higher the education level the more likely the French individual will be to surf the web. However, if an individual is bilingual, and holds less than a high school diploma, he or she is more likely to use the Internet than his or her Francophone counterparts are. Also interesting is that this is one of the only tests which provided us with some decisive answers regarding Internet use; the mean of Bilingual respondents is registered at 5.60 with 0.89 variance explained $(F_{(6;311)} = 2.53; p < 0.05)$.

Regarding finding, downloading and listening to music, if one is bilingual, the higher one's level of education, the higher the probability of listening to music, with the exception of those who have achieved less than a high school education (registering a mean at 5.60 with 0.55 variance explained). The Francophone respondents whose mother tongue is French and those who indicated English as their mother tongue answered closer to the never category of the scale ($F_{(6;313)} = 3.98$; p < 0.001).

Again, in the situation of finding, downloading and watching movies and films, both the English and French sampled population ranked lower than the Bilingual population. The fact that the English means were so low with such high variance explained can be explained by the low numbers of survey respondents who could list only English as their mother tongue. While French individuals 'almost never' use the Internet, Bilingual individuals with less than a high school education, 'sometimes' use the medium to find, download and watch visual programming ($F_{(6;312)} = 2.39$; p < 0.05).

Finally, in terms of using the Internet in order to find information regarding the

weather, a clear pattern for those individuals who have a French mother tongue is observed. The more education a person has, the more likely he or she is to use the Internet to get weather information. However, while the remainder of the analysis is not quite as clear, it is noted that the bilingual population is more likely to use the Internet for weather related information than their French counterparts ($F_{(6;314)} = 4.00$; p < 0.001).

While interaction by mother tongue and education has been established for the dependent variable 'I use Internet to find information regarding the weather', the overall indication of the means shows that the Internet is not used often by our sampled population; the exceptions are noted for Bilingual people who hold less than a high school education in three cases, the use of Internet to surf (5.60), to find, download and listen to music (5.60) as well as to find weather related information (4.29). While using the Internet to find, download and watch movies does not occur often (3.40), it nonetheless remains the higher mean in the category. The above-mentioned variables, with the exception of weather information, tend to be viewed as recreational activities as opposed to information based activities. As both Castells (2001) and Dryburg (2001) noted, the most common uses of the Internet are deemed as being for personal interest. To see that the less educated population would use the Internet for the most frequent reasons is not surprising in the least. Furthermore, in terms of weather related information, the less educated population are likely to be workers in the resource dependent communities where the media might be limited, and longer term weather information might be more easily available by checking the *online* 'weather network' in order to plan for a day in the bush.

Regardless, these tests clearly demonstrate that our hypotheses, in regards to the

variables of mother tongue and education, are accurate. Confirming that not only did individuals who listed French as their Mother Tongue use the Internet less than their Bilingual counterparts, but that the higher the level of education, the higher the Internet use, and, finally, that the higher the level of education, the higher the French use of the Internet. The exception, yet again, remains in the Bilingual population with less than a high school education.

Impact of Social Capital

The literature on Internet use covers a wide spectrum of ideas and beliefs; on one hand, there is Putnam's (2000) idea of a disintegrating society, and on the other, Castells' (1998, 2000, 2001) notion of societal progression based on the use of new communicative technologies and globalisation. With respect to determining whether social capital has an impact on variables relative to the many facets related to Internet use, a number of regression models²⁶ with Education, Annual Income and Community Participation were performed. Since the impact of education has been discussed, the focus of this section will be on social capital by way of individual annual income, social capital, the following discussion will be separated into two categories, annual personal income and participation in various community organisations. The discussion will begin by first delving into the annual income information and then turn to social capital as measured by community vitality.

Mougeon (1982) finds a difference between socio-economic groups where the working class are less apt in their French skills than the higher socio-economic classes. While his findings are based on a youth population, Mougeon is nonetheless able to

²⁶ The impact of Education, Annual Income and Social Capital (Community Participation) on Internet Use

conclude that linguistic assimilation depends on external factors. Laflamme (2004) and Bernier and Laflamme (1998), for their part, enlighten us with their findings. While Francophones tend to have inferior education, they remain at the same economic level as their English counterparts. Furthermore and interestingly, Castells (2001, p. 257) notes that the highest access to high speed Internet occurs among individuals who earn less than \$5000 annually. The socio-economic group which comprises the under \$5000.00 annual income is most likely made up of students, who need broadband for the purposes of sharing large files such as music, videos and movies, as well as participating in their individual or academic research endeavours. Wanlin (2001) notes that adequate access remains an issue in Northwestern Ontario and that the cost of technology services in the region are still high. Since annual income is a factor in the digital divide, and since there remains a cost associated with the ownership of new communication technologies as well as with the associated services, it is possible to hypothesize that the higher the individual annual income, the more likely one is to use the Internet.

Based on the Netville study, Hampton and Wellman (2003) found that the wired residents tended to participate and be more involved in the community. In fact, Hampton and Wellman place emphasis on the positive attributes of technology, which brings similar people together and promotes community involvement (Hampton & Wellman, 2003, p. 306). While Castells (2002) did not measure the impact of social capital on the Internet, he did measure the use of the Internet as well as the impact of the Internet on social capital. Based on his 2002 Catalonia study report, Castells found that most of his participants met with family and friends through traditional modes such as face-to-face meetings or by using technology such as the telephone. However, respondents used the

Internet to communicate with their friends who lived at a distance. Younger subjects participated in chats and other online programs in a similar fashion as personal interaction (Castells, 2002, p. 411). In addition, Castells found that television use rather than personal interaction was sacrificed to Internet usage.

Stebbins (2004), while looking into community vitality in Calgary, finds that while it was uncommon for Francophones to be involved in numerous organization groups, 78% of respondents belonged to at least one Francophone group. The situation among Francophones in Northwestern Ontario proved to be very different. Our survey proposed involvement on a six step Likert Scale ranging from *Never* to *Very Often*. The highest response indicating involvement in an organisation for Francophones of Northwestern Ontario is 12.8% when combining percentages for answers of *often* and *very often* on the scale, and our lowest response for involvement in an organisation for Francophones of Northwestern Ontario is 51.8% when combining percentages for *never* and *almost never* on the Likert scale.

As a result of the information gathered through the review of literature, the study can assume the hypothesis that the higher the level of personal annual income, the higher the higher the use of the Internet, as well as the higher the level of French community commitment, and the higher the use of the Internet in French. In order to assess and discuss the impact of social capital, the following discussion will be separated into two categories: annual personal income and participation in various community organisations.

