

UNIVERSITY OF CALGARY

Internet Lifestyles: Teens and On-line Experience

by

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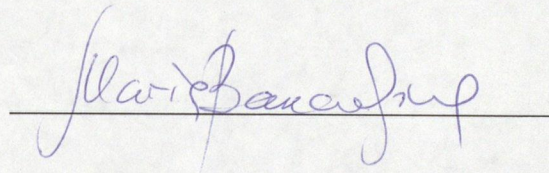
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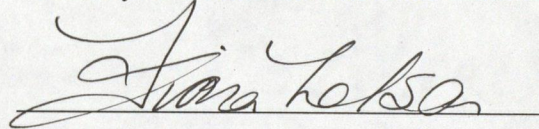
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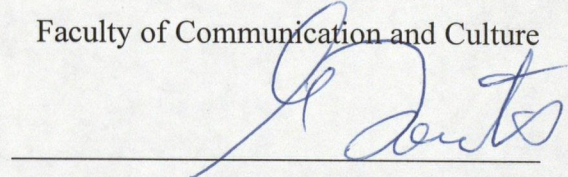
The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled, "Internet Lifestyles: Teens and On-line Experience," submitted by Shea B. Ellingham in partial fulfillment of the requirements for the degree of Master of Arts.



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Abstract

It has barely been a decade since the Internet entered daily conversation and we began thinking about communication in a radically new way. During this time a generation has grown up with the Internet as a routine part of their daily lives. Teenagers see the Internet as an extension of their social worlds and actively participate on-line. These activities are subsequently shaping both the computer and the Internet. Teens have the ability to connect in innovative ways and are creative in tackling their on-line world. The computer is a tool, a toy, a communications medium, and a way of interacting with the outside world. For today's youth, the computer enables them to extend their selves and how they present or portray themselves beyond the boundaries of the home. In this way, the computer ceases to be a tool for daily life and instead becomes an active expression of daily life.

Acknowledgements

This journey through the MA program has been as much a journey into my own self-discovery as it has been an investigation into how teens use the Internet. I am extremely grateful to my supervisor, Dr. Maria Bakardjieva, whose continual encouragement kept me on the path to finishing this degree. I would also like to express my gratitude to Dr. Fiona Nelson, Faculty of Communication and Culture, University of Calgary, and Dr. Greg Fouts, Department of Psychology, University of Calgary who served as committee members for my defense. Their generosity and input into this research enabled me to envision a broader scope for my own future endeavours.

Dedication

This is dedicated to my parents: Richard and Pat Jones, whose undying support has encouraged me to keep on going; to my children, Mechelle, Shevawn and Tallen who had to learn to be patient while I was working on the computer; and to the memory of my mother, Pamela Langston Jones, who inspired me to be the best that I could be and whose laughter made all of the hurts go away.

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Chapter One

Introduction

Tricia, 14, sits in front of the computer screen with her knees drawn up to her chest. She scans through Internet pages in search of the latest news on her favourite TV celebrities. The Net is her link to her world of TV shows and teenage culture. Her favourite sites include the “Buffy the Vampire Slayer” fan site and absolutely anything to do with figure skating sensations Jamie Sale and David Pelletier.

Tricia sits in the computer/sewing/guest room in the re-modeled bungalow basement. In the family room, next to where Tricia is sitting, her sisters watch TV and play with their favourite toys. The computer is not central to the family’s activities; it is tucked away in a room removed from the action. The family can be watching TV together in the comfortable yet chilly basement room, while the computer is removed but not segregated from the center of activity. Tricia is content to sit in front of the computer and visit her favourite sites. Mom and Dad are not far away and can wander in at any time to see what their eldest daughter is up to on the Internet.

But like many of the children’s toys, the computer is separated from central family interaction. It is not really a tool that the parents have incorporated into their daily activities. Mom uses the computer for vacation planning and banking, but not as a means of communication. Dad, who runs the family business, does not spend any time on the computer at all. Tricia’s younger sisters like to use the computer for games and socializing with friends through e-mail and MSN Messenger. Tricia spends limited time using e-mail, as she is more likely to communicate with friends using MSN Messenger or

the telephone. In any case, the computer and Internet are both a regular part of her daily activities.

This is the profile of a typical Canadian family. The Internet is shaping family activities and changing the homelife of many Canadians. Tricia and her family are but one example of a family that has embraced the Internet and brought it into their home. The foundation of this research lies in asking what other teens like Tricia, who have access to the Internet from their homes, are doing on-line? I began my investigation with the question, "What legacy have we left our children?" The Internet and other Information and Communications Technologies (ICTs) are changing the domestic landscape in Canada. What type of world will be created by the youth who grow up incorporating this technology into their daily life experiences? It is unlikely that we will be able to answer this question until some point in the future. But the time for scholarly investigation into this topic has arrived. If we are truly going to bear witness to the way that the everyday user will shape the future of the computer and the Internet, then it is imperative to begin looking now. By researching the mileposts along the road to the future, we will be able to gauge how our world is being shaped and learn about changes as they are occurring.

Teenagers are poised, at the threshold of this new millenium, to rule the world. They occupy a unique position as innovators and have considerable influence over the shape of technology and the shape of their future world. At the heart of this unique position is the present day teenagers' fluency with technology, most predominantly information and communication technology (ICT). Current research suggests that teenagers are more comfortable with information and communication technologies than

their parents (Center for Media Education 2001; Lenhart, Rainie and Lewis 2001; Livingstone 2001). For the first time since the introduction of the television (Center for Media Education 2001), teenagers have a better grasp of both the content and the technology of this new mass medium. For many adults, the technology of the computer and the Internet remains shrouded in mystery, but for many teens, it is second nature.

Technological change is occurring at a frenetic pace and it is challenging to stay on top of the innovations that are now becoming a part of daily life. Today's teenagers have a unique relationship with new information and communication technologies. They represent the first generation that has grown up with ICTs and are therefore not only more comfortable with the technologies, but are also more fluent and adaptable to ICT as it rapidly changes. A recent study released by the PEW Internet and American Life Project (Lenhart, Rainie and Lewis 2001) indicated that teenagers are adapting ICT to their needs and interests. The teenager of today is constantly multi-tasking. They are not only on-line, but also watching TV, listening to music and talking on the telephone. They utilize several different media in order to accomplish these tasks, but all of these functions can now be achieved through one medium – the home computer. As teenagers continue improving their fluency with this technology, they will have the ability to shape the future, shaping how both their peers and their parents embrace the technology.

For many teenagers and adults, the Internet is now assuming a prominent place in the daily routines of socially mediated interaction. Not only are teenagers exposed to the computer and the Internet at school, but recent research suggests that half of America's teenagers access the Internet from their homes (Lenhart, Rainie and Lewis 2001). This statement has also been reinforced by recent Canadian research which reveals that 90%

of Canadian teens use the Internet regularly (Dryburgh 2001). This generation has grown up “with a mouse in their hands”(Center for Media Education 2001, p.2) and have a fluency with the technology that enables them to creatively appropriate and adapt this technology into their everyday lives. The Center for Media Education report suggests that teens are the “*defining users* of this digital media culture” (Center for Media Education 2001, p. 2 emphasis in original). The ease with which teenagers are embracing the new ICTs is a source of concern for many adults. Faced with a new technology that is not yet fully understood and a generation of teenagers who have a better grasp of the technology than their parents, many adults are worried that they will not be able to protect their children nor detect exactly what is going on “on-line”. In response to this somewhat frightening prospect, parents are choosing to adapt in a variety of ways. Some parents choose to adhere to the old adage “not in my backyard”. If the Internet is not in the home, then the kids certainly cannot get into trouble. Some prefer to accept the notion that their kids are too conscientious to get into mischief while on-line (Livingstone 2002). And other parents have decided to climb aboard the technology bandwagon and find out what all the fuss is about. Taking the position that knowledge is power, these parents feel that once they gain even a rudimentary understanding of the Internet, it will enable them to understand, to some degree, what the kids are up to (Environics 2001).

In *Growing Up Digital*, Donald Tapscott (1998) paints a view of teenagers who have embraced the technology of the Internet and are better equipped than ever to handle the future as new technologies continue to unfold. I think Tapscott’s focus is somewhat overly optimistic in extolling the virtues of the Net generation. In his view, not only is the Net generation “alright”, but they are poised to take over the world and redefine our

notions of education, economy and political participation. This might be true, but he glosses over the problematic issues surrounding the Internet—namely privacy and consumerism. These two concerns figure prominently in the Center for Media Education report, which includes recommendations for industry to abandon its data mining practices in order to protect the privacy of Internet users as well as maintain a “clear delineation between content and advertising” on the Internet (2001, p. 108).

Somewhere between Tapscott’s overly optimistic view of the Net generation and the more pessimistic view of the Internet as a minefield of danger awaiting young teens, are the real effects of everyday use of the Internet on ordinary teenagers. Tapscott (1998) does present a strong and convincing argument about the future and the new ways that teenagers will innovatively participate in and shape that future. His research was conducted primarily with teenagers in the virtual space of the Internet, many of whom are experts with the technology as opposed to ordinary Internet users. The Center for Media Education (2001) on the other hand, conducted an extensive survey of teen websites and has produced a somewhat more cautionary view of the on-line future. Both studies are valuable in the contributions they make to the field of communications and Internet research.

It was my goal, however, to find out whether a middle ground between the polar opposites of extreme optimism and utter pessimism is warranted, by exploring the ways in which Calgary area teenagers are using the Internet in their daily lives right now. I did not seek out the teenaged Internet and computer experts who spend countless hours on-line, nor did I seek out the technophobes who shun the technology altogether. My focus was on average teenagers with access to both a computer and the Internet from their

home, who are using both of these technologies regularly within the scope of their everyday lives.

The teenagers in my study are incorporating the Internet in their daily lives in interesting, exciting and, in some cases, trivial ways. These are not Internet addicts who spend countless hours on the Internet. Rather, they are ordinary teenagers who see the Internet as an information and communications tool that allows them to interact socially, conduct research, find interesting information, listen to the latest music, and play games. My goal is to explore the Internet with these teenagers and to discover how they are using its applications in the routines of their daily lives. I visited websites with these teens and we talked about the importance of instant messaging, and e-mail. I asked questions about education, family relationships, privacy and consumerism in order to find out just what was important to them in their daily use of ICTs. We talked about music, fashion, sports and fantasy games. We laughed at e-mail jokes and found websites that were enlightening or even downright silly. Our discussions took place in the teens' homes, on their turf, where they felt comfortable. The story of my journey with these teens follows in the pages below.

This investigation is not designed to be a definitive exploration of teens and the Internet. I purposefully chose to pursue interviews with a self-selected respondent group knowing that my results would reflect a snapshot of how a specific group of teens are currently using the Internet in their daily lives. This study is not in any way universally representative of all Canadian teens. It is not an account that can be generalized with regards to a specific social, demographic, and regional group. This ethnographic examination will discuss the ways that teens are incorporating the Internet into their

experiences of daily life. I set out with some specific categories for discussion in mind when I began my interviews, but I quickly learned to let the teens have considerable freedom of expression about those areas of the Internet that were the most meaningful to them. This study was designed to allow a glimpse into the specific aspect of the daily lives of its subjects. It does not pretend, nor was it designed, to provide a comprehensive examination of the psychological, physical or emotional development of its participants. The final result is a richly detailed discussion of how teens are actively engaged with their own personalized Internet, the Internet that means something to them in their daily activities. I enjoyed meeting these teens and getting to know them. They were open and eager to share and participate. Their stories follow in the pages below, I hope that you enjoy reading them as much as I enjoyed telling them.

Chapter Two

Theoretical Framework

The Social Construction of Technology & the Role of Users

It has long been a subject of debate within academic circles, whether technology shapes society or society shapes technology. The role that technology plays in society is a complex one whereby both social agents and the technologies themselves influence change. The deterministic view, according to which technology is the driver behind social change, looks at technology as something that transforms society simply by its existence and use. This theory is somewhat seductive, in that it looks upon technology as an independent factor in the change process. The mere design of an artifact and its subsequent implementation results in society moving along a certain structural and organizational trajectory. Feenberg (1999) concludes that the way a technology is adopted within society is based on its design and intended use and ultimately, “the artifact appears purely technical, even inevitable” (p. 11). This “deterministic illusion” (Feenberg 1999, p. 11) neglects the role of the social arena within which a technology is introduced and adopted. I believe that one must consider not only the design of a specific artifact but more importantly how that artifact is conceptualized as a useful technology for the society that embraces it. In this way, it is the social impact of a technology that represents how change is accomplished.

In contrast to the deterministic view of technology, social constructivism does consider the social factors surrounding the adoption and appropriation of a technology. Constructivists adhere to the notion that the appropriation of technology is a social experience that occurs with human actors. The way in which a technology is designed is

merely the foundation upon which the impact of a technology is built. It is the role of the human actors who interact with a technology that influence the ways in which it is implemented and put to use. The adoption of a technology in any society is the result of a negotiation among the social groups who deem an artifact to be useful and then subsequently negotiate meaning around the utility of that artifact. The human actors “strive to appropriate the technologies with which they are involved and adapt them to the meanings that illuminate their lives” (Feenberg 1999, p. x). Technology does not exist in a vacuum. It is always a part of a larger system of technologies that allow for creative appropriation. What one social group believes to be a useful aspect of a technology may not fit with another social group’s ideals, even though for both groups the artifact may be useful. In this way, technology is creatively appropriated and made significant in the lives of those who use it, based on what is important to them and how they define their needs and uses for any particular artifact. How a technology ends up serving the needs of the society that appropriates it may have nothing whatsoever to do with the engineering team’s set of intended uses for that artifact.

For the purposes of this research study, I align myself with the framework of social constructivism and with what Andrew Feenberg (1999) terms the democratic rationalization of technology. Feenberg decries both essentialist and deterministic views of technology which tend to reduce “everything to functions and raw materials” (Feenberg 1999, p. viii). The doctrine of essentialism “views technologies as devices oriented toward efficiency” (Feenberg 1999, p. ix). But ordinary people are not necessarily efficient; they “encounter technology as a dimension of their lifeworld. . . and strive to appropriate the technologies with which they are involved and adapt them to the

meanings that illuminate their lives” (Feenberg 1999, p. x). He acknowledges that there is a struggle for technology to find its place in society and that there is some give and take as to how a technology will establish itself. Once established, however, the technology reaches a point of closure and loses its novelty. “Closure produces a ‘black box’, an artifact is no longer called into question but is taken for granted” (Feenberg 1999, p. 11). Both the social origins of the technology and the struggle leading up to its acceptance is quickly forgotten once the black box is closed. Determinism tends to overlook the struggle and sees the closed box as inevitable.

Feenberg writes that “constructivism breaks with the standard view according to which society conditions the pace of progress but not the nature of technology itself” (1999, p. 10). A constructivist would argue that from any new technological design there are many paths that may be followed before an artifact reaches the point of closure. Each branch from the original design has the capability to generate a new innovation or even in some instances lead to a dead end. “The ‘principle of symmetry’ holds that there are always viable technical alternatives that might have been developed in place of the successful one. The difference lies not so much in the superior efficiency of the successful designs, as in a variety of local circumstances that differentiate otherwise comparable artifacts” (Feenberg 1999, p. 10). Ultimately, constructivists believe that the development of technology takes place within a social arena where external forces influence how a technology reaches closure. Technology is neither neutral nor autonomous but is the result of social forces acting upon human agents. “Constructivism argues . . . that the choice between alternatives ultimately depends neither on technical

nor economic efficiency, but on the ‘fit’ between devices and the interests and beliefs of the various social groups that influence the design process” (1999, p. 79).

For the purposes of my study, I am not so much concerned with the design process of technology nor in the way that the computer has reached a point of closure, if indeed it has even reached a point of closure. The interesting aspect of Feenberg’s theory is his notion that “technical functions are not pre-given but are discovered in the course of the development and use of the object” (1995, p. 155). As users of a specific technology adopt that technology into their everyday lives and begin to rely upon it for specific activities, the technology attains importance. Human actors encounter technology within their lifeworld of experience where an artifact may present a host of possible uses. Ultimately, the meaningful uses that emerge for the human actors are the ones that correspond with the past experiences of its users. “Technology as a total phenomenon . . . must include an experiential dimension since experience with devices influences the evolution of their design” (Feenberg 1999, p. xii). I am interested in discovering how teenage users have interpreted the Internet as a meaningful object and incorporated it into their daily life experiences.

Feenberg (1995) uses the example of the Minitel experiment in France to illustrate his theory that ordinary users can appropriate a technology and endow it with meanings and functions outside of the designer’s intended use of the technology. This is a relevant example to my own research, as it shows that the everyday user matters in technological innovation. My argument is not necessarily that teens are innovatively changing technology, but rather that as everyday users they will ultimately affect the shape of the technology in years to come. The French Minitel communication system is a prime

example of just how the everyday user can effect change. Feenberg explains how the users hacked into the system and incorporated communications into a technology that was primarily designed for information distribution.

The ‘cold’ computer became a ‘hot’ new medium. [This is a] dramatic illustration of ‘interpretive flexibility’ of technology. A concatenation of devices configured by its designers as the solution to one problem—the distribution of information—was perceived by its users as the solution to quite another problem—human communication (1999, p. 126).

In 1981 the French government introduced the Minitel technology. The design behind this technology was to provide an electronic telephone directory to users who would then be able to access information in a new and unique way. The French government saw this experiment as a way for the French people to play a leading role on the world stage of innovative technology. The goal of the Minitel experiment was twofold; first every family was to have access to a domestic telephone and secondly families were to also receive a Minitel terminal at no additional charge. The Minitel system was set up as an electronic telephone directory which would ultimately generate revenue through advertising in order to cover the cost of the massive distribution of telephones to French households.

The Minitel experiment took some interesting turns along the path that led to its acceptance and eventual closure. In the beginning, the Minitel was centrally controlled by the government (Teletel) and the users had virtually no input into the system. Feenberg writes: “Teletel was designed to bring France into the information age by providing a wide variety of services” (1995, p. 149). Feenberg also suggests that because of the centralized control of the medium there was an element of distrust among users who were skeptical of both the need for the technology and its domestic value. In order to ease

public suspicion, the government opened the medium up so that any business could connect to the system, list a phone number and ultimately share in the profits. The telephone company's monopoly was removed. "Teletel became a vast space of disorganized experimentation, a 'free market' in on-line services" (1995, p. 150). The centralized control of the medium was challenged and this opened the door to further modifications of the system.

The Minitel users had a wealth of information at their fingertips through the electronic medium, but were primarily only consulting the phone directory. It was not until "hackers transformed the technical support facility of an information service called Gretel into a messaging system" (1995, p. 150) that the Minitel began to spark the imaginations of the users. This new messaging system received much attention from the domestic user and it was immediately incorporated into the technology itself. The demand of the everyday user successfully cracked the black box of design and made it possible to revamp the system. What began as an information medium was transformed into a communications medium. The original Minitel designers did not exclude the ability for communications, but they certainly did not intend this type of application to be a main function of the medium. In effect, the user took the medium from its original design and demanded that new innovations be incorporated into the technology in order to make it more appealing.

It is possible to trace a similar story in the adoption of the personal computer into the domestic sphere. It was originally thought that home computing would encompass information applications and its communications applications were grossly underestimated. But the domestic computer user became captivated by the

communications applications and users began to expect that these applications would play a central role in the home computing experience. The market quickly provided the means for domestic users to take advantage of this option, and communications technology was incorporated into the system. Improved communications technology became an integral part of domestic computing. The point I want to emphasize is that the everyday user of technology can play an integral role in the shaping of technology. The importance of the everyday user should not be underestimated within the scope of technological innovation, nor with the adoption, adaptation or consumption of technology.

Examining the role of social constructivism within a model of both production and consumption, Norwegian authors Lie and Sorensen (1996) focus on technology in use. Historically, the emphasis has been placed upon the production end of technological design with little or no attention being paid to the consumption of technology or rather how a technology is appropriated. These authors also suggest that from a historical perspective, the consumption of technology has been dismissed as insignificant within the scope of social change. Scholars have traditionally focused on the designs of technologies as the important factors behind societal change rather than the means by which social groups have embraced the technologies. They argue that the time has come, however, to begin to focus on the constructivist link to the consumption of technology.

Lie and Sorensen maintain that constructivism incorporates the concepts of interpretive flexibility, social networks and translation or closure. Each of these concepts, in turn, acknowledges that there is more to the acceptance and appropriation of technology than what designers had originally intended for any given artifact. "In

everyday settings, we consume technologies – or, more precisely, technical artefacts [*sic*] – by integrating and using them” (Lie and Sorensen 1996, p. 8). For these authors, constructivism involves the study of ‘technology in use’ (Lie and Sorensen 1996). The idea of focusing on technology in use is central to my own research project. Studying technology in use, or the consumption of technology, suggests that the technology is open and change is possible. There is no fixed ‘black box’ surrounding a technology, as its meaning and uses are open to negotiation across varied social terrain. Lie and Sorensen also refer to this negotiation of technology as the taming or domestication of technology. “This process of taming is characterized by reciprocal change . . . users/consumers make active efforts to shape their lives through creative manipulation of artefacts [*sic*], symbols and social systems in relation to their practical needs and competencies” (Lie and Sorensen 1996, p. 8-9).

Silverstone and Haddon (1996), like Feenberg (1995, 1999) and Lie and Sorensen (1996), map out the role of the everyday user in the process of innovation and design. They begin by establishing the premise that “innovation is a process which involves both producers and consumers in a dynamic interweaving of activities which are solely determined neither by the forces of technological change nor the eccentricities of individual choice” (1996, p. 44). In this sense then it is not left entirely up to either the designers of technology nor the user of technology to decide how a technology leaves the showroom and is incorporated into the fabric of everyday life. It is a complex series of events that allows technology to first be designed and secondly to end up playing an important role in the life of its user. The authors’ goal is to take a look at how the actual use of a particular technology fits into the process of innovation (Silverstone and Haddon

1996, p. 44). This is accomplished by a look at how an artifact is created, how the consumer is created, and finally how the consumer is ‘caught’ by the artifact. Of particular interest is the domestic sphere as an important site of incorporation. It is through domestication that the consumer takes “technologies and objects home or into other private cultural spaces, . . . making, or not making, them acceptable and familiar” (Silverstone and Haddon 1996, p. 45). But there is much more to the domestication process than simply taking a technology home for a test drive. In order to reach a true state of domestication, the technology must become embedded within the life of its user. In a sense the technology or artifact must reach a point of invisibility within the environment. Only when the user takes a technology for granted and sees the technology as an integral part of the everyday life, will the technology or artifact become truly incorporated into the fabric of everyday life of its user.

The initial step in the process of reaching a point of invisibility must ultimately begin with its manifestation in the mind of a designer. All technical innovation begins with an idea in the mind of the creator. The design of an artifact begins in theory and the designer or engineer looks at the object and incorporates both aesthetics and functionality into it. At this stage the end user of the technology takes shape within the development process. A sound technological design will factor in the potential user of the model. No technology is designed without a practical purpose in mind. There are specific tasks to be undertaken and definite goals to be reached. But what the designer overlooks, of course, is the fact that once a technology leaves the factory and is actualized in a real-world setting, it enters the social world where intelligent agents have the ability to interpret for themselves an artifact’s utility. Looking at the history of technology, one can assume that

“technologies are more than merely machines, . . . the history of their emergence is a social as much as, if not more than, a technological history” (Silverstone and Haddon 1996, p. 47). As a social history, the role of the user of technology is an important one, for it is through the uses of technology that artifacts and objects come to have meaning in our lives. Carolyn Marvin writes

media are not fixed natural objects; they have no natural edges. They are constructed complexes of habits, beliefs and procedures embedded in elaborate cultural codes of communication. The history of media is never more or less than the history of their uses, which always lead us away from them to the social practices and conflicts they illuminate (1988, p. 8).

The history of technological design is almost as much a history of humanity. Although that sounds somewhat deterministic, it is not meant to be. Our history is inextricably linked to the technology that we use. The point that Lie and Sorensen (1996), Silverstone and Haddon (1996) and Marvin (1988) are making is that the user of technology is not an ineffectual bystander who unwittingly takes up the technology and follows a rigid set of specified operations. The revealing fact is that the user of technology plays an integral role throughout the process of innovation and influences the ways that technology is transformed to fit the needs and desires of those users. Feenberg’s (1995) illuminating example of the adoption of the French Minitel, as discussed above, provides a concrete example that supports Silverstone and Haddon’s (1996) design map, where the technology design emerges from the mind of the engineer or designer, travels through the free-market, and lands in the lap of the consumer. Not only is it important to consume a technology by bringing it into the home, but one must also ascribe both meaning and functionality to it in order to recognize it as a useful object.

The development and subsequent failure of CDi technology provides a clear indication of the role of the user in ascribing meaning to objects. CDi technology was supposed to revolutionize the television set. It was hailed as the technology that would turn a television into a computer terminal. This interactive technology transformed the television into a two-way communications medium that made it possible to connect to the Internet. In this way, it was thought that consumers who were afraid of computer technology or else did not have requisite knowledge of computing or the financial capability to purchase a computer would still be able to participate on the Internet through the more familiar technology of the television set. However, as Silverstone and Haddon (1996) explain, CDi technology was slow to catch on, as there was no real market for it at first. These authors contend that in fact, the consumer needed to be created and had to be convinced that this was a valuable technology to have in the home. Through extensive media campaigns and sales promotions, the companies behind CDi technology were hoping to capitalize on the next wave of technological innovation. But in the end, the experiment failed. CDi technology never did catch on, as the consumer preferred to use the personal computer as the interface with the Internet. It is important to remember that DVD technology, which in some ways resembles the earlier CDi technology, has really only caught the imagination of consumers in the last few years. One could argue that what is presently known as DVD technology is actually a revamped version of the CDi, where the interactive capabilities of the technology have been removed. DVD technology is now posing a serious threat to the VCR and is poised to capture the home movie market.

