Virtually Invisible: At-Risk Boys and their Concepts of Self as Beings-in-the-Online-World

by

Jordan Tinney

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M. Ed., University of Victoria, 1996

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We accept this dissertation as conforming to the required standard

Dr. L. K. Baxter, Supervisor, (Department of Curriculum and Instruction)

Dr. T. Riecken, Department Member, (Department of Curriculum and Instruction)

Dr. L. Francis-Peltier, Department Member, (Department of Curriculum and Instruction)

Dr. L. Yorke, Department Member, (Department of Curriculum and Instruction)

Dr. P. O’Riley, External Examiner, (Ontario Institute for Studies in Education)

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University of Victoria

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ABSTRACT

As communications technologies flourish, increasing numbers of students are spending inordinate amounts of time in online communities. Often, students who spend excess time online are boys who are experiencing difficulty in school. For many of these boys, their participation in virtual worlds and their use of computers has shown them to be successful learners. However, for a variety of reasons, these boys continue to be disengaged in school and seriously at-risk for failure.

This study explores the lives of at-risk boys who spend several hours a day in online worlds. The researcher is a long time participant in virtual worlds and through interviews examines the notions of self in online communities and how these at-risk boys navigate between their lives on and offline. The students' participation in online forums may provide helpful insights into who they are and how we can best meet their needs in our schools.

In addition to an examination of the social formation of self in online worlds, this study mounts a critique of the promotion of an internet "culture" or "community." In the text-based world of Internet Relay Chat (IRC), many of the foundations of what constitutes a culture may be absent and researchers may be too quick in accepting such forums as true communities.

Examiners:

Dr. L.R. Baxter, Supervisor, (Department of Curriculum and Instruction)

Dr. T. Rieken, Department Member, (Department of Curriculum and Instruction)

Dr. L. Francis-Pelton, Department Member, (Department of Curriculum and Instruction)

Dr. L. York, Department Member, (Department of Curriculum and Instruction)

Dr. P. O'Riley, External Examiner, (Ontario Institute for Studies in Education)
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Preface

The format of this dissertation is unusual in that it involves several smaller studies integrated into a dissertation using narrative inquiry techniques. In order to help readers understand the text I have provided these introductory notes to the reader about the textual layout and to provide a personal context for the researcher.

Notes to the Reader

First, I have written a background personal background section that outlines who I am as both an educator and researcher and how I have come to formulate the questions that I wish to explore. This background section precedes the introduction and I feel is an important piece as it positions me before the text.

Second, The dissertation was originally written as a series of papers that have come together to form a dissertation. In pulling the pieces of the text together, I revisited the entire text with the critical eye of both a Researcher and Educator. My reflections on the manuscript and text are scattered throughout the document in a series of dialogue boxes. These text boxes are unusual in format and are written after the manuscript was first in draft form. The text boxes contain critical questions and insights that I formulated both throughout and at the conclusion of my studies. The questions and insights in the boxes should relate directly to the text in which they are situated. The reader should first read the text in which the boxes are situated and then the text boxes to understand the questions and insights I had as I revisited the manuscript. The text boxes also contain possible future research questions and comment on difficulties encountered during the research. These insights were highlighted to illustrate the design principles for these studies and the interpretive frameworks used to interpret the data. The questions will be
addressed in the concluding chapter and form the structure for the discussion of the results of the studies.

**Personal Background**

Most of the members of my family are educators: my father, my mother, my grandfather, and each of my four siblings. Teaching is a career that seems to run in the blood. When I finished high school, my father urged me to try a different career path. I chose Electronics Engineering because I felt that at the time (1979) there seemed to be a promising future in the electronics industry. After working in the industry for seven years, I longed to work with more closely with people. Despite their incredible capabilities and promise, computers, for me, remained inanimate and unrewarding. I headed into education.

Six years later, I was a teacher in middle school and had a three year-old daughter. I was heavily involved with using computers in education and had a computer at home on which I worked and tested software for use in the classroom. I loved my job and I loved working with computers.

One Sunday, we had two little girls over to play with my daughter. I had purchased a small plastic farm at a garage sale and the girls were playing with it in the bedroom. I could hear them discussing where the cows should go and if the farmer should take the tractor out of the barn. They were having great fun. Meanwhile, in the other room, I was installing a wonderful new program called Arthur’s Teacher Trouble. I was anxious to show it to my daughter. I soon had it installed and asked to show it to the girls. They were enthralled by it and gathered around the computer to play and listen to the story. I went to the kitchen for a cup of coffee. When I turned around, I could see both
bedrooms juxtaposed to each other. On one side the girls were playing on the computer. One girl was moving the mouse and other girls were watching. Talk and interaction were limited. All eyes were fixed on the screen. On the other side sat a toy plastic farm. The cow lay on its side and the tractor was in the barn. The two educational activities seemed in stark contrast. I had removed these girls from an extremely rich social environment where they were play-acting and actively negotiating what life was like on a farm and placed them in another setting where one person controlled the screen and the others watched. What little interaction remained was between the one girl and the computer. The others were passive observers. This was a turning point in my educational career.

I began to ask critical questions about the use of computers in education. I wanted to see what research said about how effective computing technologies were in support of a learning environment. I enrolled in a Masters program at the University of Victoria and studied the implementation and effectiveness of computers in education. I spent one summer reviewing literature on the uses of computers in classrooms and found many successes and many more questions. Much of my research involved the writing of an extensive paper analyzing current research on the effectiveness of computers in education. Despite reviewing hundreds of articles, I was unable to conclusively find a strong body of research that clearly demonstrated that the addition of computers to schools has resulted in an increase in student achievement.

Despite the findings of my research, I continued to be a strong advocate of computers in education. I was convinced that despite the research, computing technology was going to continue to play an important role in education. I wanted to discover or help to create learning environments that could use computing technologies to increase student
achievement. I was involved with the University of British Columbia in a collaborative project involving hypermedia explorations of environmental issues and with the Ministry of Education and the University of Victoria in creating a collaborative learning environment on the Internet. In addition, I continued to be a heavy user of computing technology at home for both work and entertainment.

In my work with students, I began to see a pattern developing. The pattern was one that highlighted boys and their use of computers. I noticed not only that boys were the dominant users of computers in schools, but that many of the boys who were users were having difficulty at school. These difficulties ranged from social difficulties to academic struggles.

When I moved from a middle school to a secondary school, it was as Vice-Principal. Two years later, I became Principal of the same secondary school. A large part of my role was student discipline. I began to notice that the same struggling boys whom I had known in middle school now were struggling in secondary school. The boys continued to be heavy computer users. The worst part was that not only were they struggling but they were dropping out and fading away.

In my life at home, I was spending increasing amounts of time on the Internet. One place that I spent a lot of time was called Internet Relay Chat (IRC). It is a text-based virtual community. I went there to chat, to watch, and to learn. What I found were people who seemed to be spending an extraordinary amount of time online. When I talked to the boys at school, not only were they familiar with IRC, they spent an enormous amount of time there.
I began to wonder about these boys. Who are they? What is the role of the computer in their life? Why are they not enjoying success in school and why are they dropping out of school? Why do they seem to be spending so much time on computers and the Internet? These basic questions, fueled by my background as a father, educator and researcher, were at the foundation of my decision to pursue a doctorate.
Chapter 1: Context, Problem Statement, Justification and Significance

Context

A student and his parents are meeting with the school principal. The principal is trying to decide whether or not to suspend the student to the School Board. It is the most serious consequence that can be given and could result in the student's indefinite removal from the school. The student has infiltrated the school's computer network and has installed software that allows him to remotely control several computers on the network. Using specialized illegal software, he has obtained, among other things, a teacher's bank card number and Personal Identification Number. The teacher had used a school computer to check his bank balance one day during lunch.

The student has also cost the school a fair amount of money in computer technician time tracking down the security breach. His actions are a major problem that the school needs to address. In addition to the network breach, the student has failed every course in which he has been enrolled over the past two years and rarely attends classes. He is in serious jeopardy of dropping out. The student is sixteen years old.

That night, in the security of his home, neednick goes online. He turns on his computer and goes to a service called Internet Relay Chat (IRC). On IRC, you have a choice of many chat rooms in which you can participate. You may participate in more than one at a time. In these rooms, participants simply talk to each other using their keyboards. They select anonymous nicknames to identify themselves while they are in the rooms. These "nicks" are easily changed and when first using the service, this

Educator: I have seen this boy many times before. I know the profile and I know he has the potential to be a powerful learner. Why is he not motivated to succeed at school?
participant couldn’t think of a name so he used neednick.

Neednick selects a channel called Hackphreak. In Hackphreak, they are busy discussing, in intricate detail, how to hack into networks and how to bypass telephone systems. The technical jargon is heavy and the amount of knowledge presented is enormous. Neednick sits and watches the dialogue as he reflects on the discussion in the school office today. He suspects that many of the participants in the channel are adolescent boys and that many of them are having problems in school.

How is it that someone can have so much technical skill and knowledge, be so intellectually capable, yet be struggling so much in school? How can someone set up networks, hack into computers, install software, bypass sophisticated network security, yet fail the course Introduction to Computers 9? How can someone be completely at ease in the world of IRC with its highly specialized technical jargon yet is completely out of his element in a classroom? This is the conundrum that neednick faces on a regular basis. I am neednick. I am also the principal of a large secondary school.

For several years, I have worked closely with students and computers. It has been my observation that many students who are highly capable computer users also struggle in school. The vast majority of students falling into this category are boys. Despite having demonstrated that they can be powerful learners, these boys become socially isolated, withdrawn, and slowly drop out of or fail school.
Problem Statement.

My observations have shown that some boys spend extraordinary amounts of time online. My curiosity has led me to question their self-concept and to ask why they are attracted to living online and what impact this has on their education. When these boys go online, who do they become and what can we learn about them that will help us meet their needs in school?

Justification of Study

There are many factors that impact on the daily lives of these boys. In this section, I will explore in detail these factors. In particular, I will: examine the impact of modern technology on the lives of adolescents; introduce the term “disboys” and justify why I feel the term is appropriate to the group of boys that I studied; explore the role that technology plays in the lives of these boys; look at physical and virtual concepts of identity; and, share observations that I have made in schools that further justify my studies.

The Impact of Modern Technologies.

Today’s adolescents are growing up during an explosion of information technologies. Their immersion in this culture has impacted their views of communications and the role of technology in their lives. They carry MP3 and CD Players, cell phones and pagers. They illegally trade music and press their own CD’s. Adolescents are getting strong messages about the importance of technical knowledge. All around them they see that the acquisition of technical knowledge and skills can lead them to success in the world.
The proliferation of the Internet over the last decade has changed our world into a “Global Village” (McLuhan, 1964). The skills that are needed to participate in and develop such virtual infrastructures are in high demand. Adolescents see that demand and feel that with advanced technical knowledge, they can make a good living.

In response to society’s need, schools are teaching students how to obtain more technological skills. Curricula are being developed and introduced and there are efforts underway to put all schools in North America online so they can reap the benefits of the Internet. It is a widely held expectation that schools will be wired and that students will understand the power of and be able to use the Internet.

While the push for students to have more technical skills continues, schools are grappling with the many challenges that new technologies present. While the system slowly moves forward, some students have become empowered by these new technologies and are forging ahead defining new ways to learn.

The Disboys: Disillusioned, Disconnected, and Disengaged

Every school has a very small number of male students who are disengaged. My observations indicate that they are disconnected from others in school, disillusioned with the relevance of school, and disengaged in the classroom. I call these boys the Disboys.

Recent large-scale assessments show that the majority of students struggling in school are boys. In reading and writing, the gap in achievement between boys and girls
widens as students get older. In our behaviour programs, the vast majority of students receiving support are boys. Honours courses are often two-thirds to three-quarters girls. The daily life of a Vice-Principal in a secondary school involves meeting and dealing with boys on disciplinary matters far more often than with girls. The disciplinary matters are often for overt disruption, disrespect, or violence. In many cases, the students end up facing significant suspensions from regular schools. In school, these boys appear socially withdrawn and academically weak. They slip through the daily existence of the classroom gathering few friends and even fewer accolades. They choose to live their offline lives in isolation despite the socially rich environment that a school presents. In many cases, they manage to survive the pressures and complexities of academic life until they are sixteen or seventeen at which time they bow out, having exhausted all available support.

Interviewer: I see these as smart, knowledgeable, social kids and it’s (school) just not working. Why?

Tom: It doesn’t work for me because I am a self-teacher. I just can’t sit in class and listen to a teacher. It’s just so trivial. It’s like the same thing every day and I think that’s the
same for a lot of people. It’s just the way they learn. They just can’t be taught the way schools teach. That’s why I have trouble going to classes. I just don’t want to be there. It’s not the way to learn.

They (disengaged students) are looked at as maybe bad kids or just kids who aren’t willing to do the work. That’s who I think they’re seen as. They’re not given a fair chance. They are not actually bad kids. They’re just having troubles and they want to do it. They are just having troubles and it’s not right for them.

**Technology and the Disboys**

Each day, many of these Disboys go online and hone their technological skills. They are watching global events with respect to technology unfold and are participating with interest. In many cases, their daily participation online dominates their life. They start their own companies, form their own communities, and move ahead in pursuit of their goals, hoping to carve out an existence in these virtual environments.

When parents see their son watching a program on the television, they may be somewhat aware of the show’s content. They may approve or disapprove and may engage in a discussion about the content. When they walk by their son on the computer and see him busy, they often have limited or no understanding of what he is doing. When working on a computer, there are many ways to hide actions and veil the environments so that the work being done can remain hidden to otherwise vigilant and observant parents.
In addition, the child often is far more technically competent than the adult and can manipulate the situation in many ways when questioned about what he is doing.

Not only do parents have limited understanding of the actions in which their son is engaged, neither do they hear him interacting so there is no filter through which to understand the nature of the interactions or the personality that the youngster is assuming when online. Parents do not necessarily know who he is or with whom he is interacting. He is talking to complete strangers who are, and will remain, completely anonymous.

IRC is a forum for an exchange of knowledge. The amount of learning done online is enormous. Each day, the interactions grow in complexity. Online, these isolated, academically weak students that we see in our schools are gregarious, aggressive, knowledgeable, and extremely skilled.

Recent literature on participation in online communities shows that some people prefer their online experiences to their offline experiences. In *Life on the Screen*, Turkle (1995) examined the notion of identity in online worlds. In her study, she looked at users who were spending inordinate amounts of time in online communities called Multi-User-Dungeons (MUDs). MUDs are based on role-playing adventures and a user creates or assumes a character’s identity. Over time, they build up a personality for that character.

Researcher: What is the relationship between these boys’ notions of “self” in real life and their notions of “self” in virtual worlds?

Educator: In speaking with these boys, I notice they can talk in such intricate technical detail that they clearly demonstrate they are powerful learners. Why is it that they are powerful learners online and disengaged learners in real life?