While weak, an individual's annual personal income was positively correlated with the use of the Internet at work ($R^2 = .28$) and elsewhere than home and work ($R^2 = .28$)

.08) as well as the use of the Internet for purposes relating to finances ($R^2 = .04$). These results indicate that the more income an individual had, the more likely they were to use the Internet at work and at other locations, as well as to use the Internet as a method for gaining information about their finances. However, annual income was negatively correlated, meaning that the more income an individual had, the less likely they were to use the Internet for the following: using the Internet at home $(R^2 = .06)$ to surf, $(R^2 = .06)$ find, download and listen to music ($R^2 = .05$), play electronic games ($R^2 = .05$), find health information ($R^2 = .07$), meet new people ($R^2 = .02$), e-mail with friends ($R^2 = .08$), and family $(R^2 = .10)$, send electronic messages for purposes in $(R^2 = .23)$ and outside of studying($R^2 = .12$), in ($R^2 = .25$) and outside of the purpose of work ($R^2 = .16$), to receive electronic messages for the purpose in $(R^2 = .31)$ and outside of studying $(R^2 = .18)$, in $(R^2 = .26)$ and outside of work $(R^2 = .15)$ and to chat $(R^2 = .5)$. The latter, using the Internet to chat, has a variance of 50%, the highest variance explained in the group. Interestingly, the usages can be differentiated into recreational activities and informational activities. The higher the annual income, the more likely the individual is to use the Internet for work or informational reasons and the less likely the individual is to use the Internet for recreational activities or reasons. Unfortunately, the survey did not question the amount of time spent on activities and thus an understanding of the amount of time spent on the Internet for recreational or informational purposes cannot be reached.

In terms of French use, annual income was also negatively correlated to finding, downloading and listening to French music ($R^2 = .05$) and chatting in French ($R^2 = .05$), suggesting that the more annual income an individual has, the less likely he or she is to use the Internet to find, download and listen to French music or to chat in French.

When assessing the level of participation in various community organizations, the study found weak, but nonetheless positive, correlations in the following cases with respect to participation in Community Activity Organizations: using the Internet at the place of study ($R^2 = .11$), using the Internet to listen to the radio ($R^2 = .02$), to find, download and listen French music ($R^2 = .05$), to find, download and watch French visual programming such as movies ($R^2 = .07$), and to participate in French forums and / or blog in French ($R^2 = .07$). In terms of participation in Community Development Organizations, the study also found weak but positive correlations with the use of the Internet to find information regarding finances ($R^2 = .04$) and the use of the Internet to answer personal ads and services ($R^2 = .04$), to send electronic messages for work purposes ($R^2 = .25$) and to receive electronic messages for purposes outside of work ($R^2 = .15$).

Finally, it was important to distinguish between participation in regional Francophone organizations and participation in other organizations. In terms of negative correlations, the study found that the variable for using the Internet in order to receive electronic messages for work related purposes ($R^2 = .26$) was negatively correlated with participation in Community Activity Organizations for Francophones in Northwestern Ontario. Accordingly, the more individuals participated in Community Activity Organizations for Francophones in Northwestern Ontario, the less likely they were to use the Internet to receive electronic messages for work related purposes. However, the opposite was true of receiving electronic messages for purposes outside of work ($R^2 = .15$), chatting in French ($R^2 = .05$), sending emails in French ($R^2 = .12$) and using the

Internet for telephonic means ($R^2 = .71$). These findings suggest that the more individuals participate in Community Activity Organizations for Francophones in Northwestern Ontario, the more likely they are to receive electronic messages for purposes outside of work, chat in French, send emails in French and to use the Internet as a telephone. In fact, in the latter correlation, the variance explained is 71%, which is a strong correlation. In terms of participation in Community Development Organization for Francophones in Northwestern Ontario, positive correlations were found with the following variables: sending electronic messages for study purposes ($R^2 = .31$), using French software ($R^2 = .12$), using a French browser ($R^2 = .68$) and surfing the web in French ($R^2 = .11$). While somewhat feeble, the correlations suggest that the more an individual participated in Community Development Organizations for Francophones in Northwestern Ontario, the more likely they were to send electronic messages for study purposes, use French software, use a French browser and surf the web in French.

The findings for social capital measured by involvement demonstrate an interesting trend and can in part be linked to the findings of Hampton and Wellman (2003) who suggest that Internet use affects community vitality. The findings can also be linked to Castells (2001) and Dryburg (2001), who both state that the most common uses of the Internet relate to personal interests. The uses of those involved in Community Activity Organisations and Community Activity Organisations for Francophones in Northwestern Ontario tend to be those which are more recreationally based such as listening to the radio, downloading French music and movies, as well as blogging, chatting and e-mailing in French. Internet use of those individuals involved in Community Development Organizations for

Francophones in Northwestern Ontario tends to be more information based such as using the Internet for finances, to answer personal ads and services, to participate in discussion forums, and to send electronic messages for work purposes and for study purposes. In addition, they also tend to use French software, use a French browser and surf the web in French. With respect to the nature of personal attributes necessary for involvement in these organisations, the findings are not entirely surprising. Again, in this case, time spent on using the Internet in French was not questioned, but the tendency of those individuals who participate in Community Development Organizations is to use French software and to surf the web in French. The tendency of those who participate in Community Activity Organizations is to use the Internet to download French music, movies and to email and chat in French. Both are promising when measuring French Internet usage.

Chapter 5: Conclusion

General Findings and Implications

The purpose of the present study was to explore the nature of the various modes of communication offered by the Internet on the vitality of Francophones in Northwestern Ontario. Since the development of the region is relatively new and literature specific to Francophones in Northwestern Ontario is lacking, the research needed to involve a preliminary understanding of the history of the region as well as the Francophone population that lives within it. The literature is somewhat confusing, but through its dissection, a number of differences are found between Northeastern and Northwestern Ontario. Northeastern Ontario was colonized first by farmers and homesteads, whereas Northwestern Ontario was populated through the inception of the railways and the employment that followed in the natural resource industry. To make sense of the differences in colonization and in francophone migrating patterns, differences in landscapes, immigration policies and economic situations in Quebec, Ontario and the Canadian West as well as in the US were examined. In the linguistic literature, regarding Francophones outside of Québec, and apart from the historical information, a large amount of discourse regarding language retention and culture preservation issues through education, media and social systems such as marriage, family composition, and family values, and regarding the nature of living as a minority within dominantly English communities was found. As often alleged throughout the literature, the loss of language and culture is an unconscious experience (Mougeon, 1982, Heller, 1994, Stebbins, 1994, Laflamme and Bernier, 1998, Bernier, Amrous, 2006, Clement, Baker et al, 2005).