The example of the failure of CDi technology and the role of the consumer in this provide a sound indication that what happens on the level of everyday life really does matter. In fact, Lie and Sorensen argue that, “everyday struggles and negotiations may have important effects on the shaping of technology and its ‘consequences’” (1996, p. 11). It is through the everyday struggles and negotiations that technology is shaped and defined by those who use it. It is evident that users and consumers do play a powerful role and do have the ability to enforce definitions of use for technological applications through the mundane activities of their everyday existence.

Lie and Sorensen suggest that everyday life comprises of the “routine activities of human existence. The ordinary actions taking place in various settings, spanning production as well as reproduction . . . the everyday is associated with what we do over and over again, . . . thus signifying stability and the reproduction of social patterns” (1996, p. 2-3). Everyday life need not be restricted to activities that take place exclusively in one domain, that is, the household or the office, because each domain spans the terrain of everyday life. Incorporating Schutz’s (1962) definition of the life world, Lie and Sorensen state that the intersubjective nature of reality makes us sensitive to the fact that we re-create our world through everyday actions. As we incorporate technologies on a daily basis in our private routines, we end up separating the technology from its symbolic position within the larger structure and re-conceptualize the technology as a tangible and useful object within our immediate reality. “In theory, technology is a standardizing, globalizing, and bureaucratizing effort. In practice, it is always appropriated and re-embedded in a local context when it is put to use” (Lie and Sorensen 1996, 16-17). In my project, as the computer is incorporated into the daily life activities

of the user it no longer represents a technology that is primarily used for work-related tasks nor is it a symbol of 'global' corporate power; instead it becomes an object that fulfills the needs and interests of the user in a unique and personal way. The computer is personalized and customized to each individual's specifications. It could be argued that the computer, in this case, acquires "meaning only when [it intersects] with daily life" (Lie and Sorensen 1996, p. 17).

It is the local and personal uses of technology that are important. It is the everyday uses of the computer in the home that reinforce the importance of this technology within the wider scope of society. As the computer becomes attached to our activities it occupies a central place in our reality. As an artifact of importance in daily life, the computer becomes a meaningful object through which the domestic user can effectively re-create their everyday world. "Once meaning has been attributed to it, it functions as an expression of self" (Lie and Sorensen 1996, p. 17). How teenagers, as domestic users, appropriate the computer and the Internet into their daily lives is central to this investigation and provides the launching point of my research. I am interested in discovering the meanings that are attached to the Internet for the teenagers who are regular users of the medium and how they ascribe importance to this technology and ultimately use it as a means of self-expression. I see that teens are making a significant contribution to the social construction of the Internet and are shaping the culture that surrounds it.

Young Users and Communication Media

Sonia Livingstone and Moira Bovill (2001) along with their colleagues set out to determine the importance of media in the everyday lives of European youth. Focussing

on the media environment in the home, Livingstone and Bovill's (2001) goal was to begin to investigate the relationship between the mediated world of today's youth and compare it to the first television generation. Livingstone and Bovill's research provided me with a foundation upon which I develop both my theory and method. Their study is the culmination of a comprehensive twelve country European comparative research project on children and media. This study was undertaken as a means of updating the Himmelweit study of television of the 1950s. As new media develop and enter the lifeworld of children, it begs the question of what effect it is having on the children who are now growing up with it.

Livingstone, d'Haenens and Hasebrink (2001) answer this question by stating that, for the most part, children are no different today than they were in the 1950s, at the time of the original Himmelweit study. Like their counterparts of the past, children grow up; they attend school, watch too much television, argue with their parents and enjoy playing outside with their friends. What has changed since the 1950s, argues Livingstone et al., is the amount of media which is at the disposal of the modern child. How they spend their time encompasses a broader spectrum of mediated possibilities than what was available 50 years ago. The most striking difference, however, is not even a technological one. Livingstone et al. found that the most significant difference between the children of today and those of yesteryear is the amount of unsupervised free time spent in public spaces. There has been a dramatic shift towards the need to protect children from the outside world. A mediated home is one way to keep them occupied while they are behind closed doors. This shift varies somewhat from culture to culture, but on the whole, Livingstone et al. (2001) concluded that children are not allowed, as

much freedom to roam through the neighbourhood as was once possible in a less mediated and less socially risky time. As a result, children are spending much more time in the home with many more types of technology. Livingstone et al. include not only the computer but also the television and the games machine (that is, Nintendo) within the scope of what is called the media environment of the home. Today's children have an array of technologies at their fingertips and use these to occupy their time spent at home.

Livingstone et al.'s research study begins with two possible questions: how do media fit into the lives of children, or conversely, how is media impacting the lives of children? The logical development of these questions is either a child-centered or a media-centered approach to finding solutions. Livingstone et al. opt for the child-centered approach to this research. They contend that through a child-centered approach it is possible to put the "media in context . . . [and play] down some of the hype surrounding new media" (Livingstone, d'Haenens and Hasebrink 2001, p. 6). In this way children are not identified as a specific type of media user, that is, computer nerd, television addict, couch potato. Rather, by putting the child at the center of the study, the emphasis can shift towards the lifeworld of the child and researchers can discern how the child is appropriating and shaping the media to fit into their lives. The home is an important locus of research and one that plays an important role throughout this study. It is in the home that one is able to observe how children are adapting the media that is available to them to fit their daily lives. Lie and Sorensen (1996) remind us that the home represents a stable environment in which daily routines are established and where technology in use can be examined.

Conversely, a media-centered approach would tend to place the emphasis on the media that is being incorporated. Livingstone et al. suggest that this would lead to a determinist stance, which they argue would be “more sensitive to the medium- or content-specific characteristics of different media, tracing the chain of influence from diffusion through both commercial and public domains to access in the home, then to actual use and, eventually, to impacts on children and young people” (Livingstone et al. 2001, p. 6-7). In this way the line from technology to appropriation would lead along one path and stay within a fairly linear model to incorporate the different users along the line. The end result would be to consider the impact of the technology on children and young people, rather than focussing on how the children are shaping the technology to fit their lives.

Both approaches to the study of technologies serve their purpose, and Livingstone et al. maintain that it is important to keep both perspectives in mind as both can inform the project. However, they prefer the child-centered approach as it tends to not pigeonhole media into a specific set of meanings and practices. Ultimately, “children and young people construct diverse lifestyles from a mix of different media . . .” (Livingstone et al. 2001, p. 7). It is the diverse lifestyles of children and young people that capture my imagination and the avenue that I would like to explore with my research project. I am interested in discovering how teenagers are diversely and creatively shaping the technology to fit their lives, representing their own personal interpretation of the Internet. This represents the point of inquiry for my own research.

I want to return, for a moment, to the point that was mentioned earlier about the restrictions that are placed on young people in the amount of unsupervised free time that

they have to spend outside of the home. Because of the perceived dangers from the outside world, there has been a recent shift towards restricting access to public spaces and making the domestic space much more enticing through the “attractions of privatized forms of leisure” (Livingstone et al. 2001, p.9). This turn towards privatization refers to the “retreat from publically [*sic*] accessible spaces where people are conceptualized as citizens (e.g. Meyrowitz, 1985). . . to the parallel shift toward domestic spaces, where people are conceptualized as consumers or audiences” (Livingstone et al. 2001, p. 9). The private space of the home then becomes the main front upon which children learn about the outside world and ultimately, through information and communications technology, interact with the world outside. Children are less frequently allowed to actually experience the world outside on their own, and perhaps this is the consequence of most importance in this discussion of the impact of the Internet on the future generation. If children are not allowed to physically interact with the outside world and instead must use media in the domestic sphere, the question that arises is exactly what are the children doing on-line? How are they interacting with the mediated world outside the comfort of their own homes?

As the family home becomes a focal point of leisure activity one might suppose that the family itself might increase in importance to children. Livingstone et al. (2001) write that this is not necessarily the case. “The process of individualization ensures that within this home, family members are increasingly ‘living together separately’. . . Individualization refers to the shift away from traditionally important sociostructural determinants of identity and behavior toward more diversified notions of lifestyle” (Livingstone et al. 2001, p. 9). These authors conclude that the concepts of privatization

and individualization “represent different ways of conceptualizing changes in social relations, the former focusing on the private versus the public or civic sphere whereas the latter focuses on individual versus communal but socially stratified sphere” (Livingstone et al. 2001, p. 9). Even though children are spending more time in the home as opposed to the outside world, their interactions are largely with media as it is common for these young people to be left unsupervised within the home as parents are working outside the home.

The home takes a position of importance throughout this discussion of privatization and individualization. The home as a private space is playing an increasingly important role as the site of both leisure and work activities. On the individual front, the home represents the site where children are exposed to a set of cultural possibilities and preferences. Traditionally these have been handed down from parents, but as the role of the media shifts within the lives of children and young people, these sets of preferences and possibilities are being handed down through the media environment. Children learn as much now from their mediated environments as they do from their parents. One could argue that in this way, the parents’ role shifts towards that of gatekeepers or sifters of information for the child.

The importance of the home as a site of appropriation and consumption of technology has been firmly established by Lie and Sorensen (1996), as discussed above, and also by Roger Silverstone (1992) and his colleagues. Silverstone et al. have concentrated their investigations on the use of information and communication technologies (ICTs) in the home, but not exclusively the computer. In fact, much of the research conducted by these scholars has focussed heavily on television and how this

technology has been appropriated in the home (1991, 1992). In *Consuming Technologies*, Silverstone et al. explore the “relationship between private households and public worlds and the role of communication and information technologies in that relationship” (1992, p.15). These authors write that the importance of communication and information technologies is derived from the fact that these technologies are not only objects, but are also media. As media, they hold a functional significance and actively link the home with the outside world. This can be accomplished in a passive manner, as in the case of the television or, in an interactive manner, as in the case of the computer and Internet.

From design to creation and consumption, the boundary between the public and private sphere constantly shifts. Silverstone, Hirsch and Morley (1992) set out to examine the relationship between the production of technology, the appropriation of technology, and the shifting boundary between the private and the public. Typically, the production of technology occurs in the public sphere while appropriation is accomplished privately. It is within this mediated grey area of shifting boundaries where:

the crucial work of social reproduction . . . takes place within the household’s moral economy. Information and communication technologies . . . [act] as mediators of the social knowledges and cultural pleasures which facilitate the activities of consumption (Silverstone et al. 1992, 19).

These researchers emphasize the role technology plays within the domestic sphere, enabling the user to reach beyond the private boundaries of home to interact with the public world outside.

This idea is similar to Joshua Meyrowitz’s (1985) concept of the blurring boundaries between the public and private sphere that are the result of electronic media in the home. He is primarily concerned with the effect of television on the blurring

boundaries between the public and the private. Meyrowitz's major arguments suggests that the electronic media "increasingly link the home to the outside world, [and] external behavioral norms begin to merge into internal ones" (1985, p. 315). This is supported through the example of television and the resulting changes in children's behaviour which he contends can be directly linked to an increase in access to information. The type of information that concerns Meyrowitz in his investigation is the information that was previously considered to be 'adult' information and not available to children. As the television entered the home it was difficult to maintain the boundaries that separated children's behaviour from adult's behaviour. As a result children became privy to "backstage" behaviour that was up until that point not a part of their daily experience (Meyrowitz 1985). It is difficult to maintain the mystique surrounding sexual intercourse once children have watched this behaviour on television. One could also make the argument that the level of violence that is depicted on television has had a dramatic influence on children's behaviour. Meyrowitz traces the critical point of change to the moment when the television entered the home and people were exposed to a daily mediated outside world (1985, pp. 226-267).

One can speculate whether a similar situation might result with the interactive medium of the Internet. The behaviour that is acceptable for the on-line world may easily spill over into the real-life world. Meyrowitz (1985) argues that behaviour that was once confined to the private sphere becomes acceptable within the public sphere, and vice versa, and it becomes more difficult to distinguish between the two spheres and to maintain the boundaries that keep them separate. One could successfully argue that this has already occurred with the Internet, as many children are allowed free reign to roam

through the cyberhighways encountering all types of information, from pornography, to violence, to websites dedicated to execution and murder. Can we reasonably assume that this will have no effect on the daily behaviour of our youth? The same question could also be asked of the adults who used the Internet regularly—how does this medium impact their own behaviour off-line? But this is a question to be explored in another academic inquiry. What interests me in the present study is the interaction and co-evolution of the Internet at teen users—how are emergent patterns of use influencing and shaping the technology?

Studying Teens' Internet Use

In the last few years, the number of Internet research studies focusing on both children and teenagers has been plentiful. There has been research conducted across Europe and in North America focusing on how youth are interacting and adopting the Internet. Several important research studies emerged within the last two years that informed my own research interests. One of these studies published by the Pew Internet & American Life Project (Lenhart et al. 2001) in the United States examines the popularity of Instant Messaging among teenagers and how this phenomenon is changing the social networks of this generation. The other study published in October 2001 comes from the Environics Research Group in Canada and looks at how youth are incorporating the Internet into their lives. This study was particularly informative because it looked at a broad cross-section of Canadian youth from ages 9 – 18. The survey research was conducted in Toronto and Montreal. Responses were broken down by both gender and age categories. In addition to this report, a supplementary report was published that highlighted responses from focus groups held in both cities with not only the young

respondents but also their parents. I found this follow-up report, although brief, to be very informative as it provided further insight into the results of the original report.

The study conducted by Sonia Livingstone (2001) and her colleagues is perhaps the most influential for a number of reasons, a few of which are discussed above. For the most part this study, even though it focused on European children, provided a broad theoretical and methodological anchor for my own research project. I would like to briefly examine these three reports and highlight some of the findings of each in relation to the present project.

The 2001 Pew report was rather specialized and focused on American teenagers and their use of Instant Messaging. However, it is useful because it enabled me to contextualize my own results. The conclusions of this report supported my own research findings and helped reinforce my methodological choices. This report looks at several areas that overlap with my own research questions and it also incorporates parents' views as well, suggesting that the Internet is playing an important role in the lives of American teens. Not only is the Internet important to the teens themselves, but their parents also agree upon this premise as well. The report suggests that 74% of teens would miss the Internet if it were no longer available to use. More than half of the parents surveyed agreed that the Internet is an essential tool for their children's success now as students and in the future as they enter the workforce (Lenhart et al. 2001, p. 3). At present, the most beneficial aspect of the Internet for the respondents of this project, is its ability to be an educational tool. For the most part the teens agree with this statement and would also add that the Internet has become their primary research tool for schoolwork.

Although there is agreement upon the role of the Internet in education, kids and parents do not concur on just how much supervision is provided for kids while they are online. This report also indicates that there is general disagreement about whether or not there are rules established and followed for Internet use from home. Teens feel that they are for the most part not supervised, while they are online and that there are no enforced rules regarding Internet use. Parents, on the other hand, consider the fact that the computer is centrally located in a public space in the home qualifies as some degree of supervision. Parents are also more likely to feel that they have established fairly explicit rules regarding Internet use but for the most part, they merely trust that their children are following the guidelines without the need to actually check-up on their teens' online activities (Lenhart et al. 2001).

Livingstone (2002) found that there was a sense of uneasiness among many parents when it came to establishing Internet supervision rules for the household. She writes "no parent denies their moral responsibility for supervising their child(ren), [however] many parents feel ill-equipped and insufficiently supported" (2002, p.8). The technology of the computer and the Internet present a somewhat daunting combination of media and equipment and for the most part, Livingstone argues, many parents acknowledge that they are ignorant of its power and receive little direction from the government by means of either policy or regulation. In the end, it is left up to the parent to decide just how the Internet enters the home and under what conditions. Livingstone concludes "parents would rather suppose their children are sufficiently responsible to regulate themselves, resulting in a kind of benevolent neglect" (2002, p. 8). Generally this could be traced to the fact that the parents who were uncomfortable with the Internet

had very little experience with the technology and therefore did not know what sorts of things to be ‘on the lookout’ for when their children were online. Many of these parents felt it was quite adequate to simply have the computer in a public space in the house and be able to physically see their children while they were online. In other instances, where parents felt totally uncomfortable with the computer and the Internet in the house, the solution was to place the machine and Internet connection in the child’s bedroom (Livingstone and Bovill, 2001). In this way, it did not intrude upon the leisure time of other family members, and the parents felt that they were providing their children with an educational advantage by bringing the technology into the home. Livingstone (2002) points out that for many parents fears regarding the Internet are rooted in ignorance: “here is a medium with no connection with their own childhood, a medium they may feel much less expert with than do their children . . .” (p. 8).

Livingstone’s conclusions are supported for the most part by the Pew report and the Environics report, which spent a considerable amount of time investigating teens’ encounters with strangers on-line. The Pew report asked parents how they dealt with safety issues on the Internet with their teens. Parents reported that they employed several strategies for Internet use in the home in order to ensure their teen’s safety. These would include keeping the computer in a public space in the home, surfing the web along with their children, checking up on their children after the Internet session and finally using filters on the computer to block certain areas of the Net. Most parents approach supervision of the Internet in quite the same way that they would supervise television viewing. By placing the computer in a public space within the home, most parents consider that they are providing adequate supervision of their child’s Internet activities. It

seems that parents of girls were more concerned for the safety of their daughters and their experiences with “the dark side of the Internet” (Lenhart et al. 2001, p. 30). These experiences ranged from unwanted e-mails and instant messages from strangers to instances where teens were being stalked in cyberspace (Lenhart et al. 2001). All three of the studies seem to corroborate the fact that parents who had little experience with the Internet themselves were the most apprehensive about the safety of their children online.

In both the Pew Report and the Environics study, most teens and their parents agree that the teens have more knowledge about the Internet. It is interesting to note that parents see the Internet as either a neutral technology with little negative impact or as an essential tool that will play an important role in their child’s future. The number one reason why parents seek out an Internet connection in the home is for the educational advantages that their child will gain with the added technology. It is also interesting to note that after connecting to the Internet, these same parents are somewhat concerned because their kids seem to use the Internet for too many leisure pursuits and not enough educational ones.

The home takes a position of importance throughout this discussion of teenage Internet access. As mentioned above, the home as a private space is achieving an increasingly important role as the site of both leisure and educational activities, mediated or not. On the individual front, the home represents the site where youth are exposed to a set of cultural possibilities and preferences. With the abundance of media that is now confronting youth on the domestic front, it seems as though young people are able to learn as much now from their mediated environments as they do from their parents or educators. As the Internet becomes a medium of choice for many teens in their homes,

the parents must also assume the responsibility of the role of enabler, making it possible for their teens to explore a world that might not always be safe and acceptable.

The Pew report also suggests that boys and girls, to some degree, use the Internet differently. In a general sense, girls use the Internet for e-mail, instant messaging and looking for dieting, health and fitness information. E-mail tops the list for boys as well, but this is closely followed by researching items that they would like to buy, looking for hobby information and playing or downloading games. Both boys and girls seem to agree that they use the Internet for fun, listening to music and looking up information about sports stars, movie stars and music groups. The Environics report claims that girls are more inclined to use the Internet for social endeavours and boys are “more likely to make purchases on the Internet and to have engaged in activities that could be considered unethical” (Environics Research Group 2001, p. 11). The findings of the Livingstone and Bovill (2001) report would concur that boys’ interests lie in the area of gaming and hobbies, while girls are primarily socially oriented on-line.

Youth in Canada, claims the Environics report, are also more likely to use the Internet as a means of communicating things that they are too embarrassed or frightened to say to someone face-to-face. The Pew report did not report on any findings that would support this conclusion; however, it did venture to say that teens would freely experiment with multiple identities and e-mail accounts so that they could compartmentalize their online worlds. This information was also supported by the Environics report, where teens have admitted to not only lying about their age but also their gender while they were online.

It is apparent from these recent research studies that important questions are being asked of youth and teens with regards to their Internet activities. These reports provided fertile ground upon which I could launch my own investigation. What I gleaned from each of these studies is a valuable sense of the types of questions that needed to be asked of my research participants. The overlap of categories of inquiry between these reports helped to reinforce my own suppositions. I was able to identify the central issues facing teens as they incorporated the Internet into their daily lives

This project will focus on the youth who are growing up with the computer and the Internet in their homes. I am looking at both technologies as objects that are not yet taken for granted. Once a technology is taken for granted it becomes invisible and it will be harder to discover just how it arrived at this juncture. It is incumbent upon the academic community to take a serious look at the domestic sphere as an important site of inquiry. The ability to examine a technology before it reaches a point of invisibility is an exciting opportunity. It is easy to lose track of all of the possible trajectories of a technology once it has reached a point of closure – the moment when it becomes invisible.

What this project sets out to offer is an in-depth examination of the ways and uses that the participants of this study have created a meaningful experience out of the applications that are bundled within the Internet. The daily life practices of the research subjects and how the Internet is incorporated within that realm is an important avenue to explore. The Internet is growing in popularity and my concern lies with the fact that it is increasingly becoming invisible to the everyday user. This is the point where the impact of the medium will ultimately be felt. Once the medium becomes another tool that is

taken for granted within the lives of those who use it, it will be more difficult to ask the questions and dig into facts surrounding how the Internet has come to be a part of the routine. I feel that for this reason, it is important to begin to ask those questions now. My task is to discover how teenagers are shaping the medium to fit their lives and how they are negotiating the ways that the Internet affects their lives.

The teenager as an everyday user of the Internet represents a specific interest in this research project. In one sense, I feel that the teenager is somewhat linked to the hacker of the Minitel example discussed above. Like the hacker who made demands on the technology of the Minitel, which ultimately forced a change within the system, the teens of today who are becoming regular users of the technology are ultimately deciding in what ways the Internet will be shaped and used routinely. The impact of this shaping is just beginning to be felt now, but the implications are far-reaching as this generation who grew up with the Internet enter the workforce. The impact of the applications that are shaping the lives of the teens today might very well be what we are all subject to later on. It is the teens, having grown up with the technology of both computers and the Internet, who will take both technologies for granted. As the computer and the Internet become invisible aspects of everyday life, this generation will learn to incorporate the technology as an extension of their own creative ability. I believe that as a generation grows up with the technology and learns to ascribe meaning to it in different ways, it embraces the technology with little fear and places no restrictions on both their own potential and the potential of the technologies that surround them. They creatively appropriate the various applications of the Internet to match their own interests, desires and needs. Ultimately, I believe that they will also have the power and ability to define the medium, to empower

themselves to shape the medium rather than sit back and allow the technology to drive them.

I find that this bundle of applications—the Internet—is seductive in the sense that there is no pre-determined way to use it. Once individuals are ‘on-line’, where they go, how they get there and whatever else they do in between is entirely a personal choice. It is this capability and the lack of fear of the technology that is empowering youth to shape the Internet. In a similar way to Livingstone’s child-centered approach to the mediated environment, I look at the Internet as a bundle of possible applications and means of expression. I see that the ways that teenagers use this bundle of applications is unique to their own interests and desires and is indeed an expression of self. The path that one travels over the Internet is also a reflection of how an individual sees his/her own role within the larger social world. It is in this sense that the teenager becomes the ‘creator’ of the technology, making decisions about what is important with every ‘click of the mouse’. Like the early adopters of the bicycle who appropriated the model that suited their own needs, preferring the ‘safety’ over the ‘racer’ and thereby altering forever the future of this mode of transportation (Pinch and Bijker 1987), the teens growing up with the Internet will have the same ability to decide which aspects of the medium play the most relevant roles in their own lives.

Following this line of inquiry, I set out to examine how the computer and the Internet as domestic media have shaped the everyday lives of the teens who use them. I am interested in exploring the role of the Internet in education and social relationships. How does the Internet represent a means of connecting to the world outside the home and how do these teens use the Internet for leisure activities? I am also interested in knowing

if the Internet has changed the spending habits of this age-group and whether or not the excess of information available on-line has influenced the social consciousness of any of my respondents. I feel extremely fortunate that I was able to talk to teenagers and to have had them take me on a guided tour of their own individual Internet experience. This enabled me to witness how individuals weave their own web of meaning, from the cyberspaces and places they visit, to the e-mail accounts and nicknames they use to express themselves. Bearing witness to this active “technology in use” (Lie and Sorensen 1996) proves that as intelligent agents, human beings take up technology and adapt it in creative ways. Within the framework of social constructivism, I am most interested in investigating how the Internet has become meaningful to the teenagers as a tool, a communications medium and as a means of self-expression.

Chapter Three

Research Design

Research Framework

There has been a long-standing tradition of using quantitative measures, and by this I mean primarily statistics, as a means of measuring audience responses and engagement with media. The information yielded by these types of measurements has played an important role in the field of communications, primarily for the media industries themselves, but the type of information gathered through these explorations has also been somewhat constrained by its very nature. This information is valuable in the sense that it is possible to tell just how much media is being consumed in what capacity and by whom. Indeed, the Nielsen rating system still used today by the television industry provides solid evidence of just how quantitative measurement of audiences can be used as a way to customize media products to meet audience demands. However, Morley and Silverstone argue that “[s]tatistical techniques are by their very nature disaggregating, inevitably isolating units of action from the contexts that make them meaningful” (1991, p. 149). These authors contend that there is a need to study the uses of media in a natural setting where it is possible to discern “the specific ways in which particular communications technologies come to acquire particular meanings” (Morley and Silverstone 1991, p.149). To study media in their natural setting, it is necessary to go to the source – the home as it were – and find out how the technology is utilized within the everyday fabric of life. My desire to study the computer in the natural setting of the home led me to consider that an in-depth ethnographic study was the only way to succeed in this endeavour.