Researcher: Turkle’s research was done in worlds where participants chose an identity that was in role. IRC has no roles. How does identity unfold in worlds where there are no roles or cultural attachments?
Participants in MUDs found that they enjoyed being able to explore different identities online. In many cases they indicated that their experiences online allowed them to demonstrate or experience facets of their identity that they were not able to display in “real life.” Participants found that their experiences online and offline were becoming blurred. In Turkle’s study, one user commented that he lived multiple lives, each represented by a window on his computer. He navigated a variety of identities and worlds commenting that to him, real life is “just another window” (p. 13). There are many similarities between the participants in Turkle’s study and this study. One major difference between the studies is that the users in this study are all experiencing some difficulties in navigating life in conventional social settings. A strong similarity between the studies is the amount of time that participants are spending online. Some of the participants interviewed for this study are spending up to nine hours a day online. This is consistent with many of Turkle’s participants who were spending up to eighty hours a week online.

Physical Worlds – Virtual Worlds: Multiple Identities

In the information age, many adolescents have an increasing presence in environments that are quite different from the social settings to which we are accustomed. Online, new relationships are being formed without many of the conventions that define the offline world. Youth are engaging in a discourse that includes these worlds as part of their daily existence. They navigate between these realities seamlessly and in many cases find the alternative identities that they choose online far more satisfying than the ones they display offline. These virtual worlds, for many of the people, have created new ways of relating and new ways of being.
I have commented that many of the students who spend extraordinary amounts of time in virtual communities seem to have difficulty managing routine social demands. Faced with these demands, they withdraw further to live out a significant portion of their lives in the relative safety of a virtual world. These students are much more comfortable in social situations of anonymity and few constraints. They seek safety and knowledge in online communities where they find they don’t have to adhere to social norms.

I intend to identify core themes that emerge in my interviews with the boys. These themes may give us further clues about why adolescents spend time online and who they become when they go online. In addition, these themes can provide important information about the changing nature of relationships and communications in today’s world and how those relationships can affect a student’s life in school.

Observations in School

Jim sits in my office. He is a boy who has spent almost six months in our school. He is fourteen years old and has experienced many problems during his school life. He has been referred to my office for lack of work, lack of attention, disruption of others, and disrespect toward the teacher. He is currently failing his courses and does not hand in his work. Our Student Services Team has diagnosed him with a Severe Learning Disability. In reviewing his file, there is a history of depression and withdrawal and his potential for attempting suicide has been a concern. 1
met Jim on the first day of school as a student creating some problems in our theatre during our opening ceremonies for grade nines. He stood out in the crowd because of his large mop of curly blonde hair. Almost afro-like, his hair was impossible to miss. By the time I met him again in my office, he had shaved off all his hair and had attempted suicide once more.

The discussion with Jim was difficult. He would not look me in the eye, would not speak in any more than the shortest of sentences. His favourite phrase was “I don’t know.” His passive-aggressive front was virtually impossible to crack. I had observed Jim in our computer lab several times and he seemed to really know his way around a computer. I asked him if he enjoyed using computers and he responded with a quiet “yes.” Taking a different approach, I asked him if he enjoyed playing computer games. Yes, he enjoyed a game called Starcraft he said.

On Friday afternoons, I had often played Starcraft in the lab with a group of boys. I was familiar with the game and told him I played. “Are you a member of any clan?” I asked. Jim’s face beamed, he looked up with sharp, clear eyes in response to the magic words. The fact that I asked about clans not only meant that I knew about Starcraft but that I was an advanced player who played online. He beamed and the conversation went on for 45 minutes about advanced tactics and strategies, favourite maps and species. He revealed to me a depth of knowledge and interest
that we often see in our very best students. The person who talked to me about Starcraft was not the person we knew as an unmotivated, shy, withdrawn at-risk student.

This story and many others like it initiated my doctoral studies. I began to think about IRC as an ideal forum for examining the notion of self. Many boys, much like Jim, frequent IRC and exhibit social disengagement at school yet flourish in virtual worlds. I wanted to examine the notion of self online and to explore how that self was different from the self we know in our classrooms. What are the implications for these new constructions of self? What is the impact on education when, through the proliferation of social connections and its resulting distribution of knowledge, the cultural authorities of knowledge are being dismantled? These questions led me to my study and to the theoretical and methodological frameworks I use.

John is a boy in my school. He is fifteen years old and spends between four and nine hours a day online. He admits he is addicted to IRC and the social environment it presents. John is one of a group of boys that I have chosen to interview as part of my study. He does not do well academically at school, has few friends, and is socially withdrawn. In a week, he spends more time online than he spends at school.

In talking about IRC, John says, “You are who you want to be.” John knows that he can examine any “channel” and mold his responses to fit that particular world. “I am more aggressive in a hacker’s channel and much quieter in IRC help.” John’s description of his responses to social cues demonstrates

Researcher: I should be careful about saying several selves. It may be that there is only one self but it is widely distributed as Gergen suggests.
that he does as Mead (1934) suggests by monitoring the state of the social context and adjusting his responses and input accordingly. John appears to have several selves and he consciously chooses which one to display in response to specific environments.

**Significance of the Study**

Each day, we navigate through a variety of social situations. Responding to our environment is as natural as breathing. In each context, we may respond in a different manner. Part of growing and maturing is learning to adapt to social settings and to respond to social cues in a manner appropriate to the situation. In our daily lives we navigate a variety of worlds and display identities that change from context to context.

This navigation between social settings and the different identities that come forward in those settings are at the heart of the social construction of identity. These identities emerge in a world of face-to-face and voice-to-voice interaction; however, the information age is presenting and constructing new social situations. Using the Internet as a powerful tool for communication, large numbers of youths are gathering online in virtual environments to live out their lives in ways that would be considered bizarre in the context of our physical world. On Internet Relay Chat (IRC) participants engage in activities that range from simple socializing to anarchistic plotting. A majority of these participants are boys. They talk, fight, stalk and kill all under the veil of complete anonymity and safety. It is a world unknown to many adults. It is a world without boundaries and is beautifully simple yet infinitely complex. Many of these boys
are spending as much time online as they are at school. The boundaries between life online and life offline are becoming blurred and at times, erased. As the boundaries disappear, many of the boys are becoming disengaged with life offline. This disengagement has significant educational implications because at their age, disengagement from life offline often coincides with disengagement from school.

Interviewer: If I met you online and I met you in school would I be able to tell that you are the same person?

Tom: No. I don’t think so at all.

Interviewer: So why is it that you present so differently online?

Tom: Because I’m not worried about anything. I can be me and not worry about what anyone has to say.

Interviewer: But you can’t be you in real life?

Tom: Not as much.

Social constructivist theories combined with the narratives formed in IRC are rich sources of information to examine the notion of self and its fluidity in virtual and real domains.

This study will help us to better understand the lives of these disengaged boys. Who are these boys? Why do they go online and what implications does this have for educators? Their disengagement from life offline is a concern. While they may go on to live successful lives in virtual worlds, how do we help them succeed in school so that they can become productive members of our communities? These boys have the ability to succeed but for some reason they are unable, or unwilling, to succeed in school cultures.
Interviewer: Do you trust IRC?

Tom: Not at all. Because I know there are thousands of people out there just like me.

The purpose of the introduction was to have readers understand the context of my study, its justification and specific problem statement. I have also presented a brief explanation of the participants and the significance of the study. In Chapter 2: Literature Review, I will examine existing theoretical frameworks for the notion of self and define a coherent lens from which to examine self in virtual worlds. These frameworks were based on the notion of a social constructivist notion of self. Continuing from the literature review, I will propose that self is a product of social discourse and language and so hermeneutics was the appropriate methodology for the study as it emphasizes language and discourse. In Chapter 3: Methodology, I will explain the method used to interview participants both online and in person and then elaborate on the descriptive analysis used to identify common themes for why these boys are attracted to going online and what they do when they are there. The interviews revealed thematic areas that helped explain why students went online and what impact it had on their lives. In Chapter 4: Findings, I will define the culture of a specific virtual world and detail the findings of my interviews. Readers will be introduced to one of the Disboys in a section devoted to his particular interview and I will discuss how the notion of self manifests itself in physical and virtual worlds. Finally, I will describe several themes that emerged through the interviews that identify why these boys go online. In Chapter 5: Summary, I will revisit the Disboys to discuss who they are in physical and virtual worlds. I will explore the implications for life
online and for education. In the Conclusion, I will discuss how the study encountered may significant challenges and I will attempt to leave open some critical questions that set the stage for future research in virtual environments.
Chapter 2: Literature Review

The Nature of Self: Centered, Decentered, and Distributed

The dominant Cartesian discourse would have us believe that the nature of self is rooted in “I think. Therefore I am (cogito ergo sum).” The Cartesian dualism proposed that our existence could be split into two separate entities, a mind capable of thought and a physical being capable of interacting with the world. This dualism created a problem because it was difficult to determine how human beings brought their two modes of existence (physical and mental) together to create a unity in their being and in their experience in the world. Theorists have grappled with the problem of the Cartesian dualism for over 300 years. This dualism represents the classic mind-body dilemma.

Descartes viewed the mind and body as separate entities and though they interacted, the mind could objectively consider the physical universe and come to understand it through observation and analysis. The mind was viewed as pure thought but the body could extend to the physical world. Despite much philosophical attention, the Cartesian dualism remained largely unchanged for hundreds of years. It wasn’t until recent times that we began to seriously question the validity of the Cartesian dualism. Jacques Lacan began the break from the Cartesian notion of mind separate from body. This break suggested that self exists through discourse and language. Building on the work of Martin Heidegger who questioned our being-in-the-world as described through language, Lacan proposed that it is our relations with the environment and language that allow self to unfold. Lacan’s proposition resulted in a shift where the self moved from...
being at the center of the physical world to a de-centering where the self exists in relationships and discourse. This thinking greatly influenced many theorists.

Further complications emerge when we consider how the world is constructed. In many instances, we construct our experiences through language. Poststructuralists disagreed with using language as the primary means to describe our world, as language is itself a construction of our world. If we believe that self is rooted in language and discourse we question the very ways in which we establish a notion of self and existence. For the purpose of this study, I have chosen to view self as a construction rooted in language and discourse. The constructed worlds of a virtual community seem to leave few alternatives.

Commonly held beliefs assert that the notion of self is deeply embedded in language and social interactions (Mead, 1934; Lacan, 1997; Giddens, 1991; Harre’, 1986; Ricoeur, 1992). To accept that social interactions play a significant role in the development of self, we have to also accept the importance of the role of the Other in establishing an identity. We have to be able to take the position of those with whom we are interacting. This positioning is referred to as taking the place of the Other (Ricoeur, 1992).

Social relations and activities are preconditions for the emergence of self. Individuals experience themselves not directly, but indirectly, through the

Researcher: These theories all suppose a physical world. How will they apply to a world without physical presence?

Researcher: A self constructed in language and through conversations. On IRC the language is not “normal” English and the conversations are small snippets in time. I don’t know how these theories will translate to the virtual world of IRC. In addition, the participants are not only constructing a “self” online, they are also constructing the “other”.
viewpoints of different members of a social group (Mead, 1934). The philosophy of the social construction of self examines how self is created within social contexts.

The conversation that takes place between people in social life is of central importance to the notion of self. These conversations have been used to form a theory of social and personal being. In these theories, the concept of role-playing is key. In our daily lives, we play many roles. Father, husband, teacher, Principal and male are all roles I assume. Some roles we consciously play and others we unconsciously assume. In social constructivist theory, an individual plays many roles depending on the social situation and the presentation of oneself in public. These roles of social life contribute to the notion of self. The notion of social being is synonymous with the parts people play and the way they perform those parts (Harre, 1983; Goffman, 1959; Garfinkel, 1967).

A common thread linking the social-psychological theories of self with the structuralist theories of the self, is the view that language and knowledge are the organizing and structuring principles in social life (Burkitt, 1991). Discourse, including relationships and language, is a principal element in the construction of self. Poststructuralists deconstruct the humanist notion of the individual and attempt to show how a human is part of the humanist discourse itself. This discourse includes the building of a notion of self through language and interactions (Lacan, 1997). The result of this thinking is the death of the rational notion of self as a single coherent identity and the emergence of a dynamic notion of self rooted in social context and discourse.
It is clear that conceptual and theoretical understandings of self continue to shift. We are beginning to understand and accept that human beings are social animals and their behaviour and even notion of self are deeply embedded in social cultures, contexts, and languages. Many recent theorists have rejected the rational positivist stance of a mind isolated and objectified and have embraced the notion of a social construction of identity.

The proliferation of technologies has presented us with new forums that allow for fascinating glimpses into the emergence of cultures and social contexts. The Internet is a world of virtual communities that exist for the purpose of sharing information and making contact. In many of these worlds, there are no graphical representations. The world exists solely in text. Internet Relay Chat (IRC) is one example of such a text-based virtual world. At any given time, there are between fifteen and twenty thousand people inhabiting this world. They live and die by their text and they use nicknames as pseudonyms that ensure anonymity. In a world of text where everyone is anonymous, possibilities abound for explorations of the notion of self. A self that is disembodied, highly connected socially, and widely distributed.

Theoretical Perspectives of Self

What theoretical underpinnings help us to understand the emergence of self in virtual worlds? A review of the literature reveals several theoreticians who have examined the social construction of self. Their work includes many useful insights that allow for a rigorous examination of how self unfolds in virtual communities. The purpose of this chapter is to explore the common threads that exist between theorists who embrace the social construction of self and to suggest how these theories can be used to examine the notion of self in a text-based virtual world. These theorists include Harre’, Mead,
Giddens, Goffman, Gergen, Foucault, Lacan, Wittgenstein, Heidegger and Ricoeur. I will begin by briefly exploring these theoretical frameworks and then I will draw a template for the interaction of these theories to help define a coherent lens for examining the emergence of self in virtual worlds.

Sociological Perspectives of Self

The mind is not something that can exist separate from the body. Our lived experience must be a starting point for the development of a system that can examine the notion of self. The individual and society are in a constant state of adjustment where the interactions between the two help define who we are. It is through language that we construct our world and the objects around us. These constructions exist in relation to a society and it is society that makes new meanings from the constructions (Mead, 1982; 1934).

Of central importance in the development of a notion of self is our ability to take the role of the “Other” in social interactions. In developing a notion of self, it is important to be able to see how others react to you, in a sense to step outside of yourself and into the “role of the Other” to look at yourself and judge responses. In this way, you are able to constantly adjust your behaviour to elicit responses that you feel are socially acceptable. Language is a phase of the social process inseparable from action and it is the act that is the most primitive unit (Mead, 1982).

To be self-conscious, one must understand the viewpoint of the Other. The awareness of oneself in relation to others is what determines

**Educator: These boys do not seem to be able to take the role of the Other in conventional social settings. On IRC there really is no “other” at all. It’s just text. The boys’ attraction to IRC may be reaffirming their ability to ignore the “other” and may not be helping them negotiate life in the real world at all.**
self-consciousness. This awareness occurs by taking the place of the Other a process "that builds up the 'me' that one knows" (p. 94).

The notion of self can be divided into "me" and "I." The "me" is the self as observed while in the role of the Other. "I" is the self that is constructed through "inner conversation" (p. 32) and through adjustment to social clues and context (p. 104). It is through this inner and outer conversation that a notion of self is constructed. The conversation also includes one's interactions with the environment.