While some of the research indicates that nothing that can be done to stop assimilation (Lachapelle & Henripin, 1982), other research indicates that the only way to preserve culture is through people's persistence (Davis 1985). Others believe that some external factors can influence both culture and language retention, such as education, social capital and language (Mougeon, 1982; Amrous, 2006; Stebbins, 1995; Laflamme, 2004; Bernier, 1998; Castells, 2001, 2002).

The literature has shown us that, as with other technologies (electricity, telephone, television, recorded music), a societal debate occurs regarding the moralistic dangers and the practicality of new technology. The same occurred with the onset of the computer and the Internet. While the author is tempted to accept the positive attributes (information sharing, communication, social networks, etc...) of the Internet in all of their magnitude, strong and important arguments have been raised regarding the negative attributes of the Internet (digital divide, cultural singularity, etc...). Castells' (1998, 2000, 2001) arguments regarding the social benefits and enhancements brought forth by the Internet were presented, as well as Putnam 's (2000) and Nie's (2001) fears regarding social isolation and destruction. In the presentation of Castells' 2002 Catalan study and Hampton and Wellman's 2003 study, it was explained that society is not allowing the new medium to control individuals' lives, but is allowing it to complement their daily lives. Through deciphering the literature around technology and the debate over its positive and negative attributes, it has become clearer that regardless of its use as a tool of cultural singularity or a tool to help enhance community, its use can be impacted by individuals' level of education, social capital and language. Not only can its use be impacted by these external factors, but it can also impact community by promoting the

use of the mother tongue and, as suggested by Hampton and Wellman (2003), by the very nature of impacting social capital as measured by community involvement. Furthermore, social networks and virtual communities can be methods of becoming involved not only in a global context, but also in a community context. The positive occurrence of community involvement evolved in Hampton and Wellman's Netville (2003) study where the wired members used the Internet to discuss community issues such as recent break-ins. Not only did the participants become involved online, they printed and posted information for non users. The Netville example, among others, is a strong indicator of the Internet impacting social capital.

In addition, insight was gained into the media use of Francophones in Northern

Ontario through Laflamme's work as well as his other collaborations. It would not be
diligent to simply accept the positive attributes without exploring the issue regionally and
culturally. In previous studies, Laflamme also found that education and language were
key indicators of French use, whether that use is through traditional modes or new
communicative technologies.

While the scope of this paper did not allow for a longitudinal study into whether the Internet acts as a tool towards cultural singularity, Castells' (2001) notion of the users who shape the Internet was taken into consideration. As such, the focus has been on the impact of the mother tongue, education and social capital on Internet use and Internet use in French. Since the goal in creating the survey was to ensure getting as much data as possible and providing the ability for the collaborating agencies to use the data for their future needs, the questionnaire was designed as a self-administered survey, which would be distributed to any individual who currently resided in Northwestern Ontario and could

understand French. After two distributions through the collaborative agencies, the study received 359 non-student surveys, representing less than 4.5% of the Francophone population in Northwestern Ontario²⁷. Not only is the data skewed in terms of the percentage representation but our data also suggests that five percent of our respondents did not complete high school, whereas 29% attained a university degree. This is quite problematic since the 1996 educational levels for the region are registered at 21.8% for those having less than high school and only 6.4 for those having achieved a university degree. Our population is also misrepresented by gender where 67% of respondents are women and only 33% are men. As a result of these differences, caution must be used when making claims about the Francophone community in Northwestern Ontario. Using the literature as well as the data provided in collaboration with regional community groups, the study established that communicative technologies are used more frequently by those who are educated, wealthier and have a higher economic status. In fact, with the data, the study showed that individuals who declared having a French mother tongue use the Internet less than individuals who declared an English or Bilingual mother tongue. In regards to the impact of education, some interesting trends have been uncovered. It has been shown that the higher the level of education, the higher the Internet use, and that the higher the level of education of those with a French mother tongue, the higher the use of French on the Internet, with the exception of those holding less than a high school diploma. In this case, individuals holding less than a high school diploma were more prone to using the Internet in French. In addition, the impact of education trend showed that the higher the education, the more use of the Internet for purposes relating to

²⁷ The 2001 census recorded 8,010 Francophones aged 19 years and over.

information, and the lower the education, the more use of the Internet for recreational activities. Regarding social capital, the study also showed that the higher the individual's annual income, the higher his or her use of the Internet for the purposes relating to work and finances. In fact, the higher the education, the less likely he or she is to use the Internet for recreational activities.

Finally, through the data, the study showed an interesting trend regarding involvement in community organizations and Internet use. While the results were weak, it is clear that the higher the level of community commitment, the higher the use of the Internet in French. Moreover, in terms of community involvement in Francophone organizations in Northwestern Ontario, correlation was found with a number of online activities; but what is interesting is the trend showing that those who are active in Community Activity Organizations tend to use the Internet for recreational activities, and those who are involved in Community Development Organizations tend to use the Internet for informational or non-recreational activities.

Overall, the results were weak; therefore, while confirmed, at best, our hypotheses can only suggest trends in Internet use. In general, our results also showed that none of the francophone population sampled used the Internet often. The reason for this lack of usage remains unclear at the present time, whether it is a result of the technology being newly introduced in the region, of the high English content of the Internet or a combination of the two. Interestingly, only one situation demonstrated a high mean indicating an 'almost always' response: individuals who presented a Bilingual mother tongue and who had achieved less than a high school education used the Internet to surf the web *almost always* ($F_{(6:311)} = 2.53$; $p \le 0.05$).

Recommendations

Based on these findings, further qualitative research will better inform the central research question. The planned focus groups should be used to find out if the information is accurate, and to uncover any additional insights that the participants can offer the researchers. Not only would focus groups be useful in ensuring the accuracy of the findings outlined here, but it would also be an opportune time for the research team to understand the dialect of the Francophones in the area, thereby allowing them to improve the linguistic fit on any future surveys. Also, regarding the questionnaire, the addition of questions about the current linguistic situation of respondents as well as questions regarding the amount of time spent on the Internet would be useful in better understanding the current situation of Francophones.

In addition, it would be useful for the research to gain participants from these focus groups for future research in the area of technology and French culture preservation. If longitudinal data existed, it could be transformed into a tool for municipalities to help promote the region, as well as a tool to help the French associations understand how best to aid in the retention of the French language, specifically for Francophones in Northwestern Ontario. In order to shape the Internet, as Castells (2001) suggested, one must understand that one has the power to shape it. The associations could use the findings in order to promote this power. Once power is established, persistence would clearly follow, as suggested by Davis' (1985) findings on French language retention. Furthermore, the French associations have political power, and thus, according to Sharp (1973), they are a part of the solution to stopping the 'code switching' factor. In fact, it is clear that the *AFNOO* takes a similar approach to that of Amrous

(2006); they believe that the Internet is favourable to Francophone cultural preservation, as they have already put in place the first of Amrous' (2006) recommendations. The Techno Nord-Ouest program is a great example of the recommendation that people, especially youth, need to be prepared and encouraged to use the Internet as a cultural tool where they can diffuse their culture and produce materials online in their primary language.