The ethnography as a research practice has traditionally been linked to the field of anthropology. The ethnographic process has also been adopted, more recently, by the field of media studies (Drotner 1993). This method involves the “analysis of multiply structured contexts of action, aiming to produce a rich descriptive and interpretive account of the lives and values of those subject to investigation” (Morley and Silverstone 1991, p. 149-50). The primary investigative method associated with ethnography has been participant observation. Indeed, when one thinks of conducting an ethnography, the image that leaps to mind is that of the researcher going ‘into the field’ of the ‘Other’ to find out the ‘truth’ about the culture under study. The goal of ethnography is to enter into a long-term study of subjects as they go about their daily routines and to ultimately arrive at an interpretation of the data that will provide some insight into the culture under study. This is what Geertz (1973) called the ‘thick’ description of the complexities of daily life. The ethnographer’s goal is to “collect whatever data are available to throw light on the issues with which he or she is concerned” (Hammersley and Atkinson, 1983, p. 2).

James Lull argues that the ethnographic method used in the context of qualitative empirical audience research represents:

an integrated means for understanding the everyday world of social groups, their patterns of interpersonal communication, and their uses of the mass media. The intent of the ethnography of mass communication is to allow the researcher to grasp as completely as possible with minimal disturbance the ‘native’s perspective’ on relevant communicative and sociocultural matters indigenous to him (1980, p. 199).

Lull sees that the goal of ethnography is the observation of routine behaviour in a natural setting with “special attention paid to the often subtle, yet revealing ways that different aspects of the context inform each other” (1987, p. 320). No matter how careful the researcher is at setting aside bias or prejudice, the ethnography will only ever be an

interpretation from a particular perspective. One could venture further and say that an ethnography is a construction of reality between the subject and the researcher. Whatever the researcher observes is merely what the subject allows him or her to observe.

However, I would like to point out that if we accept the limitations of ethnography as a method, we can also accept its strengths as well. The ethnography provides a contextual understanding of natural domains. Ethnographic information and interpreted data will enlighten and provide insight into areas of concern and question.

Traditionally the ethnography has focused on extended periods of observation involving the researcher living with the culture under study. For the purposes of my study of teens' use of the Internet in the home, it was not a feasible suggestion for me to live "in the field", as it were. One might argue then, that without an extended period of research spent in the field that this study should instead be categorized as a qualitative investigation rather than being associated with the ethnographic tradition. I would offer this in response. The basic characteristics of the ethnography, as established by Baszanger and Dodier (1997) focus on three primary aspects of research:

1. the need for an empirical approach;
2. the need to remain open to elements that cannot be codified at the time of the study;
3. a concern for grounding the phenomena observed in the field. (p. 8)

I felt that for my own purposes, my research should be carried out in a manner that met these objectives. As mentioned above, the goal of media ethnography is to engage in observation of routine behaviour in a natural setting for the purpose of revealing the relevance of a particular communications tool in the life of the respondent. I was able to observe my respondents in a natural setting – the home – and by their engagement with me in a narrative fashion they revealed the ways that the computer and

the Internet had come to assume a place of relevance and importance in their everyday lives. They allowed me to observe how the Internet had become a part of their world. Through this process, I was open to the information that they felt was important, and was not limited by my own preconceived notions of how the teenagers were constructing the Internet in their daily lives. They shared their experiences with me and took me on a virtual journey. We visited the places where they like to “hang out” while on-line and they allowed me a momentary glimpse into their lives. But not only did they show me what was important, we also talked about what the Internet had come to mean to them in their daily experience. We laughed and we joked, and some of my respondents and I even pondered the future. Thus, I came to know them to a certain extent as they shared with me a brief glimpse into their daily lives and interests. This could only be accomplished by meeting the teenagers on their own turf, by stepping into their lives and observing them in their natural habitat. I feel that even on this small scale, I was the field ethnographer encountering my subjects on their own terms.

Conducting research in the domestic sphere presents a host of challenges for the researcher. This very private and personal space is not always readily accessible to the outside. Visitors are sometimes unable to participate in the normative aspects of daily life in the home. In this regard, the researcher will always only be privy to the behavior and routines that the subjects allow him or her. There will also be areas of the house that will be off limits. In this respect, it is difficult to gather information from a perspective of objectivity. The researcher must assume that she or he is only going to hear one side of the story. In order to compensate for this inevitability, I tried to hear as many stories as possible by interviewing other family members to see if at least a portion of the

information matched. The fact that I was only hearing a particular version of the “truth” through the eyes of my respondents did not in any way diminish the relevance of the information. What I gleaned from each situation was insight into the activities that the respondents felt were worth sharing and discussing.

Building on the methodology used by Bakardjieva and Smith (2001), I conducted in-depth interviews situated in the home of the subject. My goal through this process was to put the subject and his or her family at ease, and so I set out to discover the ways in which the computer and the Internet had at first become situated in the home and subsequently how both technologies had become a part of the daily activity within this realm. I began by talking with the family and through conversation gained some insight into the family background. I would then ask the subject to tell me about a typical day in his or her life and we would begin our journey from this point. This type of interview made it possible to observe how the participant had incorporated the computer and the Internet into his or her daily life. Through this interviewing process, subjects were empowered to narratively re-construct the meaningful aspects of the Internet and computer. In this way, the interview unfolded and became a negotiation of knowledge between the participant and myself. I was not putting words in the mouths of the respondents, nor was I providing answers to their questions; rather, the negotiation between us became the unfolding of a story that featured the subject as the main character. The computer and the Internet played feature roles as the tools of choice for the purposes of communication, education, and entertainment.

Other family members were invited to participate in the study through an informal group interview. The goal of this interview was twofold: 1) to discover how the main

informant, the teen, interacted with his or her family, and 2) to diffuse the fears of other family members – namely the parents – about the type of research I was conducting. The group interview also enabled me to form a type of mental picture of how the computer and Internet had become important to the family as a whole, and not only to my main informant. It was useful to find out how the media environment of the home had changed, if at all, since the introduction of the computer and/or the Internet, and if these changes had affected the subject's behaviour patterns or interaction with the media.

For the purposes of my research project, I have adopted the term “quasi-ethnography” (Bakardjieva and Smith 2001) to categorize the type of research that I conducted. I feel that this term encompasses the positive aspects of the ethnographic method, which focuses on the engagement between the subject and the researcher, without leading one to believe that the research was conducted over an extended period of time as in the traditional ethnographic method. At the same time, however, it is not my intention to diminish the importance of the ethnographic method by adopting this terminology.

Once I had determined how I wanted to conduct my research, I needed to draw upon a method of questioning that would enable my respondents to feel as though they were somewhat in control of the process. I was interested in listening to the stories of the respondents and allowing them to freely speak about the importance of the computer and Internet in their daily activities. In order to accomplish this task, I set about to incorporate a process of active interviewing with my respondents. In the chapter “Active Interviewing”, authors Holstein and Gubrium (1997) state that the interview represents a site for the production of knowledge between the interviewer and the respondent.

Holstein and Gubrium suggest that rather than consider the respondent to be a “wealth of knowledge just waiting to be excavated” (1997, p. 114), the interviewer should consider the interview to be a conversation that enables the respondent to narratively reveal the details of his or her life.

Drawing on a background in ethnomethodology and conversation analysis, these researchers consider the interview “a social encounter in which knowledge is constructed . . . not merely a neutral conduit or source of distortion” (Holstein and Gubrium 1997, p. 114). The interaction between the interviewer and the respondent represents a situation of ongoing interpretive practice that yields a common ground of understanding. In this way, there are no objective truths or simple facts that exist unto themselves. Information is always situated within a larger context and there are always conditions of interpretation. The goal of this type of interview process is to understand the meanings produced through the interview and not simply to analyze the answers to the questions. In order to understand how ordinary users of technology, and in this case the Internet, make this technology meaningful in their daily lives, it will be necessary to qualitatively explore the areas that are important to each respondent. The active interviewing process is a way of transforming the respondent into a “productive source of knowledge” (Holstein and Gubrium 1997, p. 121) enabling him or her to reflect upon the topic of conversation. These authors contend that the goal of the active interviewer is to activate the subjects’ “stocks of knowledge” (Schutz 1962) and bring this information to the present discussion. In this way, information may be revealed through that active process that might otherwise be neglected or remain unexplored in a more impersonal interview setting.

In some respects this type of interview might be seen to pose a risk to the respondent in that some potentially embarrassing information might be revealed during the course of the less formal interview process. I had been questioned through my ethics application about the potential harm that the respondents might be exposed to during the interview process. I took every precaution to ensure that the risks to the participants were minimalized. The subjects were free to withdraw from the interview at any time during the process and they also had the right to refuse to answer specific questions if they caused any type of discomfort whatsoever. However, I also feel that the conversational nature of the interview helped to relax the respondents and to make them feel as though they were not subjects of a research study but rather just discussing aspects of their lives with an acquaintance. Had I adopted a more formalized interview process I believe that the data from the project would have been considerably different and the respondents' answers much more guarded and clipped.

Within the boundaries of sociological research, it has been suggested that for the most part, children are not taken seriously as research subjects (Morrows and Richards 1996). I wanted to avoid this type of inquiry and truly believe that as research subjects, teens are fully capable of being full participants in the interview process. Earlier, I suggested that teens hold a unique position in today's society with respect to their relationship with information and communications technology. I would further argue that the behaviour they exhibit now with these technologies will have a dramatic effect on the future.

Virginia Morrows and Martin Richards suggest, that from a sociological perspective, the reason why children have not always been considered to be valid

research subjects is that adults tend not to be very “respectful of children’s views and opinions” (1996, p. 91). These researchers identify several areas of concern whereby children’s views and opinions have been investigated under somewhat ethically questionable circumstances. Any researcher working with children (defined as anyone younger than 18 years of age) needs to be aware that there are issues of power and control that need to be sufficiently addressed throughout the research process. The researcher, in any research situation not specifically where subjects are under the age of majority, holds the balance of power in the interaction. It is the researcher who controls the research process regardless of the application. This is especially true for children who may feel powerless in a research setting.

Morrows and Richards (1996) suggest that research on children in the setting of everyday life is long overdue. There have been plenty of studies conducted that have taken children as subjects and then taken either a psychological, behavioral or medical approach to the study, but the exploration of the daily lives of ‘ordinary’ children has been ignored. Morrows and Richards further suggest that as researchers dealing with minor children there are a host of natural tendencies that adults must overcome in order to provide the research subjects with a comfortable environment in which they can relate to the adult researchers. The first and foremost point for the researcher to consider is to recognize that children have their own unique competencies and are fully capable of communicating these competencies providing that the researcher does not discredit the information. “[R]esearchers need to set aside ‘natural’ adult tendencies ‘both to take children for granted and to accord them a provisional status . . . The belief that children are inherently ‘wrong’ when they disagree with adults is an obstacle to overcome” (Fine

and Sandstrom, qtd in Morrows and Richards 1996, p. 100). In this regard as well, researchers need to recognize that children are not a homogenous group and they are as susceptible to the variables of social location as are adults who may participate in research projects.

I recognized from the outset of my project, that there were certain obstacles that I had to overcome in order to gain both access and insight into the lives of my young respondents. As a stranger, I felt that there was a high degree of probability that the teenagers whom I interviewed would be hesitant to reveal too much information about their daily lives. Not only was I unknown to them, but teenagers can be suspicious of adults who are seeking more information than they are willing to offer. These young people are not accustomed to having their daily life activities scrutinized for the benefit of a research study. Questions about daily life activities from almost any adult let alone a stranger, could possibly put the teenager into a heightened state of skepticism and guardedness about the information that was shared during the information process.

I also felt that in order to help the teen respondents set aside their own 'natural' tendencies to be wary of authority, that I would also have to set aside my 'natural' tendency to take the role of the authority figure who 1) knows more than the teen, and, 2) is therefore more likely to doubt the validity of the information that was gathered. I was not there as a parent figure or a teaching figure whose goal might have been to discover incriminating evidence against the teen in a specific circumstance. Instead I was conducting these interviews out of a genuine interest and desire to explore the daily life experiences of these subjects.

In order to accomplish this goal, I felt that by adopting a conversational stance in the interview process that I would hopefully construct myself as someone who was less of an authority figure and more on an equal footing with the respondents. I did not think that they would treat me as a friend, but I was hoping to achieve the status of a friendly acquaintance that was not a risk to their privacy or security. I found that I also had to be consciously aware throughout the entire interview process of my own natural tendency to interrupt the teens and offer my own opinions. On more than one occasion I had to contain my urge to add a comment or response to the information that was being shared by my respondents. I felt that by physically restricting some of the comments that I had the natural tendency to make, I was allowing the teens to occupy a position of knowledgeable authority about the subject of our discussion. The goal was to empower the teens and help them to feel comfortable enough to offer more narrative detail about the role of the computer and the Internet in their daily life experiences.

I had also hoped to instill this sense of power in the teens at the very beginning of the interview process when the ethics forms were signed. Morrows and Richards (1996) indicated that in many instances of research, the child as a subject is often by-passed in the process of seeking informed consent. This is due to the location of the research and who else might be involved. In the cases where research is conducted in a school setting, the principal often grants consent on behalf of the students. In a setting where the parents might need to be consulted about the research, they are the ones who grant permission for the research to begin and the child, as a minor, is never actively consulted. I wanted to make sure that the teens who participated in my research project not only fully understood what was expected of them, but I also wanted to ensure that they were aware

of their own rights as participants in a research project. By taking these positions, I felt that I had treated the teens in my study as “. . . social actors in their own right, as sources of valid sociological data” (Morrows and Richards 1996, p. 98). The information gathered in the interview process was treated with the utmost respect as were the teenagers who participated in the study.

Recruitment: How

Now that I had identified the type of subject that I want to engage with in the project and how I wanted to interview them, I set my sights on finding them. I began by interviewing the children of friends and acquaintances and branched out into the social networks of these people. Initially I found it was difficult to find teens willing to participate in this project. In hindsight, this does not really surprise me, as a natural response to such request is: ‘why should I do this, what is in it for me?’ Perhaps this is a bit of an exaggeration, and a more plausible reason for the lack of participation is the time involved. People are busy and it is difficult to commit to giving up three hours of one’s time for a research study.

In an effort to find and include a more diverse population of teens, I posted flyers in local arenas, swimming pools and libraries. Unfortunately this did not yield a single response. I was disappointed, but determined to forge ahead. I sent out an e-mail message to the parents of my young son’s hockey team. I asked if any of them had older children (13-18) and might be interested in participating. For a brief moment, I thought that I had managed to persuade a few families to participate, as the research project became a topic of discussion at the team’s Christmas party. But when it came time to commit to an interview, the appeal of the project had waned as the demands of hockey

and other leisure activities made it difficult to schedule interviews. In the end, I secured most of my respondents through the social networks of my own friends and acquaintances. In some cases this approach led me to strangers who agreed to participate in order to do a friend of theirs a favour. It certainly is an uneasy feeling to walk into the house of a complete stranger and expect that they would be willing to offer the private details of their lives.

I found entering the homes of strangers to be a bit overwhelming and it took a formidable amount of courage and self-confidence. The first interview of this kind was the most difficult. I had no idea what to expect and I am sure that the participants were not sure what exactly they were getting themselves into either. One mother was quite taken aback when during the signing of the ethics forms she discovered that the interview process might take as long as three hours. She had to work that day and was not at all prepared to commit that much of her time to this project. In the end, I think that this interview was completed in just under two hours.

Recruitment: Who

The means by which I gathered my research participants made a definite impact on the type of teenager that was included in the research. Since I focussed on friends and acquaintances in my own social networks and asked them to search through their own networks for participants, most of my research subjects were white, middle-class, urban families. The houses for all of the respondents were located in middle to upper-middle-class neighbourhoods and ranged in age from two to thirty year-old homes. In the families with two parents, both worked outside the home. For these families, the annual

household income ranged from \$60,000 to \$120, 000. All of the families lived in Calgary and had been residents of the city for at least three years.

Notwithstanding this homogeneity, I was fortunate to find a family from the lower end of the socio-economic scale. This interview immediately forced me to restructure my own role as researcher and to re-conceptualize the role of the computer in the household. This family had been contacted through a local community agency. The Calgary Community Network Association is a community agency that provides both training and free Internet access to individuals. They had also recently begun a project that enabled them to place both computer equipment and Internet access in the homes of low income families. The CCNA provided the names of a few of the families who were participating in the Barrier Project for me to contact and ask to participate in this study. One family, a single mother with a teenage son, agreed to be interviewed. I showed up for the interview (which had already been cancelled once previously) to find that the son was asleep. Of course I suggested that I come back another time, but the mother insisted that we go ahead. Needless to say, the son was less than enthusiastic about answering questions regarding the computer and how he used the Internet. This was my shortest interview lasting only 45 minutes.

In all, I was able to conduct 14 in-depth interviews with teens between the ages of 13-18. Of these, only four were male and the rest female. I had originally wanted a more equal representation of both genders but struggled to find male respondents who were willing to participate. It did not take me too long before I began to identify a few significant patterns of use among my research respondents. It soon became clear that the

teens were involved in the areas of communications and entertainment on the Internet and these two dominant themes surfaced in every interview.

With respect to their technical skills, I would not qualify any of the teens that participated in this study as “techno-geeks” who spent all of their leisure time on-line and downloaded all of the latest versions of programs, or continually upgraded their equipment. On the other end of the spectrum, I can also say that none of the teens I interviewed was afraid of the computer or the Internet. They possessed a range of technical and computer skills that matched both their interest and engagement levels with the media. I would say that the teens who participated in this research study exhibited a high degree of comfort with both the computer and the Internet. Many were proficient with many of the applications they used regularly, and they were also not afraid to admit that there were areas of the computer that they were not so familiar with. My participants spent from 2-15 hours a week on-line. National statistics report that Canadian teens spend an average of 10 hours per week on the Internet engaged in a variety of activities (Rotermann 2001). My respondents, therefore, I would qualify as ‘average’ Canadian teen Internet users.

Recent surveys from Statistics Canada suggest that 92% of Canadians between the ages of 15-17 have used the Internet (Dryburgh 2001). Of this population 56% were connecting to the Internet from their home, “making this the most popular point of access, as opposed to school, work and other locations such as friends’ and relatives’ homes, libraries, Internet cafes and other public access points” (Rotermann 2001, p. 5). In Canada, the highest number of Internet participants are found in British Columbia and Alberta where 61% are on-line. This is further compounded by the fact that both income

and education influence whether or not the Internet is a part of the daily experience of Canadians. The “wealthier, better educated individuals [are] more likely to be using the Internet than their less wealthy, less educated counterparts” (Dryburgh 2001, p. 2). As members of middle-class Canadian families, my respondents certainly fall within the wealth and education parameters characteristic of Internet participants. It is from this perspective that I characterize my respondents as typical Internet users based on their age, socio-economic status, as well as by the amount of time that they spend on-line.

I would also like to add at this point that the limitations of my respondent group, namely gender, number of respondents, and socioeconomic status, made it impossible for this study to be qualitatively or quantitatively representative of the general population of Canadian teens. I did not intend that this study should be universally representative of teens who were characteristic of specific social, demographic, and regional categories. Instead I set out to elaborate certain details of teenagers’ relationships with the Internet on a personal level.

Data Collection

Upon entering the home, I would ask where we should set up for the group interview. I would also engage in a bit of small talk in order to set the respondents (and myself) a bit more at ease. Once we had entered the room of the interview, I would set up my audio tape recorder and then bring out the ethics forms. We would briefly discuss the research project and the goals for the interview. The family would have the opportunity to ask any questions about the process. I would then ask each participating member to complete an ethics form. There were separate forms for parents and teens. I made it clear that the teen was in charge, and that he or she had the right to withdraw at

any time, and also the right to refuse to answer any question that made him or her uncomfortable. I also explained to the parents that any information that was shared with me during the interview would not be shared with anyone else, including them. Any information that was shared between the teen respondents and myself remained confidential. The teen, of course, had the option of discussing the research with his or her parent(s) after the completion of the interview. Transcripts were available only to the respondent of the interview and were not available to the parents of the teen in any instance. After all of the ethics forms had been signed, I would turn on the tape recorder and we would begin with some general background information about the family itself before moving into the more specific questions regarding the computer and Internet in the home.

Recognizing that the home is a natural setting to its residents and perhaps a less than open space for visitors, I felt I should talk to as many family members as possible in order to gather a broader picture of the teen's life. The first part of the interview involved a group interview with all family members to gather background information on the family, the computer and the Internet. I was also interested in discovering how a pattern of interaction had been established between the family members and the computer and Internet media. I asked how long the computer and the Internet had been a part of the family and the main reasons for bringing both into the home. I wanted to hear the stories surrounding the introduction of the technology into the family, and encouraged all family members to participate by filling in bits and pieces of information as they went along. I also encouraged family members to tell me how the computer and Internet had become meaningful parts of the fabric of daily life within the home. I would ask about fights

between family members about computer access and how these arguments were dealt with. In this way I felt that I could develop a sense of how the family got along together. I will reiterate that as a stranger in the home, I was only privy to a narrow picture of family interaction, but even within a short time it is possible to pick up tensions between family members, as well as good-natured teasing. Spending time with the family provided me with the opportunity to witness how family members interacted and it also allowed the family to get to know a bit about me and the research project. My secondary goal for the family interview was to address any potential concerns that the parents or the respondent had regarding the project and the type of information that I was hoping to find. I felt that it was easier to deal with potential misunderstandings at the outset of the interview process than risk losing valuable data later on because something was not fully discussed prior to the beginning of the interview.

After the family interview, I would follow the teen to the computer and we would talk about the role that the computer and Internet played in daily life. My first question to the subject was to tell me about a typical day in his or her life. I asked them to begin with their morning routine and their preparations for school and then asked them to share with me all of the activities that comprised a typical day in their life. These questions were not just geared towards the time when they were sitting in front of the computer. This would not have provided any insight into how the teens found the computer and the Internet to be useful within the scope of their daily lives. By extracting a description of the entire daily routine, I was able to discover just how prominent a role both the computer and the Internet played in the lives of my respondents. After hearing the story about the typical day we would talk about how much time was spent on the computer on a weekly basis

and whether this changed on the week-end. After gathering the background information, I would ask the subject to take me on a tour of his or her favourite websites. I did not specify which sites I wanted to see but rather allowed the subject to take me to those places that were a part of his or her regular Internet routine. At this point I made copies of the electronic artifacts in the subjects' computer. This involved screen capturing¹ the bookmark files in order to gain an in-depth picture of what aspects of the Internet they considered to be important. I was surprised to discover that many of the teens did not use bookmarks, but would instead just remember the URLs of their favourite websites and type them in.

After touring their favourite cyber-spaces, I asked the teen to take me to their e-mail in-box. We would discuss the messages that were sitting there and the people with whom they corresponded. This discussion would often lead to MSN Messenger or ICQ, which are instant messaging programs, and we would talk about their 'buddy list' and the people on it who were important in their lives and why. I asked to take electronic copies of both the in-box and the buddy lists to add to my cache of electronic artifacts.

In general terms, I would ask the teen to comment on their computer and Internet use as it related to social relationships, family relationships, education, leisure activities, identity, consumerism and security. These categories arose from a review of the current literature that I discussed in the previous chapter, namely the Livingstone and Bovill (2000) report, the Pew Internet and American Life Project (Lenhart, Rainie and Lewis 2001), and finally the Environics Research (2001) group report. Each of these reports placed a heavy emphasis on the educational aspect of the Internet and how this has

¹ Screen capturing involves using the 'print screen' function. "Prt Sc" will copy all of the information on a computer screen. This can then be pasted into a program like MS Paint and then copied to a disk.

influenced Internet use. All three reports also look at the socialization aspects of the Internet and how youth are incorporating this medium as a communications tool. The Pew report and the Environics report both examine how the Internet specifically impacts the family relationship, and Livingstone's research conducts a broad survey of media in the home in general. The issues of privacy, security and consumerism, which I have identified in my project, are not central themes in the Livingstone report, but they are prominent in the other two reports. The benefit of having these reports to draw upon for my own research was the fact that this current research provided a foundation for the identification of the categories I used in constructing my own interview framework.

I see that my own research provides insight into the uses that teens see as a part of their Internet experience. The information that was provided illuminates the ways that the Internet has become meaningful to these teens and goes beyond the scope of a survey. Since it also focuses on the medium of the computer and the Internet it also surpasses, to some degree, the broad exploration of the domestic mediated environment that was conducted in the Livingstone and Bovill (2001) report. Statistics, in my view, only provide part of the story. They allow one to see the broad view of a larger population, to recognize the general patterns of a specific group and to make assumptions about this group as a whole. An ethnographic account, on the other hand, allows for a richer interpretation of the data that will highlight the unique and interesting ways that the research subjects have ultimately carved and molded a meaningful existence out of the clay of technology. Through the ethnographic exploration, it is possible to reveal new and unexpected sides of peoples' use and experience with technology. The teen users' viewpoint, the way in which he or she makes sense of the new medium becomes central

to the investigation. Along the same line of reasoning Livingstone et al. (2001) used in their study by putting the child first in the inquiry, I see that through the ethnographic journey, the research is entirely focussed upon the user and his or her experiences. The detail that is included in this account provides a sense of the real lived experiences of this albeit small group of respondents. These teens, who have incorporated the computer and the Internet as a part of their daily lives, have inscribed meaning into the technologies and made them an important part of everyday life. I fully acknowledge that this group of respondents comprises a very narrow band of what one can consider to be the teenaged computer and Internet user. These subjects, with the exception of one, all fall into an upper middle-class economic milieu. The results of this ethnographic encounter should not be interpreted as emerging patterns of use that can be further generalized to a wider population. Instead, I see this ethnography as a detailed and rich description of how a typical, but not representative, sample of Canadian teens are incorporating the computer and the Internet into their daily lives in meaningful ways.