The process of thought is social in itself. It is the inner conversation that results in the act of language or gestures. These beginnings of social acts are the most important stimuli for members of the social group. Words are symbols whose meanings are shared and these meanings must be interpreted in social contexts. Language is the "mechanism for social conduct" (p. 56).

At the heart of Mead's theories is the notion that the organism (the physical body) is part of a larger whole. The interplay between the organism and its environment is part of what defines self. Where this exists, the self can be separated from the organism. The self is the social construction that cannot be located; it is related to the mind, body, heart, and hands. It includes gestures, language, thought, and is in constant adjustment to the surroundings. "We are all, in short, constructs of the group in which we live" (p. 149).

Mead was intrigued by the work of Darwin and it is interesting to note that Mead's theories of self can be seen as an evolution of self where the self is

Researcher: "An environment of social context and temporality." Social context is so hard to pin down on IRC. How is there a context when the world is re-written every 20 lines or so? When one pops in and looks at the world there is no context, only the immediacy of text that is flowing at that moment.
situated in the environment of social context and temporality. Knowledge was seen as provisional as it was contingent on time, place, and purpose. As the individual relates to his/her environment, they evolve and change. This is called the "principle of emergence." This change can occur by an inner conversation in which responses are cued by the social context and environment. Discursive practices are viewed as social practices and they have a practical intent. That intent is the construction of self and identity as a product of socially structured and continually evolving problem-solving relations among people involved in relationships (Mead, 1982).

**Sociological and Philosophical Perspectives of Self**

Taking the opposite viewpoint of the Cartesian sense of order, recent theories of self may be going too far. How can we come to an understanding of self if the self is completely embedded in social relations? If we accept this notion, then how can we form a theory of consciousness if consciousness is situated in a social context? Without such a theory of consciousness, it is difficult to form a theory of self or personal identity. The work of Mead provides tools for theorizing how identity develops and yet allows us to retain the discursive character of self. Using Mead’s work and the work of other social constructivists, it is clear that one must accept the core notions of a construction of the "self" before examining how identity is formed within social discourse. The historically objective accounts of self or identity do reveal the power of the individual but ultimately imprison our understanding of human behaviour within the boundaries of language and discourse.

There are some intriguing continuities between the sociological approach of Mead and the philosophical approach of many poststructuralists. A common philosophical
premise is that thought, meaning, and action are constituted in and by language. Mead locates the subject firmly within the social processes that are shaped and defined by symbolic interactions. When identity is embedded in relations of discourse and power, language becomes a vehicle for a system of social control (Butler, 1987).

The notion that thought, meaning, and action are constituted in and by language supports poststructuralist thought. Highlighting the importance of temporality in establishing meaning can extend upon this notion. The self has a dynamic unity that changes through time (Ricoeur, 1992). This addition of the temporal nature of relationships adds further complexity to the notion of self.

The debates surrounding Postmodern thought have generated some confusion regarding the status of the concept of self. The ideological stance of Poststructuralism has often been seen as decentering the self and relocating it within a larger set of structures including discourse, power, and desire. In contrast, pragmatist conceptions seem even more promising when considered in this context. They attempt to decenter the self by combining external and internal considerations in a way that leaves the self intact. They break down the isolation of the Cartesian dualism by constituting the self in social relations. Mead attempts to mute the attacks on the modern conception of self by linking the self to the structures of its surrounding community. Unlike the poststructuralist reduction of the self to language and discourse,
the pragmatist conception differentiates the self into multiple relations of communication, both internal and external.

Discursive Construction of the Self

In our lives, we play several roles. In each role, we enact our identity to established social norms. The enactment of these roles is an important part of our identity (Goffman, 1959). The notion of social being is synonymous with the parts people play and the way in which they perform those parts.

Within such roles, we are uniquely positioned to examine the notion of meaning from differing perspectives. To completely understand a role, one must examine it from within (Garfinkel, 1967). Many feel that it is impossible to separate the examiner from what is being examined. We are all participants in social settings and contexts whether we agree to be or not and our presence influences each situation. The dramaturgical method that Goffman described can be combined with Garfinkel’s ethnomethodology and used to form a theory of social and personal being (Harre’, 1983). This theory can be used to interpret the conversation that takes place between people in social life. This conversation is of central importance in the notion of self. A person is “the socially defined, publicly visible embodied being, endowed with all kinds of powers and capacities for public, meaningful action” (p. 26).
Discourse is the principle element in the construction of self. The result of poststructuralist thinking is the death of the rational notion of self as a single coherent identity and an emergence of a dynamic notion of self that is embedded in social context and the narrative of the human discourse.

**Oneself as Another – from Text to Action**

In establishing a framework for understanding how identity unfolds in virtual worlds, we need to be able to interpret narratives. In today’s theoretical worlds, narratives emerge in a time when the cogito is shattered. The questions need to move from “Who am I?” to “What is self?” This nature of self is strongly linked to both human narrative and human action. Action itself is a narrative and also needs to be considered as such when we explore the construction of our identity. Text is action and in turn, action is text (Ricoeur, 1991; 1992).

To explore such notions of self we must assume that the self is an interpretive self. There is a natural conflict between the notion of self as stated in the Cartesian terms and a self that is a being-in-the-world as Heidegger (1927) described. In this conflict between a constructed and deconstructed self we end up with a decentering. At one time the notion of self saw “I” as central to all things. We now see self emerging in language, gestures, and relationships. Self is not the first, but the last category in a theory of understanding.

To adequately understand texts, the function of language, the structure and action in text, and the configuration of human temporality in narrative, one must consider the strength of the hermeneutic circle. In using the texts from virtual worlds, one must

Researcher: Heidegger, who I have found difficult to read, may have had it more right than anyone. On IRC, we are simply beings-in-the-virtual-world.
reconsider the role that language is to play. Since text is all that exists in virtual communities such as IRC, we must be comfortable with moving text from the framework of language to one of action.

At the heart of Ricoeur’s (1992) notions of identity is the temporality of the subject. The interpreted self has an historical context but is constantly changing in response to language, utterances, and social cues. Personal identity “can be articulated only in the temporal dimension of human existence” (p. 114).

The self is separated into interrelated components. These components, the Ipse (self) and Idem (sameness) are two core ideas in the notions of self. Self and sameness are quite different. If an individual wears the same clothes, or responds in a similar manner from time to time, he/she is not necessarily the same self. Since temporality is a key issue, as is the historical and social narratives in which the subjects are embedded, then the self is in fluctuation even if one’s appearances are the same.

In addition to the interplay between oneself and another, the notions of character and plot also come into play in the construction of self. Character is the specific traits or characteristics that are fairly consistent over time and help to define a self. Plot is the narrative of actions emerging from a self and contributing to our notions of personal identity. In the study of self, we must interweave character, plot, and notions of temporality to form a coherent whole. The temporal dimension to self means that this self will be unstable over time (Ricoeur, 1992).

Narrative is a universal feature of social life. It is the fundamental mode through which the grounding of human experience in time is understood. The temporality of the
human condition must be mediated through the indirect discourse of narration. There are consistencies between “being-in-time” and the possibilities of human experience and lived experience as they exist in phenomenological time. These two temporal dimensions may be considered incommensurable. The narrative attempts to bridge this incompatibility through the possibility of a third time that interweaves fiction and historical time (Ricoeur, 1992).

If narrative is the primary medium in which temporality is thought, then it forms a dimension of both individual and social identity. Narrative structures are grounded in the structures of human action and experience. Interpretation of the narrative is essential and central to action in that it can only be distinguished from physical movement through a network of expressions and concepts that can only be provided in natural language. The narrative interpretation of experience points to the symbolic nature of human actions. Human action is symbolic in nature and therefore can be narrated. Action is readable, only because it is symbolic. To understand human action, one needs not only to be familiar with symbolic mediation, but also with the temporal structures inherent in the interpretation.

Identity is contingent upon a set of social relations. It is not fixed, but is also not arbitrary in that it is embedded within an historical narrative. The historical narrative has

Researcher: Ricoeur’s theories are complex yet make sense in a physical world of social interactions. The issue in IRC will be that the fleeting nature of the narrative and the limited structure of the language make applying his theories difficult. I agree that meaning is embedded in language but the language of IRC is so vastly different to that used to communicate in every day life.
a large impact on the interpretation of human actions. Meaning is not just an effect of the
relational structure of language, it is also an ‘event’, that is, the product of a living
medium of communication. (Ricoeur, 1991, 1992)

**Historical, Temporal, Cultural and Moral Considerations of Self**

In recent times, the rapid social changes of modernity are creating a crisis of self
which is characterized by a loss of traditional frameworks (Beck & Beck-Gernsheim,
are not to be dismantled but can be examined for areas of congruency which, when
combined with theoretical frameworks of social construction, can open new doors to the
examination of self (Russell, 1999).

Individuals use a personal narrative to establish a sense of unity. This life story is
reflexive in that the individual is situated in both a moral and personal context. They use
future planning to provide some direction and meaning to their lives. To unfold one’s life
and to examine it for comprehension is one way to better inform future directions
(MacIntyre, 1981). This personal “quest” has been located in an affirmation of ordinary
life. The ordinary life, void of beliefs in the sacred, has become the context in which
living is fulfilled. This fulfillment includes attaining

the goods one desires (Taylor, 1989).

A personality is capable of undergoing
fundamental change. This is possible because one
can view the self phenomenologically. If a self is
unbounded in relation to society, reality is embedded
in one’s feelings. These feelings can and may change with time and context. Sennett

**Educator:** I wonder if these boys feel that they cannot display their “true” feelings in
a world outside of IRC. In the interviews, participants clearly stated that they felt their
physical world self was a very cautious version of their online self.
(1988) calls this “fetished” self a creature of immediate appearances and sensations. “This selfhood puts an immense premium on “direct” experience with other people; it detests reserve or masks behind which other people are felt to lurk, because in being distant they seem to be inauthentic, not taking the immediate moment of human contact as an absolute” (p. 99).

Alternative feminine versions of selfhood see the fully functioning self as interdependent. This self exists within a moral ethic and prizes care as highly as it does justice. These alternatives are worthy of consideration as they include social morality as an important component in the notion of self. In the pursuit of an understanding of self, there has historically been too much emphasis placed on the separation or autonomy of the individual (Gilligan, 1988). We cannot discuss self with an individual separated from history and time. Such a view fails to recognize the interdependence of adult life, and in fact offers a distorted vision of the human condition, that which is referred to as ‘the culture of narcissism’ (Russell, 1999).

There does exist an alternative method to map the moral domain that aligns with feminist research. Particularly in adolescence, women tend to base their morality on a different viewpoint from men. The historical view of morality and self imply a view where the individual is separated from relationships or those relationships are hierarchical. In contrast, a feminine perspective would propose a view where the self and other are interdependent and there is a relationship of networks. The individual’s attention and response sustain these networks over time (Gilligan, p. 8). Such a method
has interesting implications when one considers the interconnectedness of virtual communities and the lack of gender that exists within the communities.

The concept of a temporalized narrative of self helps overcome some opposition around which much thought on identity tends to revolve. Specifically it helps address the dualism of static versus dynamic concepts of identity. This temporal complexity offers a way of conceptualizing the mediated nature of identity and examining the changes within relationships.

If identity is constructed in social settings, it must also contain components that consider the role of power. The interplays of technologies of domination must be taken into account if one is to have a complete understanding of identity in socially constructed contexts. The aspect of temporality and identity is a hermeneutic issue in that it requires an examination of narrative and an interpretation of time. These examinations suggest a way beyond the fixed unity of modern thought and also a way to avoid confusion associated by the notions of a decentered self. "Narrative is international, transhistorical, transcultural: it is simply there, like life itself" (Barthes, 1982, p. 251).

Decentered and Distributed Self

As communications technologies allow us to construct varieties of communities online, different identities emerge. Consistent with the social construction of self, we read the social situation and context and respond appropriately. We may decide to present ourselves differently than we would in life offline, even exploring facets of ourselves that
we wished we had or try to mute in the real world. Aided by computers and the Internet, we are capable of forming thousands of relationships in our lives. Our notions of self have become decentered and distributed. While exploring online, individuals may try or “cycle” through many different identities (Turkle, 1995).

In the move away from a centered self we are “witnessing a progressive emptying of the self - a loss in the credibility of subjectivity, agency, the "I" at the center of being” (Gergen, 1996). Modern telecommunications are designed to put people in contact with others. One of the impacts is that the number of relationships that one can form in a lifetime has been increased exponentially. With this, self is becoming more widely distributed and the depth of relationships may be suffering (Turkle, 1995; Gergen, 1996).

In addition to concerns over the distribution of self, we are being asked to understand a much wider range of ontological considerations than ever before. One of the major reasons for this is that we no longer communicate mostly within our geographic location. Thanks to the Internet, we are now finding ourselves immersed in online cultures that include viewpoints from all over the world.

No longer do we dwell within the boundaries of a single geographically contained community, a region, an ethnicity or even a culture. We have not a single satisfying intelligibility within which to dwell, but through the process of social saturation, we are immersed in a plethora of understandings - the psychological ontologies of varying ethnicities, class strata, geographical sectors, racial and religious groupings, professional enclaves, and nationalities. We are
exposed to the argots of the streets, the laboratories, the drawing rooms, the brothels, and so on, each with their particular and peculiar turns of self-expression. Further, because the technologies enable otherwise marginal groups to locate the like minded - from across the country - and to articulate and publicize (if not proselytize) more broadly, one encounters well articulated ontologies reinforced by large and determined numbers (Gergen, 1996).

As we continue to inhabit virtual worlds and cycle through different identities, perhaps we need to become more skilful and comfortable in taking the role of an “Other” since the range of diversity with which we communicate is expanding so rapidly.

A Plurality of Life-worlds: A Coherent Lens for the Self

The person as socially defined and as phenomenologically experienced are necessary components of identity. Similar to the notions of self and other, and “I” and “you,” the components of an individual can be categorized as “self” and “person” (Harre’, 1983). Person is “the socially defined, publicly visible embodied being, endowed with all kinds of powers and capacities for public, meaningful action” (p. 26). In contrast, self indexes the private experience of being an origin of one’s perception, the constant, ongoing phenomenological center of one’s existence. For the individual, person and self might be thought to correspond roughly to “self as object” and “self as subject” (or, respectively, the Jamesian notions of me and I).
In discussing how we live 'in the world' all of our experiences are “situated in time and space” (Giddens, 1991, p.187) and, when combined with the centrality of the mediated experience, our world radically changes. The phenomenological world of the individual is situated within the collective social life of society and the individual. These comments lead to a consideration of the impact of virtual worlds on the life worlds of boys. Their “being in the world” is situated in two vastly different mediums. The world ‘as lived’ in their social experiences in life and school, and the ‘being in a virtual world’ where they assume a different identity by embedding themselves in a world of text and anonymity.