Furthermore, as Laflamme (2005) has done in the Sudbury region, a true comparison between the French and English population would be interesting, as it would show the true linguistic differences in Internet use. At this point, it remains unknown how the Anglophone population in Northwestern Ontario use the Internet. Our study has only shown the difference between French speaking individuals who have differences in their first language.

Finally, Micheal O'Keefe's (2004) concluding thoughts regarding *sustainable minority community* are perhaps a great way of fostering recognition of the importance of French culture outside of Québec. In fact, the terminology, used in and of itself, lends itself well to being understood by the Francophone population in Northwestern Ontario, where the focus has been on moving toward more sustainable methods of practicing (whether it being in forestry, mining or other sectors) within the natural riches of Northern Ontario.

As most of the literature regarding Francophones outside of Québec questions language and culture preservation, and as a Francophone in Northwestern Ontario myself, I anxiously await future research to see how Francophones have managed to preserve our culture and more importantly, how we have shaped the Internet.

LES FRANCOPHONES DANS LE NORD-QUEST ET LES MÉDIAS

QUESTIONNAIRE SUR L'USAGE DES MÉDIAS

Le questionnaire que vous avez entre les mains s'adresse à toute personne qui habite dans le Nord-Ouest de l'Ontario et qui peut communiquer en français. Les questions qu'il comporte permettront d'obtenir des informations sur l'usage des médias et elles serviront à divers intervenants afin de favoriser le développement des communautés. On vous demande de répondre aux questions avec sincérité et au meilleur de votre connaissance. Il ne s'agit pas d'un test. Bien entendu, vous n'êtes pas obligé-e de répondre au questionnaire ni, si vous y répondez, de répondre aux questions qui pourraient vous déplaire. Le succès de cette recherche dépend, toutefois, de votre collaboration.

Si vous avez déjà rempli ce questionnaire, nous tenons à vous remercier pour votre collaboration. Vous n'avez pas à le remplir une deuxième fois.

Dr Simon Laflamme

Département de

935, chemin du lac

Sudbury (Ontario)

Université Laurentienne

sociologie

Ramsey

P3E 2C6

D^r Chris Southcott M^{me} Nicole Corbett

Département de sociologie Université Lakehead 955 rue Oliver Thunder Bay (Ontario)

P7B 5E1

Tél.: (807) 343-8349

Courriel:

chris.southcott@lakeheadu.ca

Courriel:

En partenariat avec :

M^{me} Denyse Culligan

Association des Francophones du Nord-Ouest de l'Ontario

292, rue Court Sud Thunder Bay (Ontario) P7B 6C6 M^{me} Sylvianne Mauro

Conseil Scolaire de District Catholique des Aurores

Boréales

175, rue High Nord Thunder Bay (Ontario)

P7A 8C7

	S'il vous plaît, ne rien écrire dans cette section du questionnaire; elle est réservée à l'usage des chercheurs.
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	Québec	4	4	
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Sans objet.....

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7.	Combien de personnes habitent dans votre maison ?	personne(s)).
8.	Quel travail exerce ou exerçait votre mère ou tutrice ? [Soyez spécifique. Par exemple : enseignante au secondaire, ver magasin, avocate dans une société, ou mère de famille.]	ndeuse dan	s un grand
9.	Quel travail exerce ou exerçait votre père ou tuteur? [Soyez spécifique. Par exemple : bûcheron à son propre consecondaire ou vendeur dans un grand magasin.]	•	_
10.	Indiquez le niveau de scolarité le plus élevé qu'ont atteint vos p	arents ou t	uteurs.
	[Encerclez dans chacune des deux colonnes le chiffre appropr correspond pas à votre cas, encerclez le chiffre « 0 » pour « San		tuation ne
		Mère ou tutrice	Père ou tuteur
ans ob	jet	0	0
	es années de l'école primaire	1	1
Cours p	rimaire terminé	2	2
Quelque	es années de l'école secondaire	3	3
Diplôme	e d'études secondaires	4	4
Quelque	es cours du niveau collégial ou universitaire	5	5
Diplôme	e d'études collégiales	6	6
	e d'études universitaires de 1 ^{er} cycle (B. A., B. Sc., B. Éd) e d'études universitaires de niveau supérieur (maîtrise,	7	7
doctora		R	Q

11.	Comment ce questionnaire vous est-il parvenu?		
	Ce questionnaire m'est parvenu par l'intermédiaire d'un enfant qui va à l'école	1	
	Ce questionnaire m'est parvenu par un organisme dans la communauté	2	Reportez-vous à la question 13 Reportez-vous à la question 13
12.	Encerclez le chiffre de l'énoncé qui correspond le r	nieux	avec votre situation ?
	Par rapport à l'enfant qui vous a fait parvenir ce questionnaire, vous êtes un enfant et c'est à la maison que je fais mon apprentissage scolaire		
13.	Quel est votre statut matrimonial? [Encerclez le chiffre qui correspond à la bonne réponde de la bonne reponde de la bonne rep	onse.]
	Séparé-e ou divorcé-e 3 Veuf-veuve 4 Autre 5		
14.	Indiquez le niveau d'instruction le plus élevé que v [Encerclez le chiffre qui correspond à la bonne rép		
	Quelques années de l'école élémentaire		

15.	Quelle est votre occi [Encerclez le chiffre	upation ? · qui correspond à la bonne rép	ponse.]
	Travailleur-euse à te	mps plein	
	Retraité-e	4	Reportez-vous à la question 18
	Chômeur-euse	5	Reportez-vous à la question
	Étudiant-e	6	Reportez-vous à la question 18
	Ménagère	7	Reportez-vous à la question 18 Reportez-vous à la question
	Pensionné-e pour acc	cident de travail	18
16.	Depuis combien de t	emps occupez-vous cet emplo	i ? ans
17.			n propre compte, enseignant-e au n, mère de famille.]
18.		vous, de façon approximative, e qui correspond à la bonne rép	votre revenu annuel personnel ? ponse.]
	moins de 500 \$		
	500 \$ à 4999 \$		
	5000 \$ à 9999 \$		
	10 000 \$ à 29 999\$		
	30 000 \$ à 39 999 \$ 40 000 \$ à 49 999 \$		
	50 000 \$ à 59 999 \$		
	60 000 \$ à 69 999 \$		
	70 000 \$ a 09 999 \$		
	70 000 9 00 ptus	•• •	
19.	Appartenez-vous à u [Encerclez le chiffre	ne religion ? e qui correspond à la bonne rép	ponse.]
	Oui 1	Quelle est cette religion ?	
	Non 2		