Data Analysis

All of the interviews were captured on audio tape and later transcribed verbatim into word-processed documents. From here, I coded the interviews using the main categories listed above to identify the patterns and themes that arose in the areas of education, social and family relationships, leisure activities, consumerism, identity and security. This was a daunting task. Throughout the conversational interview I followed the teen wherever he or she chose to take me. The respondents would take me on a tour and talk about what was important to them. I tried not to structure the interviews in such a way that they would follow a strict set of questions or rigid research protocols. In the end,

this made the coding of data a bit like finding the proverbial needle in the haystack. No two interviewees necessarily talked about the same topic in the same way. Areas of relevance that emerged from each interview were unique to the individual, and it was through the detailed work of the transcription process and subsequent analysis that enabled me to make sense out of the data.

While I made efforts to trace in the transcripts some predefined themes, I was also looking for themes that emerged, allowing the stories of importance to reveal themselves through the pages rather than impose meaning on them from the researcher's point of view. In some cases, what did emerge was quite surprising and I had to challenge the memory of the interview to match the words that ended up on the page. I recognized at several points in a few of the interviews, that I had in fact cut the teens off in mid-sentence in order to add a comment of my own. Instead of encouraging them to speak at this point, in some instances I was taking over – a practice that I deeply regret. I can only guess at the richness of data that I have lost because of this oversight. In other cases, I found that I had to participate more in the interview than I had planned, because the participant was not very forthcoming during the interview and it was an exercise in frustration in order to get the interviewee to volunteer any information beyond a simple yes or no answer. In these instances I found that I would end up asking the same question several times throughout the interview, each time phrasing it a bit differently in order to draw out the information from the respondent, allowing him or her to think more deeply on a topic. The phrasing of the question was in some cases too intimidating for some of the respondents, but a simple re-phrasing sometimes enabled the teens to interpret it in a

different way or else sparked something within the teen that would ultimately lead to a more detailed answer.

Summary

What emerged from my interviews were three main themes or patterns of Internet use from among my study participants. The first one was the entrance of the Internet into daily life, which can be linked to the literature on the domestication of technology. This pattern involves the ways and means that the computer and the Internet connection ended up in the family home and the subsequent way that the teen became a regular user of the technology. In chapter four, I go into considerable detail about the placement of the computer inside the home and how this reflects on the possible and potential meanings of the machine for the family members who use it (or not). The placement of the computer inside the home laid the foundation upon which patterns of regular use emerged. From the more recent Internet studies on teens and the Internet, the second theme that I identified was the prospect of the computer and the Internet as an educational tool, which often pitted parent against child in identifying the primary uses of these technologies in the home. For many families, the initial reason for bringing the computer into the home was for the children to use it as an educational tool. The role of the computer and Internet as a tool for research and homework influences in many ways where the computer is placed in the home and how parents envision the machine will be used.

The third theme that I have included is the Internet as a tool for self-expression. This theme is an attempt to incorporate the social relationships, family relationships and specific applications undertaken by the respondents as representative of the teen's own sense of identity or self perception. I look at the ways in which the computer becomes a

tool for these teens to explore different aspects of their own identity and also how these media become an extension of their ability to express themselves. The activities that are incorporated in the daily life experiences of these respondents represent the interests and desires of the respondents and correlate to how these teens see themselves at this particular moment in time and space. This theme for me represents my own point of departure into this investigation. Drawing upon the symbolic interaction school of thought, which I outline in chapter five, I discuss the importance of what the teens are doing on-line as a foundation for both identity formation and expression of self. I am also interested in how the on-line activities of these teens influence how they see their own role in relation to the Internet as both an information and communication technology.

Chapter 4

The Computer comes home

Introduction

In following the story of how the computer and the Internet come to hold a meaningful place in the everyday lives of the respondents of this study, I begin in this chapter to discuss the findings that are relevant to two of the themes outlined in the previous chapter. I begin with the story of how the computer is positioned in the household and what that represents to the teenaged user of the technology. The placement of the computer and Internet within the home has the ability to influence how the teen uses the technology, how often and for how long. It also, I suspect, influences the types of applications, programs and websites that are visited by teens.

My respondents were fairly uniform in terms of family background and income, with one notable exception. So in this chapter I also include a brief discussion of socio-economic status and its relationship to Internet access in the home. I end this chapter with a discussion of the relationship between the Internet and education. For many families, education is the primary reason for bringing both the computer and the Internet into the home in the first place. In this respect, the view of the Internet as an educational tool provides the foundation upon which the family constructs a meaningful interaction with the machine and the medium.

Where shall we put the computer?

Tricia, 14, sits in front of the computer scanning through the Internet pages in search of the latest news on her favourite TV celebrities. The Net is her link to her world of TV shows and teenage culture. Her favourite sites include “Buffy the Vampire

Slayer” fan site and absolutely anything to do with Canadian figure skating sensations Jamie Sale and David Pelletier. Tricia’s Internet time is highly connected to her TV interests and in some ways the Internet has become a virtual extension of the tube. Tricia often visits the home pages of her favourite shows to see if she can find out information about upcoming plot lines or perhaps find out more background information on the show’s main characters.

In a home not far from Tricia’s, the Internet represents a gateway to games and finding fun things to do on-line for fourteen year-old Allison. These games range from Neopets, where players ‘own’ virtual creatures and become their primary caregivers, to the more traditional solitaire card games. Allison, 14, is not interested in celebrities or TV culture like Tricia, 14. Allison did not talk much about the TV nor did I see one in the main family area of the house. In both Tricia’s and Allison’s families, the TV was located away from the kitchen, dining and living room areas – the center of family activity. The TV is not the main focus of either family’s leisure activity and in this sense both families are quite similar. But there was one notable difference between the two houses – the location of the computer. In Tricia’s home, the computer was located in a room just adjacent to the main TV room which in effect also positioned it away from the central action of the family. In Allison’s home, however, the computer was located in the family dining room right in the center of family life. The computer, therefore, had earned a higher place of importance in Allison’s family, as it is a machine with which every family member is engaged. The computer, in this household, is not merely assigned to the children’s domain; rather it is a tool that is equally utilized by all family members. In Allison’s home, computer interaction is much more likely to take place while other

family members are around, and TV watching occurs in far away spaces in the home and can be a much more solitary activity. The computer, on the other hand, is fair game for everyone and there are no private spaces away from inspection. Mom and Dad are never far from the activity and can easily monitor all three of the children while they are on-line.

The inclusion of the computer in the home makes a statement about how families view the importance of the machine; the addition of Internet access clearly reinforces the importance of the medium within the domestic sphere. Bakardjieva (2000) writes that the ways that families place new technology within the home involves a “creative engagement on the part of its inhabitants.” There is no set of instructions that arrives with the new gadget that delineates how or where the technology should be situated within the domestic space. In *Make Room for TV* (1992), Lynn Spigel concluded that the introduction of the television into the homes of post-war America helped to redefine the roles of women within the household. The emphasis on ‘family values’ and the return to a central focus on the American home, forced women to reintegrate themselves into the domestic setting. With an end to World War II, women who had ventured into the workforce to replace the men who had gone to war, were now encouraged to go back into the home and focus all of their energy on the reunification of the family. The introduction of the TV into the home and subsequent marketing campaigns which emphasized the ‘need’ for TV, encouraged women to redefine family leisure activity within the home. This was in large part due to the placement of the TV within the home. Women, heavily influenced by magazine advertising, were encouraged to create a place of importance in their homes for the television set. In turn, the focus of all leisure activity was then

centered on the TV. Bakardjieva (2000) further elaborates that “even if users of new technologies do not literally write and publicize their own definitions of artefacts’ meanings, they objectify these meanings by inscribing artefacts into an already meaningful structure of objects”(p. 2). The TV, having received a place of importance within the home, became the center of family leisure activity. But more than this, it also became a symbol of the family itself and the opportunity for families to bond while watching TV together (Spigel, 1992).

This concept is reinforced by Silverstone and his colleagues as they indicate that the underlying significance of a technology, in this case the television, within the domestic sphere is indicated by the placement of the artifact within the home. The TV earns its place of honour in the home by the fact that it becomes the central object in the living room, the one place where the family gathers to spend time watching together. As media enter the home, its placement within that environment or domestication of the object (Silverstone et al 1992) is conducted in “accordance with the household’s own values and interests” (p. 16). The television has been subsequently dubbed, by some, as the “electric hearth” and Spigel (1992) writes that it replaced both the traditional fireplace as a focal point for seating arrangements and the piano as the focal point of family entertainment.

In a similar fashion, the personal computer, as it has gained in popularity, has demanded equal consideration as an important object when it enters the home. Where a family places the computer physically within the home signifies how the computer is valued within the family. Once a family incorporates the computer into the structure of their everyday lives, the computer is reified as an artifact of higher or lower importance.

In their discussion of the TV, Silverstone et al recognized that the TV represented a single purpose technology as an entertainment medium within the home. It was therefore possible, to maintain that families domesticated the TV in fairly uniform fashion. The computer, on the other hand, is somewhat problematic in this sense. Silverstone et al argue that the computer occupies many roles within the home, as a games machine, an educational tool and as a “work-facilitator” and the combination of these applications have the potential to “transform the boundaries around the home” (1992, 20). Hine (2000) would add that with the Internet as well, there is no pre-set determination of uses – it is possible to configure the applications of the Internet to fit the specific interests of the individual. In this sense then, it is difficult to ascribe a single meaningful status to the domestic computer. For each individual user, the computer occupies a different role. The computer can encompass an array of activities both as a tool and an entertainment medium. Ultimately, a computer and the Internet will become meaningful objects only after they have been defined in relation to the user and been inscribed with importance within everyday life. Aune (1996) writes that this is where the power and influence of the user is truly experienced. “Domestication covers both the processes where *technology is adapted to everyday life* and the processes that involve *everyday life’s adaptation to technology*” (Aune 1996, p. 93 emphasis in original). The location of the computer within the household signifies, to a large degree, just how families adapt the technology into their everyday lives.

Drawing upon the categories outlined by Bakardjieva (2000), I have identified two primary categories of computer placement in the home: ‘the family computer room’ and ‘the wired bedroom.’ The location of the family computer room could be any central

room in the home where a multitude of family activities take place. These rooms are not necessarily relegated to either the main floor or basement of the home. The 'wired bedroom', as the name suggests, identifies those families where the teen has his or her own computer located in his or her own bedroom. Access to this machine is reserved exclusively for the teen.

An interesting instance of computer placement arose in a family that owned nine computers in total, six of which were in active operation. I call this the 'wired house'. I was able to conduct five separate interviews on five different computers, each in a different room in the house. The 'main' computer was located in the parents' bedroom and it was a fairly new machine with a 17" monitor. I was happy to set up here thinking that as it was deemed to be the main computer that most of my interviews would be conducted on this machine. However, even though it was called the main computer, it was not the one that everyone used. My subsequent interviews with each family member took place on the computer that they each used the most frequently. For Brenda, 17, it was the computer in the guest bedroom in the basement which directly connected her to school. For Sally, 12, it was the computer in the family room also located in the basement. Mom and Dad each had their own laptops and interviews were conducted in the living room and dining room respectively for these two. The main family bathroom even had a mini-desk installed where Mom could retreat, if necessary, to find some quiet computer time. Thankfully, none of my interviews needed to be conducted in this room. In this family, the computer plays an important role for each member. Every family member had access to a machine which was exclusively their own and they were each able to ascribe their own set of meanings and activities to their own computer. Computer

and Internet time is solitary time, where family members retreat and engage in activities that isolate them from the rest of the family.

In many of the families that I interviewed, the basement was a common location for the 'family computer room'. Deep in the recesses of the home, one finds the computer sharing space with the family TV, perhaps a stereo and a games machine, and in many cases the 'office' space. I found that in many households, these areas are chilly and somewhat uninviting. This leads me to wonder why anyone would want to spend more than a few passing moments surfing the Net. Perhaps teens just put up with the fact that Mom and Dad have decided that the computer should reside in the basement and there is not much that can be done about it. In many of these families where the computer is located in the basement, it is primarily recognized as the children's activity center with limited use by the adults of the family. I also suspect that teens are somewhat happy with the arrangement because the further removed the computer is from the central family action, the more privacy they can find in their own computing environment.

The most uninviting basement I encountered was at the home of David, 14, and Elizabeth, 13, two studious yet engaging siblings who had found that the Internet could supplement their growing interest in on-line interactive fantasy games. I was curious about how the mechanics of the game worked in an interactive setting, being only nominally informed about the fantasy game world itself. Anxiously I followed David into the basement to find out a bit more about his world. We headed down the stairs and at the bottom I was confronted with a closed door directly in front of me and immediately to my left what looked like a dead end as the air return for the furnace stared back at me. What to do? I called out to David, "Hello? Where did you go, I lost you."

“Here I am,” he replied “Come through here.” I followed the sound of his voice through the impassable (almost) path beside the furnace, thinking to myself how did they get anything into the basement at all? Later I learned that the door at the bottom of the stairs led to a suite that was rented out and that there were two doors to this suite, the other of which led into the main ‘family room area’. I use this phrase in quotes simply because there was very little family atmosphere at all in this computer/office/toy room.

The computer area was cluttered with papers and CDs. A desk sat beside the computer area where much of the family financial planning was conducted. On the floor behind the computer were boxes and boxes of gaming cards for the fantasy game. Among the gaming card boxes, there were also containers of toys ranging from Lego to stuffed animals. The father commented, at one point, that this was a family in transition. The toys in containers were the remnants of the younger childhood days of his two offspring, while the gaming cards were signs that his children had moved on to ‘bigger and better’ leisure pursuits. Even though I found this basement to be rather uninviting, it was clear that in this family, everyone used the computer. Mom and Dad both spent time on the computer for their own individual activities, but it was primarily David, 14 and Elizabeth, 13 who incorporated computer time into their daily routines.

Tricia’s, 14, computing environment was far more inviting and hospitable as she sat in the computer/sewing/guest room in the renovated bungalow basement. The computer is not central to the family activity as it is tucked away in a room removed from the action. The family can be watching TV together in the comfortable but chilly basement. The computer is removed, but not segregated, from the family interaction. Tricia is content to sit in front of the computer and visit her favourite sites. Any of the

other family members are free to wander in at any time to see just what one is up to 'on-line'. For this family, the computer has been objectified as the children's toy/educator. The computer's placement in the sewing/guest bedroom signifies the importance of this object as primarily reserved for children. It is not central to family interaction and is removed from the focal point of the family room, the TV. Tricia is not able to view the TV from her spot in front of the computer, however, she can most definitely listen to the TV and the screen is only a few feet away should something catch her ear. The placement of the computer is convenient for Tricia as she enjoys using her Internet time as an extension of her television interests. She is able to maintain some privacy away from the rest of the family but is still not totally removed from the TV. As the eldest of three girls, Tricia is the primary computer user of the family.

Unlike David, 14, Elizabeth, 13, and Tricia, 14, however, Katie, 15, is an only child in a single-parent family and does not have to compete with siblings for the use of any of the media in the home. In this home, the computer sits in the combination family room/office found in the bungalow basement. There are no partitions between the 'office' and the 'TV room' but a partial wall makes it impossible to watch TV and use the computer simultaneously. There is evidence that Katie's mom is the primary user of the office space and yet Katie assures me that her Mom rarely uses the home computer. Katie's, 15, primary uses of the computer involve leisure activities – namely Harry Potter fan sites, following up on Anime (Japanese digital art) and the latest trends in music. As an only child and the primary computer user of the household, Katie, 15, has taken charge of the computer, all of the bookmarks found in the browser are hers and the desktop has been arranged with a wallpaper backdrop of Katie's favourite artist of the

moment. In this family, the computer resides in the space that is most often used by Katie. The basement has become the focal point of Katie's leisure time activities with a TV, a games machine as well as the computer and Internet.

Shared office/TV room space also figured prominently in another family, where Sheila, 16, shares computer space in the basement with the family office and entertainment room. Sheila and her sister have their own computer, while Mom's computer is strictly off limits to the girls, as she runs a home-based business and will not tolerate any chance of downloading a virus because of her daughters' carelessness on-line. Sheila, 16, for the most part, does not mind sharing this space with the rest of the family. It is quite common to have both computers running, the TV on and the stereo blasting all at the same time. This family computer room is large enough to accommodate each family member, but provides very little natural light, as there is only one small window in the corner. It is clear that for this family, most of the family living takes place in this room in the basement. It is the place where everyone gathers, to be entertained and to spend time together. Each family member can be independently focused on his/her own activity while physically occupying the same space within the home. This is the new sense of togetherness. Media occupies your attention while you physically share a space with someone else. The role of the computer in this household is central to daily life. Mom's business is dependent upon the computer and Sheila, 16, completes the majority of her schoolwork on the computer. Her educational interaction with the computer will be discussed later in the chapter.

Allison's, 14, family has assigned a different set of values and importance to the family computer. For this family, the computer is primarily used for entertainment and

occupies a place of honour in the central family dining room. In this household, it is the TV that was tucked away in the basement, not the computer. The living room is located just off of the dining room and the family gathers in both areas to spend much of their leisure time together. This area of the house is cluttered with craft materials, laundry at various stages of completion and somewhere underneath the piles of clutter, the family dining table can be found. The computer desk is nothing more than a small triangular-shaped table with the computer monitor wedged into the corner of the dining room. There is a side table covered with the computer and CD-ROMs, disks and the odd manual. There is no writing space at all in this environment, and as it is the main dining room, there is also very little privacy for the computer user. It is common for Mom and Dad to be reading in the living room and their children to be completing homework either on the dining room table or at the computer. It is an accepted family rule that computer activities are open to inspection by any other family member and computer time is not a private affair. The computer in this family is used heavily for games and as new games were found, other family members are invited to play along.

I did come across families where the use of the computer did represent a more isolated and solitary experience. The 'wired bedroom' is represented in two households where each teen had their own computer. In this way, the computer, an important tool for the teen user, is recognized as one, which was primarily set aside for the teen exclusively. In each family, there were a different set of circumstances that led to the present arrangement. In Lisa's family, the computer is set up in her room primarily because she is the only computer user in the household. Neither of Lisa's parents have computer literacy skills but they perceived the computer as an important tool in the educational

success of their daughter. The arrangement is further reinforced by the arrangement of the room itself. The computer is set up on an elaborate corner desk, which also contains various books, a stereo and CDs. The signature piece to the whole room is a painted mural on her bedroom wall, which featured her favourite 'alternative' music band, Limp Bizkit. Lisa confided that her friends volunteered to help paint the mural and there was significant sentimental value placed in each of the scenes on the wall. The small room had a definite delineation of space between leisure activities, represented by the mural, the bed and the guitar which occupied one side of the room and study purposes, represented by the computer and desk that occupied a large part of the other side of the room.

By contrast Ian's, 18, bedroom is starkly decorated. His laptop occupies a small corner of his room and only a few posters adorn his walls. Ian has also delineated space in his room that corresponded to both his leisure and study activities. The computer/study area contains a desk, filing cabinet and a bulletin board. The bed and stereo occupy the opposite side of the room. In Ian's case his computer is a recent Christmas present and there are at least two more computers in the house for other family members to use. The computer is an important tool in this household, which is represented by the fact that there are multiple machines that were currently in use.

Neither Ian nor Lisa have to worry about competing with other family members while they are on the computer. They have the ability to retreat into their own private space and have complete and unrestricted access to the Internet. I wondered, at this point, whether or not either family had established rules regarding Internet use. Lisa shares that her father trusts her to not do anything 'stupid' while on-line. Lisa's father elaborates that

if she does get into trouble, he feels that Lisa has an extensive social network to draw upon. He trusts Lisa and expects her to carry herself with common sense and confidence while on-line. As the oldest teen in my study, Ian is not at all concerned with rules about Internet use. Ian freely travels wherever he wants at any time. With the acquisition of his own new laptop, Ian feels that his parents have not only given him free reign over his time on-line and what he does there, but they have also implicitly given him their absolute trust in his ability to act appropriately on-line.

For the families where the computer occupies a central space within the home – the ‘wired family room’—the teens are allowed to traverse the pathways of the Internet freely. There is an implicit rule, however, that anything conducted on-line is still open to the scrutiny of other family members. This is overtly evident in Allison’s, 14, family where the computer is located in the dining room. In those families where the computer is located in the basement family rooms, there is a sense that the teens are able to experience a certain amount of privacy. However, the chance still exists that family members have the opportunity to scrutinize one another’s on-line activities. From this perspective, the teens with computers in their own bedrooms enjoy an increased sense of privacy and feel that whatever they do on-line is entirely their own business. In Lisa’s, 15, case this fact is even more apparent since neither of her parents possess the required skills to check up on their daughter’s on-line activities. For some parents, the lack of computer literacy skills causes some concern about their own ability to either check up on their children’s Internet use or alternatively to protect them from the perceived dangers of the Internet.

The computer is constructed as an important object in the daily life of teens and their families, which is reinforced by the placement of the computer within the home. Parents objectify the computer as a valuable tool for their children and exhibit this by placing the computer in areas of the home, which are suited for their children, namely the family room. In this way, it becomes clear that the message to the children is that the computer is a toy and a tool for the whole family. The computer is centrally located which means that it is a tool for more than one family member. The family room is typically the center of leisure activity within the home. The computer as a part of this room comes to be associated primarily with the children as an educational and recreational machine. Parents feel reassured that they can supervise their children while they are on-line because the computer is located in an easily accessible and open space within the home. The family room computer offers a host of functions and applications to multiple users.

For the families that have multiple machines in the household, and also interestingly enough for families where the children are the only users of the computer, the pattern of placement within the home was somewhat similar. Families with more than one machine would often have a machine reserved primarily for the children and another that was reserved for the parents. In these homes, the computer represented a personalized tool as each machine provided a point of entry for a different set of individuals. In these families, the children's computer was perceived as both an educational and recreational tool while the parent's computer was involved in some sort of work-related application. In multiple machine families, the children's computer was often placed in a centralized location where all of the children might have access or

conversely it was often located in the teen's bedroom where access was restricted to the single teen user. This pattern of placement was also prominent in families where parents had little or no interaction with the computer at all. For these families, the computer was important only for the teen user and as such it was located in the primary living space within the home where the teen would spend most of his/her time – the bedroom. In all of these families, the computer becomes a valuable asset, but one that challenges the traditional concepts of supervision within the home.

Parent's concerns over wasting time on-line

Sonia Livingstone (2002) writes that for most parents, the idea of regulating Internet access for their children is a daunting task because many of them just do not understand enough about it to feel comfortable in setting limits. This results in what Livingstone terms “benevolent neglect” (2002, p. 8) on the part of the parents. They would like to think that their children are competent enough to be able to regulate themselves and not visit questionable sites or engage in unacceptable practices while on-line. Livingstone (2002) also suggests that there is little support from governing bodies to help parents with this dilemma. As a result, some parents feel pressured to do more than just leave regulation up to their own children. For these parents, who possess only a partial understanding of the Internet and feel somewhat anxious by the climate of danger that is often portrayed in the media in relation to the Internet, the need for stricter rules within the household can end up being an exercise in frustration. The filter software that is available is easily by-passed by techno-savvy teens who want to gain unrestricted access. Alternatively, this same software can represent a technology barrier to the parents

themselves, who do not possess the necessary skills to ensure that it is installed and operating properly.

The Environics Research Group report (2001) entitled “Young Canadians in a Wired World” suggests that parents tend to supervise children on-line in a similar way to the supervision of TV. Parents feel that the central location of the computer within the home and a periodic check to see what is on the screen is sufficient supervision. This goes hand in hand with the notion that the teens are capable of self-regulation and are not really interested in the darker side of the Internet. Parents are also more likely to feel that they have established fairly explicit rules regarding Internet use, by making statements such as “no chatrooms”, or “no downloads” and certainly “no personal information”. Teens, on the other hand, feel that they are for the most part not supervised while they are online and that there are no rules enforced regarding Internet use in the home.

David, 14, and Elizabeth’s, 13, family had struggled to find a way to limit the amount of Internet time so that it did not become the main focus of family leisure activity within the home. Prior to setting up an interview, Mom warned me that her children’s time on-line was severely restricted so that they might not even qualify as regular Internet users. I was immediately intrigued and was anxious to pursue an interview. I had not yet encountered a family that had established any firm or concrete rules regarding Internet use in the home, other than the typical house rules of Internet safety as described above.

Upon arriving at the home, I noticed that Dad had a laptop set up on the dining room table and Elizabeth, 13, was just finishing her music practice for the day. With the interview barely underway, Mom explained that both David’s, 14, and Elizabeth’s, 13, Internet time was limited because the parents did not want their kids to be spending all of

their leisure time on the computer. In order to establish limits and boundaries, the family had instituted a program whereby the kids could earn more time on the Internet than their allotted half hour per day. In order to earn more time the kids would have to first participate in a family activity. The example that was shared with me was the family hike. The first half hour of the hike was considered to be 'family time', but once the hike continued beyond the 30-minute boundary, the children were then in a position to earn Internet time for every extra half hour of hiking.