The self that emerges online can be examined using the theoretical frameworks established by social constructivists. This emergent self, when contrasted to the self as lived in the social world of every day life at school, shows some stark differences. These differences highlight the importance of accepting the premise of the emergence of self situated in time, space, and social context. While the theoretical frameworks and understandings are quite distinct, their concepts can be drawn into a coherent lens from which to view the construction of self in online communities.

It is impossible to have a subject, an “I” without a corresponding object, “Me.” In our negotiations of daily life-worlds, we constantly have to take the perspective of an Other in order to establish the notion of a subjective self. In doing so, we take the role of both the observer and the observed. The relationship between “I” and “Me” exists in an ongoing inner conversation in which one builds a self. In this way, the self is not so much

Researcher: IRC is so egocentric. I wonder if there is no “I” or “me?” I wonder if there is only an “I” on IRC. My experience is that people on IRC don’t care a lot about the Other.
a substance as it is a process in which an ongoing conversation of gestures becomes internalized into an organic form. When we think of ourselves, we take both the role of the observer and the observed. This process is embedded within a social context in which the organization of social structures are part of our consciousness (Mead, 1934; Giddens, 1991; Lacan, 1997).

When we take the role of an objective other from which to examine ourselves, we enter into a “plurality of life-worlds” (Giddens, 1997). In these life-worlds, the impact of mass media and communications has resulted in a change in the phenomenal world. This world is now infiltrated on several fronts. We incorporate mediated experiences into our lives every day and they are increasingly forming part of our experiences. These experiences result in a plurality of life-worlds. These are adding to our social context and our social construction of a sense of identity.

Despite a plethora of information being available, we have to actively select the things to which we pay attention. Our life-world is a collage of opportunities and stimuli that exist similarly to pictures, advertisements, and stories on pages of a newspaper. We select the pieces to which we pay attention and then form our life-worlds. Our phenomenal world is becoming global and temporality is shifting.

Within these life-worlds the ongoing conversation of gestures underlines language’s role in the development of self. Taking the role of the Other is difficult in that the amount of information from which we draw to take that role is increasing. That information adds to the complexity and one must be careful in navigating life-worlds because there are many perspectives from which to view oneself or the “Other”.
In navigating these life-worlds, we establish positions through discursive practices. Smith (1988:xxxv). Any person can be an individual agent or a subject. By subject, we mean a conglomerate of positions into which we are momentarily called by the discourses we inhabit. In taking a position, we are acting from the stance of a person who is using their historical and social understandings of discourse to inhabit that particular life world. This stance is very consistent with the notions of taking the role of Other within a plurality of life-worlds. We are only caught in these positions while a particular discourse exists.

Positioning is simply locating oneself in discourse. We are placed in conversations as coherent and active participants who help to jointly produce story lines. In addition, what one says can also position another so there is a constant fluidity to positioning as there is to any discourse of conversations and gestures. It is important to remember that you cannot always control your position. Your life is positioned by your ongoing production of self in a variety of situations. To determine what position one is taking, one can extract autobiographical aspects of a conversation. These autobiographical aspects make it possible to understand how one views oneself in a discourse by seeing what positions are taken up.

These discourses and their use in examining the nature of self require us to draw from the cultural repertoire available to us. Our culture and our language construct the discourses within which we inhabit. The self is not a fixed identity but is a complex and unstable network of different subject positions. The unconscious is developed like a language and is shaped by our cultural heritage. In this view, cultural heritage itself may hold and establish a position that in turn informs how one establishes a position. The
plurality of life-worlds is informed and constructed by language which in turn is informed by cultural heritage (Lacan, 1997).

In our lives, small windows, or frames of interaction take place while we are in the role of the Other. Using other theorists one could argue that these frames can include a subjective view of oneself. Using mediated communication, these frames are increasingly complex. Under the dramaturgical model, one can take a role in the presentation of oneself. In doing so, one would have to understand what an appropriate role would be. The implication is an understanding of the social context and what would be appropriate social modeling (Goffman, 1959). This leads nicely to the work of the other theorists in that one must first understand what is appropriate and so must be able to take the role of the Other. This role could be an additional frame and we must know how to interpret what goes on and the context within which it emerges.

Recent additions to theorists’ conceptions of identity and positioning are important. Through these additions, we must recognize the centrality of being-in-language. This is a bridge between Heidegger’s notion of being-in-the-world and Lacan’s notion of language in the construction of identity and positioning. In positioning oneself in the role of the Other Ricoeur (1992) states that “otherness is not added on to selfhood from outside, as though to prevent its solipsistic drift, but that it belongs instead to the tenor of meaning and to the ontological constitution of selfhood” (p. 317).

We can tie together the functions of character, identity, and institution as a way to bridge the personal and the social. There is a natural tension between experience, both individual and communal and private and social. This tension requires mediation. This
mediation comes from three variables, “the same, the other who possesses a face, and the other who is a third party, the subject of justice” (Ricoeur, 1998, p. 92).

The relationship between the individual and society is also important. Cultural mediation is at the center of the adult cognition and cognitive development. Social origins take on a special importance and social processes give rise to individual processes and both are mediated by artifacts. (Vygotsky, 1962) The mind doesn’t simply stop with the skin and the relationship between the individual and the environment is much more complex and dynamic than we often assume. If the notion of self is embedded in discourse, then we cannot lose the notion that the talk we use in any discourse is a product of other kinds of discourses. Our language is embedded within ethical, historical, and political dimensions. Our task is to notice what it is that we do in the everyday practical living of our lives and to understand the influences that form who we are as beings-in-the-world. There may be no subject distinct from the external world of things because Dasein is essentially Being-In-The-World. It is a concrete mode of existence that means you are connected to oneself, the external world, and to others who inhabit the physical world with you. A subject can’t sit back and “know” something. Knowing is part of being-in-the-world (Heidegger, 1927).

In the past, the notion of a stable and unified self was widely accepted. With the theoretical shifts in the concepts of self, we see the emergence of the importance of relationships; relationships with others, with self as other, and with the environment as a being-in-the-world. Complexity increases as we consider how these relationships are embedded within time, language, and discourse. These relationships are consistent in the
physical world but in online communities where time, language, and discourse are fragmented, continuity of relationships is more difficult to establish.

The proliferation of mediated communication has allowed for an explosion in the number of relationships that one can establish in a lifetime. As a result, the self is becoming further de-centered. Rather than simply a decentering of self, we are seeing a distribution of self (Turkle, 1995). As relationships are increasing in number, they are also decreasing in depth. With this decrease, the temporality of interactions takes on increased significance. This changing nature of relationships and the resulting implications for the notion of self is very important.

Much of the importance is in the concept that as relationships and information proliferates, cultural authorities are losing their validity. This decentering of cultural authority has broad implications for teachers and education. It questions the notion of how we impart knowledge to students in that they may have in their lives a number of relationships from which to draw upon for knowledge. This may undermine the teacher’s role of one who holds knowledge.

“One of the most fascinating alternatives on the cultural horizon represents a shift toward the relational—that is, turning away from the concepts of self and group in favor of such concepts as interdependence, conjoint construction of meaning, mutually

Researcher: This last piece is very rich in possibilities. However, I think that readers may have difficulty with the definition of “virtual worlds.” IRC is extremely limited and many of the theories are difficult to apply. While they may have applications in other virtual worlds, it is increasingly important to me to consider the following questions:

What is a community?
What is a culture?
What is a relationship?
I am beginning to wonder if some of these “raw” worlds like IRC actually do constitute a culture where participants form relationships in a traditional manner.
interacting entities, and systemic process” (Gergen, 2000).

On the Internet, relationships and notions of identity exist independent of a physical component. Identities are being developed that may not relate in any way to the concrete existence of a participant. In these new identities, lasting relationships may exist independent of a physical body or world. The core of these relationships is discourse and self will be determined by the positions that people take in virtual worlds. Computer-mediated-communication and its resulting proliferation of relationships form a new cultural lens from which to view the highly complex environments in which we are immersed. The resulting changes to our understandings of self and of cultural authority hold important implications for education (Gergen, 2000).

Researcher: To read back over this material is so disappointing. I had such high hopes that these widely accepted theoretical frameworks could translate to the virtual world of IRC. Now that I look back it seems so clear that these frameworks were not capable of allowing me to establish a lens for the self in virtual communities. It is devastating to see my hard work end up being so incapable of allowing me to establish a clear lens for examining the self in virtual worlds. However, I should not be surprised. Why would I assume that theoretical frameworks that have never been exposed to virtual worlds and communities would provide insights into those worlds? What now is it that I can say to the reader to help him/her understand why the frameworks were inadequate and what implications this has for research in virtual worlds?
Methodological Implications

As theories of the construction of self become more complex, there remain established qualitative methods for examining the notion of self in social contexts (Edwards and Potter, 1992; Guba and Lincoln, 1989; and Strauss, 1987). While these methodologies offer rich possibilities for examining the notion of self in virtual worlds, methodological challenges do exist. For example, how does one go about obtaining consent from someone that cannot be identified and may never be seen again? Does one need to gain consent for research from a robot? How does one establish an identity for a character that may have the same nickname in the future but may actually be a different person on the other end? This can occur because the same nicknames can be used by more than one person but not simultaneously.

While it is important to pay attention to discursive techniques and established procedures, new ground will have to be broken in forging rigorous methodologies for explorations in virtual worlds. Relatively few researchers have traveled these new pathways but as more and more of our lives are being spent in virtual communities, such processes and methodologies become increasingly important.

In looking at studies of self and associated methodologies, I have become particularly interested in the hermeneutic phenomenological approach. As I continue to spend time in virtual worlds, I use my experiences and perspective to inform me about...
the identities of the participants in my study. This process is consistent with the hermeneutic circle in which one immerses oneself in literature and research before returning to the context that one is observing.

Using the work of Strauss (1987), Potter and Wetherell (1995), and Guba and Lincoln (1989), a qualitative analysis of the data gathered will be performed. Theoretical works on the nature of self will be used to explore how notions of self and identity form in virtual worlds. A qualitative analysis of data will include interviews with boys comparing their lives on and offline and an examination of texts from virtual worlds. I am a long time participant in virtual communities and believe that ethnomethodology is also a consideration for this study.

The Hermeneutic Circle and Virtual Challenges

In an examination of self, qualitative methodologies offer rich opportunities for interpretation. Following the paths of the social constructivists, the notions of interweaving narratives is one way to examine the nature of self and personal identity. Hermeneutics asks for us to interpret individual instances and then step back to consider these narratives as being embedded in the larger context of social situations. At the core of the concept of the hermeneutic circle is understanding that one’s own preconceptions are different from those of the Other and that it is impossible to seek truth from your perspective alone because you are bounded by your own horizons. Meaning is negotiated between the researcher’s own preconceptions and those within the horizon of the Other (Tate, 1998). Once we then consider these layers of narratives, we may once again focus down to the individual instances of time and place to seek meaning through our explorations. In this way, we are constantly within the hermeneutic circle where we use
our understanding of the broader context to help us interpret individual snapshots in time and place.

Much of the current theory on self discusses how self unfolds in time, place and in the context of social environments and relationships. Self is embedded in our language, utterances, social cues, physical motions and gestures, and culture. How then does self unfold in a world where there is no history? There are no grand narratives in a world of anonymity without social boundaries. Each time a person logs into IRC, they can assume a different identity with a different name. There is no way to know with whom you are speaking. Each set of interactions is as if it were with absolute strangers in a world where the only cues you get to how the context unfolds is from the text you see on the screen. If parts of our identity are embedded in language, then in IRC, the text is your identity.

How we come to understand what is acceptable and what is not is our ontological security (Giddens, 1991). Through our lives we come to understand our notion of self and how it should be displayed in differing contexts. When we login to IRC, we exist in that world and assume or present an identity. Often this identity is quite different to the one presented in our face to face interactions with people.

Interviewer: Of the 7 or 8 [identities] that you use online, are any of them really you?

Student: Yes.
Interviewer: Like you as I know you?

Student: No. No, I'm a totally different person.

Once we log off, that identity is gone. Our fate in this virtual world is often in the hands of channel operators where a simple word out of place gets your character banned for life. Is this a problem? No, you simple change names and emerge back into the world brandishing a new identity. Your identity has “died” and you need to assume a new one to be reborn and live again.

Hermeneutics maintains that there is no way to stand outside of the life-world and observe it. You must be both a participant and observer. With this in mind, for the past three years, I have been an active participant on IRC in a variety of channels. I have lived in the world and experienced many of the things my subjects have discussed. This lived experience is a crucial part of my study.

In following the hermeneutic circle and to understand the notion of self as it emerges online, I have chosen to perform a qualitative analysis of texts that exist online. In order to examine the texts and to obtain meaning based on theoretical frameworks, I have chosen to follow the work of several theoreticians who espouse theories of self in a distributed and constructed world. When examining these theorists, I will draw on their theoretical frameworks for interpretation. I will supplement my understandings of the theoretical work with interviews of boys who have been selected for this study.
Interpreting the Human Experience

Studies focusing on the life-world attempt to describe and interpret the human experience as lived. Among others, the movement includes: Dilthey, Husserl, Heidegger, Merleau-Ponty, Gadamer, Ricoeur, and Habermas. In such studies and theoretical perspectives, two major methodological themes emerge: they are existential phenomenology (descriptive) and hermeneutics (interpretive).

In an empirical approach, knowledge of the world is gained by distancing oneself from the environment and examining it. The observer views him/herself as no longer being engaged in the world. Such studies are often identified by their systematic acquisition of knowledge gained from facts. The phenomenological approach focuses on the structures of experience and attempts to describe them while considering the surrounding contexts. These experiences exhibit organizing principles that give form and meaning to the life-world. The hermeneutic approach concentrates on interpreting the historical meaning of experience and its developmental and cumulative effects at both the individual and social levels.

The term descriptive refers to a group of research endeavors in the human sciences that focus on describing the basic structures of lived experience. Included are phenomenological sociology, ethnomethodology, phenomenological psychology, and existential phenomenology. They follow Husserl’s method for gaining rigorous descriptions of the structures of consciousness, followed by an existential critique of this position (Polkinghorne, 1983).

Researchers can investigate consciousness in a way that could be considered essentially separate from the “facts” of the empirical realm (Husserl, 1913). However, we
now believe that consciousness is not separate from the world and instead is a formation of historically lived human existence. We needed an existential correction to Husserl that would understand the essential structures as the basic categories of being-in-the-world rather than pure consciousness (Heidegger, 1927). Research included an emphasis on the relationship between the structures of experience and the embodied condition of human existence. The existential turn moved Husserl’s realm of pure consciousness into the realm of the contingencies of history and embodiment. In existentialism, the structures of consciousness do not resemble the structures of logical and mathematical operations; they are made up of transactions that have been constructed into meaningful human experience so that sense can be made of existence (Merleau-Ponty, 1962). The existential-phenomenological (descriptive) system of inquiry investigates the various structures of orientation toward the world that make up human experience. The existential phenomenological approach attends to the life structures through which experience is organized and made meaningful. Descriptive or existential-phenomenological human science aims to uncover the basic structures of human existence. It seeks to describe the schemata or themes that constitute experience.