20. Indiquez votre opinion à l'égard de chacun des énoncés suivants.

[Encerclez, pour chacun des énoncés, le chiffre qui correspond le mieux à votre situation. Si, par exemple, vous n'êtes « Pas du tout d'accord » avec l'énoncé, vous encerclez le chiffre « 1 », si vous êtes « Tout à fait d'accord », vous encerclez le chiffre « 6 » ; les chiffres de « 2 » à « 5 » correspondent à des positions intermédiaires.]

		du to cord	ut		out à d'acc	
Je suis, sur le plan religieux, une personne croyante	1	2	3	4	5	6
pratiquante	1	2	3	4	5	6
importante	1	2	3	4	5	6

21. Quelle-s est votre ou quelles sont vos langue-s maternelle-s ? [Encerclez le chiffre qui correspond à la bonne réponse.]

Français	1
Anglais	2
Français et anglais	3
Français et autre	4
Anglais et autre	5
Français, anglais et autre	6
Autre	7

22. Indiquez, pour chacun des énoncés suivants, la fréquence qui se rapporte à votre situation. « Jamais » correspond à « 1 » et « Toujours » à « 6 » ; les chiffres de « 2 » à « 5 » correspondent à des positions intermédiaires.

J	lama	ais			Tou	jours
Mes parents se parlent entre eux en français	1	2	3	4	5	6
– en anglais– dans une langue autre que le français et	1	2	3	4	5	6
l'anglais	1	2	3	4	5	6
Avec ma mère, je parle en français	1	2	3	4	5	6
– en anglais– dans une langue autre que le français et	1	2	3	4	5	6
l'anglais	1	2	3	4	5	6
Avec mon père, je parle en français	1	2	3	4	5	6
– en anglais– dans une langue autre que le français et	1	2	3	4	5	6
l'anglais	1	2	3	4	5	6
Avec mes frères et sœurs, je parle en français	1	2	3	4	5	6

– en anglais– dans une langue autre que le français et	1	2	3	4	5	6
l'anglais	1	2	3	4	5	6
Avec mes amis, je parle en français	1	2	3	4	5	6
— en anglais	1	2	3	4	5	6
- dans une langue autre que le français et l'anglais	1	2	3	4	5	6
Dans mon milieu de travail, je parle en français	1	2	3	4	5	6
en anglais dans une langue autre que le français et	1	2	3	4	5	6
l'anglais	1	2	3	4	5	6
Je regarde la télévision en français	1	2	3	4	5	6
— en anglais — dans une langue autre que le français et		2	3	4	5	6
l'anglais	1	2	3	4	5	6
J'écoute la radio en français		2	3	4	5	6
– en anglais– dans une langue autre que le français et	1	2	3	4	5	6
l'anglais	1	2	3	4	5	6
J'écoute de la musique enregistrée en français	1	2	3	4	5	6
– en anglais– dans une langue autre que le français et	1	2	3	4	5	6
l'anglais	1	2	3	4	5	6
	1	2	3	4	5	6
— en anglais — dans une langue autre que le français et	1	2	3	4	5	6
l'anglais	1	2	3	4	5	6
biographie) en français	1	2	3	4	5	6
- en anglais	1	2	3	4	5	6
— dans une langue autre que le français et l'anglais	1	2	3	4	5	6

23. Répondez par oui ou par non à chacune des questions ?
[Si votre réponse est « Oui », vous encerclez le chiffre « 1 » qui correspond à la question.
Si votre réponse est « Non », vous encerclez le chiffre « 2 ».]

		Qui	Non
23.1.	Dans votre domicile, y-a-t-il un téléviseur ?	1	2
23.2.	— un magnétoscope ou un lecteur DVD ?	1	2
23.3.	— le câble ou une antenne parabolique ?	1	2
23.4.	- une radio ?	1	2
23.5.	- un lecteur de disques compacts ?	1	2
23.6.	– un télécopieur ?	1	2
23.7.	 une ligne téléphonique ? [Si ce n'est pas le cas, reportez-vous à la ligne 23.11.] 	1	2

23.8.	Est-ce que l'appareil est portable ?	1	2
23.9.	Ce service téléphonique est-il branché à un répondeur ?	1	2
23.10.	Ce service téléphonique comporte-t-il un afficheur?	1	2
23.11.	- un ordinateur ? [Si ce n'est pas le cas, reportez-vous à la ligne		
	23.17.]	1	2
23.12.	— plus d'un ordinateur ?	1	2
23.13.	— un branchement Internet? [Si ce n'est pas le cas, reportez-vous à		
	la ligne 23.17.]	1	2
23.14.	Ce branchement Internet, est-il à haute vitesse?	1	2
23.15.	Ce branchement Internet, est-il sans fil?	1	2
23.16.	Ce branchement Internet, est-il branché à un routeur ?	1	2
23.17.	Disposez-vous d'un téléphone cellulaire ? [Si ce n'est pas le cas, reportez-		
	vous à la ligne 23.20.]	1	2
23.18.	Ce service téléphonique est-il branché à un répondeur ?	1	2
23.19.	Ce service téléphonique comporte-t-il un afficheur?	1	2
23.20.	Disposez-vous d'un assistant personnel (PDA)?	1	2
23.21.	- d'un ordinateur de poche ?	1	2
23.22.	— d'un ballado-diffuseur (lecteur MP3, CD ou IPOD)?	1	2
23.23.	- d'une caméra Web ?	1	2
23.24.	Sur les lieux de votre travail, disposez-vous d'un service Internet	1	2

24. Indiquez, pour chacune des activités suivantes, l'usage qui correspond le mieux à votre situation.

[Le chiffre « 1 » signifie que vous ne vous adonnez « Jamais » à l'activité qui est désignée par l'énoncé ; le chiffre « 6 » signifie que vous vous y adonnez « Très souvent » ; les chiffres de « 2 » à « 5 » correspondent à des positions intermédiaires. Si l'activité ne correspond pas à votre situation, vous encerclez le chiffre « 8 » pour « Sans objet ».]