I was captivated by this family and their use of the Internet, each family member had, to varying degrees, become involved in the on-line interactive fantasy game world. This fantasy game involves taking characters from game cards and inserting them into an interactive fantasy game world. The goal is for your character to outwit, and outplay all of the other characters in play at the same time. Throughout the game, your character can gain new skills and reach new levels of proficiency to enhance the chances of survival. Once immersed into the fantasy game world it is quite common to spend upwards of two hours in one game. Both David, 14, and Elizabeth, 13, were actively involved in the on-line fantasy game world as well as the real world fantasy game competitions. The prizes for these competitions run from game accessories (mostly cards) all the way up to college scholarships. David has achieved a rather high level of proficiency with the game and is well on his way to earning the top prizes for his skill. The on-line version of the game is a way for the children to hone their skills before a major competition. Considering the time investment necessary to improve one's skills in the fantasy world, David is allowed much more freedom to spend time on-line if he is preparing for a competition.

This revelation caused me to question the whole system of limiting time on the Internet. An on-line game is quite involved and it would seem that the children would have a difficult time accumulating enough time, through their daily allotment of 30 minutes and then any bonuses they might earn, to play even one game. Both Mom and Dad confessed that their strict Internet schedule does not always apply, especially if David is preparing for a big competition. In this family, the game has taken on a meaningful role as it provides both David and Emma with an opportunity to strive towards winning college scholarships. It is the ability to become proficient in the interactive world that enhances player's skills. The game, therefore, is more than a leisure activity; it has become a valuable activity that places it on par with both studying and work. David's parents want to act responsibly by not allowing the Internet to eat up all of their children's leisure time. But in actual fact, the plan was difficult to implement, especially once both parents began to involve themselves with the on-line fantasy world and realise the potential educational rewards that are available. For this family, however, there are a multitude of activities to occupy their time, the Internet being only one, and certainly not the main leisure activity.

For most families, the goal of including the Internet in the home was to provide an opportunity for the children to become literate with the technology. Most parents see that the Internet will play a big part in the lives of their children as they grow up. Allison's father explained that he felt it was essential for his daughters to be able to navigate through the Internet and it was a skill that they would need to have in order to become successful in the future. For this family, the Internet is viewed as a public space that their children will have to deal with in their lives so why not give them a head start at home?

Not only was the Internet a part of the everyday family interactions, but by placing the computer in the family dining/living room, everyone could participate and see just who was doing what on-line. Dad explained it to me this way:

I want to protect my kids. But at the same time, the world's gone almost crazy in my humble opinion. Put a helmet on, put knee pads on, put shin pads on, let's put them in a bubble. Nonsense. You're here on the planet – live! The Internet is a tool they're going to have to deal with. You're not just going to be able to bury your head in the sand and say, well, I don't have to do that. I think most people should embrace it and take the precautions rather than trying to run from it.

This family extended this view so that it was accepted that everything on the Internet was in the public domain. Not only were family members likely to walk by and see what was going on on-line, but it was also accepted that anyone in another part of the world who had access to the Internet might just as easily be able to watch what was going on on-line. The web browser was configured so that the last visited site would be the home page the next time the program was launched. The parents felt that this was an acceptable way of monitoring the paths that their children blazed through the terrain of the Internet. Dad would often check the file cache to see exactly where the girls had been.

In this house the computer was one of the main leisure time activities for every family member. All of the children are regular users of the computer and Mom spends time on-line everyday. The focus of computing in this house is primarily games related. Allison, 14, and her sisters spend much of their time finding neat games to play. Other family members are invited to come and try their luck at the new games that make their way into this house. The Internet is a centre of activity and also an object of discussion. The latest Internet pursuits become the topic of conversation between family members on

a regular basis. It is also common for family members to share an activity at some point. The placement of the computer in the main family living area means that this medium is one that is shared among family members.

In each of the above families, the computer represents a way for each person in the family to explore their own interests, but they have also incorporated a way that the family can take an active role in on-line activities. Each family has also tried to take an active role in the regulation of the Internet in the home. In David, 14 and Elizabeth's, 13, family, neither of the children are expected to spend more than their allotted time each day on line. Both parents agree that it is more important for the family to spend time doing activities together and not become too immersed in the on-line world. In somewhat of a contrast, Allison's, 14, family has constructed the Internet as a public space for all family members to become involved. Because the computer is located in the main family/living area, it is accepted that on-line time is open to the scrutiny of every other family member. There are no explicit rules about Internet use in this family. There is simply one accepted fact: anyone, anywhere, can find out what one is doing on-line, so act responsibly. The ability to access the Internet is a privilege and as long as it is treated as such in this family, there are no disputes. For both of these families, on-line activities are not the focus of family time, but merely an advantage that each family can provide their children. As Allison's Dad explained, the Internet is inevitable and if he can allow his daughters the opportunity to learn to use it now, while they are young, then they will be that much further ahead once they are adults. Not all families have the opportunity to provide the same type of advantage for their children.

Who's on-line and who's not?

Most of the families, that participated in my research project, were upper middle class families, with many economic advantages, who were able to provide much more than simply the necessities of life for their children. Providing domestic Internet access is a wonderful gift to be able to provide for one's child, but not all families can afford to do so. The issue of universal access has become a contentious one with respect to the Internet and its proponents who suggest that it will become all things to all people. Donald Tapscott (1998) writes that the consequences of excluding young people from the opportunity to access digital technology will have detrimental effects on their future roles as citizens in the new Information Economy. "Denied the opportunity to assimilate the new media in their youth, they will, instead, have to adapt to it . . . their employment prospects in a knowledge economy, their potential income levels, their prospects for stable families, and their potential for a fulfilling life will all be greatly diminished" (Tapscott 1998 p. 257). Tapscott is also convinced that school access to the Internet will not sufficiently ensure that the youths who fall at the lower end of the economic scale will be able to compete on the same level as their wealthier cohorts.

In a report tabled by the Information Highway Advisory Council (IHAC), economic inequality and lack of technical knowledge were the two leading factors cited as access barriers to information and telecommunication technologies such as the Internet and e-mail. The final IHAC report, submitted in 1997, identified access as the "cornerstone of the information society"(Industry Canada). The council's mandate was to explore Canada's role in embracing an information society framework in order to meet the challenges of remaining competitive within the global market in the 21st century. The

key to achieving this new role is through the Information Highway¹, of which the Internet is a key component. The report recognizes the potential for economic growth that will result from widespread Internet access, particularly in rural and remote areas. “Access to the powerful new learning opportunities provided on the Information Highway will be crucial to the development of the skilled, flexible labour force needed in a modern economy” (Industry Canada 1997). In addition to the economic benefits, community development, education and health information have also been cited as areas that will improve with increased access to the Internet. “New learning opportunities on the Information Highway will help close the gap between information haves and have-nots” (Industry Canada 1997). However, obtaining access to basic services presents a barrier to many Canadians as they are unable to afford computer equipment and do not have the technical knowledge to comfortably participate on the Internet.

Public network agencies figure prominently in the battle against differentiated access and are mandated to provide information about and access to information and communication technologies. One such public network agency is the Calgary Community Network Association (CCNA). The mission of the Calgary Community Network Association is “to provide the Calgary community with public access to information networks, and to educate the public in the use and value of information technology” (CCNA n.d.). IHAC considers the role of the public service agency to be vital in the “democratic health of the emerging society” (Industry Canada 1997). It is in this spirit that the CCNA has launched a project to provide computer equipment, training and access to the Internet for low-income families. The CCNA’s vision of this project is

¹ The Information Highway is used synonymously with Internet in this section of the chapter. I recognize that there are differences between these terms, however I feel they are commonly used in this way.

that “universal access to advanced information services and computer networks is a defining characteristic of a knowledge based society and a prerequisite for a move to an information based economy” (CCNAb n.d.). The CCNA has determined, through day to day contact with members of the general public that the cost barrier still presents a significant challenge to many individuals. “In 1997, Alberta Social Services stated that 40,000 Albertans were on social allowance. The number receiving AISH (Assured Income for the Severely Disabled) was 23,000” (CCNAb n.d.). The number of children living in poverty in Canada continues to increase as the financial gap seems to widen between those hovering at either end of the spectrum. The goal of this project is to bypass the financial gaps and eliminate the barriers that prevent people from accessing a basic Internet service.

It was through a contact at the CCNA that I was able to secure an interview with one of the pilot families of the Barrier Project. I was delighted, as this was my opportunity to find out just how the Internet fits into the daily routine of a family that was not like my other respondents. For this family, the challenge to meet the day to day needs of food and shelter occupied much of their time and energy. There was little room for the pursuit of higher technology and without the Barrier Project, there was no way this family would have ever had the ability to connect to the Internet.

Sam, 15, and his mother live in a medium sized two-bedroom townhouse. Sam’s mother lives on a fixed disability income and finds it very difficult to make ends meet and to also provide extras for her son. The only way that this family is able to afford a computer is through the CCNA Barrier Project in conjunction with the Schizophrenia Society of Calgary. The CCNA provided Sam and his Mom with a computer, including a

PCU, monitor, printer, and Internet access. After the initial year, the family gets to keep the computer, at no cost to them, but they must assume the responsibilities for paying for the Internet service from that point forward. Sam's mom was quick to tell me that her year of free Internet service was just about up and she was having a difficult time finding the extra money necessary to pay for the Internet connection.

The computer that Sam, 15, used was old and looked as if it could barely meet the minimum requirements necessary to run any type of Internet program. Mom's knowledge of computers was severely limited so Sam became the computer expert in this family by default. My interview with Sam was very short but extremely enlightening. Sam was interested in working on the computer but found it frustrating to use his computer from home simply because it could not match the types of computers that his friends had nor even what he was able to use at the public library.

Sam, 15, was prevented from conducting many of the types of searches that he wanted to because his computer did not have enough memory to download programs or even enough RAM to run some websites. It had become an exercise in frustration for him. He did not even want to turn the computer on while I was there because of the amount of time it would take for him to show me anything on the Internet. He did not keep files bookmarked nor did he do much web surfing from home. He preferred to spend his time surfing the web from friends' homes, where the computer equipment was more up-to-date and the Internet connection faster. The home computer was really only used as a typewriter for Mom and occasionally for e-mail.

In this case it is plain to see that socio-economic status plays a huge role in not only the ability to have Internet access in the home, but more importantly it plays a role

in how these teens see their own ability to participate in society as a whole. Sam would have liked to be able to do more Internet surfing from his home but it just is not a possibility with the equipment that he has available. Sam's mother definitely wants her son to be able to do well in school and sees that the Internet might play a bigger part in that goal if he was able to have better access to the Internet from home. As Sam enters grade eleven, he will find it increasingly difficult to complete many of his school assignments because of his lack of computer technology in the home. Sam wants to do well in school, but I also got the sense that it would be a convenient excuse for him not to bother to try to excel in his schoolwork because of the inferior technology in the home.

The intention of the Barrier Project is to be able to provide both equipment and access for low income families, and for Sam and his mother, they have accomplished this task – but just barely. The age of the computer and its technical configuration present a barrier to Sam and his mother in their desire to become full participants in the Information Society as described above. It is ironic that the goal of the Barrier Project is to provide access, but it is the technology of this project that adds an extra barrier to access for these low-income families. Sam wants to be able to use the computer in his home for educational and recreational purposes, however, he is prevented from these activities because his equipment is drastically outdated.

The Internet and Education

The role of the Internet as an educational tool is a common theme that emerges when one discusses on-line activity. As new technologies enter the everyday lives of users, they are often 'sold' to the public based upon their merits as educational tools. Often, the rhetoric surrounding new technology is based on its ability to be used as a way

of redefining the education system (Buckingham 2002). The ability of the Internet to provide an educational advantage to students is similar to the type of hype that accompanied both the TV and the personal computer as they entered the classroom (Buckingham 2002). The rhetoric surrounding the Internet was no different than the technologies that had preceded it – it seemed that the Internet was going to revolutionize the way that we were educated. It still may be too soon to judge whether or not the Internet will have a major societal impact on the delivery of education. Education is, however, a major theme that surfaces in the minds of parents when they opt to bring a computer and the Internet into their home.

The demands on the educational system are growing and with government funding cutbacks, parents are anxious to provide whatever benefits they can outside of the classroom, in order for their children to achieve success (Tapscott 1998). A computer in the home and access to the Internet are leading the way as a means of providing that educational advantage for many families. Of the families that I spoke to, ‘help with schoolwork’ was cited as the primary reason behind introducing the Internet into the home.

Lisa’s father, Bob, sees that her educational future lies on-line. As Lisa, 15, enters grades eleven and twelve and then continues to university (there is no dispute about that) Bob predicts that the Internet will play an increasingly important role in her life. Bob acknowledges that the reason behind acquiring a computer and Internet access was for the help it would provide his children with their studies. He realises that Lisa’s current Internet use is geared towards entertainment not education, but he is convinced that this will change as Lisa enters her later secondary and post-secondary years. Bob is

not afraid of technology nor does he claim to be any sort of technophile, however, he does recognise the importance of technology in his daughter's life. When I asked him whether he felt the Internet was important for teens, he replied "almost as important as the telephone." I laughed at this response, but he soon indicated that he was serious about this distinction.

I think telephones are important for kids doing homework ... I wasn't in the class, I don't know that the teacher is wanting ... so obviously the only person she is going to be able to get help from really [are] ... her fellow classmates ... I think right now the phone's probably more of a tool than the Internet is for her, I think.

As Lisa finishes high school and enters university it will be interesting to see whether or not the telephone continues to be a central tool for checking out homework with her friends or whether she will replace them with real time chat programs like MSN Messenger or ICQ. For now, Lisa prefers to download music from the Internet and she finds that listening to her favourite bands is an indispensable Internet activity. Bob predicts that as Lisa moves into university the academic demands of research will force her to redirect her energies away from her on-line leisure activities toward a more focused and educational exploration of the Internet. This was certainly the case with Ian, 18, a first year university student who participated in this study.

Ian, 18, finds that his life on-line is fairly heavily geared towards conducting research via the Internet, both at school and from home. He also relies heavily on e-mail and MSN messenger, both of which he finds indispensable for homework purposes. Ian uses e-mail frequently throughout his day to check in with professors and other classmates for updates on assignments and discussion groups. He also uses it to organize meetings and finds it much less intrusive than the telephone. At the time of our interview,

Ian was working on a peer writing conference with several other university students. The aim of this conference was to provide a forum for high school students to share their writing. The organization of this conference involved setting up various meetings with people that Ian had not yet met in person. He found that e-mail was the most efficient way of completing this task.

Ian: I have one student in my group who is writing a play, so she sent it to me over email and we've been organizing when to get together to talk about it. And we're going to have a final dinner for all the student mentors, so I have to do that, doing it all over e-mail, sending notes back and forth, finding out when people are going to be available and stuff.

Shea: Do you find it easier to use e-mail to set up this type of thing than say the telephone?

Ian: Yea, I think so. It's a little easier when you're not on a friendship basis with the person. Like these students, I've never met them before until this project, so . . . I think it's a little better to use email, it's less intrusive in their lives I think."

But e-mail is not the only application that takes up his time. Ian is also finding a big difference between the homework demands of high school and the academic demands of university. He uses the Internet for more research-based applications in order to help him with assignments. He describes a typical day:

Ian: If I have any time I'll check my email before I go to school, because I keep in touch with some of my professors through email. I usually ask questions about projects and stuff like that, so I'll see if they're any answers in the morning. Go to school. I usually have about an hour break between classes . . . and I use that to . . . go to the library and grab a book for whatever project I'm doing. Again, I'll check my email. Come home, depending if I work or not, if I work, then I usually do a bit of homework, but if I have the night off then I'll . . . get on the computer for an hour or two . . . trying to research things

Ian commented that life in high school had been much more carefree and that he did not find it necessary to do much research via the Internet unless he was working on a specific project. Janelle, a 17 year-old high school senior, would agree with his sentiments. She is a conscientious student who wants to pursue a degree in psychology following high school. Janelle does not necessarily qualify herself as a regular Internet user. Instead she sees the Internet as a “helping hand” for school and for staying in touch with friends and family. For Janelle, the idea of being considered a regular Internet user meant that she spent all of her time on the computer at the expense of other activities in her life. The Internet, then in this sense was viewed as a tool that was available for her to use and the benefit of having Internet access in the home was that she had much more flexibility over how and when she completed the on-line tasks that she found useful. Janelle adds, “[I]t’s good to know that the information is going to be there and that I can go and get the information whenever I [want].” Janelle’s father, Carlo, a Ph.D. student, recognizes the advantage that Janelle has because of the availability of the Internet as a research tool, over his own experiences as a youth.

Carlo: If I was doing a project at school, normally we would search encyclopaedias, that’s the way we did it. The search for information was much harder. I used to say to [my children] that nowadays [you] can find anything on Internet, anything that [you] need.

As teens advance in their high school years, the demands of school almost require that the focus of the time spent on-line shifts from leisure to education. As the homework load increases, many of the older teens in my study commented that they had time for little else but homework while they were on-line. The Internet is quickly becoming a primary resource for students. Livingstone and Bovill (1999) expressed that “older teenagers less often think computers are exciting, but are more aware of the importance

of computing for the job market” (p. 10). I would add that older teens are also more concerned with the use of computers for the educational setting as well. In fact, I found that in some cases, teachers assume that students have access to the Internet at home and design some assignments around this fact. I asked Janelle about this during our discussion.

Janelle spends much of her computer time doing homework. We talked about several assignments that had been designed strictly for the Internet. I questioned Janelle about her fellow classmates and whether they all had Internet access at home. She knew of one girl in her class who did not have Internet access at home. The teacher made concessions for this student so that the assignment could be completed at school. But the assumption was made that every student knew how to navigate the web, regardless of whether they owned a computer.

The same assumptions are not made for younger teens. Those who are still in junior high are not expected to use the Internet in order to complete homework assignments, unless of course, one is taking a computer course. None of the younger teens I interviewed shared that their teachers expected them to use the Internet in order to complete homework. At this point the Internet was a value-added bonus for the completion of research assignments, but not a requirement. There is only a few years difference in age between the 14-year-old junior high student and the 17-year-old high school senior and yet the Internet gap between them is considerable. The high school senior sees the Internet as something that is indispensable for the completion of homework assignments and research. The junior high student looks at the Internet as a neat distraction for talking to friends and downloading music. Of course I am making

generalizations. I am not contending that the high school student focuses solely on homework and research while on the Internet, however, these activities do tend to take more time and effort as the school career advances.

Education has changed dramatically since many of the parents of my respondents were students at school. Now the computer is a mainstay in many classrooms and much of the curriculum is designed to incorporate at least some aspect of technology. While Janelle's educational experience is still fairly traditional in the sense that she physically attends classes at her school and uses the computer as a supplemental tool for research and homework assignments, there are more non-traditional models emerging with the development of information and communication technologies. The Internet presents an opportunity to expand the notions of distance learning. Tapscott (1998) expounds on the virtues of digital media both inside and outside of the classroom and the endless learning possibilities that are afforded by access to such technology. From among the interviews that I conducted for my study, I found two young women whose educational experiences were indeed transformed by the computer and the Internet.

Sheila, 16, and Brenda, 17, were both high school students whose education was much more integrated with the Internet than a traditional student. Each girl represents a slightly different case in the new educational model: Sheila, 16, attends classes at a school that is highly focussed on the use of technology, while Brenda, 17, attends a virtual school from her own basement and only attends a traditional classroom to write exams.

Sheila, 16, is a student at Masters' Academy in Calgary, a charter school which is heavily geared towards the delivery of education based on a technology model. The

students are expected to use the computer for the major part of their assignments. Sheila regularly uses Powerpoint to complete her presentations for school and she is expected to submit many of her assignments in this way.

Masters' Academy incorporates the Internet into its educational mandate. Each student is required to have an email account (Sheila has three), and they are expected to communicate with teachers using this medium. Sheila regularly submits homework assignments via email and she receives feedback from her teachers in the same way. The students at Master's Academy are expected to participate through the Internet and use it as their primary research tool. The school is even equipped with 'Smartboard' technology that allows the teacher to write on a whiteboard, which can then be downloaded into each student's e-mail. This technological capability was one of the selling features that captured Sheila's mother's attention when she considered enrolling her daughter in the Academy. Sheila, however, confided that even though the school has the technology, it is not something that is used regularly. Perhaps this is just indicative of cultural lag or perhaps it's something that is used to convince parents that Master's Academy is able to fulfil the promise of a bright future through the delivery of education based on a model of technological advantage.

Sheila describes her use of e-mail during a typical school day in the following manner:

Sheila: . . . But I search lots for like research projects and stuff. If I don't understand something, I'll just go search it.

Shea: So what's the purpose of e-mailing yourself stuff at school? What do you e-mail yourself?

Sheila: Well, if I'm doing something on the work here, I'll send it to my Masters account so I can open it up at school because they prefer us not to

use Yahoo! and Hotmail and stuff 'cause we have our own e-mail account. So I send stuff that I'm doing on the computer that I'm going to carry on doing at school to my account.

Brenda, 17, on the other hand, attends virtual school where she participates 95% on-line. The only time she ever visits a classroom is for the purpose of writing an exam. Brenda's parents felt that this type of an educational environment would be beneficial for her because she was having a very hard time staying in class and was skipping out much of the time. The social aspect of the classroom was too much of a distraction for Brenda and she was lured away from her studies. Through virtual school, Brenda logs in from home every day by 10:00 am and attends virtual classes where her teachers 'lecture' in real time through multi-media or else the notes are simply posted on the Internet and Brenda can then complete assignments online and receive feedback from her teachers.

Brenda finds this a much better way for her to attend school, because there are far fewer distractions, and she is able to complete assignments and stay on track. Brenda's dad, Frank, acts as the key parent who is privy to all email correspondence that Brenda and her teachers exchange. The role of the key parent is an important one, as it is Frank's responsibility to ensure that Brenda maintains her grades and her attendance. If something goes awry, Frank is notified immediately and it is easier to correct the situation right away. In a traditional school setting, it took longer for Frank to be notified that there was a problem with Brenda's attendance or grades and it was more difficult to get things back to 'normal' in this setting.

I found this act of using the computer and Internet, as a means of 'discipline' was intriguing. Here was a situation where the more traditional means of monitoring children had failed in this family, but a digital model had been able to fill in the gap. Frank, a

manager for a computer research and development company, has been on-line for ten years and not surprisingly, sees the Internet as a benefit for his family. He feels that the virtual school is definitely providing Brenda with an educational advantage and his relationship with his daughter has grown because of his role as key parent.

Frank: I have a lot more insight into what [Brenda's] doing, when things are due, when they're not getting done, when she hasn't logged in by a certain time of day. So yea, it has changed that. So it certainly enabled more communication than there was previously.

Brenda agrees that her relationship with her father has changed because of his role as key parent. She feels that she now has an obligation to participate in school and complete her assignments, because if she does not Frank will know right away. Brenda felt that she could not get away with as much 'goofing off' because Frank would be notified if she did not hand in assignments or failed to log in to class. Frank also received a copy of Brenda's grades so if she happened to miss an assignment there was no time delay in finding out about it. For Brenda, that was the incentive she needed to stay on the right track. For proponents of a virtual model of education this would be a success story as Brenda was using the system to her advantage where the traditional classroom model had failed her. The ability to communicate between family members that are residing in the same house through a computer network is also an important point. Because the computer-mediated-communication acts as a moderator between Frank, Brenda and the school, there is far less opportunity for miscommunication as the facts are presented on an equal footing to all three parties. Family members are busy and not always present at the same time. Conversations around the dinner table might not even occur in many families where individual members eat in isolation because of work and extra-curricular

activities. In this family, the computer provides an open line of communication between father and daughter that transcends the boundaries of both physical space and real time.

Conclusion/Discussion

The ways in which a computer and the Internet become a part of the domestic sphere are a good indication of how much importance is placed upon the machine and the medium. No computer enters the home under completely neutral circumstances; computers end up in the domestic setting because they are recognized as useful technologies for the home and daily life. The final location of the computer within the domestic setting represents the means by which users have identified and constructed this technology as an important artifact. No matter where the computer may end up in the home, it represents a significant purchase and one that is undertaken with careful consideration. Whether or not the computer is placed in a central area for the whole family or if it ends up in a teenager's bedroom will influence how the computer shapes the routines of those who use it regularly.

From among my respondent families, I learned that the primary reason for bringing a computer into the home was that it was recognized as a useful tool, most often as an educational tool, for the family. I have identified two primary patterns of computer location in the families that I interviewed. The placement of the computer in the 'wired family room' enabled multiple family members to become regular computer users. In these families, the children and parents have the capability of using the computer as it occupies an open or public space in the home. It is also easier for parents to supervise their children's on-line activities when the computer occupies a more public space in the home as opposed to the more secluded territory of a bedroom. Even when computers end

up in family room basements, it is more frequently the case that the computer will not be the sole domain of an individual user in the family and that all on-line activities are open to scrutiny by other family members. In these families, the computer is aligned with other media where it is common for family members to be sharing the space with each other but just might as easily be engaged in different activities. For instance in families where the computer is located in a central family room (or just adjacent to one) it is highly likely that one family member might be on the computer while one or more other members are watching TV or playing with a games machine. In this way the placement of the media in the household provide a central living space for the family, where they are physically gathered together but separately engaged in different activities. As mentioned in a previous chapter, this pattern of interaction is indicative of the 'living together separately' (Livingstone et al. 2001) phenomenon where family members share a physical space while they are engaged in isolated activities.