Hermeneutics supplements the descriptive approach by seeking to understand human actions and expressions. Because the meanings of actions are not always immediately apparent, interpretive techniques are required to make the meanings clear. Interpreting the meaning of a particular conversation often requires knowledge of the structure of the language in which the conversation is taking place.
Descriptive and hermeneutic methods supplement each other, the first focusing beneath the surface of individual events in order to describe patterns, the second focusing on the linguistic and nonlinguistic actions in order to penetrate to the meaning of these events.

Dilthey (1989) held that all human expression is open to hermeneutic interpretation, and more recently Paul Ricoeur has proposed that human action in general can be interpreted as if it were a text. Hermeneutics has passed through three phases this century. Its earliest phase followed Dilthey's proposal that the interpreter should attempt to "take the author's place" through a "sympathic" move in order to grasp the meaning of a text. The move was necessary for a true and objective understanding of an expression. The second phase, which resembled the skeptical and relativistic position of Wittgenstein's language games, centered in the work of Heidegger and Gadamer. Akin to the recent historical realism position in the philosophy of science, the third phase of hermeneutic theory proposes to overcome the second position through a method of probability assessment of various interpretive attempts. This last position has been developed by Emilio Betti, E.D. Hircsh and Paul Ricoeur (Polkinghorne, 1983).

Heidegger's Being in Time (1927) marked the beginning of a significant challenge to the assumptions underlying Western science. For Heidegger, hermeneutics was not a method which, once designed, could be learned and employed by
researchers concerned with the human realm, and he did not address the issue of why one interpretation is better than another. He maintained that to be human is to be interpretive, for the very nature of the human realm is interpretive. Interpretation, then is not a tool for knowledge; it is the way human beings are. All cognitive attempts to develop knowledge are but expressions of interpretation, and experience itself is formed through interpretation of the world. Being human is a laying-open of what is hidden: we are beings who approach ourselves with the hermeneutic question “What does it mean to be?”

Truth and Engagement with our Life-Worlds

Truth occurs in our engagement with the world and with each other. This is the essence of a method that can be used to make sense of our lives as lived, our life-worlds. We continue to shed the suppositions that to understand our world, it is necessary to break it into discreet chunks, interpret the meaning of those small events and then put them back together to form a meaningful whole. It is the essence of hermeneutic phenomenology to accept that our engagement in the world, embedded in time and place is the beginning of a truth.

Despite moves away from logical positivism, certain beliefs continue to be our undoing. Beliefs such as: true knowledge is free from presupposition; that human passions blind us to “things as they really are;” and that only purity of thought can lead to truth. Any discourse that succumbs to such beliefs and is presented as a factual discourse “is constructed to be apparently factual and resilient to rhetorical onslaught” (Edwards and Potter 1992, p. 152). True understanding is the result of human engagement, for there
is no "pure truth" that lies outside human engagement with the world. Truth lies within, not outside of our interactions with the world.

Our interpretation of the narratives that unfold during our engagement with the world will help us seek truth. The parts of the narrative are not a mere mechanical collection; they are a complex that hangs together in a unity that holds the meaning of the narrative. The process of understanding is a movement from the first prejudgmental notion of the meaning of the whole, in which the parts are understood, to a change in the sense of the meaning of the whole because of the confrontation with the detailed parts of the text. This movement from whole to the parts to the whole is the essence of the "hermeneutic circle" (Dilthey, 1989). The movement is not really a circle, however; it is more of a spiral in which each movement from part to whole increases the depth of understanding. The experience of understanding — as proposed by the concept of the "hermeneutic circle" — is common.

"Paul Ricoeur is the most important contemporary writer proposing that hermeneutics is the appropriate methodological position for the human sciences" (Polkinghorne, p. 233). Ricoeur proposes that the researcher should take the position of a reader of text. The problem is to understand the meaning of text. Human actions as well as literary works can be read as texts. Texts and actions need to be interpreted in order to disclose their meaning.

Interpretation leads to the understanding of the meaning of human action, the object of human science. However, meaning takes place in a social context. A structural investigation deepens the interpretive approach to single events by providing an
understanding of the broader system. There needs to be a movement between looking at the uniqueness of an event and at the social context in which it forms (Ricoeur, 1991).

Guiding Principles for Validity

Kockelmans (In Polkinghorne) lists five guiding principles that can be used to understand social meaning and to attempt to guarantee “intersubjective validity of the interpretation.” (p. 236) They are:

1. Interpretive research needs to accept the autonomy of the object. The source of the articulated meaning is the phenomena itself. The phenomena should not be forced into any preconceived interpretive schemes.

2. The researchers should search for an interpretation which make the phenomena maximally reasonable or human. ‘Many social phenomena are so complex and so richly structured, so deeply rooted in the past of a society, that their genuine meaning often cannot be made explicit.’ The researcher must try to understand the phenomena in a more profound way than those who are involved with them or confronted with them.

3. The researcher must try to achieve the greatest possible familiarity with the phenomena.

Researcher: If these Principles are guides for validity then I feel very confident about my study and what I attempted to do with my examination and methodology.
4. The hermeneutic circle. This is the process of knowledge development that moves back and forth from understanding the parts to understanding the whole.

5. The researcher must try to show the meaning the phenomena have for the present situation. After the researcher has tried to understand the phenomena in their historical origin and further development, he or she must look at them to determine their meaning for the present situation.

The descriptive and hermeneutic systems are aimed at describing and clarifying the nature of the experience which people live through and in which they plan and carry out actions. These systems are especially sensitive to the circular nature of understanding the human realm, which is studied from within itself because hermeneutics maintains that there is no way for the knower to stand outside the life-world and observe it.

Several authors have works that outline a qualitative methodology that supports the hermeneutic phenomenological approach (Guba and Lincoln, 1983; Strauss, 1987; Edwards and Potter, 1992; and Polkinghorne, 1989). “The methodology of the constructivist is very different from that of the conventional inquirer. The latter is linear and closed. By contrast, the former is iterative, hermeneutic, at time intuitive, and most certainly open” (Guba and Lincoln, p. 183). Such notions lend themselves well to a study of virtual worlds where the researcher is deeply embedded in those life-worlds.
Theoretical support for methodological considerations is important. In addition to the theories, I have learned that the description of my study as it unfolds is also a crucial step in having a valid method. Methodology is a process and not a recipe. The theoretical perspectives are the ingredients that guide you in your examinations. However, the descriptions of the challenges faced and the considerations and alterations made in the journey of a study are vital. Theory informs practice, and practice reflects theory. In a hermeneutic study the documentation of processes needs to support the theoretical basis that one has used.

The methodologies that have been discussed have, of course, emerged in times where we are attempting to describe or interpret our existence in a physical world. The emergence of virtual worlds presents new and compelling problems. In conducting my study, there have been many constraints that have required an interpretation of existing methodologies to allow me to proceed. The first constraint was to consider the notion of anonymity and consent.

**Anonymity and Consent**

In online worlds, and specifically on Internet Relay Chat (IRC) everyone is anonymous. It is important to examine texts from this world to interpret the notion of self as it emerges online. In doing so, one can simply “log” the text that emerges for later study. Logging saves a copy of the text which can be retrieved later. What are the ethics behind logging and how do you obtain consent from someone who is not physically present and anonymous? In addition, some participants in channels are “bots.” Bots are automated characters who are part of a channel. It is common to have a dialogue with
them but their abilities are limited. They are, however, important members of the community. What procedures should one follow to obtain consent from a robot to use their text? Researching in virtual worlds clearly presents some interesting challenges.

To answer the question about logging text, I went to a channel and first posed the question of whether or not characters were truly anonymous. I had several people, including channel operators and highly competent hackers tell me that it is impossible to trace anyone. To prove this, several users attempted to trace me. After repeated attempts, it was clear that it was impossible. The IRC server service, which is the actual owner of many domains and channels, informs me that the service is completely anonymous. It is clear that there is no way to identify users.

I then asked participants in a channel if they felt that logging text for analysis was in any way a violation of privacy and whether or not they felt that I needed to seek consent. They agreed that to obtain consent was impossible because from whom do you obtain consent? If you asked in a channel, you would have to ask every 5 minutes or so as a channel scrolled. Because the dialogue exists only in the window that you see and that window is constantly scrolling, you cannot inform participants ahead of time that you are in the position of researcher. If you did, that text would be lost in seconds. Any channel is a revolving door of participants and scrolling text. It was agreed that if anyone typed in a channel, then they had consented that their text was not private. If they did want to go private, there is a private mode. Subsequently it was agreed that the logging of the text was permitted.
Developing Themes for Living Online

When looking for participants in this study from our high school population, I sought boys who had spent extraordinary amounts of time online. These volunteers consented to be interviewed and through the interviews, it became clear that there were strong themes that were emerging. The themes appeared to be the main reasons that participants went online. After transcription of eleven interviews, a template was developed that identified several common themes.

The themes were:

| Acceptance | Learning |
| Confidence | Openness |
| Control | Perceptions |
| Danger | Power |
| Identity | Reality |
| Interface | Safety |
| Knowledge | School |
| Language | Teaching |

Interviews, once transcribed, were broken down into the above themes. Each comment that a participant made was collated into these areas. When transcriptions were complete, it was clear that there was significant overlap between themes. The themes and comments were then collated to fewer thematic areas. The themes became:

<table>
<thead>
<tr>
<th>New Theme</th>
<th>Original Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety</td>
<td>Acceptance, Safety, Openness, Confidence</td>
</tr>
<tr>
<td>Living Online</td>
<td>Time online</td>
</tr>
<tr>
<td>Schooling</td>
<td>Attitude toward school</td>
</tr>
<tr>
<td>Who am I?</td>
<td>Identity</td>
</tr>
<tr>
<td>Power</td>
<td>Knowledge, Learning, Control, Power, Danger, Teaching</td>
</tr>
<tr>
<td>Interactions</td>
<td>Social Interaction, Language Perceptions</td>
</tr>
<tr>
<td>Navigation</td>
<td>Navigation/Reality</td>
</tr>
</tbody>
</table>
In the Findings section of the study, a detailed description of each theme is made and examples of comments and the rationale for such categories explored. At the same time, it became clear that it was important to explore one or more of the participants in depth. This was for several reasons. One reason was that the interviews revealed that the boys have quite a different view of reality than most of us share. In particular, the nature of social interactions was viewed quite differently from most people. It was decided to take a transcript of one student and make it into a narrative that could be read as a life story. Such a narrative would be revealing in helping readers become more familiar with the particular demographic that I am studying. The narrative was supported by additional documentation outlining a supporting this student’s disability. It presents an interesting portrayal of this one boy’s perspective on life and society.
The Culture of Virtual Worlds

In the early portion of the study, it was difficult to have people understand the exact nature of IRC. A detailed description of IRC including an examination of a conversation was documented and presented. This is an important part of the study because to truly understand IRC one must see the world and experience the text as it exists. A paper was written that demonstrated the world of IRC complete with snapshots of windows and examination of textual logs.

In presenting the narrative of one boy’s life-world and the culture and nature of IRC, it seemed that a similar chapter could be written presenting the life-world of an IRC participant. This is much trickier as there is limited text of a particular individual. Extensive logging took place and then comments from one character were extracted in an attempt to understand who this character was online. The examination of such text presents questions as the comments have a particular temporal dimension and we cannot, in fact, be certain that it is the same individual each time. We assume that the same individual uses the same nickname each time. This is actually not true and has presented some difficulties for me before where a character swapped nicknames with a bot and I couldn’t decide whether I was talking to the bot or to the individual. In any case, it is one example of the methodological
difficulties when performing research in virtual worlds. The textual analysis of a single IRC nickname forms part of another chapter in the Findings section.

Continuously throughout my study, I met with my supervisor and reviewed my progress and status. Each time, we would examine the literature reviewed, extent of the interviews and themes, and the possible presentation of a dissertation. The literature reviewed, experiences gained by participating in virtual world, and thematic examination of the interviews provided directions for writings. It was decided that the findings could be presented as a series of papers including: observations in the school; identity of one participant; identity of an online character; the culture of IRC; and a detailed examination of the themes and how they emerged from the interviews.

Consistent with the hermeneutic circle, I have twice met with members of my doctoral committee to review the status of my research and consider paths to explore. Each time, the committee was presented with a series of papers and discussions were held about the nature of virtual worlds and impacts on the notion of self. These meetings have been important moments allowing me to step outside of the writing and consider alternative viewpoints to my studies. Committee members have suggested alternative readings and positions to take. After these meetings, it was important to immerse myself in readings and continue to write giving consideration to the

Researcher: It is interesting to note that even in my comments here I am taking two distinct perspectives. The first, that of the Researcher is seeing the difficulty of doing research in virtual worlds and bringing that research to the forefront. The second, the Educator is deeply interested in the findings and how they can help us understand these boys. The sad irony is that the research itself has proved to be so difficult that I don't know how much I have learned to help these boys. Still, as an educator, I know them better than ever. However, what I see is that perhaps our schools as they exist are ill-equipped to deal with the complexity that these students present. IRC may be simply helping them find the margins they so desperately seek.
committee's recommendations.

One important question that has emerged from my committee meetings is where is the educator in my research? I believe that the increasing numbers of relationships that these boys are forming online is having an effect on their understanding of the distribution of knowledge and cultural authority for knowledge. They have come to understand that they can seek and obtain knowledge online in a variety of contexts. This knowledge is specific to their needs and wants. As a result, their view of the teacher in a school has been diminished. They understand that the teacher is a very limited resource of information. They have also come to view school as an environment in which they find it difficult to navigate. Conversely, online they navigate with ease and fluidity. This navigation online supports more exploration online and increases their feeling of self-worth in that community. As a result, they are happy to continue to distance themselves from others at school and remain isolated and withdrawn. These are highly capable and powerful learners that are not learning in our institutions.

Interview Techniques

In the early stages of this study, a student performed the interviews. This was an attempt to keep the issue of power-over at a minimum during the interview process. While students had agreed through the process of consent to be interviewed by me, my role as vice-principal (and later principal) may have hampered their willingness to answer honestly and openly. In reviewing the early transcripts where students had performed the interviews for me, it was clear that the process of student interviewers appeared to undermine the nature of a hermeneutic study. There were certain themes that needed exploring during the interviews and without the particular perspective that I was bringing.
as a long-time inhabitant of virtual worlds, the interviews were not as rich as I would have liked.

I proceeded to perform the next few interviews. The fact that interviews were held outside of school time and in a location of the participant’s choice seemed to help. In addition, light conversation about my experiences in virtual worlds helped students understand my perspective coming into the interviews. Students appeared extremely open during the process and answered very honestly. Where possible, interviews were held outside of the school building and some students no longer attended our school at the time of interviewing.

The most important part of me being able to interview was the ability to go in-depth into particular themes that emerged during the interview process. A clearly defined set of questions allows one to see issues that emerge, but a personal history in virtual worlds coupled with an understanding of the methodology allows the interviewer to explore participants life-worlds in detail.