	Jamais				sc	Très ouvent	Sans objet
J'utilise Internet à la maison	1	2	3	4	5	6	
— sur les lieux de mon travail	1	2	3	4	5	6	
— ailleurs qu'au travail et à la maison	1	2	3	4	5	6	8
- dans le milieu où j'étudie	1	2	3	4	5	6	
pour « surfer »	1	2	3	4	5	6	
 pour effectuer des opérations bancaires pour trouver, télécharger ou écouter de 	1	2	3	4	5	6	
la musique	1	2	3	4	5	6	
– pour des fins de téléphonie	1	2	3	4	5	6	
- pour préparer des voyages	1	2	3	4	5	6	
– pour écouter la radio	1	2	3	4	5	6	
pour lire des journaux sur Internetpour visionner des vidéo-clips sur	1	2	3	4	5	6	
Internet — pour trouver, télécharger ou écouter	1	2	3	4	5	6	
des émissions ou des films	1	2	3	4	5	6	ļ

pour les nouvelles ou les informations d'actualité	1	2	3	4	5	6	
	•		. 3	4	5		
pour le clavardage (« chat »)pour intervenir dans des forums de	1	2		·		6	
discussion	1	2	3	4	5	6	
 pour découvrir de nouvelles personnes pour répondre à des petites annonces de rencontre ou à des services de 	1	2	3	4	5	6	
rencontre	1	2	3	4	5	6	
pour les jeux électroniquespour trouver des informations	1	2	3	4	5	6	
culturelles	1	2	3	4	5	6	
pour les informations sportives	1	2	3	4	5	6	
 pour accéder à des sites érotiques pour trouver des informations sur la 	1	2	3	4	5	6	
santé — pour trouver les informations sur la	1	2	3	4	5	6	
bourse et les finances	1	2	3	4	5	6	
— pour la météorologie	1	2	3	4	5	6	
- dans le cadre des études	1	2	3	4	5	6	
dans le cadre de mon travailpour effectuer des recherches, un peu	1	2	. 3	4	5	6	
comme j'utiliserais une encyclopédie J'utilise le courriel (e-mail) pour	1	2	3	4	5	6	
communiquer avec mes ami-e-s	1	2	3	4	5	6	
– les membres de ma famille	1	2	3	4	5	6	
 des membres associés avec mes affaires J'envoie des messages électroniques dans le 	1	2	3	4	5	6	8
cadre de mes études	1	2	3	4	5	6	8
- en dehors du cadre de mes études	1	2	3	4	5	6	8
— dans le cadre de mon travail	1	2	3	4	5	6	8
 – en dehors du cadre de mon travail Je reçois des messages électroniques dans le 	1	2	3	4	5	6	8
cadre de mes études	1	2	3	4	5	6	8
— en dehors du cadre de mes études	1	2	3	4	5	6	8
- dans le cadre de mon travail	1	2	3	4	5	6	8
- en dehors du cadre de mon travail	1	2	3	4	5	6	8
chi dellors da cadre de mon davait	•	_	,	-	,	•	, ,

25. Indiquez, pour chacun des énoncés suivants, la fréquence qui se rapporte à votre situation. « Jamais » correspond à « 1 » et « Très souvent » à « 6 » ; les chiffres de « 2 » à « 5 » correspondent à des positions intermédiaires. Si l'objet désigné par l'énoncé ne se rapporte pas à votre situation, encerclez le chiffre « 8 » pour « Sans objet ».

					Très	Sans	
	Jamais					objet	
Lorsque j'utilise mon ordinateur, je me sers d'un							
ou de logiciel-s en français (Windows, Word, etc.)	1	2	3	4	5	6	8

Lorsque j'utilise Internet, je me sers d'un logiciel	4	2	2		-		
de navigation en français	1	2	3	4	5	6	8
Lorsque j'utilise Internet, je « surfe» en français	1	2	3	4	5	6	8
J'utilise Internet pour trouver, télécharger ou		2	2	4	-		
écouter de la musique francophone	1	2	3	4	5	6	8
- anglophone	1	2	3	4	5	6	8
 dans une langue autre que le 		2	_	4			
français et l'anglais	1	2	3	4	5	6	8
J'utilise Internet pour trouver, télécharger ou	1	2	3	4	5	6	8
écouter des émissions ou des films francophones — anglophones	1		_	•		_	_
	1	2	3	4	5	6	8
 dans une langue autre que le français et l'angleis 	4	2	3	4	5	6	8
français et l'anglais	1	2	3	4	3	O	0
français	1	2	3	4	5	6	8
en anglais			3	•	_	-	8
_	1	2	3	4	5	6	٥
J'utilise Internet pour clavarder (« chater ») avec des ami-e-s qui habitent dans ma communauté	1	2	3	4	5	6	8
— avec des membres de ma famille	,	4	,	-7	3	U	
qui habitent dans ma							
communauté	1	2	3	4	5	6	8
 avec des ami-e-s et des membres 	•	_		,	-		_
de ma famille qui habitent hors							
de ma communauté	1	2	3	4	5	6	8
 avec des gens qui habitent dans 							
ma communauté mais que je n'ai							
jamais rencontrés	1	2	3	4	5	6	8
 avec des gens qui habitent hors de 							
ma communauté et que je n'ai		_	_		_		
jamais rencontrés	1	2	3	4	5	6	8
J'utilise Internet pour envoyer des courriels en	4	2	2	,	E	4	
français – en anglais	1	2	3	4	5	6	8
	1	2	3	4	5	6	8
J'utilise Internet pour envoyer des courriels à des	4	2	2	4	E		
ami-e-s qui habitent dans ma communauté — à des membres de ma famille qui	1	2	3	4	5	6	8
habitent dans ma communauté	1	2	3	4	5	6	8
	,	2	,	7	,	U	"
ma famille qui habitent hors de							
ma communauté	1	2	3	4	5	6	8
 – à des gens qui habitent dans ma 	•	-	_				
communauté mais que je n'ai							
jamais rencontrés	1	2	3	4	5	6	8
 – à des gens qui habitent hors de ma 							
communauté et que je n'ai jamais					_		
rencontrés	1	2	3	4	5	6	8
J'utilise Internet pour des fins de téléphonie et je	4	2	2	4	E	,	
parle en français	1	2	3	4	5	6	8
— en anglais	1	2	3	4	5	6	8
J'utilise Internet pour des fins de téléphonie et je							
parle avec des ami-e-s qui habitent dans ma communauté	1	2	3	4	5	6	8
Communaute	1	L	ى	4	J	U	1 0

 avec des membres de ma famille qui habitent dans ma communauté avec des amiliers et des membres 	1	2	3	4	5	6	8
de ma famille qui habitent hors de ma communauté — avec des gens qui habitent dans ma communauté mais que je n'ai	1	2	3	4	5	6	8
jamais rencontrés	1	2	3	4	5	6	8
jamais rencontrés	1	2	3	4	5	6	8
de discussion ou bloguer en français	1	2	3	4	5	6	8
— en anglais	1	2	3	4	5	6	8
J'utilise Internet pour intervenir dans des forums de discussion ou bloguer avec des ami-e-s					-		_
qui habitent dans ma communauté — avec des membres de ma famille qui habitent dans ma	1	2	3	4	5	6	8
communauté — avec des ami-e-s et des membres de ma famille qui habitent hors	1	2	3	4	5	6	8
de ma communauté — avec des gens qui habitent dans ma communauté mais que je n'ai	1	2	3	4	5	6	8
jamais rencontrés – avec des gens qui habitent hors de ma communauté et que je n'ai	1	2	3	4	5	6	8
jamais rencontrés	1	2	3	4	5	6	8