In contrast to the 'wired family room', the families that had chosen to place the computer in the teen's bedroom often had a different view of the technology. For the most part, the placement of the computer in bedrooms, was representative of either one of two patterns. In some cases, the teens with the computer in the bedroom lived in families with a high degree of computer knowledge and there would often be at least one other computer in the household. The other pattern was identified in families with little or no computer literacy skills who had purchased the computer solely as an educational tool for their children. The computer would end up in the teen's bedroom, simply because no one else in the family was required to use the technology. In this way the teens were constructed as the primary users of this machine. The addition of the computer into the

bedroom helped to transform the room. Not only was this the primary space for sleeping, but it would also become the primary space for a host of other activities as well, namely studying, entertainment and communication. As with all teens, the bedroom becomes an extension of the personality and the addition of the computer enables the teen to interact with the outside world from their own private space.

By constructing the computer as an educational tool for their families, parents make a conscious decision to incorporate a computer into the home in order to provide an advantage for their children. Once inside the home, the computer is at first a novelty and much attention is focused on all of the different kinds of things that can be accomplished with both the computer and the Internet. Parents might idealistically enlist the computer and Internet for educational purposes, but they are not so easily fooled into believing that all of the time on-line is spent in the pursuit of education. In the long run, however, most families expect that a computer and Internet access in the home are valuable tools for their children.

As with many new media, as they enter the public realm, they are often promoted as representing an improved way of delivering education to society. This is certainly true with the Internet. As it was first evolving into a consumer medium, it was hailed as the future wave of education. This note struck a cord with many parents, who subsequently decided to bring the Internet into the home as it would undoubtedly benefit their children. In many cases, schools have also promoted this idea with families by embracing the technology and building its use into their curricula. There are examples of new ways of delivering education based on the technology of the Internet which transcend the traditional concepts of classroom and interaction.

Witnessing this trend first hand, enabled me to understand in more depth the idea that parents, their children and our schools have placed a significant amount of faith in the technology of computers and the Internet. The message that is implicitly delivered is that the computer and the Internet represent the future and individual success is wrapped up in one's ability to comprehend and effectively use these technologies. But as with many new technologies the cost of acquisition represents a significant barrier to those families where there is simply not enough money for such luxuries. These families may still believe that the Internet and a computer are valuable educational tools but they are simply unable to afford to provide them for their families. The message that we ultimately send to these families is that by not providing access to these technologies in the home we are, in effect, preventing these children from fulfilling their future potential as contributing citizens (Tapscott 1998).

But exactly what are we accomplishing with the computer in the home? For many families, once the novelty of the computer has worn off, it becomes an expensive games and communications machine. Others, however, are more willing to incorporate the computer and the Internet into an active role in both work and leisure. For a few families, primarily those with a relatively high degree of computer literacy, the computer and the Internet become full partners in the educational experience. Not only are the teens encouraged to use the computer and the Internet as a regular part of their school projects, but some teens are also involved in education programs, where it would be impossible to participate without the co-operation of both technologies. For these teens, the computer and the Internet are playing a significant role as it shapes their immediate educational future. For those teens, who are not as heavily involved with the technology

at this point in their educational careers, parents expect that their level of engagement will increase as they advance in school. Students in more traditional school settings, will find the computer and the Internet more practical as they advance through high school and then on into post-secondary education. The promise of higher education and increased computer skills seem to go hand in hand for many of these families.

Confronted as they are with a new technology, for many parents the idea of bringing a computer into the home is an unsettling event. Research indicates that parents are feeling ill-equipped in their ability to supervise their children's on-line activities. For the families that I interviewed, parents expect that their children will make rational and reasonable decisions about their time spent on-line. There is an underlying assumption that their teenagers will not put themselves at risk by revealing too much personal information while on-line, nor will they travel to the seedier side of the web. Parents tend to engage in supervision of on-line activities in much the same way as television viewing. For many, the fact that the computer occupies a 'public' space within the home is enough to ensure that parents have a general idea of what their children are doing while on-line. Children in these homes, however, tend to consider that there are no rules regarding Internet use in the home despite the fact that the computer is located in an area where other people might see what is going on.

I found it quite interesting that in families where there is a high degree of parental literacy with computers, that there is also a higher degree of trust over what children might be doing on-line. There also tends to be a few tangible rules regarding Internet use in these households, probably due to the fact that parents have some idea about the kinds of activities one can get into while on-line. For these families, the rules surrounding

Internet use tend to be generalized along a pattern of interaction. In many cases, there were only two rules: no downloads, and no personal information. Other than that for most families, there were no restrictions on the types of sites that one visited or even whether or not teens were allowed to participate in chatrooms.

No matter how the computer had entered the home, it was evident that it had influenced communication patterns and entertainment activities within the home. For many of the families I interviewed, it has become a medium of personal interaction and self-exploration. In the next chapter, I delve into the ways in which the Internet provides teens with the opportunity to pursue different avenues of self-expression, which influences the process of identity formation.

Chapter 5

Expressions of self: social interaction in the digital world

Introduction

The process of identity formation in teens is a journey through socialized behaviour, which is heavily linked to interactive media and popular culture (Arnett 1995, Livingstone 2001). Becoming an adult involves a series of trial and error explorations into differing values and belief systems. For teens, who are also retreating from parental influences for value development, social relationships tend to take center stage in their lives as they try on new identities (Suess et al. 1998). The influence of media in this respect can be profound. As the home becomes a repository for a vast array of media, the opportunity for teens to learn about, and try out, different values and belief systems increases exponentially. When one adds the interactivity of some media, namely the computer and the Internet, the process of identity formation can end up becoming a negotiation between unknown mediated worlds and self-expression. As teens reach to explore cyber-space they ultimately take a part of themselves on the journey. As they find new forms of expression and interaction these new associations are in turn incorporated back into their own sense of self. How they perceive themselves at any given moment in time is a result of the combination of mediated messages they have been exposed to and how they have perceived those messages.

The media, itself, is uniquely positioned for this age group. Media represent a means by which young people can learn about the world around them. Popular culture is also heavily tied into media for exposure and marketing. As young teens seek out media they are more likely to represent an ‘avant-garde of consumers’ (Drotner 1992). Media

provide them with links to popular culture and, as they begin to experiment with new aspects of identity and values, they are easily positioned to exercise their power of choice through consumerism. Boethius (1995) writes that youth “fall upon new media and media products” (p.48). The relationship between youth and technology is an easy one, with little intimidation. Young people are adaptable to new technologies and capitalize on this role as they actively seek out the latest gadgets. “Young people test out new media and genres” (Fornas 1995, p. 1) and the two go hand in hand in the formation of youth culture.

In this chapter, I look at the on-line activities of teens to discover how these mediated explorations and activities influence their concept of self in relation to their social interaction. My goal is to examine how the teen as an active media user constructs a sense of self-identity through the media and translates this self-concept into their social world. I also look at the teen’s mediated activities as a possible site for the teen to also become an active member of society.

Identity formation is primarily achieved in two ways: firstly through the interactions of the individual with their social world, which influences how they see themselves in relation to the world around them. And secondly, through a process of socialization as they internalize and interpret the messages that society sends them and ultimately decide, for themselves, just how these messages will fit with their own self-concept. Symbolic interactionism provides a foundation for this section of the chapter. In it, I will discuss how this theoretical framework establishes a way to understand how teens garner a sense of self through their social worlds. The activities they participate in while on-line represent a means of self-expression. In the larger picture, then, on-line

activities are a direct representation of who the teens think they are at this particular moment in time. This question also leads me to inquire if perhaps the sense of self can be further extended into a more futuristic look at who the teens might eventually want to be.

As individual users incorporate a number of different activities into their on-line activities, they are using the medium as a means of self-expression. With each click of the mouse, the Internet user is deciding which activities are important to their on-line experience. Having the opportunity to participate on the Internet with a vast array of applications and activities means that for the individual user, the Internet is a personalized and unique medium. The way that one individual uses the Internet is different from the way that another individual uses the Internet. Both of these individuals are involved in a process of self-expression, and both are also incorporating the Internet as an important part of the routine of self-expression.

The role of communication technology within the social relationship has been the subject of scholarly investigation since the appearance of ICTs. With the telephone, Carolyn Marvin (1988) investigated how this technology caused a social revolution in the sense that new and innovative social relationships were now possible. Parents were afraid to have the telephone enter the home because of the potential this medium had for corrupting their children. Before the telephone it was impossible to maintain any type of social relationship, in real time, without actually being physically present. The long distance relationship has always been possible through the delivery of mail, but the telephone added the possibility of pursuing a social relationship over distance in real time. It was now possible to carry on a conversation with someone who was not physically present in the same space. Conversations could be turned into full-fledged

relationships and the telephone was the instrument by which young people might enter into some morally questionable relationship. The parents of these teens, who had not grown up with the telephone, found this new type of social interaction to be unacceptable and did not adhere to the societal norms of the time. The deviation from acceptable norms of behaviour made this type of social interaction inappropriate.

In a similar examination of the Internet, there has been much speculation over the types of relationships that are now not only possible, but also flourishing through this medium. Scholarly investigation into the types of relationships that are now possible because of the computer and the Internet have focused on the restructuring of organizations (Zuboff 1988; Sproull and Kiesler 1991), to the restructuring of community (Rheingold 1993) and finally to the restructuring of the self (Turkle 1995). Recently James Slevin (2000) has undertaken a critical examination of the rise of the Internet and the impact of this medium on organizations, community and everyday expressions of self. In his work, Slevin looks at the Internet as a “medium of practical social activity” (2000, p. 90) where not only new forms of human association are possible, but also new forms of cultural transmission are emerging. “When we address the way in which the internet is making possible new ways of using and articulating information – in the sense that it is facilitating the reorganization of social relations – then we are studying how the internet is involved in *cultural transmission*” (2000, p. 55 emphasis in original). Slevin qualifies the Internet as a medium which is not merely “incidental to our lives but fundamental to the way we live now” (2000, p. 4) because of the ways that the Internet is becoming ingrained in our daily lives. One might qualify this as a “web lifestyle” where one uses the Internet as a part of the natural fabric of life, much in the same way that we now use

the telephone. In a similar fashion, Thompson's claim that "the use of communication media involves the creation of new forms of action and interaction in the social world, new kinds of social relationship and new ways of relating to others and to oneself" (1995, p. 4) supports the idea that the Internet is changing the way we live our daily modern lives. For both Thompson and Slevin, information and communication technology represents a foundation upon which we build our social worlds. I would add that these technologies also become the foundation upon which we build our 'selves'.

The digital self: Internet as self-expression

Internet users express themselves in the way that they incorporate electronic activities into their lives. There are no set guidelines and limits to the ways in which the Internet can be used as an information and communication technology. As each user takes up the Internet in a unique way, they are inscribing their own set of symbols and meaningful action within the medium. This process of self-expression involves continual trial and error, where one is encouraged to try to invent and re-invent the self in a reflexive process of mediated social interaction.

I look toward a framework of symbolic interactionism as a means of laying the analytical foundation for this chapter. Symbolic interactionism argues that the self is constructed through social interaction involving meaningful symbols. As individuals encounter the social world they can reflexively act upon the meaningful symbols they find and incorporate these symbols into the way that they in turn interact with the social world. In a sense, then, social interaction provides a foundation upon which the self is constructed.

George Herbert Mead, who is largely identified with the field of symbolic interactionism wrote that “[a]ll types of interaction, not just interaction during socialization, refine our ability to think” (cited in Ritzer 2000, p. 222). Mead contends that the process of interaction is central to the assignment of meaning to action. In other words, the social world provides the means by which one can determine which symbols become meaningful.

The ways in which a ‘self’ might react to social situations that will ultimately influence identity is limited only by the ability to think and to consider which responses might be appropriate. In this way, scholars Holstein and Gubrium (2000) recognize that the self-as-a-process (of possible responses to particular situations) is a task undertaken by each individual *at each moment of the day*. It is through interaction that it is possible for the self to be “diversely constructed” (2000, p. 13). “The self survives because we continue to refer to *it*, speak of *it*, and act toward the *entity* that we take to be at our moral core” (Holstein and Gubrium 2000, p. 230 emphasis in original). This referring, speaking and acting towards the self occurs through reflexive involvement. The product of this reflexive turn impacts our perceptions of self and further impacts future interactions with both our ‘selves’ and other ‘selves’.

In an argument that closely echoes Holstein and Gubrium, Giddens writes, “the self is a reflexive project” (1991, p. 32). He defines reflexivity as “the monitored character of the ongoing glow of social life” (1984, p. 3). Reflexivity involves the concept that we, as social actors, monitor social action as participants and then use this information to subjectively influence our subsequent actions. This process of monitoring any new information that is introduced can lead to change. Giddens explains the reflexive

process by “the fact that social practices are constantly examined and reformed in the light of oncoming information about those very practices, thus constitutively altering their character” (1990, p. 38). As teens become involved with media and are subject to its messages, they have the ability to reflexively internalize media’s messages and use their own responses to these messages throughout the process of ‘self’ creation. This is not to suggest that teens are subject to media effects in a way that diminishes their own creative interpretation. Rather I am suggesting that media messages are powerful in that they can influence just how people, not only teens, might alter their sense of ‘self’ in order to project a response that either mimics or opposes the intent of the original message. This is largely exhibited through popular culture. Teens actively internalize the messages of trends in fashion and music and respond by either adopting or rejecting the messages (Bibby 2001). This is an active process in that what is deemed to be ‘cool’ or ‘in’ one week can just as likely be ‘un-cool’ or ‘out’ in a short time period. In this way, teens actively create a self through the reflection of the popular culture lens. Teens who dress like their favourite celebrities are engaging in a process of self-creation through emulation. Likewise, teens who reject the messages of popular culture are equally engaged, but they are publicly creating a self in opposition to what popular culture says is ‘cool’.

As human actors, we rely heavily on our social worlds as a means of our own self-identification and self-expression and any social activity we undertake is symbolically linked to the way that we construct our selves. In other words, when individuals make choices about the types of activities they participate in they are doing so as an expression of who they are as individuals. In terms of the Internet, then, the

applications that an individual undertakes as a part of their experience while on-line is inevitably an expression of who they are – an expression of self. As previously mentioned in the last chapter, Tricia, 14, uses the Internet as her link to the world of celebrities and TV culture. Her use of the world wide web is geared towards fan sites and finding out information about her favourite shows and actors. Tricia has created an Internet world that revolves around, ironically enough, TV culture. She is primarily interested in searching for information that is linked to her favourite TV shows. The Internet, for Tricia, is secondarily a communications medium in which she e-mails and talks to friends through MSN Messenger. Tricia spends a few hours a day on-line and would like to spend more time on the Internet on the weekends, but other family members compete with her for Internet time. She has constructed her Internet as an extension of her interests in popular culture. Tricia's view of herself, through on-line expression, is that of a fan and member of a social group sharing their interests and values. Her identity through the Internet is linked to the popular culture icons that fill up her computer screen. She emulates TV celebrities and uses these personalities as a foundation upon which she builds her own sense of self.

For Allison, 14, however, her Internet time is used for finding new games to play and fun things to do on-line. She is not interested in pursuing information about TV culture or visiting fan sites. Allison looks at the Internet as a means of entertainment as she looks for games and puzzles to fill up her free time. The Internet provides her with the opportunity to extend her interactions with the outside world beyond the physical boundaries of the home. Allison spends a couple of hours a day on-line and would enthusiastically spend the whole weekend on-line if she had the opportunity. Allison

looks at the Internet as a means of doing homework and research. At the time of our interview, she was doing some school assignments that involved a dream analysis website. Allison was so intrigued by the website, that she had shared this site with other family members and they had all tried it as well. For Allison, her interaction on the Internet is her way of connecting with the outside world, where she consumes and internalizes the information, but rarely participates as a content producer. She checks her e-mail regularly in case she receives messages, but she does not use e-mail herself to correspond with friends or family members. MSN Messenger is also not on her list of priorities because she spends so much time talking with her friends at school that she finds instant messaging to be rather boring. Allison's connection to the outside world via the Internet is her quest for new games, puzzles and sites which will keep her entertained. Her Internet time is really an opportunity for her to express her self in a way that is not constrained by friends or family members. She has the ability to pursue her interests without having to please her social group, who might judge her because of her interest in game sites that are 'un-cool'.

Lisa's, 15, primary interest on the Internet is heavily linked to music. She spends most of her time searching for music lyrics, downloading songs and visiting the home pages of her favourite bands. Lisa, 15, describes her typical day and how the Internet plays a role in her activities:

Lisa: But then when I get back from school, I'm usually on and I chat with my friends, search for guitar things and go through my email. And if there are any school projects or typing up a report or something then I'll do that. But mostly the computer is for my own personal use but I haven't been using the computer much this first semester of school cause nothing really is based on the computer. I usually like to download a lot of songs and that's basically about it.

For Lisa, the Internet is her primary pastime outside of school. She uses it as a resource for school projects, and for her interests in music. She prefers talking to her friends over the phone, but does not rule out chatting via MSN Messenger or the occasional e-mail joke. Lisa's link to the outside world via the Internet is based upon hobbies and information primarily and she also looks at the Internet as a communications medium secondarily. Besides music, she is also interested in fast ball and hockey. The Internet serves as a constant source of information for Lisa and she can actively pursue her interests in a way that is uniquely her own. Her tight group of friends do not share her interest in hockey or fast ball so through the Internet, she feels free to express her self in these areas. She finds useful information through the Internet and uses these meaningful symbols to reflexively construct her self-identity. She recognizes her self as an athlete and a sports fan with a developing taste in alternative music. Where Lisa feels constrained to express this part of her identity to her friends, the Internet provides her with the opportunity to explore this side of her self.

Katie's, 15, self-identification involves the world of fan fiction and Anime digital art. Without siblings to compete with and being the child of a single mother, Katie spends much of her time alone in the house and subsequently much of this time is spent on-line. Katie's use of the Internet is based upon her own ability to express creatively through the digital medium. She is actively engaged as both a producer and a consumer of content. At the time of our interview, she was actively involved in the Harry Potter fan fiction sites. She had actually stumbled across the site by chance and then became quite involved in bulletin board discussions about the movie version of the wildly popular books. Katie is also an artist who uses digital drawing tablets to publish her own art that

imitates the digital style of Anime art. Anime is a type of Japanese digital art that is most commonly associated with Pokemon and Yugio cartoons.

Katie says that she sees the “Internet is just one big thing of information, news everywhere, and I would be just one of those little bits of information that it takes in and spits out.” Even though her words seem to trivialize her relationship to the Internet, Katie spends much of her free time on-line which underscores the importance of the medium in her life.

Shea: Let’s say that something happened and that all the technology disappeared out of the house. No phone, no radio, no Internet, no TV, no VCR – which one would you miss the most?

Katie: The computer.

Shea: the computer because?

Katie: cause you can get everything on it, you can still talk and you can still watch things and you can read and draw – you can do everything.

Katie’s view of her place in the world is intricately linked to her ability to interact with the outside world via the Internet. It is a liberating exercise that allows her to travel virtually where her age prevents her from travelling physically. Global boundaries disappear as she travels through cyberspace. For Katie, the world is available through the keyboard and screen; she can find any type of information that she deems to be meaningful. Her self-identity is linked to her ability to express beyond the physical boundaries of the home. She spends much of her time by herself in the house, but she rarely feels lonely.

Any discussion of identity formation must also involve the role of gender. In this study, that discussion of gender must also focus upon the role of the media in the identity construction process. Representations of self are heavily linked to gender messages in

contemporary Western society. The media, in turn, allow adolescents to learn about typical gender roles, sexuality and relationships as a means of exploring this important aspect of identity building (Arnett 1995). Traditionally in our Western culture, gender role identity formation has been reinforced in both print and screen media. In popular teen magazines, girls are implicitly instructed on how to make themselves more appealing to the opposite sex with beauty products that abound in print advertising. The articles featured in these magazines also tend to be geared towards learning about “the intricacies of heterosexual relationships” (Arnett 1995, p. 520). Many of the popular television shows are also heavily geared towards focussing on the details of heterosexual relationships as a way of implicitly instructing teens on the ‘how-to of dating’. But more than learning about the ways and means of inter-relating, young men and women consume media in different ways.

Researchers Lemish, Liebes and Seidmann (2001) discovered that there is a significant gender discrepancy aligned with media consumption in the home, including an array of media from telephone, to television, to the games machine and finally the computer and Internet use. On the whole, they found that for the most part that “boys’ culture is game dominated [while] girls’ culture is all about relationships and talk” (p. 278). Moreover, these differences are reinforced by the parents’ own gendered behavior: “boys and fathers share similar interests in sports and computers, girls and mothers share similar interests in human relationships” (2001, p.278). This seems to be a striking over generalization about the gendered nature of relationships and cultural expression. The results of the Lemish et al study, however, correlate to some degree with the detailed findings of a Canadian study conducted by the Environics Research Group (2001). In

focus groups conducted in Toronto and Montreal, the Environics Group discovered that girls, aged 11-16, generally were more interested in real-time chatting (ICQ), e-mail and looking up amusing things on the Internet (p. 14). Younger boys, aged 11-15 were primarily interested in looking up things on the Internet which included finding information related to games and hobbies (p. 15). I acknowledge that my own study sample is too small to make a correlation to the broader findings of either study mentioned above. However I find it extremely interesting that of the two pairs of siblings that I interviewed, both exhibited, to a large degree, the same gendered pattern of media consumption in the home.

Angie, 14, spends her time on the Internet using e-mail and MSN Messenger. She rarely surfs the web and tries to avoid all homework-related applications as much as possible. Angie sees the Internet as primarily a communications tool and a leisure time activity. Angie's Internet time is spent building and maintaining social relationships with her friends. In this way, Angie's identity construction is linked to socialization. Angie's brother, Jason, 15, would rather not use e-mail at all. He spends his Internet time surfing the web looking for games and the 'cheat sheets' for his X-box games. When he uses e-mail it is primarily for sending jokes to friends. Jason's Internet usage ties directly into the typical 'game-centered boy' who is more concerned about using the Internet as a way of enhancing his own gaming abilities. In this way, Jason's identity construction occurs through the gaming world, where he identifies himself as competent player who is able to meet and surpass the challenges of computerized games.

The other pair of siblings that I interviewed, David, 14, and Elizabeth, 13, also exhibited a tendency towards focussing on games and communication respectively as

outlined in the above mentioned studies. David, 14, the young man whom I previously mentioned as being heavily involved in the on-line fantasy world would fit the concept of the typical 'game-centered boy'. Although it is interesting to comment that because David's games were interactive he did have the opportunity to communicate with other players in the game. These conversations are game-related and involve characters talking to one another and also the players talking about the game itself and exchanging tips to enhance their own skills.

Elizabeth, 13, despite her heavy involvement in the on-line fantasy game world, which at first glance might seem to align her along male patterns of computer use, also spent a considerable amount of time using both e-mail and MSN Messenger. During her interactive gaming adventures, Elizabeth was more interested in finding out about the personal details of the other players' lives in addition to enhancing her own skill as a player. Many of her on-line activities focussed on her social life, as she talked regularly with friends from school. Her communications experiences on-line had been somewhat problematic as she had had her accounts 'hacked' in the fantasy game and all of her gear had been sold without her knowledge. When I asked Elizabeth if she had shared her passwords with anyone, she replied: "Only with people I know and trust. My particularly close friends who are going to the same school as me."

This concept of sharing passwords is quite common among young girls who use it as a test of loyalty and friendship. This trend was more common among the younger respondents (13-14 year olds) than the older ones. In the virtual world where there are no physical boundaries, these young girls go to some length to create virtual boundaries. By sharing passwords with their friends, they structure their social world to include a

privileged group. The fact that the passwords exist mean that there are those who will also be excluded from the group. And from the perspective of a social network, there is nothing worse than being excluded from a group either physically or virtually. For young girls, the ability to exclude and the threat to do so means that loyalty can not only be tested but it can also be enforced. Being identified as a member of such a social group with all of the privileges that go along with that distinction is an important aspect of identity (Arnett 1995). Elizabeth bases her identity on the fact that she is a member of a social group of friends that is important to her self-esteem and feelings of self-worth. It is through her social network that she is connected to a specific set of beliefs and values, both of which tie in to how she constructs her 'self'.

If I were to look at how other respondents in my study fit into the gender mould, I would say that for the most part, these patterns are reinforced. For most of the young girls that I interviewed, much of their Internet time was structured around maintaining and building social relationships with an existing social network. In this way the computer and the Internet symbolize the ability for these young girls to extend their ability to socialize beyond the boundaries of the home. The social connections to their network of friends is an important aspect in the identity process for these young girls. They need to feel included and connected and the Internet allows them to fulfill this need. My male respondents in this project are so few that I find it difficult to draw any further generalizations outside of the two boys mentioned above.

The digital world: Internet as Novelty

I found the topic of gender and Internet use to be a fascinating one, but because of my small sample size, I had to look elsewhere for patterns that informed me about how

teens were finding meaningful uses for the Internet as a means of self-expression. In this search, I found that the length of time that the computer had been in the home had a significant influence over the types of activities and applications that the teens were using. This was also compounded, to some degree, by the age of the teenager, which ultimately influenced just how many school demands are made upon their time and the subsequent requirement for using the Internet on a regular basis to complete school assignments.