**Extracting Narratives from Internet Relay Chat**

One of the most difficult tasks throughout the methodology has been to extract individual narratives from IRC. A large advantage in IRC is the ability to log interactions. Any time you are in a virtual world, you may decide to store an electronic record of your interactions. While advantageous in that it allows for reviewing and examination of narratives, the size and length of the files is an issue. At present, this researcher has 146 narratives that have been examined for consideration in this study. Some of these
narratives are over 60 pages in length. The process has revealed that it has been most useful to focus on one or two channels and attempt to understand specific channel participants in depth. Further challenges include the amount of text that any one participant decides to provide. Channel participants often sit idle, not saying anything. In a session lasting several hours, you may be provided with three or four lines of text from which to form an understanding of identity. These challenges have resulted in the extensive analysis of logs in a variety of forms in an attempt to isolate individuals and understand their identity as it unfolds online. This has been a difficult and complex process.

Extracting Identities Through Interactions

Faced with a combination of extensive log files and interview transcripts, one key to establishing identities as they have unfolded online has been to spend time online interacting, wherever possible, with participants. In this way, I can explore topics in depth, as I was able to do during the interview process. One difficulty is that it is often a challenge to get participants online to answer questions that are not consistent with the established topic of a channel.

<neednick> And we're both at the whim of the Ops who are probably weighing when they'll kick us for being off topic
<k4y0> nah
<k4y0> there is no topic

Returning to channels on a regular basis and interacting with participants is consistent with the hermeneutic process. In addition, lurking in a channel and simply observing is a valuable way to pay attention to hermeneutic processes. There is the consideration that my presence online as a researcher may affect the topic and
conversation but while that may be a serious consideration in life offline, it is minimal at
best online. Participants are most likely to carry on their conversations with little regard
for other threads of conversation. The fact that they are anonymous adds complete safety
and participants are most likely to say whatever is on their mind regardless of the
situation.

**Being-In-The-Virtual-World: A Hermeneutic Approach**

To understand and interpret human interactions in virtual worlds and how today’s

youth navigate between life offline and

life online one must be familiar with life

online. In a hermeneutic approach, it is

imperative that the researcher not only live

in the world, but that they hone their

understanding of relevant theories of self

so that they can reflect on the nature of

self as it exists in our life-worlds. For

participants of this study, their life-world includes prolonged existence in virtual

communities. The researcher must also be able to navigate between worlds and draw on

relevant experiences, literature, and attend to the tenets of hermeneutics if they are to

remain true to a rigorous exploration of the nature of self as it emerges online in text-

based communities.
Chapter 4: Findings

Virtual communities are unlike any other environment. Despite our oft-repeated attempts to make these simulated world as close as possible to the physical world, they remain vastly different. To open this chapter, we will explore, in detail, the virtual environment known as Internet Relay Chat (IRC). A definition of terms is essential for readers to be able to interpret the conversations that occur online. After a definition of terms, we will explore some dialogue as it unfolds online. Once the reader is familiar with online environments like IRC, we will then discuss research constraints in virtual communities as they applied to this study.

The group of boys that participated in this study was representative of a small percentage of high school students. The Boys spent extraordinary amounts of time online and it is important to present the profile of one of the study participants to readers. His story is included in this chapter as an introduction to the type of student who may be attracted to a life online.

There were many reasons why these boys spent time online. Through the interview process strong themes emerged. These themes are explored in detail and the notions of power and control online are clarified.

Virtual Communities and IRC as a City online

To understand the discourse that emerges in IRC it is important to be familiar with some of the possibilities and technical details of the community. The purpose of this section is to provide those technical details as well as descriptions of navigating and communicating in IRC.
Definition of Terms

There are many different types of virtual worlds. The term is used quite loosely. To better understand the virtual community that is Internet Relay Chat, there are several terms that must be understood.

Internet Relay Chat (IRC)  A virtual world based entirely in text. Users run a small program and connect over the Internet to an IRC server that gives them instant access to thousands of chat channels.

Channel  A forum where users can exchange information and files. A channel is available to those users who want to be in the channel and is usually limited to a specific topic. Anyone can "speak" in a channel.

Nick  When a user is online, they must choose a name. This name is called a nickname or nick for short. Usually nicks are bizarre combinations of alpha and numeric characters and often represent a pun. It is extremely unusual for anyone to use a proper name for a nick.

Op  A channel operator. Ops establish channels, set the topics and maintain control over the environment. In many ways, they are police of IRC.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Lurking</td>
<td>Inhabiting a channel without participating. Staying online and watching a channel. Also referred to as being idle.</td>
</tr>
<tr>
<td>Bot</td>
<td>A robot or artificial user. Bots assume nicknames so they can be difficult to identify. There are many different software versions available to construct bots. Often when addressed, they will reply in a manner that makes it very difficult to tell if the user is real or a bot.</td>
</tr>
<tr>
<td>Online</td>
<td>When users are connected to the Internet, they are referred to as being online.</td>
</tr>
<tr>
<td>Offline</td>
<td>When users disconnect from the Internet they are referred to as being offline.</td>
</tr>
<tr>
<td>Hacker</td>
<td>A user who attempts to gain information which can be used to compromise computer hardware, software, or networks.</td>
</tr>
<tr>
<td>Kick</td>
<td>The temporary removal of a user from a channel. Used for minor violations of a channel’s rules.</td>
</tr>
<tr>
<td>Ban</td>
<td>The permanent removal of a user from a channel. Used when a user has committed a serious offence in a channel.</td>
</tr>
<tr>
<td>Flooding</td>
<td>Putting out more than four consecutive lines of text. “Flooders” are usually automatically kicked.</td>
</tr>
</tbody>
</table>

**Researcher:** I don’t know how else to describe the world. Readers will really have a hard time understanding what IRC looks like. To describe a world to a reader without their ever having been there is going to be extremely difficult. IRC is a world that is so foreign to many.
For example if a user is going to get a cup of coffee, he may tell the channel “nickname runs to get a cup of coffee.” Common gestures include routine help or insults such as “nickname1 slaps nickname2 across the face with a wet trout.” Gestures can be automatically programmed so that they are easy to use and the text doesn’t have to be typed each time.

Internet Relay Chat (IRC): Introduction to a City of Bits

It is Sunday morning. Neednick decides to go online for a visit. He enters IRC. There are about 65,000 people online and over half of them have chosen to set their user mode to “invisible”. There are over 9,000 rooms or “channels” to join. Neednick visits a channel called #IRCNewbies. As neednick enters the channel, three users, negora, sgango, and dAposTmAn send greetings. A discussion is going on about whether or not troldepus is a robot. For its part, troldepus answers intelligibly but redundantly. Neednick and negora argue about the problem. Neednick is sure troldepus is a “bot” and negora sends assurances that troldepus is indeed human. Neednick continues to push the point wanting proof of a human interface. Users state that in IRC there is no way to tell who is a bot and who is not. Troldepus is just lurking at this moment and that’s why he/she/it seems a little “off”. Neednick slaps negora across the face with a wet trout and exits the channel.

Neednick continues his education. He enters #hackphreak where several users are discussing how to make a blue box to make illegal phone calls. They don’t like spending a quarter for a call. This time, neednick is trying to discover if it is possible to find out anyone’s true identity on IRC. Surely a hacker channel is as good a place as any to have
the question answered. The question is posed. Several hackers jump quickly to identify neednick and are pretty certain that they can pin him down to being on the west coast of North America. An0nim0uZ quickly finds out the computer's Internet address but that tells little other than general geographic location. Rloxley says that neednick is in Redwood City, California and even furnishes an address. Blackops immediately kicks Rloxley from the channel for flooding. Rloxley pops back in laughing about getting booted. Razor^ is sure that neednick is from Chicago. Meanwhile, gerbil and Razor^ are deciding whether or not to order pizza and from where. Neednick is forced to explain why he wants to trace identities and explains university ethics. An0nim0uZ says “your [sic] whatever you want to be online, remember that.” Neednick thanks the channel and leaves content with the knowledge that there is no sure way to identify anyone online.

Everything one can imagine is happening in IRC. People are meeting and falling in love; Alcoholics Anonymous meetings are taking place; people are chatting about any topic imaginable. Channels are dedicated to politics, peace, or anarchy. On the dark side, pedophiles are lurking, hackers are scheming, and the illegal trading of software, pornography and music is flourishing. It is a world of complete anonymity and complete freedom. It is a world that requires little technological competence to enter and one can connect for free.

Interviewer: How much time do you spend online?
Tom: About 7 hours a day, at least.
Interviewer: So when do you go online?
Tom: I get home from school, get on. If I go out, I get off. Whenever I am at home I am on the computer.
Explorations of a Virtual Environment

To connect to IRC, I use a piece of software called a client. This client is the program that accesses the servers that run the IRC channels and communities. A very popular client for Windows is called MIRC.

When I run MIRC and connect to an IRC server, a text box pops up to inform me that I am now connected to an Internet Relay Chat (IRC) server. The server informs me that there are:

- 119015 users online;
- 46 servers;
- 183 Operators; and,
- 48132 channels.

I have just entered the world of IRC. In this virtual community there are over 48000 channels I can join either to chat with people or observe their interactions with each other.

I decide to enter the channel IRChelp. The following window appears:

Welcome to the Internet Relay Network
neednick!+neednick@66.183.229.190
Your host is irc-1.stealth.net, running version 2.10.3p3/S02.3
This server was created Mon Oct 22 2001 at 23:54:57 EDT
irc-1.stealth.net 2.10.3p3/S02.3 acoOirw abeiKlmnoOpqrsTV
- There are 119015 users and 4 services on 46 servers
183 operators online
58 unknown connections
48132 channels formed
I have 4545 users, 0 services and 1 servers
-
Message of the Day, irc-1.stealth.net
- Welcome to Stealth Communications' Client Server.
- ...Behave, and thy time shall be a lot jollier...
In figure 1, the text on the left is the current conversation. The scroll bar on the right indicates which people or bots currently inhabit the channel. The small area at the bottom of the screen is where I type the text that I want to contribute to the channel.

Channels are the forums for dialogue. The text one encounters in this world is a combination of symbols and words. Each channel has a name; for example a good place to start is IRCHelp. The channel informs me that the topic of the channel is “You need help. We know. Don’t know with what though so TELL us.” There are only thirteen people in the channel right now and the discussion looks like this:

Figure 1. Screen capture of the IRC environment.
<table>
<thead>
<tr>
<th>Channel Text</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session Start: Sat Nov 20 08:53:56</td>
<td>Time of session start.</td>
</tr>
<tr>
<td>1999</td>
<td></td>
</tr>
<tr>
<td>[08:53] *** Now talking in #irchelp</td>
<td>Channel I have entered</td>
</tr>
<tr>
<td>[08:53] *** Topic is `Undernet’s IRC Help Channel – Ask your NON colour/caps Question and wait for an answer : - )</td>
<td>Topic for the channel</td>
</tr>
<tr>
<td>[08:53] *** Set by pan--- on Sat Nov 20 04:48:18</td>
<td>Who set the topic: pan is an operator of the channel and, in this case, is a bot. We know this from previous entries into the channel.</td>
</tr>
<tr>
<td>[08:53] --{Dove}-- neednick you are visitor number 1010680 I have seen join #irchelp, since 06/97. If you have a question, just ask it and wait for the answer. For my help files, type: !dovey. If you are looking for someone, type: !seen “nickname”</td>
<td>A broadcast to anyone entering the channel. It informs you that there have been over a million visits in two years. I can access help files and find people using a specific IRC command (!).</td>
</tr>
<tr>
<td>[08:54] *** Parts: TallCedar</td>
<td>TallCedar leaves the channel</td>
</tr>
<tr>
<td>[08:54] *** Parts: DiMpLeS^</td>
<td>DiMpLeS^ leaves the channel</td>
</tr>
<tr>
<td>[08:54] &lt;neednick&gt; what does +tn mean at the top of the channel?</td>
<td>neednick asks a question about the title bar of the channel.</td>
</tr>
<tr>
<td>[08:54] &lt;<em>Edwin</em>&gt; +t = topic is protected ..... +n = no messages from outside the channel...</td>
<td>Edwin responds to .</td>
</tr>
<tr>
<td>[08:54] &lt;negora&gt; chennel [sic] doesn’t allow other people from outside to send messages and only Ops can change topics</td>
<td>Negora talks about operators (Ops) and the topic of a channel. Ops control a channel.</td>
</tr>
<tr>
<td>[08:54] &lt;neednick&gt; thx</td>
<td>neednick says thank you.</td>
</tr>
<tr>
<td>[08:55] *** Joins: RACHID23</td>
<td>RACHID23 joins the channel</td>
</tr>
<tr>
<td>[08:56] &lt;negora&gt; so you’ve been werkin’ for nbig bucks ed? ;)</td>
<td>Negora and Edwin continue an ongoing discussion</td>
</tr>
<tr>
<td>[08:57] &lt;<em>Edwin</em>&gt; hmmm......big bucks</td>
<td></td>
</tr>
</tbody>
</table>
Each “person” who lives or inhabits IRC has a nickname or nick. In the above
channel, Negora, Dove, Edwin, and neednick are having a discussion. One of the realities
of IRC is that any time you enter a channel, you are entering into the middle of a
conversation. It is as if you have opened the door to a party and walked in. You are
visible only by your nick appearing in the right-hand column unless you choose to speak.
If you type anything, it appears to the whole channel.

Nicknames are not permanent and are anonymous. Anyone may change his nick
at any time by a simple IRC command. The changes appear in a window in the following
format:

*** Cipro^ is now known as CipAfk

If you change your nick before you enter a channel, then no one knows your
connection to a previous nick. The only way to look more closely at a user is with the
WHOIS command. The command (/whois rabbitt) will give information like:

Rabbitt is blah@136.204.192.117 * DerFurher
Rabbitt on #kfp_warez +#chatterz
Rabbitt using NewBrunswick.NJ.US.Undernet.Org [204.127.145.17]
AT&T WorldNet IRC Chat Service
rabbitt End of /WHOIS list.

This tells you little about the person who is behind Rabbitt if indeed it is a person and not
a bot. The limited information that is available on a person attests to IRC being a world of
anonymous users.
The rules of IRC change from channel to channel. IRC is a world in which the vast majority of people are technically literate. Each channel has its own code of acceptability. Usually, the introductory message gives you a clue about the users who inhabit a channel.

-HP-Bot- Welcome to #Hackphreak. Are you NEW? Go to http://www.hackers.com/html/neohaven.html and READ. Please, NO Credit cards, virii, warez, inciting to riot. Denial of Service attacks (newks) are only discussed in their prevention. DON’T MESSAGE YOUR QUESTIONS TO THE OPS, Ask your questions IN THE CHANNEL. Hackers Trivia is in #Comp-Trivia. Ops are by invitation only, please don't ask.

Hackphreak is a channel devoted to helping people learn the skills of hacking computers. Phreaking is taking advantage of the vulnerabilities in phone services for different purposes and can include criminal activities. This particular channel says that it does not like to deal in Credit Card information, viruses, or warez. Warez is the trading of pirated software. Newks are remote attacks on computers intending to shut them down and this channel has decided to work on prevention not promotion. The operators do not want questions directed to them and do not want anyone to ask for Op status. The message is given by a user called HTBOt. There is no way to know if it is actually a bot or a person. Sometimes bots tell you up front that they are bots. Otherwise there is no way to tell.