26. Encerclez le chiffre qui correspond le mieux à votre situation. [Si, par exemple, vous n'êtes « Pas du tout d'accord » avec l'énoncé, vous encerclez le chiffre « 1 », si vous êtes « Tout à fait d'accord », vous encerclez le chiffre « 6 » ; les chiffres de « 2 » à « 5 » correspondent à des positions intermédiaires. Si l'énoncé ne se rapporte pas à votre situation vous encerclez le chiffre « 8 » pour « Sans objet ».]

	Pas du tout d'accord				ut à d'acc	Sans Objet	
 Je solutionne la plupart des problèmes techniques que je rencontre quand j'utilise un ordinateur J'ai le sentiment, quand je manipule mon ordinateur, de manquer de 	1	2	3	4	5	6	8
connaissances en informatique — Je comprends, pour l'essentiel,	1	2	3	4	5	6	8
comment fonctionne un ordinateur — Il m'arrive d'éprouver des difficultés	1	2	3	4	5	6	8
avec la technologie informatique Les ordinateurs me jouent des tours	1 ,	2	3	4	5	6	8
désagréables	1	2	3	4	5	6	8

 Quand j'éprouve un problème technique 							
avec l'informatique, j'ai quelqu'un qui vient m'aider	1	2	3	4	5	6	8
 Il est facile, pour moi, d'utiliser des 							
logiciels de traitement de texte — Il est facile, pour moi, d'utiliser	1	2	3	4	5	6	8
Internet	1	2	3	4	5	6	8
 Je comprends le fonctionnement de la plupart des sites Internet sur lesquels je 							
me rends — Je me sens souvent dépassé-e par la	1	2	3	4	5	6	8
logique Internet	1	2	3	4	5	6	8
une formation sur l'usage d'Internet — S'il y avait des cours sur l'usage d'Internet, dans ma communauté, j'y	1	2	3	4	5	6	8
assisterais	1	2	3	4	5	6	8

27. Est-il possible que plusieurs personnes à la maison veuillent se servir d'Internet en même temps ?

[Encerclez le chiffre qui correspond à la bonne réponse.]

Oui	1	
Non	2	Reportez-vous à la question 29
Sans objet	8	Reportez-vous à la question 29

28. Quel critère décide qui aura la priorité pour utiliser Internet ? [Encerclez le chiffre qui correspond à la bonne réponse.]

Travail	1
Étude ou devoir	2
Statut familial	3
Premier rendu, premier servi	4
Autre	5

29. Encerclez le chiffre qui correspond le mieux à votre sentiment.
[Si, par exemple, vous n'êtes « Pas du tout d'accord » avec l'énoncé, vous encerclez le chiffre « 1 », si vous êtes « Tout à fait d'accord », vous encerclez le chiffre « 6 » ; les chiffres de « 2 » à « 5 » correspondent à des positions intermédiaires. Si l'énoncé ne se rapporte pas à votre situation, encerclez le chiffre « 8 » pour « Sans objet »]

Je m'identifie à ou au	Pas du tout d'accord			Tout à d'acc	Sans objet		
ma famille	1	2	3	4	5	6	
la francophonie	1	2	3	4	5	. 6	
l'Ontario français	1	2	3	4	5	6	
l'Ontario	1	2	3	4	5	6	

1	2	3	4	5	6	
1	2	3	4	5	6	
1	2	3	4	5	6	
1	2	3	4	5	6	
1	2	3	4	5	6	
1	2	3	4	5	6	8
1	2	3	4	5	6	
1	2	3	4	5	6	8
1	2	3	4	5	6	
1	2	3	4	5	6	
1	2	3	4	5	6	
1	2	3	4	5	6	
	1 1 1 1 1	1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3	1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4	1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5	1 2 3 4 5 6 1 2 3 4 5 6 1 2 3 4 5 6 1 2 3 4 5 6 1 2 3 4 5 6 1 2 3 4 5 6 1 2 3 4 5 6 1 2 3 4 5 6 1 2 3 4 5 6

30. Encerclez le chiffre qui correspond le mieux à votre situation.
[Si, par exemple, l'énoncé ne vous correspond « Pas du tout », vous encerclez le chiffre « 1 », s'il vous correspond « Énormément », vous encerclez le chiffre « 6 » ; les chiffres de « 2 » à « 5 » correspondent à des positions intermédiaires.]

P	as du	tout		Énormément		
 Je suis impliqué-e dans des organismes de développement communautaire pour la 						
francophonie du Nord-Ouest de l'Ontario – Je suis impliqué-e dans des organismes de	1	2	3	4	5	6
développement communautaire — Je suis impliqué-e dans des organismes d'animation communautaire pour les	1	2	3	4	5	6
francophones du Nord-Ouest de l'Ontario — Je suis impliqué-e dans des organismes	1	2	3	4	5	6
d'animation communautaire – Je fais du bénévolat pour des organismes	1	2	3	4	5	6
francophones du Nord-Ouest de l'Ontario	1	2	3	4	5	6
Je fais du bénévolat	1	2	3	4	5	6

31. Encerclez le chiffre qui correspond le mieux à votre situation pour chacune des activités suivantes.

[Si, par exemple, l'énoncé ne vous correspond « Pas du tout », vous encerclez le chiffre « 1 », s'il vous correspond « Énormément », vous encerclez le chiffre « 6 » ; les chiffres de « 2 » à « 5 » correspondent à des positions intermédiaires. Si vous ne s'avez pas vous encerclez le chiffre « 8 » pour « Je ne sais pas ».]