As teens begin to look at external influences outside of their immediate family as ways of establishing their own sense of self, it is often the case that media fills the gap. Arnett (1995) argues that as the family plays a diminished role in the lives of many teens, they strive to break away from familial bonds and focus their energies upon social relationships with friends as a means of reflecting those values and beliefs that are important to them. This is further compounded by the role of media, which enables teens to seek out and absorb aspects of cultural and belief systems that ultimately influence how they see the world and their place within it. The information they find about their favourite music celebrities and TV personalities often encourage young teens to try on certain characteristics for size (Suess et al. 1998). They use popular culture as a means of discovering self-actualizing concepts that enable them to construct different versions of their selves.

As mentioned in detail in the previous chapter, parents recognize that the Internet provides a great educational tool as well as a leisure activity for their children. However, at the same time, parents are cautious about the excesses of the medium – too much flash, too much advertising, too many games, leads to too much wasted time. Some parents

expressed concern that by bringing the Internet into the home, there is a risk that their kids will drop all other activities and become addicted to the Internet (Environics Research Group 2001). Sensationalized media reports of young people who not only become addicted to the Internet, but also let it take over their entire lives often reinforce this stereotype. Scandalous reporting does reassure parents and allow them to set aside their concerns.

When the Internet first enters the home, it is a new experience for many family members. Teens who have not had much experience with the medium are often anxious to explore and experiment in order to find out what types of activities are possible and often to see what it is many of their friends have been talking about. In many families, it is the teens who have exerted pressure and influenced their parents to make the computer and the Internet a part of the domestic media landscape (Livingstone 2001). Typically, “households with children generally own more ICT, and many more media goods . . . [that] are targeted at and adopted by the youth market” (Livingstone 2001, p. 308). The Internet represents a vast new space for self-expression and self-exploration. For many young people, it is imperative to find out how to navigate through cyberspace. The need to be accepted within social networks and the need to ‘be in the loop’ of the latest trends in both culture and technology make the Internet a powerful tool in the hands of a young teen. I found that many of my respondents had experienced a change in their Internet and computing habits from the time that the computer entered the home until the time of the interview. It seemed that when the Internet was a novelty in the household there was a impetus to discover just what all the fuss was about. However, once the initial excitement of the Internet has worn off and it becomes an accepted aspect of family life, the amount

of time spent on the Internet seems to level off as well. Fifteen-year old Katie explained it this way:

Katie: At first I was excited 'Yea, the internet!', so I was trying everything like chats, lots of chats and having 5 or 10 e-mails. Just trying it out, joining everything you possibly can. But then you start to realize that you don't want all this stuff.

Shea: so how has it changed now?

Katie: I never chat, I just don't like it, I only chat with my friends, like that I know. And I have one e-mail and I'm picky about [it]. I like Excite cause Hotmail keeps on closing down, and it's slow and Excite doesn't close down ever.

This need to 'try everything out' seems to transcend both age and gender barriers. All of the respondents shared with me that the ways they were using the Internet now had changed at least to some degree since they were first on-line. I would argue that as the Internet enters the home usage peaks within the first few months as family members are trying to navigate and negotiate meaning with the variety of applications. After this initial 'honeymoon period' the amount of time spent on-line tapers off as individual family members come to identify with those applications that are the most meaningful to them in their daily routines. This of course, depends upon the particular family and their individual interests.

Older teens also expressed that they had to be somewhat more self-disciplined about their time spent on-line. Ian, 18, who had been an Internet user for several years, found that the ways that he was using the Internet now had changed to meet his educational needs. His initial Internet activities involved browsing comedy websites for fun video clips, downloading music and e-mailing jokes to his friends. He had also found an amusing picture of Mr. T. on the Internet, and by substituting his own face along with

the faces of two of his friends, he created an amusing collage. Upon entering university, there were more demands on his Internet time to be focussed on school-related activities. His on-line leisure pursuits often had to be put on hold while he attended to homework, but he admitted that he was sometimes too easily distracted by the more amusing activities. He found that he needed to exercise a little bit of discipline in order to be productive with his time on-line. Ian admitted that email “takes up a huge chunk of [his] time”. Overall, he contends that he could live without the Internet, life would just be more inconvenient. He views his participation on the Internet as occupying a tiny corner of the Internet universe, not enough for anybody to notice – he does not have his own website, nor does he buy anything or advertise on-line. But without email and music he would find life to be rather dull.

As teens navigate their way through cyberspace exploring its spaces and roadways, they encounter many different aspects of culture, both popular and real that enable them to question which beliefs and values are important to their own sense of ‘self’. As they first encounter the Internet they are often caught up in the frenzy of the activities and possibilities for interaction. But as they begin to identify which aspects of this type of interaction are important to their daily lives, their Internet and computing habits fluctuate in order to meet those needs. For many of the respondents, this meant that they would no longer participate in some activities as Katie indicated above. The Internet as novelty represents a way for these teens to try on different aspects of ‘selves’ to see which ones they identify with the most. Once they have achieved both competence and comfort with the Internet, their on-line activities tend to fall into a specific pattern of

interaction where they are likely to pursue only certain types of sites for entertainment, educational or communications applications.

Katie's excitement over the Internet as it was first introduced in her home led her to try many new activities (chatting and e-mail) that quickly lost their meaning. As she experimented with these types of interactions, Katie soon realized that she did not identify with these activities. Her expression of her 'self' was not well served through these encounters. As a result, her Internet activities evolved to meet her needs for self-expression and identity. She became more involved with fan fiction sites and pursuing her own artistic and creative abilities.

The digital relationship: family and friends

Social relationships lie at the root of our society and the way that we socialize tends to exert a heavy influence on our lives in general. In place of the diminished role of the family, teens tend to fill this void with social relationships (Arnett 1995). It is through the power and influence of friends, that many teens construct varying versions of their 'self'. The friends that one associates with have the ability to influence how one dresses, talks, behaves and ultimately what one might or might not believe. The social relationship among teens become an important aspect of their identity formation and represent a foundation upon which teens begin to build and construct their public persona outside of familial influences.

The Internet, with its electronic socialization situations, provides teens with the opportunity to connect with their existing social networks in new ways, but it also provides them with the opportunity to forge connections across geographical boundaries within new social networks. The introduction of real-time chat programs provide teens

with a way to interact on-line either using a one-to-one application or else in the more traditional 'chatroom'. For many on-line users, the chatroom experience can be somewhat overwhelming as there is no limit to how many participants can actively engage in conversation at one time. The ability to connect one-to-one is often more appealing as it is easier to follow a conversation and there is not the 'voyeuristic' threat of lurkers sitting back and watching without participating. MSN Messenger is one such real-time chat program that is quite popular among teens. With this program the user creates a 'buddy list' and individual users are subscribed to the list. Once engaged in conversation, it is possible to carry on separate conversations with a number of 'buddies' or else it is possible to engage more than one 'buddy' in a single conversation.

The emergence of MSN Messenger as a communication application is changing the on-line habits of some users. It is possible to 'call' on users at any time, which can be a welcome interruption for some and an annoying disturbance for others. Ian, 18, confessed that he did not appreciate having his 'buddies' bothering him all the time, but he was unsure how to turn the program off, so he instead hid his on-line presence by changing his status to 'away'.

MSN Messenger represents an interesting communication phenomenon. One begins by adding buddies to their 'hotlist'. (In order to become a buddy it is necessary to have an email address with hotmail.) One can enable the option as to whether or not you have to approve buddies to be added to one's list or not. This way it is easy to reject strangers from being added to your list, a significant safety feature from parents' viewpoint. In order to gain access to one's list it is also necessary to know the specific e-mail address. This again is supposed to offer some security that one's interactions on-

line are more secure. A buddy list is a private thing, almost like a little private club where membership changes often. In some cases young teens will frequently add and delete members. A spat between two friends might result in one friend being banished from a number of buddy lists, only to be reinstated once the fray has been resolved.

I found that there is a real sense of playfulness with MSN Messenger, which I think is directly linked to the sense of security that one has with one's buddies.

Nicknames are an integral part of the fun. It is possible to change nicknames with little technical expertise and young teens take great delight in playing with their nickname identities. During a single conversation I have seen teens change their nicknames several times. These 'identity' changes reflect the teen's playful sense of self. The nickname that is chosen at any particular moment might be a reflection of mood or situation, and I would argue that it closely resembles their sense of self-expression that is exhibited through clothing and body jewelry. The way that one is feeling at the moment will be expressed through the virtual medium using a combination of letters, keyboard characters and 'emoticons'¹. It is not possible, for many teens, to express themselves on-line as physical representations, so the virtual persona is created through text. The nickname that one uses reflects the 'self' as it is constructed at a particular moment in time. The moment passes and another nickname is used to reflect the evolving 'self'. What is popular today might not be popular tomorrow, but for today it is something to have fun with.

¹ The emoticon is a combination of keystrokes that is supposed to mimic emotion. MSN Messenger has the option of turning these keystroke combinations into graphical depictions of the particular emotion. For instance, the keystroke combination of a colon [:] followed by a right bracket [)] is supposed to signify a happy face. If the emoticon feature is enabled on a particular program, then typing in this particular combination will automatically result in ☺.

The nicknames that are used can be an unpronounceable combination of keyboard characters and emoticons or can otherwise be a descriptive phrase that seems to encapsulate how one is feeling at that particular moment. The buddies on the buddy list can be categorized according to family or friends, work or school relationships. While I was interviewing one young girl and looking at her buddy list I realized that there was no way that I could even come close to pronouncing or even deciphering the nickname of one of her buddies.

Sandy, 13: 'Kay this, this is Amber. (pointing to the screen nickname)

Shea: How can you tell?

Sandy: [laughs] Um, 'cause I put her under 'best friend'.

Whenever Amber, 13, changes her nickname it will still register on Sandy's best friend category so that she can be easily identified. Alternatively, Sandy had a good grasp of the e-mail addresses of most of her friends, so that whenever their nicknames change they are still easily recognized by their hotmail e-mail address.

For the most part, I discovered that the teens who regularly use the Internet from home are incorporating this medium into their daily priorities – music and friends seem to play a big role in their Internet time with a little bit of homework thrown in to the mix. When I asked many of my teens which technology they felt they could not live without, the number one answer was the telephone (or cell phone) followed closely by television and/or stereo and finally the computer. Teenage culture is very wrapped up in friends and popular culture (Arnett 1995). The Internet helps these teens extend their worlds by allowing them access to information that helps them stay 'plugged in' to pop culture in ways that are vastly different from the more traditional media of the TV. They have the ability to not only find lyrics to the songs of their favourite pop stars on-line, but they can

download the entire song to listen to while they are actively searching the Net for information on the band that performed the song. Some of my respondents even admitted that they have stopped buying CDs because they prefer to download their favourites from the web.

The Internet allows them to e-mail friends who are both around the corner and around the globe, they can also 'talk' in-real-time with buddies without necessarily tying up the family's phone line (depending on what type of Internet connection one has). The social network of the teen who is connected on-line can be quite extensive. They have the ability to maintain a social relationship outside of school, with friends whom they see almost daily. But more than this, they have the ability to maintain a social relationship with friends who might have moved away and are therefore not a part of their daily social network. The social relationships that used to be maintained through telephones and letters, can now be maintained through electronic communication. For the teen, who gains much of their 'self' perception from both friends and popular culture, the ability to maintain this type of relationship has enabled them to remain connected across geography with a sense of immediacy that closely resembles the daily encounters with friends.

Janelle, 17, whose family immigrated to Canada from South America so that her father could pursue his Ph. D., found that the Internet and e-mail helped her stay in close contact with her friends. During her five years in Canada, Janelle felt that she still maintained a close relationship with her friends 'back home' that never would have been possible without the Internet. Now that Janelle's family is returning to South America, she feels that because of the Internet that she will be able to pick up with her friends with little trouble. Janelle has lived in Canada from the time she was 12 until 17 – almost a

lifetime as far as a teenager is concerned; for her the Internet has been a lifeline to her friends. This was especially important to Janelle, who found it difficult to make friends in a country where she did not speak the language that well upon arrival. Janelle's initial social experience caused her some distress as she felt that she did not fit in and she also questioned whether or not she really wanted to fit in at all. Through her electronic social network, she was able to maintain her friendships with people that she had grown up with. But more than simply maintain the relationship she was able to experience it on a regular basis, by chatting in real time through the computer and by exchanging regular e-mail messages. Janelle was freed from the need to have to conform to the social demands of her new culture in order to become accepted within this social sphere. She maintained her existing friendships and did not have to compromise her sense of 'self' in order to fit in with a new group of friends. The technology of the Internet made it possible for Janelle to retrieve her sense of 'self' from electronic relationships. She was connected to her established friends and perpetuated her identity through this group of confidantes whom she knew so well.

Of course, over the five years that Janelle did live in Canada, she did make friends and become a part of a social network. This, she achieved through her favourite sport of basketball and it was her team members that became her close friends in Canada. But she was able to accomplish this task with the added benefit of feeling connected and accepted among an existing social network. She did not have to sacrifice her old friends in order to make new ones. Janelle maintained a virtual social network that was every bit as important as the real life activities that were taking place in her life. I would argue that during her first year in Canada, the virtual relationships meant more to her than the real

life relationships. Janelle confided in me that she felt that she would have no trouble whatsoever picking up the friendships 'back home' once she returned there and this was directly linked to her ability to connect electronically with her friends.

Angie, 15, was another teen that I had interviewed who was using the Internet as a way of maintaining friendships after her family had moved to Calgary from British Columbia. For Angie, e-mail and MSN Messenger enabled her to maintain contact with friends without tying up the family phone line or incurring large long distance bills. Angie admitted that she would much rather talk to her friends over the phone, as this would enable her to maintain a closer connection to her friends. In the end, Angie settled for the electronic connection via the computer. The computer is located in the basement so there was an added sense of privacy with electronic communication that was not always possible with the more centrally located telephone. This way, she was able to talk to her friends more regularly and keep up with the daily details of their lives. Her virtual connections helped to ease her discomfort of having to change junior high schools twice in as many years. She had no trouble making friends at school, it was simply more comforting to chat with established friends.

Sheila, 16, another recent immigrant to Canada from Australia, regularly maintained e-mail contact with her older brothers back home. She felt that this activity was, for the most part, not extraordinary in the least. For her, this ability to e-mail her family and stay in contact with them was a normal everyday activity. It also represented a way for Sheila to stay connected to her Australian identity. She did not necessarily find it difficult to fit in with her new Canadian friends, as she was able to connect with friends who shared similar interests. But maintaining contact with both friends and family in

Australia enabled her to be able to rely upon established friends as a means of a social relationship. At a time when most teens are reaching out to friends instead of relying on the family relationships, Sheila had the ability to reach out to friends with whom she had a common history and bond. As she was also forging new social relationships in Canada, her electronic world provided her with a sense of security and stability in the often turbulent social world of teens.

Family, however, does not always take a back seat to friends, especially in these families where a geographic re-location has caused each of them to forge new social networks. These teens recognize the value of their family but they are also much more interested in making connections with friends outside the home. In many families, it is difficult to maintain a close relationship based on geography because technology has made it possible for people to re-locate to various parts of the globe. At this point in our evolution, it is possible to not only learn about career and educational opportunities in different parts of the world, but the Internet makes it possible to actively pursue these opportunities. The ability to maintain contact with family members through relatively uncomplicated means also enables families to be physically dispersed, but remain virtually connected (Miller and Slater 2000).

Ian, 18, however, did venture to speculate that despite the ease of connection, communication via the Internet was too impersonal and as a result, families had become less important than the technology. Ian commented that because of the Internet, the family had become 'decentralized'. When I asked him to elaborate on this statement he said, "The family is not as important now as it was back then [in my parents' youth], back then it seemed to be everything, but now . . . instead of the family being the most

important part . . . now it's kind of individual.” Ian felt that the Internet was a poor substitute for the personal connections of family. I pointed out to Ian that most of his e-mail contacts that we had discussed were in fact family members. His reply was that keeping in touch by e-mail was impersonal. I suspect that Ian's comment about the decentralization of the family is linked directly to the technology that has enabled families to be able to move and pursue career opportunities across geographical distance. It is a symptom of our modern society that our fast-paced technologically infused lives have created a dispersed family, where it is quite acceptable to live in different parts of the country or globe rather than just around the corner.

Ian would much rather be able to maintain the type of family togetherness that he experienced as a young boy. In his childhood, Ian's parents were still married and his cousins and grandparents all lived in the same city. Family gatherings were common and some of his fondest memories are of playing with his cousins. Now, Ian must deal with divorced parents; both of his parents have remarried and his father lives in Montreal. Most of his cousins have moved away and he now finds himself in a situation where he must substitute technology for personal contact. From among my respondents, Ian held the most philosophical perspective on the impact of the Internet on family life. I think that his perspective is also indicative of the return to the family that teens tend to experience as they begin to enter adulthood. In the early teen years, friends take center stage in the lives of many teens and friends have the most influence over the development of values, beliefs and ultimately the shaping of identity. But as teens mature and enter their adult years, they re-discover, to some extent the ‘wisdom’ of their parents and realize that perhaps families are not as bad as they had once thought. Ian was definitely

re-discovering the value of his parents and trying to find a way to re-establish close relationships. But more than re-establish relationships, I believe that Ian was also trying to 're-discover' himself in terms of his own family heritage and how those connections had come to influence the person that he had become. His self-identity is closely tied to both his social networks of friends but also his family heritage. As he entered early adulthood he realized that his link to his family identity needed to be restructured in order to fit in with his sense of self and the complex system of relationships that had emerged since his childhood.

The technology that we have incorporated into our daily lives has enabled us to change the way that we engage in social relationships. North American life in the 21st century is complicated and we have emerged as a dispersed population with the ability to maintain close social relationships through a variety of methods. The ability to communicate via traditional post, telephone and now through e-mail and instant messaging programs means that close connections can be maintained through distance and time. The remarkable aspect of these types of communication experiences is that for young people, these socially mediated relationships are just another avenue in their social worlds. It is not an oddity to maintain friendships through a keyboard and a computer network. The friendship is maintained through the sharing of both experience and information, which can either take place face-to-face in real time or else screen-to-screen in real time or else something very close to it. These changes in communication patterns are influencing how we relate to those around us and also how teens accept that a relationship is meaningful. For many of the young people who are growing up with the technology of the computer and the Internet, socialization is just as meaningful through

the mediated network as it is in person. For the teens growing up with this ability to communicate with anyone at anytime over almost any distance, they are beginning to see the world as a much smaller place. Distance is a relative concept or perhaps simply a minor obstacle in the ability to form a social bond.

Identity formation is also a process of looking beyond. How does the Internet play a role in how these teens see themselves in relation to the rest of the world? It is quite commonly accepted that the Internet has been touted as the medium that allows endless possibilities of connection to anywhere in the world at any time. The Internet is the medium that enables McLuhan's global village to exist. The question that intrigued me the most was asking these teens how they saw themselves in relation to the Internet. This question earned a variety of responses from outright blank stares to a creative visual image of road maps. Allison, 14, responded that for her the Internet was like a road map complete with hills and valleys, winding roads and swamps. Allison envisioned herself as one of the road signs along the road of the Internet. Brenda, 17, on the other hand sees herself as a tiny light on the globe of the Internet while Katie, 15, sees the Internet as a big network of information and her role is that of just a bit of information within that network. Janelle, 17, looks at the Internet as her helping hand that gives her a boost to help her find the information that she needs to get through her day.

Each of these teens look at the Internet as a way to connect them with the world that lies beyond their immediate environment. Whether it's an information connection or a social one, the Internet provides them with the ability to see how they fit in the larger, somewhat global picture. In this way, I see the teens using the Internet as a way of constructing their 'global' identity. David, 14, summed it up this way:

I think the Internet makes people more global about everything in the world. Like before the Internet I wasn't really thinking about what was happening in Japan or whatever and now 'magic' [the role-playing fantasy game] has picked up in Japan so in respect to us, so it's just more global.

The social interaction that teens undergo through the medium of the Internet provides them with an open door to the world. Their worlds are connected through friends, family and a seemingly endless stream of information. This more global turn led me to question how these teens actively engaged this aspect of their identity formation through either actively seeking information related to global issues or perhaps even participating in activist movements.

The digital teen activist

The potential for teens to access information on current events is vast. Today's teens have much more information at their fingertips and one of their challenges will be to see how they can manage this excess of information. It has been suggested that because of the ease with which one can find information that teens will become more globally conscious and aware of just what is going on in the world around them. Tapscott (1998) suggests that the Internet is a "vehicle for revolution" (p. 300), and will provide a means for socially motivated teens to become politically involved. Tapscott writes that, "nascent social movements from around the world, from the media guerrillas organizing to expose unethical corporations that are pushing smoking or anorexia or exploiting child labor, to the surging students in Serbia working to topple a bankrupt and authoritarian regime" (p. 300) are all using the Internet as a means to an end. Without the Internet, these groups would find it difficult, if not impossible, to organize and accomplish their goals. The question remains, however, whether or not people are actively using the

Internet to become involved with these social movements? Are the teens who have all of this information available at their fingertips, spending the time and energy to become well-informed citizens? Are these active Internet users translating their on-line activity into real life activism? Unfortunately, none of the teens that I interviewed considered themselves to be actively involved in any type of social movement. Nor did any of them admit to actively searching for information on social issues either on or off the Internet. What I did discover, however, was that current events was rarely a topic of discussion unless there was a specific assignment or task that was required for school or unless there was a major breaking news story. None of the teens I interviewed considered themselves to be aware of many types of news stories in any type of media. They did not regularly watch TV news, nor did any of them admit to regularly reading a newspaper.

The one notable exception, of course, was the bombing of the World Trade Center on September 11, 2001. This event which seemed to transcend so many different media outlets, sent many of my respondents scrambling to see what they could find out on-line. Katie, 15, found that she was actively scouring the Internet for information that was linked to the events of September 11. The Internet provided her with immediate access to a host of different websites from official news reporting agencies to the personal homepages of those who needed to make a public statement about the event. Many sites were overloaded with activity immediately following the tragedy and Katie also found, to her distaste, that there were a lot of hoax websites published that mislead people about the events.

Shea: Let's take a minute and talk about the war in Afghanistan since that seems to be still newsworthy. How do you know, do you know anything about it, is that something you follow at school or on your own?

Katie: Actually, I didn't believe it. [My friend told me] "Two planes hit the towers", I'm just like ah, you're joking!

Shea: Was this on-line or at school?

Katie: No at school. Cause I went early because I had to sing for choral and so by the time I was at school . . . it was happening. So we had no idea what was happening and then we go to class and we're listening to the news, not doing any work, just listening to the news. And like it was a shock and then I come on-line and there's pictures everywhere, there's gags lots of gags. There's people take a picture, they make it look like there's a guy standing on the building while the plane was coming at it. There's like donate to so and so but it's lying so they could get money. And it was huge, like all of a sudden, people [saying] pray for all these people . . . Actually you saw how much people cared, it really showed that people on the Net actually do have some compassion. "This site is closed out of respect for . . . three days" or something like that.

Katie's 'global identity' was fully engaged through this experience as she actively pursued information surrounding this occurrence. For her, the Internet provided the avenue by which she felt she could learn more than what was available in mainstream media. Her abilities to search for information that was meaningful to her made the events of September 11, 2001 much more concrete and real to her.

Aside from this excursion, Katie confided in me that she did not consider herself to be an active consumer of news. She had also conducted Internet searches on the Colombian drug wars, but this exercise was directly linked to an assignment for Spanish class. This was the general trend among all of my participants, current events was an assignment in school and not a part of their daily media activities. I found that the teens' worlds are primarily centered around their own immediate environments and not even easy access to global information shifted this focus. Howard Rheingold (1993) has suggested in the past that the development of the Internet was linked to the slogan "power to the people", and it was the little guy who would be able to access information and

stand up to authority. Tapscott (1998) provided evidence to suggest that for social movements the Internet has become an indispensable tool in their ability to organize their activities. But this social activity does not seem to be trickling down to the representatives of the Internet generation that I interviewed. Most of my respondents are apathetic towards the idea of social movements and exhibit a general lack of concern over the global future. Thomas Patterson (2002) recently detailed the reasons why people have become disillusioned with the political process. For young people, he suggests that they are largely not interested in becoming actively engaged in politics because they see that their lives are not affected by politics (Patterson 2002). There are no major issues to contend with and they live in relative comfort despite which political party happens to be at the helm. There are few incentives for young people to seek out a social movement and become actively involved in protests.

Perhaps this lack of motivation to become involved is also a reflection of the identity formation process that is occurring in these young people's lives. Not only are there no incentives to becoming involved with the political process, but there might be some risks. I have stated above that teens are heavily tied to popular culture and friends and social relationships occupy a place of central importance in the lives of these teens. Awareness of current events, unless these events are related to pop culture icons, generally does not occupy a place of importance in the lives of most teens. Life is a day-to-day struggle to build and maintain friendships, and to stay on top of homework. There is not a lot of immediate need for awareness of global or social issues. There tends to be so much emphasis placed upon one's own developing self that any extension beyond this might take too much energy. Perhaps this is the way it should be; get a good grasp of who

you are and what you stand for, before you venture forward to tackle the really big issues of global survival. However, I would argue that it is just as easy to incorporate the activities of social activism within the scope of daily life as it is to ignore them. It might also be more of a reflection of family values at this point as to how involved teens become with the unfolding global events. It takes either an ingrained routine of news consumption in order to make it a part of one's daily experience, or else one needs to have a passionate response to a situation. I am thinking specifically of Craig Kielburger (2002) and his crusade to end child labour. He began his quest at the age of twelve and his crusade has become a central part of his own self-identity. He has constructed himself in relation to his quest for justice on behalf of the exploited child worker. Because of his compassion in this crusade, he has put much energy into identifying himself with his cause. He has traveled the world and made it his personal mission to make a difference. He recently launched a website campaign to encourage other young teens to become more socially aware and involved.