	Pas o	du toı	ıt	Énd	ormér	ment	Je ne sais pas
 Il est difficile d'organiser des événements sociaux ou culturels pour la communauté francophone du Nord-Ouest de l'Ontario 	. 1	2		4	5	6	8

 Il est difficile de connaître les besoins des 							
organismes qui font de l'animation où du							
développement dans la communauté							
francophone du Nord-Ouest de l'Ontario	1	2	3	4	5	6	8
 Il est difficile pour les organismes francophones 							
du Nord-Ouest de l'Ontario de connaître les							
besoins de la communauté francophone	1	2	3	4	5	6	8
 Il est difficile pour les membres de la 							
communauté francophone du Nord-Ouest de							
l'Ontario de communiquer avec les responsables							
du développement ou de l'animation			_		_		_
communautaire	1	2	3	4	5	6	8
 Il est difficile pour les organismes francophones 							
qui sont responsables du développement ou de							
l'animation communautaire de sensibiliser la		_	_		_		
communauté francophone	1	2	3	4	5	6	8
 Il est difficile, pour les francophones du Nord- 		_	_		_		
Ouest de l'Ontario, de communiquer entre eux	1	2	3	4	5	6	8

32. Indiquez, pour chacune des activités suivantes, l'usage qui correspond le mieux à votre situation.

[Le chiffre « 1 » signifie que vous ne vous adonnez « Jamais » à l'activité qui est désignée par l'énoncé ; le chiffre « 6 » signifie que vous vous y adonnez « Très souvent » ; les chiffres de « 2 » à « 5 » correspondent à des positions intermédiaires.]

	Jamais					Très Souvent
Je lis des journaux imprimés	1	2	3	4	5	6
Je lis des revues ou des magazines imprimés	1	2	3	4	5	6
mon travail	1	2	3	4	5	6
Je fais du magasinage	1	2	3	4	5	6
Je vais à la bibliothèque	1	2	- 3	4	5	6
Je vais au restaurant	1	2	3	4	5	6
Je vais au théâtre	1	2	3	4	5	6
Je vais au cinéma	1	2	3	4	5	6
Je visite des galeries d'art	1	2	3	4	5	6
Je m'adonne à des activités sportives d'été	1	2	3	4	5	6
Je m'adonne à des activités sportives d'hiver Je fréquente des centres de conditionnement	1	2	3	4	5	6
physique	1	2	3	4	5	6
culturels	1	2	3	4	5	6
J'assiste à des spectacles de musique classique	1	2	3	4	5	6
J'assiste à des spectacles de musique populaire	1	2	3	4	5	6
J'écoute de la musique à domicile	1	2	3	4	5	6
J'achète de la musique enregistrée	. 1	2	3	4	5	6

J'achète des livres	1	2	3	4	5	6
J'assiste à des spectacles de danse	1	2	3	4	5	6
Je vais au cirque	1	2	3	4	5	6
J'assiste à des événements sportifs	1	2	3	4	5	6
J'achète des œuvres d'art	1	2	3	4	5	6
Je fais des sorties au restaurant avec des ami-e-s	1	2	3	4	5	6
J'écoute la radio	1	2	3	4	5	6
enregistrements vidéo : VHS, DVD)	1	2	3	4	5	6
Je regarde des enregistrements vidéo (VHS, DVD)	. 1	2	3	4	5	6
J'utilise un ordinateur pour jouer	1	2	3	4	5	6
Je vais à la pêche	1	2	3	4	5	6
Je vais à la chasse	1	2	3	4	5	6
Je fais de la motoneige	1	2	3	4	5	6
Je fais du véhicule tout terrain (ATV)	1	2	3	4	5	6

33. Pour chacune des aptitudes linguistiques de la colonne de gauche, encerclez le chiffre qui correspond à votre situation. Le chiffre « 1 » signifie que votre aptitude est « Mauvaise » et le chiffre « 6 » signifie qu'elle est « Excellente » ; les chiffres de « 2 » à « 5 » correspondent à des niveaux intermédiaires. Si vous ne connaissez pas du tout la langue désignée, encerclez le chiffre « 8 » pour « Sans objet ».

Aptitude à	Mauva	ise			Exce	ellente	Sans objet
comprendre l'anglais	. 1	2	3	4	5	6	8
lire l'anglais	. 1	2	3	4	5	6	8
parler l'anglais	. 1	2	3	4	5	6	8
écrire l'anglais	. 1	2	3	4	5	6	8
comprendre le français	. 1	2	3	4	5	6	8
lire le français	. 1	2	3	4	5	6	8
parler le français	. 1	2	3	4	5	6	8
écrire le français	1	2	3	4	5	6	8
français et l'anglais	. 1	2	3	4	5	6	8
et l'anglais	. 1	2	3	4	5	6	8
français et l'anglais	. 1	2	3	4	5	6	8
l'anglais	. 1	2	3	4	5	6	8

34. Comment évaluez-vous votre compétence en français et en anglais comparativement aux groupes désignés dans la colonne de gauche ?

[Encerclez, pour chacun d'eux, le chiffre qui correspond à la bonne réponse.]

	En français			En anglais					
Compétence par rapport à :	Inférieure	Équivalente	Supérieure	Inférieure	Équivalente	Supérieure			
mes parents	1	2	3	1	2	3			
mes collègues de travail	1	2	3	1	2	3			
un annonceur de radio mes professeurs ou mes	1	2	3	1	2	3			
patrons	1	2	3	1	2	3			
tout le monde	1	2	3	1	2	3			

35. Indiquez la réponse qui correspond le mieux à votre situation.
[Le chiffre « 1 » signifie que vous estimez que votre situation est « Mauvaise » ; le chiffre « 6 » signifie que vous estimez que ta situation est « Excellente » ; les chiffres de « 2 » à « 5 » correspondent à des positions intermédiaires.]

	Mauvaise				Exce	Excellente	
- Comparativement aux autres personnes de mon âge, ma santé physique est	1	2	3	4	5	6	
 Comparativement aux autres personnes de mon âge, ma santé émotionnelle est 	1.	2	3	4	5	6	

36. Indiquez, pour chacun des énoncés suivants, la réponse qui correspond le mieux à votre situation.

[Le chiffre « 1 » signifie que vous n'avez « Jamais » connu état qui est désignée par l'énoncé; le chiffre « 6 » signifie que vous l'avez connu « **Très souvent** » ; les chiffres de « 2 » à « 5 » correspondent à des positions intermédiaires.]

Au cours des trois (3) derniers mois, je me suis	Jama	is			SC	Très ouvent
senti-e seul-e	1	2	3	4	5	6
senti-e découragé-e	1	2	3	4	5	6
quelque chose	1	2	3	4	5	6
choses	1	2	3	4	5	6
senti-e facilement contrarié-e ou irrité-e	1	2	3	4	5	6

37.	Indiquez, dans l'espace aménagé ci-dessous, comment, selon vous, il serait possible de faciliter la communication entre les membres ou entre les organismes de la communauté francophone du Nord-Ouest de l'Ontario.
n	
38.	Indiquez, dans l'espace aménagé ci-dessous, toute information que vous aimeriez transmettre aux responsables de cette recherche.
	-

MERCI DE VOTRE COLLABORATION

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