The Digital Teen consumer

The final issue I would like to address in this chapter is the role of consumerism in the life of teens. Throughout this discussion I have made the link between the media and popular culture and how teens emulate pop culture icons. This emulation helps provide these teens with a means of trying out belief systems and personality traits that they find appealing. In order to experiment with various identity aspects, many of these teens exercise this ability through consumer products.

Popular culture and media exist in a symbiotic relationship of consumerism. Teens are heavily influenced by and connected to popular culture, which is perpetuated

through the media (Arnett 1995). Media, on the other hand, recognize their own dependence upon the teen market and tend to eagerly respond to the needs of this demographic. The media not only educate teens about culture, but they also heavily influence the choices that teens make (Center for Media Education 2001). Because of the unique relationship that exists between teens and the media, I was quite interested in discovering how the Internet had changed the spending habits of teens or if it had had any type of impact at all. Consider for a moment, that this segment of the population has access to a significant amount of money. The Globe and Mail reported that Canadian children, aged 9-14, spend \$1.5 billion annually (Mulroney 1999). Their power is derived from the fact that all of the income from part time jobs is largely discretionary as these teens are not “saddled with the debts that stilt adult spending like rent, utilities and groceries” (Zollo cited in Tapscott 1998, p. 186). When these youths spend money, corporations listen and teens are a target market for many companies (Center for Media Education 2001). So how has Internet access influenced their spending habits? This is a difficult question to answer. Their lack of access to credit cards makes it difficult for them to conduct on-line purchases. I found only two teens from among my respondents who had actually made an on-line purchase. But almost all of the teens that I had interviewed had done research over the Internet about the consumer products they had actually purchased in a retail outlet. In this sense then the Internet had provided the respondents with ready access to information, which they could then use to complete their purchases in traditional retail centers.

Katie, 15, whose hobby is art and who likes to use the computer for the creation of her art, had purchased both books and computer programs on-line. Katie had two

different experiences with on-line purchasing. In the first instance, she was anxious to buy some Anime (Japanese cartoon art) books. She located a site on the Internet where she could order art books. This particular site was locally domainned so she was able to complete her order without a credit card. Once she had placed her order, she deposited the total owing at a local bank and then it was shipped to her. This transaction required Katie to have a considerable amount of faith about the site. Was there any guarantee that once the money had been deposited that her books would be shipped to her? No, no guarantee. But she tried it and it worked, so there was no problem. Her other Internet purchasing experience involved a borrowed credit card from her mother used to purchase a computer software program. Lisa's, 15, experience with on-line purchasing was much the same as Katie's experience. She needed to borrow a credit card from her Mom in order to complete the purchase. In Lisa's case, her purchase was for exercise equipment and even though the actual purchase was completed on-line, it was through the TV that Lisa had found out about the product and was then convinced to buy it. In Lisa's case, the product was not available in stores, so in order for her to buy this item, her only choice was to borrow a credit card and either order it on-line or else over the phone.

Many of the teens I interviewed *want* to buy things on-line but are restricted because they do not have access to credit cards. Janelle, 17, wants to buy an NBA team jersey and Ian, 18, wants to buy clothes on-line because he can get a 'wicked cut' over general retail pricing. Allison, 15, wants to buy Beanie Babies and siblings Elizabeth, 13, and David, 14, want to purchase paraphernalia for their fantasy game. I am sure that many of the parents of these teens heave a collective sigh of relief that their children are, thus far, not able to purchase anything on-line. But the future is coming. These teens

realize that on-line consumerism is not a part of their realm of experience at this point in time, but soon it will be. They are split as to whether or not on-line commerce will become a big part of their lives in the future. Lisa, 15, thinks that Internet spending will play a part in her future, while Janelle, 17, prefers going to the mall with her friends and doing most of her shopping in the traditional way. She also feels that once she returns to her home country in South America, her family will likely do more on-line shopping because there are just too many people and it is difficult to navigate through the city. Janelle is predicting that her family will bank on-line and buy groceries on-line once they return 'home'. Some of the teens feel that the Internet will provide an expansive opportunity for spending money and foresee buying clothes and music on-line.

Eventually these teens will have access to credit cards and the retailers will try to entice these young shoppers to spend their money on-line. Although the electronic market has not yet reached its potential, recent statistics indicate that as teens enter their twenties, there is an increase in the amount of money spent on-line. Twenty-four percent of Canadians between the ages of 20-24, use part of their Internet time to purchase goods or services, as opposed to only 11% of Canadians aged 15-17 (Rotermann 2001).

The key for them at this point in time is that they are forming habits, which will influence their future actions. Many of the teens that I talked to used the Internet as a research tool in preparation for making purchases 'in the real world'. Katie, 15, had researched software programs to find out which one was the best choice before she decided to purchase her art drawing program. Lisa, 15, had researched information on guitars before she had invested money in her musical instrument of choice from a local retail outlet. Both Lisa and Katie are developing the habit of using the Internet as a

resource for finding information about consumer products. The Internet provides them with a link to finding what they need to enable them to make informed spending decisions. Instead of window shopping in the local mall, they are 'window' shopping in the virtual mall.

Conclusion

Today's teens are engaging with the Internet for communications and informational purposes. They are maintaining social relationships with family and friends, using the Internet for educational research, playing games, and exploring the possibilities of on-line consumerism. The social practices of the respondents in this study are as individual and unique as each subject. Each individual travels through cyberspace actively participating in the different applications of the Internet. Throughout this journey, s/he constructs a socialized version of their 'self' that is the culmination of all of these activities and more. But the pattern that emerged from these interviews embraces more than simply visiting websites and exchanging e-mail jokes. The pattern that emerged from the interview process highlighted the ways that these teens are actively using the Internet to engage with the world around them. They are using the communication network of the Internet to establish a routine that will shape the future. These teens are reaching a point where they look at the Internet as the mode of interaction and communication. They turn to the web without necessarily thinking about the applications and activities in which they participate. The Internet is, in fact, becoming an extension of their social worlds. As the connections through the Internet are established and re-established on a daily basis, this type of interaction is gaining a prominent place in their life experience. As these teens experiment with e-mail and instant messaging, they

are learning to rely on these avenues of communication. The patterns that are established through the daily experience of the Internet now will ultimately influence the applications of the medium that remain meaningful as they experience the world as adults. As a research tool, these teens are learning how to navigate through the web to find reliable information to meet both their educational needs and their leisure pursuits. The Internet is not a mystery to these teens. It is becoming, above all else, a tool for daily living. It provides access to communication, entertainment and information. It is their one-stop central source to meet multiple needs.

The instant-messaging programs provide a good example of how the teens are shaping the communications aspect of the medium to fit with their own needs. As they take the instant-messaging programs and use these technological applications to meet their social needs through the playful experimentation with nicknames and the strategic inclusion and exclusion of buddies, these teens are symbolically recreating their social worlds through the virtual world of the computer. The same behaviours that are exhibited through the physical world are recreated in the virtual world. The real-time connections that occur through instant-messaging redefine teen's ability to express themselves and to also engage in group building activities. Designers of these instant-messaging programs have picked up on the cues that the teens have deemed important for these applications. Emoticons have been incorporated into the nicknaming applications so that teens can not only use textual interfaces in order to express themselves, but they can also add an emotional tag to their nickname as well. Likewise, program designers have also made it possible for users to categorize their buddy lists so that 'buddies' can be sorted according to status and importance. Similar to the Minitel hackers, who

demanding more from the Gretel messaging system, teens have shaped the instant-messaging programs to meet their needs of social bonding in the virtual realm.

Chapter 6

Conclusions

In this research project I set out to discover how teens as regular domestic users of both the computer and the Internet have come to identify both as meaningful tools. I wanted to learn how these teens had negotiated a useful routine out of daily access to these technologies. Had the teens, through the domestication process, introduced innovative ways of using the technology? What were they doing on-line? Through my investigation I was anxious to learn how these teens were using the computer and the Internet and it was my goal to discover how their current use of these media might help inform me about the potential future of the technology.

I began my investigation by looking at the ways that teens had domesticated the computer and the Internet (Lie and Sorensen 1996, Silverstone and Haddon 1996). The everyday framework that the respondents of this project were situated within made it possible for them to gradually incorporate the technology within a routine of use. This concept of a technology in use (Lie and Sorensen 1996) plays an important role in the shaping of the artifact as it signifies how technologies become important through their intersection with daily life activities. From a bundle of applications that comprise the uses of the computer and the Internet, teens select those that allow them to accomplish a host of meaningful tasks. These tasks are repeated and further intensified, as they become a part of the daily routine. As the computer and the Internet play a prominent role in the teen's ability to connect with the outside world these applications become an extension of their social world.

When families decide to bring the computer and the Internet into their homes, the primary reason is to help the children with their schoolwork. Families are busy and parents who work outside of the home are not always available to help with homework. The computer and the Internet provide handy research tools that are available to teens especially when parents are not around. At the same time parents recognize that their children will need to be skilled in the use of the computer and the Internet in order to achieve success in both future educational pursuits and the workplace. By bringing these media into the home, parents also ascribe meaning to the technologies. They see these technologies as tools that will enable their children to be successful.

The Domestic Sphere

The home, by definition, represents a private space that is somewhat protected from the invasion of the outside world. Granted, the line between the sanctity of the home and the intrusion of the outside world becomes somewhat blurred when one stops to survey the amount of mediated information that enters through the front door, telephone, and cable lines. But even from this perspective, the media enter under certain restrictions; media are largely under the control of the members within the home. Control is quite easily maintained through the established media, namely television, telephone and newspaper, as these are a one-way channels of communication. Information from the outside world enters the home in a unilinear pattern of domestic consumption (Silverstone, Hirsch and Morley 1992).

The addition of the Internet into the home adds a dimension of interactivity to the domestic media landscape. The Internet, like the traditional domestic media, allows family members to learn about the world outside of the home. But unlike the television

and radio, the Internet is a two-way communication network, which enables family members to engage with the outside world as well. Of course, one can argue that the telephone accomplishes the same task allowing family members a two-way interaction. The difference is that with the Internet, the opportunity to bring information into the home and to also interact with the outside world is magnified by the fact that both activities can occur simultaneously through one machine and include intense visual images. This interactive capability allows for the potential to re-structure leisure and educational activities within the home, to influence the way that family members spend time together (or apart) within the home, and to ultimately redefine the role of the media within the domestic sphere.

My respondents see the computer as an extension of their social worlds, as another option that they have at their disposal to connect with the outside world. But the connection through the Internet is in many ways more intense and self-engaging than more traditional media in the home. The computer that is connected to the Internet with a high-speed connection can be a TV, radio, and a telephone for the multi-tasking teen who is fully capable of taking command of the technology. These teens have grown up with the computer and the Internet, and they have the ability to connect in innovative ways and are creative in tackling their on-line world.

The Tools of Daily Life

Sherry Turkle (1995) talks about the early days of computing when the only way to think about the computer was as a tool. The computer represented ways of accomplishing specific tasks along a closed trajectory. As technology enters our lives, we tend to think of it at first as a tool to be used in a distinct way. In the beginning, this

was the only way of thinking about the computer. This changed. As the technology and software changed, it became possible to interact with the computer in different ways, in more intimate ways. The computing environment now offers us “new models of mind and a new medium of which to project our ideas and fantasies” (Turkle 1995, p. 9). This switch to thinking about the computer as an interactive machine has caused discomfort for some. As an interactive machine with an unlimited number of possibilities, it is now feasible to think about this machine as something other than a tool. The computer became an extension of one’s ability to communicate and interact with the outside world. This was a new way of looking at the computer, it was not a single-purpose machine but instead it was for many an interactive gateway to the world.

Paul Levinson (1999) writes that “media tend to make their grand entrances into society largely as toys – as a gadget or gimmick that people appreciate just for the fun of it, not for the work that it may accomplish” (p. 140). The success of the home computer and the Internet with today’s youth may just begin with this notion. Although parents ultimately have the idea of introducing the computer and the Internet to their children as educational tools, the children likely see the ‘play potential’ of these ‘tools’. For many children, the computer and Internet provide a link to an endless world of games. Children are left to explore and ‘mess around’ with the machine in order to become comfortable with the technology. In families where the children are the computer experts there is no formal training on how one should use the computer. In these instances, the first encounters with the computer and the Internet might very well be involved with a limited number of applications. As these young people experiment with the machines they also learn that there is an almost unlimited potential to engage with the world outside.

The computer may enter the home under the auspices of an educational tool, but the children see it at first, as a toy. And as a toy, it is treated with the casual regard that is reserved for playthings. At first, the young user explores the applications and programs without fear of using it improperly. The computer represents a freedom to explore the world in new and unique ways. The young user becomes accustomed to forging ahead in cyberspace without a care as to whether or not something tangible is accomplished. I believe that this is a significant key in the ways that children and youth end up not only ascribing meaning to the computer but also in the ways that they end up taking the computer and the Internet for granted later on. As they gain experience with the computer and the Internet, it is transformed into a useful tool that can help them complete school assignments and communicate with their friends in addition to all of the ‘fun’ things that they have been doing with it. The computer becomes a meaningful object in their daily life and one that they will continue to rely upon because of its utility. This computer generation has no frame of reference for thinking of the computer as just a “big calculator” (Turkle 1995, p. 18). For their entire experience of computing, the computer is not only the intimate machine, but it truly is an extension of their world, a two-way communication medium that allows them broaden their horizons and extend their reach beyond the physical boundary of the home or school. The computer is not only a tool, but also a toy, a communications medium, a way of interacting with the outside world – in other words, an extension of their ‘selves’ and how they present or portray themselves beyond the boundaries of the home.

When I talked to teens, they described using the computer to ‘do homework’, to ‘send e-mail’, to ‘surf the web’, to ‘browse’, to ‘write’, to ‘download’ and to ‘create’. All

of these actions describe using the computer as a tool, in a way of accomplishing a specific task. But they think about the task and not necessarily the machine that enables them to accomplish it. The computer and the Internet have become invisible to these teens. Their relationship with the machine is embedded in the way they view the world. It is though they live and breathe the computer. The tasks they want to accomplish are a part of their everyday reality and they need only click the mouse in order to set the machine in motion. Today's teen does not need to think about how to communicate using the computer any more than one needs to think about how to use a telephone, or whether or not one should use the telephone, or even if it is appropriate to use the telephone. One just uses the telephone as it is embedded in their reality of daily life. For the teens who have adopted the computer and the Internet into their lives along a similar pattern of use, they are living an "Internet lifestyle"(Gates qtd in Segaller 1998).

I do not want this to sound as though the computer has reached a point of closure for these teens because I believe that it is far from being put inside the black box of technological determinism. The computer for these teens has become a way of interacting that closely resembles the external nervous system (McLuhan 1964). The tool of the computer and the Internet for many of these teens represent a gateway into other worlds of interaction without any limitations of use. They do not readily see that there are limits to the way that one can use the computer and the Internet, rather these teens are enthusiastic about finding new ways of doing things through the computer and the Internet. In this sense, the computer ceases to be a tool for daily life and instead becomes an active expression of daily life.

Parents who have little experience with computers tend to see this machine and the Internet generally along the lines of how Turkle says that we have traditionally thought of tools—as single purpose machines. For many parents, they bring a computer into the home because the computer and the Internet will provide their children with an educational advantage as well as valuable work skills. The computer becomes a tool that will enable the teens to accomplish the task of completing school and finding a job. The computer and the Internet will enable their children to be successful.

The participants in my study shared that they used the computer for leisure pursuits and entertainment purposes primarily and then to help them with schoolwork less regularly. The thought of the computer as a tool was not foremost in their minds. The computer became an extension of their own interests and the fact that it was a tool became invisible to them. Katie, 15, used the computer in a creative way, producing digital art and she used the Internet as a publishing site for her own short story and fansite writing. Lisa, 15, used the Internet to look for song lyrics and to download her favourite music. Ian, 18, likes to surf the web to find joke sites that he can share with his friends. He also likes to download comedy clips from his favourite TV shows and music from his favourite bands. Allison, 14, used the Internet as an avenue to finding great games to play. Tricia, 14, looked for celebrity information on the stars of her favourite TV shows. David 14, and Elizabeth, 13, were totally consumed by the on-line interactive fantasy world. In each case, the ways that the teens have used the computer is unique to their own interests and desires; but what they have in common is that to each individual the uses are important, meaningful and the computer that enables them to accomplish these tasks has become invisible. For each of these teens, the ways that the computer and Internet have

become a part of their daily life is the result of their own expression as individuals. The computer and the Internet have become a vehicle for innovative self-expression.

The Road Ahead

Roughly 40 years ago, Marshall McLuhan pronounced that “the medium is the message”(1964). It was not the content of the medium that mattered; what mattered was the way that the content was being delivered. Of course content matters, but the most significant aspect of media is the way that it delivers messages into our everyday reality. For McLuhan, the delivery of the message played a more important role in the shaping of society than the, somewhat trivial by comparison, messages that were being delivered. The fact that one can learn about the world through reading a newspaper or watching television news and today via the Internet makes a difference in the way that one comes to view and think about the world (Levinson 1999, pp. 1-6). The impact of new media is not truly felt or examined closely until a newer medium comes along and replaces it.

Paul Levinson (1999) has extensively examined McLuhan’s theories of media and their ‘coming of age’ in the digital world. He writes that for many, McLuhan’s ideas were confusing and somewhat pedantic but in the digital age of the Internet, they begin to make more sense. Levinson (1999) argues that now that we have arrived in the digital age, McLuhan’s notions of the ‘global village’ and ‘the medium is the message’ are more clearly understood. He also contends that as new media continue to enter our lives and replace older forms we can clearly trace a path from the media of the present backwards to determine its impact on our present situation. For instance, Levinson comments that the structure of the novel did not come under scrutiny until such time as movies were popular and the novel as the old medium, became the content of the new movie medium.

Likewise, the content of television was based upon the movies, which in turn opened up the movie to academic scrutiny. The VCR as a medium of transmission made it possible to further examine the content of television and the impact of viewing experience itself. In each successive medium the older media becomes something that is examined and analyzed and taken apart to find out the impact on society. McLuhan wrote that “we look at the present through a rear-view mirror. We march backwards into the future . . . [attaching] ourselves to the objects . . . of the most recent past” (cited in Levinson 1999, p. 173).

As a new medium enters our sphere of comprehension, it consumes the one before it as content. Levinson argues that “the Internet is poised to trump each and every one of these prior ‘liberations’ of media into content, because the Internet is making content of them all” (1999, p. 5). On the Internet, one can read newspapers, write e-mails, listen to radio, watch television and movies, and simulate telephone conversations. The content of the Internet is not simply the one medium that preceded it, but rather it consumes all of the media that preceded it. But the impact of this activity is not only in the fact that one can incorporate many different media into the uses of the Internet. The profound impact of the Internet lies in the hands of the user. The user creates the content of the Internet (Levinson 1999, p. 39). As each individual travels to different places and spaces on the world wide web, or uses the different applications of e-mail or downloading music or video, that individual is creating the content of the Internet that is meaningful to him/her. So in one sense, it may not necessarily be important what any one individual is doing on-line at any particular time, but the important fact is that an individual can do whatever they want on-line at any particular time. The Internet is the medium and the message it

carries or allows to be created are of lesser importance. The key significance of this medium lies in the fact that it exists and it is becoming ingrained and invisible in our daily lives. This is even more significant for the teens who are growing up with the technology because they will only be able to recall a life that has included both the computer and the Internet and doing without these media will seem strange and foreign. The new media toys of today's children and youth will become the invisible foundations of tomorrow's society. But tomorrow is not as far away as one might think. Tomorrow is just around the corner; tomorrow may even be today.

New patterns of communication and inter-relation are already beginning to emerge in young people's daily practice of Internet use, but the changes are subtle and gradual. This is why attention to the detail of what is taking place on the computer and in cyberspace is important in order to understand the changes that are now in motion. What seems to be just another avenue of communication is gradually changing the way that work is done and relationships accomplished. The convenience of the Internet as a research tool is gradually re-shaping the standards by which education is both delivered and managed. The interactive communications applications are re-structuring how we inter-relate. Today's teens have embraced the technology of the computer and the Internet. Should we be concerned about what the kids are doing on-line? Yes, but not because they are at risk. We should be concerned that the world is changing all around us and if we do not pay close attention to the details of those changes, to the gradual shifts in communication or expression then we will have lost the opportunity to influence and shape that future. We are in the position to look forward not through the rear-view mirror of what has gone before and analyze the impact of the Internet twenty years down the

road. Rather, we can listen to the youth as they forge a new path towards the future and join them as we all create the future together.

This investigation has served as a solid basis upon which to open up areas of new research. This study provides a glimpse into the emerging future but further research is needed in order to discern how new communications technologies enable young people to interact with their world. My sample size was far too small to tackle the issues of gender, but there is a definite need for further exploration in this area. Is there a gender gap that exists between how boys and girls are using the computer or has this been transcended by a new generation of girls who have grown up with equal access to the computer?

The social aspects of computer and Internet use that emerged from this study also suggest that further research will be warranted. As the innovation of instant messaging programs trickles down to younger and younger children, the question emerges as to how will this type of communication change the ways that they establish, maintain and interpret social relationships? As well, this study also leads me to question the changing roles of other family members as the computer and Internet begins to establish itself within the daily communication routine. How are parents reacting to the Internet as a part of everyday life and in turn, how is Internet use in the house influencing the computer behaviours of younger children in the family?

Our concepts of privacy and identity will come under further scrutiny as teens continue to experiment with these concepts as they playfully interact using nicknames and identity markers that may or may not reflect reality. There needs to be further investigation into the consequences of this type of behaviour in “real life” situations that deal with identity and privacy. The existing rules surrounding copyright will continue to

be challenged as these teens continue to push the limits with the technology that they find so easy to manipulate.

These are merely a few areas of potential research that can be explored. As the computer and Internet continue to be integrated into the fabric of daily life, there is a great opportunity for communications scholars to open up new areas of investigation. The Internet will likely not be the only factor that creates a new species of teenager who sees the world in a dramatically different way. No doubt in the future, teens will look at the world differently than their parents, but this will be a gradual change. The Internet is providing teens with an opportunity to engage with their world in a way that transcends established patterns of interaction. Today's teens have much more information at their fingertips and their challenge is to see how they can manage this glut of information. Their future will be dedicated to finding ways to navigate daily life despite the excess of information. They will face the constant challenge of trying to determine what is and is not relevant. The old rules of information management may no longer apply, but for this group of individuals, they will find new ways to deal with information and communications. They will undoubtedly teach us a few things along the journey. The legacy that we can leave our children is the opportunity to explore with them as they travel into the future.

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APPENDIX A:

ETHICS CLEARANCE



UNIVERSITY OF
CALGARY

CERTIFIED COPY

CONJOINT FACULTIES RESEARCH ETHICS BOARD

c/o Research Services
Telephone: (403) 220-3782
Fax: (403) 289-0693
Email: plevans@ucalgary.ca

To: Ms. Shea Sturgeon
Faculty of Communication and Culture

Date: October 5, 2001

From: Professor J. C. Levy, Chair
Conjoint Faculties Research Ethics Board

Re: **Certification of Institutional Ethics Review: Life On-Line: Teenagers and the Internet**

The above named research protocol has been granted ethical approval by the Conjoint Faculties Research Ethics Board for the University of Calgary.

Enclosed is the original of the signed **Certification of Institutional Ethics Review**. Please make note of the conditions stated on the Certification. A copy has been sent to your supervisor as well as to the Chair of your Department/Faculty Research Ethics Committee. In the event the research is funded, you should notify the sponsor of the research and provide them with a copy for their records. The Conjoint Faculties Research Ethics Board will retain a copy of the clearance on your file.

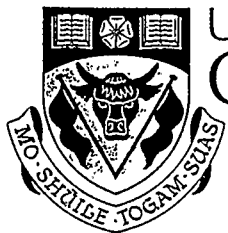
In closing, let me take this opportunity to wish you the best of luck in your research endeavour.

Sincerely,

Patricia Evans
Executive Secretary
for: J. C. (Chris) Levy
Conjoint Faculties Research Ethics Committee

Enclosures (2)

cc: Dr. M. Bakardijeva, Supervisor
Chair, Department/Faculty Research Ethics Committee



CERTIFICATION OF INSTITUTIONAL ETHICS REVIEW

This is to certify that the Conjoint Faculties Research Ethics Board at the University of Calgary has examined the following research proposal and found the proposed research involving human subjects to be in accordance with University of Calgary Guidelines and the Tri-Council Policy Statement on *Ethical Conduct in Research Using Human Subjects*:

Applicant(s): Shea L. Sturgeon
Department/Faculty: Faculty of Communication and Culture
Project Title: Life On-Line: Teenagers and the Internet
Sponsor (if applicable):

Restrictions:

This Certification is subject to the following conditions:

1. Approval is granted only for the project and purposes described in the application.
2. Any modifications to the authorized protocol must be submitted to the Chair, Conjoint Faculties Research Ethics Board for approval
3. A progress report must be submitted 12 months from the date of this Certification, and should provide the expected completion date for the project.
4. Written notification must be sent to the Board when the project is complete or terminated



Chair
Conjoint Faculties Research Ethics Board

OCT. 04/01
Date:

Distribution: (1) Applicant, (2) Supervisor (if applicable), (3) Chair, Department/Faculty Research Ethics Committee, (4) Sponsor, (5) Conjoint Faculties Research Ethics Board (6) Research Services