-BigBot- Hi neednick! I’m BigBot, an eggdrop bot.
-BigBot- I do not recognize you. If you plan to become a regular on #Bothouse, ‘/msg BigBot addme’ and I’ll add you to the userlist!
Sometimes, people wish to express an action. This can be achieved in many ways but one of the simplest ways is to message yourself. That way the message appears in a slightly different format with an asterisk in front of the nick rather than just the nick and a comment.

* Cipro^ gives a big wave to ashnot :-)
* ashnot waves right back at Cipro^ 

Much of the communication is symbolic. Smilies and acronyms are ubiquitous.

Smilies denote expressions using only keyboard symbols. Some examples are:

<table>
<thead>
<tr>
<th>Smiley</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>:-)</td>
<td>Angry</td>
</tr>
<tr>
<td>=) or :-</td>
<td>Basic Smile</td>
</tr>
<tr>
<td>=( or :-(</td>
<td>Basic Sad</td>
</tr>
<tr>
<td>:o</td>
<td>Big Hug</td>
</tr>
<tr>
<td>=^)</td>
<td>Broken Nose</td>
</tr>
<tr>
<td>:-t</td>
<td>Angry Nose</td>
</tr>
<tr>
<td>'-(</td>
<td>Crying</td>
</tr>
<tr>
<td>:-e</td>
<td>Disappointed</td>
</tr>
<tr>
<td>:-)'</td>
<td>Drooling</td>
</tr>
</tbody>
</table>

Some examples of acronyms or different spellings are:

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>akshully</td>
<td>Actually</td>
</tr>
<tr>
<td>BB4N</td>
<td>Bye for Now</td>
</tr>
<tr>
<td>BBIAS</td>
<td>Be Back In A Sec</td>
</tr>
<tr>
<td>BBL</td>
<td>Be Back Later</td>
</tr>
<tr>
<td>BBS</td>
<td>Be Back Soon</td>
</tr>
<tr>
<td>BRB</td>
<td>Be Right Back</td>
</tr>
<tr>
<td>BTW</td>
<td>By The Way</td>
</tr>
<tr>
<td>'k</td>
<td>Okay</td>
</tr>
<tr>
<td>kewl</td>
<td>Cool</td>
</tr>
<tr>
<td>kewt</td>
<td>Cute</td>
</tr>
<tr>
<td>L8R</td>
<td>Later (as in g'bye)</td>
</tr>
<tr>
<td>LMHO</td>
<td>Laughing My Head Off</td>
</tr>
<tr>
<td>LOL</td>
<td>Laughing Out Loud</td>
</tr>
</tbody>
</table>

The use of symbols can be expanded and there are elaborate symbolic gestures made on channels. These are often produced by using what are called popups. Popups are simple commands (scripts) that put out strings of text or standard messages such as:
Much of the information about how to work and live in IRC is to be found by surfing channels and asking people. Neednick sees carrot^^^ using fancy formatted text and is curious about how to make fancy text in a channel. The following dialogue begins:

```
<neednick> hey carrot
<neednick> qn for you.
<neednick> Is that a script?
<carrot^^^> popups neednick
<neednick> how do I learn about popups?
<caatt> neednick you first need a file of them
<neednick> and how do I get such a file? I see the popups item under tools.
<caatt> neednick if you wish to get popups rather than make them go to #mirc_colors or #mirc_rainbow & request them from the ppl playing them. It would be a good idea to /msg the Ops there for channel policy.
```

Neednick joins #mirc-colors to continue his search for the knowledge to make popups work.

```
-Hueyter1- howdy neednick
<neednick> howdy
<neednick> I am trying to find out how to use popups.
<D^L> do u have some
<neednick> nope
<D^L> well u gotta have some first
<D^L> www.mirc-colors.com
<neednick> ok, going...
```
Neednick goes onto the Internet via Internet Explorer and downloads a file of popup text. When finished, he pops back into the channel to continue the quest:

<neednick> ok, got some
<neednick> now what?
<D^L> now u need to load them
<D^L> u kno whow to move files
<neednick> yes, where should I put them?
<D^L> they need to go in your main mirc file
<neednick> How do I load it so as to appear as a popup?
<D^L> ok the txt files will play through txtplayer
<D^L> o r PPP
<neednick> hmmmm
<neednick> dunno what u mean DL
<D^L> do u have txtplayer
<neednick> nope, where from?
<D^L> I will send u it
<neednick> k

D^L agrees to send neednick the file he needs to make the popups work. One feature of IRC permits users to send and receive files privately. It is the feature that allows illegal software trading. Users can trade files right in the channels. Allowing another to send a file to you without a virus checker is not advised but in this case, neednick has virus protection and since he initiated the request, he feels safer than he otherwise might.

<D^L> put that in main mirc floder
-D^L- txPLÂY5.0 You just received txplay50.mrc, file number 2430 that I have shared :-) 
<D^L> then type/load -rs txtplayer50.mrc to load
<D^L> it will show up in your nick list
<neednick> ok, loaded
<D^L> click in your nick list to see if it is in the list
<neednick> yes, it’s there
<D^L> to play txt type/txt then highlight the one u want
<neednick> cool, lots of neat stuff
<neednick> do I have to /load each time I enter IRC?
<D^L> no
<D^L> it is there
At this time, neednick opened his own channel (as any user can do) to play with the new method of using text. He practiced using the menus and discovered what the different messages were. The interaction between neednick and DL is typical of many IRC channels where help is readily available. Other channels are less likely to help so willingly. Simply asking the wrong question can get you kicked or banned.

Kicking and banning are powers of the channel operators. Ops can kick someone for any reason. In some of the more technical or illicit channels, simply the way you word a question may get you kicked. DaSaiNT was banned from a channel because the Op didn’t like his nick. He gets advice to message one of the Ops and begs to get back in.

<i><DaSaiNT></i> i was banned from a channel that didn’t like my nick
"PaRaS|Te" told me 2 change it and i changed it
<i><DaSaiNT></i> still they or he won’t let me in
<i><afk></i> DaSaiNT if banned from a channel all that you can do is type /names #channelname and look for the people in the channel with an @ next to their name. Next, /msg one of them and politely beg to be let back in.

The chance of success may be slim, as many Ops do not like to be messaged directly. Some Ops will kick a user simply because of his level of newbieness or lameness. A “newbie” or “lamer” is a user who is a complete beginner. Newbies and lamers are easily defined by the language they use on IRC.

*** Now talking in #isowarez
*** Topic is ‘No colours, !Triggers, general lameness’
*** Now talking in #kfp_warez
*** Topic is ‘If anyone of you DCC or MSG the OP for request then you’ll get a KICK for that [We don’t always HAVE it]!’
In #isowarez, if you use any colors at all you will be banned from the channel which is quite a distinction from mirc-colors which specializes in colorful text messages. In www.mirc-colors.com there is even a schedule of Christmas light shows complete with dates, times and the name of the nick who will be presenting.

While people can be kicked or banned from a channel for any reason, most often, it is for foul language, insults, or behaving inappropriately. Often the kicks or bans occur before a nick can even enter a channel. For example:

```plaintext
*** Joins: AAYINEOCO
*** W sets mode: +b *!*Klavye*@*
*** AAYINEOCO was kicked by W (*!*Klavye*@* [nasty scripts])
    *** W sets mode: +b *!*dgighx@*.canada.psi.net
*** pacman was kicked by W ((HOBBIT^) advertising)
*** Keri^ is now known as KindaHere
*** Joins: dma1

AAYINEOCO is kicked and the mode of the channel is set to ban him/her/it permanently (+b) because of running a nasty script. We are left to wonder what the nasty script was. Pacman is kicked and banned because of coming into a channel to advertise.

In the next case, road^bump kicks a user from a channel simply because road^bump did not approve of another channel the user was visiting.

-road^bump- :§ private msg §: you are person number 1706 that i have seen kicked from this channel. You were bad, really bad!.
    :+p--

In the above case, neednick was in a warez channel and was not allowed into the IRChelp channel because of his status in inhabiting a warez channel. In many channels, warez is frowned upon.
In other situations, users sometimes create a bot to help them run a channel but don’t then have the technical knowledge to keep the bot running. When the bot shuts down, the channel is open for a takeover. Another user will come in and establish his presence and Op status in the channel. Once a channel has another Op, the original owner may not be able to regain Op status.

<NiteHawk'> have a question here our channel lost X and hasn't been there in 2 days anyone know what is up
<NiteHawk'> [« « NiteHawk’ » »] go to #cservice
<road^bump> channel bot help channel

Takeovers are temporary as properly registered IRC channels have assigned bots who reestablish the channel. So channels are never lost entirely. Unregistered channels are open for attack. In some cases, users will convince unsuspecting channel operators to make them Ops. Once a user has Op status, s/he is in a position to take over the channel. Some topics warn of the danger:

*** Now talking in #irc4kids
*** Topic is ‘DO NOT OP ANYONE UNLESS YOU KNOW IT IS THEM. IF YOUR OPPING RESULTS AS A TAKEOVER, YOU WILL BE SUSPENDED FOR MORE THAN A WEEK.’

Researcher: I am now curious how I would describe the culture of IRC. It is very difficult to do. In over 40,000 channels, there are, perhaps, 40,000 cultures each distinct in their own way. It may not be appropriate to talk about an IRC “culture” or “community.”

On any IRC channel, there is a confluence of these technical details. To create an online presence and survive in this virtual world, a user must learn the nuances of each channel. He/she must become familiar with the channel’s technical operation, languages, and its sense of community. Once familiar with the culture, users are free to chat and to continue to establish themselves as part of the community.
Participant Viewpoints on Virtual Culture

It often can be difficult to draw participants into a meaningful conversation about IRC culture. The temporality of the dialogue and the constant interruptions make it difficult to have an extended conversation. However, through my extensive logging of channels, it has been possible to draw some conclusions on how participants in a particular world view the culture of IRC.

<Dalang> drewz, irc is just like real life
<Dalang> except, you see a lot more artificial stupidity
<Dalang> be back
<Drewz> gotta use your imagination
* mary^jane thinks it is a little like the wild wild west. No law, no order. The quick and the dead.
<mary^jane> of course, mary^jane drinks.

"The quick and the dead" fits nicely with the concept of elitism online. In IRC, the elite manage to survive and continue to be active participants in a channel. Elite participants (or leet for short) are users who have extensive technical knowledge and skills. If users demonstrate a low level of knowledge or insult others, then they are kicked or banned. Users do not need to be elite to survive but it is one of the ways to become a channel operator.

If you get kicked or banned, then life exists in another channel. As well, any user can open a new channel and decide what s/he wants the content to be.

<Dalang> If you should get banned or kicked from a channel, you are always free to start your own channel and decide what is appropriate content there. Imagine channels as houses. The owner of the house can decide to share ownership with someone else and can decide to prevent any individual from entering his house. In your own house,-you-call the shots. :-) Feel free to Create your own channel, and set up your own rules for it.
For some users, getting kicked is significant. Users establish a personality in a channel and want to maintain their existence there. Getting kicked means that you have to start again establishing your identity and level of power and knowledge. For others, getting kicked is part of the fun of IRC. They enter channels, insult users and get kicked out. It often appears to be a game of cat and mouse. In the following excerpt, STEVE36FL has just been kicked and banned for being extremely vulgar in a channel.

Any user who has not chosen to be invisible can be tracked while they are logged in to IRC. A listing of the channels in which they are residing can be obtained. Neednick tracks STEVE36FL and asks about the behaviour:

```
<neednick> I'm just curious, why would you say something like that in IRChelp?
<neednick> just for fun?
<STEVE36FL> cuase [sic] trouble
<STEVE36FL> no real reason
<neednick> I mean you're just going to get kicked. think you can beat it?
<STEVE36FL> just being asshole
<STEVE36FL> who cares if one gets kicked lol
<neednick> But they may domain ban you
<STEVE36FL> who cares
```

Humour is often used and as one would expect, puns abound. Often channels are very quiet (idle) for extended periods and people swap chat just to keep some conversation going. Simple flirting, plays on words, and discussions on any topic keep the channel active.

Educator: One of my participants during an interview went on at some length about the game of insults that he would play. He enjoyed it so much that the game itself was the attraction to IRC. He felt completely untouchable in IRC. He could say anything he wanted and no one could really do anything about it. He loved it and described it with glee.
Participants often talk about the amount of time they spend in IRC and the overlap with their lives offline. They refer to life offline as rl or Real Life. In discussing how the lives on and offline sometimes get blurred, some participants confuse the text-based commands of IRC (preceded with a /) with the text they use in their offline lives.

Researchers: It's interesting that despite many attempts I have never managed to engage IRC users in a discussion of what really constitutes a culture. They refer to "life" online and offline but never in a descriptive way about the culture of IRC. The more exploration I do the more I am inclined to challenge the notion of "community" and "culture" in online communities. It appears to me that these may not, in fact, be communities at all and may lack the qualities that define a culture.

In the analysis of the text it is clear that participants in this study are proud of the amount of time they spend online and laugh at the blurring of their virtual lives with their
lives offline. While they navigate seamlessly between worlds, they experience varying amounts of success in the two forums.

<k4y0> is rl life more like irc or is irc more like real life?
<neednick> IRC is real life
<k4y0> how?
<k4y0> ok
<k4y0> how is irc real?
<neednick> you're here, I'm here - reality. Your and my text is real
<k4y0> but if i role play
<neednick> the trick is, I don't know who (or what) you are - you are completely safe in IRC
<k4y0> its not real
<k4y0> i can be me
<k4y0> or i can be a 19 year old lesbian
<neednick> You will assume, and identify with many identities, each of which serves a purpose
<k4y0> or i can be a tayall [sic] asshole
<neednick> You only are who I take you to be. It isn't you that defines yourself, it's me.

Students who spent time in IRC had a very clear understanding of the differences between life online and life offline. They indicated that they understood the absence of social cues online and felt that they could respond to any comments openly and freely in a channel.

Student: How I behave on-line compared in real life? I don’t know, in real life you really think a lot, there’s a lot more factors to life, like I mean you talk to somebody you know what to say, make sure it’s not really offensive, when sometimes on IRC, I’ll just let it out.

Interviewer: So, when you just let it out, is that because...

Student: ...because it’s so impersonal, that’s just like, it’s just chatter over type, you know, somebody reads it, it’s not the same as if you were to talk in real life cause you don’t have expressions, you don’t have change in tones of voice, and things, and little factors that we use in real life, in English compared to type, like type is very little.
Interviewer: Some people would say that on-line, people are more inclined to say what they want to say.
Student: Yeah, that’s exactly it, you just let it out, and it doesn’t matter, its just type.
Interviewer: Well, because there’s also no social checks in play.
Student: Yeah, there’s no social checks and there’s no limits
My name’s Darren. I am 15 years old and I have something called Asperger syndrome. I don’t really know how to describe it to you but it means that I have trouble getting along with people. It is really difficult for me to make friends. I am smart and everything. I actually can do very well in school. However, too often I have a lot of problems with people in school. They mock me and make fun of me. At first I tried to battle back but it just seemed useless after a few years. I am really good at insulting people because I’ve had so much practice at it over the years.

For the first few years in school I did all right. I was in a small school where you sort of knew everybody. But as I moved to a bigger school, life became more difficult for me. I didn’t know anyone and kids often made fun of me. I got really good at hurling insults back but by the time I finished grade six I had decided that people were just something to be avoided. I started reading a lot. Sometimes up to a book a day. Mostly science fiction.

Asperger Syndrome or (Asperger’s Disorder) is a neurobiological disorder named for a Viennese physician, Hans Asperger, who in 1944 published a paper which described a pattern of behaviors in several boys who had normal intelligence and language development, but who also exhibited autistic-like behaviors and marked deficiencies in social and communication skills.

By definition, those with AS have a normal IQ and many individuals (although not all), exhibit exceptional skill or talent in a specific area. Because of their high degree of functionality and their naiveté, those with AS are often viewed as eccentric or odd and can easily become victims of teasing and bullying. While language development seems, on the surface, normal, individuals with AS often have deficits in pragmatics and prosody. Vocabularies may be extraordinarily rich and some children sound like "little professors." However, persons with AS can be extremely literal and have difficulty using language in a social context.
stuff because there are so many possibilities in the future.

I take straight enrichment courses at school and have almost straight A’s. The only problem I have is in science. The material is interesting and everything but we have to do labs. I hate labs. It means that I have to work with people and I’m pretty much guaranteed to have problems in that kind of a setting. So I have avoided science courses and that is presenting some problems with graduation. Recently I met with my school counselor and found out that Information Technology courses count as a science so that will save me. It’s a relief to know that I won’t have to do labs.

I don’t really have any friends at school. I spend a lot of time hanging out with my girlfriend and so now I’m stuck with her friends. I didn’t really have any friends before I was going out with her. The people I was hanging out with were more acquaintances and it was a lot like in a chat room. We would just hurl insults back and forth. I guess I’m a little too good at that to be popular.

I have been using computers for about five years now and I probably use them more now than ever. I got hooked when dad brought home a machine and put a game on it. I enjoyed playing it and I was hooked. We actually have three computers at home now. One for me, one for my dad, and I have a laptop that I take to school. We have a cable
modem and a network at home so no one has to wait to use the Internet. We have had the Internet for about three years now.

I have a shaw@home email account but don't use it. Hotmail works better for me. I play games a lot. My favourite right now is Diablo II. I have been playing it for about six months. I used to use ICQ but I got sick of it. I use it once in a while to send files. I visited some chat rooms once but got bored. They are a neat concept but not as much fun as playing a game. There really isn't much to say in them. That is why I sometimes use ICQ. It is better than a chat room because it's one on one. I have never used IRC. Once I sent a 300 meg file to a friend in Alberta. It took a long time.

I spend a fair bit of time online, usually around four hours a day. Sometimes I go on for 5 or more but when you get to about 5 hours your wrists start hurting so you need to stop. Sometimes that means that I go on for three or four hours then eat then go on for a couple more. That way my wrists get a bit of a break.

Games are my passion when I am online. While you can play with anyone, I usually play Diablo with my friend from Alberta. He's got a free phone connection anywhere in Canada after six so we talk on the phone and play online at the same time. That way things are a lot easier to co-ordinate. There is a message system within the game but I find that if you stop to send messages you just get killed. Diablo is all about going on quests together and collecting things so the phone is really useful to help us co-ordinate things.

My favourite player is called a Necromancer. There are six characters that you can choose from in Diablo and it takes about a couple of weeks to finish the game with any one character. I actually have finished the game with all possible characters. After I
finished the game I was allowed to go to Nightmare mode and that’s a little more challenging. After Nightmare mode comes Hell. I don’t know if I’ll play long enough to get to Hell.

Necromancers are the best characters. They’ve got Bone Spear, which is really good at a distance. It goes through everything and hurts them all. They also can summon Gollums which are really good at high levels. If you get Lots of Gollums and Mastery with Level 12 of a Necromancer plus 240 life then you can do a lot of damage. I started with Barbarian but then got bored when I finished the game. That’s when I decided to try all of the characters.

As I said, games are my passion but I have used ICQ to speak with people as well. I don’t mind typing to talk when it’s on ICQ or something, chat rooms are usually too chaotic unless you’re going to a specific one to meet some people or something. I have tried to speak with people online in chat rooms but I just don’t like it that much. I find it too chaotic. Everyone is talking at once and you don’t know anybody. When you’re on ICQ you know the person a little but it’s still online so you can say pretty much anything which is probably the best part about talking online.

I’m much different online than I am in the real world. Meeting people in the real world makes me nervous. Unless it is someone that I already know, people make me uncomfortable. I just don’t

Gamer: I’ve played Diablo. I’ve finished Diablo. What Darren is describing represents perhaps 100 hours online or more. It took me about three weeks of hard playing to finish the game. To then start again and finish it with every character and in every mode is an onerous time commitment.

It’s important to remember that the person with AS perceives the world very differently. Therefore, many behaviors that seem odd or unusual are due to those neurological differences and not the result of intentional rudeness or bad behavior, and most certainly not the result of "improper parenting."
trust people. When I’m online with people I don’t have to worry.

People online are a lot nastier than people in the real world. It’s like they have nothing to do but just bug other people. People post stuff, mocking everyone. Some people are polite, well, not necessarily polite, but just nicer than others. When you’re online you don’t have to be as careful as in real life. You can say stuff and not worry about getting yelled at or shunned because it’s online. If you do get shunned, then you can just go find somebody else to talk to. It is really easy to leave a conversation if you don’t like it.

Trust doesn’t matter online. You can do anything you want and it just doesn’t matter. Recently on Diablo II I had to trust a guy. I had to drop some stuff on the ground. What I dropped was a Bone Snap Mace. It is unique and really good. In return I got some armour with 439 defence. It was the best stuff I have ever seen. I trusted that person because he offered to drop first and did. At one point I had all his items and he had to go out and get another character to trade and come back to complete the trade. I could have just left but I didn’t. Normally I wouldn’t have done this but I wanted that armour.

Usually, there is no reason to honour your word online. There is nothing to keep them from never seeing you again. If you cheat somebody at school, they’re going to do their best to hurt you. Either that or they are going to get pissed and act like a jerk.

Despite the fact that I feel safe online, the interactions I have don’t really help me in the real world. A lot of the solutions that you find to life online just don’t work in the
world. You just can’t have instant vanishing ability in the real world and you can’t
disappear if you don’t like where you are. There is no way someone is going to hurt you
online unless they do it mentally. Anyway, by the time that I was going online I was
fairly immune to psychological trauma from what people thought of me or what they
said.

People have often insulted me in real life and they insult you online as well. It is
easier to ignore online because it’s somebody that you’re not going to have to see. But if
you’re really good at ignoring it in real life then it’s not going to bother you at all online.

Everyone is anonymous online. That makes it easier to share information about
yourself. Not your phone number or bank account or anything like that, but personal stuff
because the person you’re talking to can react to it and they can’t spread the word to your
friends. Odds are they have never heard of your friends. They don’t even know your
name. It also makes people a lot more critical, like nobody is going to know whose views
these are so I can just have the worst possible views of everything and slam everything.

I think they do that because they’re mad. Sometimes you can have really good
arguments and debates online about technical information on computing game systems or
reasons for things but most things are just stupid. They say things like:

“This sucks.”
“No it doesn’t. You suck.”
“Well you’re a...”

I don’t really see why people bother doing that. It seems even more pointless than
doing it in real life because in real life you’re getting hurt by what people are saying.

Online you’re not even really there so none of the people are actually bothered by this.
They’re just spouting at you. I don’t know why.
When I'm online I like to have a goal. That's why I like gaming. When you're in a chat room your goal is to have a conversation with somebody or something like that and I find that hard to do with so many people around. I don't like larger groups of people online. I'm much less comfortable in a large group in real life than I am with just a couple of people. It's easier to have a conversation one-on-one cause you're only worrying about the views of the person you're talking with. When I'm in a larger group I'm worried about the views of all the people sitting around watching. When you're in a group there is always some jerk to bug you.

I don't like being in a classroom. It just doesn't work for me. There are too many people. In a large group I tend to be either really quiet or really obnoxious. I don't worry much about fitting in because I'm just not good at it.

I've only got one really good friend. He now lives in Alberta. I really don't have anyone else, other than my girlfriend, that I am close to. It's been like that for about at least five or six years. When I was in middle school, I had one good friend. He came with me to this school but then as I said he moved to Alberta. Ever since he left I haven't ever been able to find a replacement. The computer has been a good replacement for friends.
I don’t know what I’ll do when I leave school. I’ll probably go to university as my parents will pay so I don’t think I have anything to lose. I’m a fairly good writer but I don’t like math and science. Actually, science isn’t that bad but I can’t stand doing labs. When there is a lab I have to work with people that I don’t know. They usually don’t like me or don’t know me. People tend to be either neutral toward me or they don’t like me. There is not a huge ton of people who don’t like me but there’s enough so that I’m pretty much guaranteed to have three or four who bug me no matter what science class I’m in. It actually might not be that they don’t like me, it’s just like they act like that to everyone they don’t know. They bump into you and joke amongst themselves.

Life has been that way for me for a while. It started instantaneously in grade six. Before that I hated school because I thought it was stupid. I didn’t like the way it was set up. Then I went into grade six and discovered that people were basically hideously evil. They were mean, insulting, and not easy to make friends with. I didn’t have any friends in my class, didn’t fit in and hated it in there. Things are better for me now.

I was in a small school before. I guess that if people didn’t like me they basically kept it to themselves. You knew everybody’s name and most of the people from other grades and most of the teachers. Then after that I moved to a really big school and maybe half a dozen people knew my name out of these hundreds. I had no idea how to make friends. I guess I was fairly obnoxious too and I had a tendency to make irritating comments, which I still do.

It was about this time that I found out about computers. I started to play a game called Bolo. It was fun and interesting. Computers were a good diversion as was reading books. They’re a good replacement for friends whether it’s online or not. I used to go
through a book a day but not anymore. Sci-Fi fantasy was the best. I also used to read a lot of Westerns and stuff with animals. I have two shelves of Star Wars books at home but I got bored with those because they couldn’t get any new characters that were any good. Now I play more on the computer.

I don’t know where we are going with technology. I think we could be making a lot of really cool things but we’re probably going to destroy the planet before we get there. Just pollution and stuff like that will probably prevent us from ever having inter-spatial ships or whatever. Hopefully, computers will continue to get better so that games can continue to get better.

So life goes on. I will keep playing Diablo with my friend. Hopefully he will get Sacrifice for Christmas and we can play that together. My girlfriend’s friends all spend time in chat rooms. They’re all playing games that are text based online and stuff like that. I don’t know how much time they spend in them but they’re always chatting beside each other on their computers. For some reason they’d rather talk to the person who is sitting 6 ft. away through the chat room. I can’t understand that. If some one is six feet away it seems that it would just be a lot easier to talk to them.

Then again, maybe that’s not true. If it were a stranger, I would rather meet them in a virtual world than in the real world. After all, I just don’t trust people. My life has taught me that they are basically hideously evil.
Observations in Schools

In this chapter, I wish to be more explicit about my observations in schools, the participants in my study, and the interview process. The time I have spent in school has allowed me to observe adolescents in a number of settings including spending extended periods of time working with computers and students.

Eleven boys with ages ranging from sixteen to nineteen volunteered to participate in my study. The boys were familiar with my study through a presentation and were happy to participate. There was no offer of money and their participation was completely voluntary. I told them that I was looking for students (boys) who spent large amounts of time online, specifically on IRC. I did have other volunteers but chose not to use them as they either did not spend enough time online or spent their time solely in gaming rooms. I was more interested in IRC.

I have stated that these boys have had difficulty in school. Of the eleven boys, two have graduated, one did not complete high school, two have dropped out since my interviews, two are in alternate learning programs in an attempt to complete their schooling, and four remain in school. Eight of the boys have learning disabilities or were identified by our district to obtain support from our Student Services Team. The Student Services Team supports students who, for a variety of reasons, may be having difficulty in school but primarily focuses on students

*Educator: I re-read this section with sadness. Two weeks ago the last of the boys in my study was removed from school for ongoing behavioural issues. Of the eleven students who started my study, only three graduated from grade twelve. Of those three, only two graduated with respectable marks. For the last Disboy, we tried a vast array of supports. Eventually his behaviour was simply too much for the environment. Nothing we tried seemed to work. I feel helpless. He’s a good kid.*
who have learning disabilities. Seven of the participants in my study have been identified to receive support from our “Stay in School” program that works with students who may be in jeopardy of dropping out. In general, the eleven boys represent a group with significant learning and behavioural issues. There are two students in the group who seem to be making it through high school in a normal fashion. They have not presented any behavioural or learning difficulties and simply spend inordinate amounts of time online. Both of them, however, carefully monitor their time online to ensure that it is not interfering with school.

The other issue with the boys is their social interaction. At least eight of the boys are on the fringes of the regular school culture. They have few friends and quietly go about their business of being in school. I witnessed only one of the eleven students participating in any extra-curricular activity. Poor attendance has been a significant issue for many of the boys. Five of the boys have been suspended from school for a variety of issues ranging from drugs to violence. Three of the boys have had school or district level consequences for hacking or tampering with computers.

I have been working closely with students and computers for eight years. In that time, I have noticed that many of the students who use computers extensively do not engage in the regular social circles in a school. My experiences have been with students whose ages range from eleven to nineteen. In their early years, the students seem to be fascinated with the power of the machine. With what they can do with it and how it allows them to be successful in a forum in which they otherwise demonstrate limited success. I specifically spent time with two grade six boys who were having great difficulty in school. They loved “playing” on the computer and spent all the time they
could in front of one. At the same time, I also worked with students in grade eight. The grade eight students worked with me to support the school’s network. They were highly capable. It was, however, difficult to find students who would stick with the task. They wanted the fun and glory of working with a computer but when it was necessary to do repetitive tasks (installing software, fixing settings) the students were not that willing to help or were very willing to help but did not complete the job satisfactorily. The two students who were task oriented and helpful have gone on to be very successful in high school. I have spoken to them both and while they were heavy, powerful users in middle school, in high school they used computers to a much lesser extent. They found other pursuits. In my discussions with them since they left middle school, they have demonstrated a healthy understanding of the role of the computer in their lives and use it accordingly to support their goals in a variety of areas. One of the students replaced the time spent on computers with time spent rowing and went on to become a very successful athlete.

The heavy users I have encountered have been overwhelmingly male. In middle school, I was aware of only two female users who were very capable and enjoyed using computers. At all times, those two students were very willing and able to carry out tasks to support computer use in the school but also had a very healthy understanding of the computer and its role in their lives. They were extremely successful students and continued to be so in high school. In middle school it was clear that boys dominated the computer lab and that girls indicating a similar interest, risked being labeled less feminine than their non-using female peers. At the high school level, I know there is one girl who is extremely competent on the computer. She is in grade nine and I have already started
to work with her on projects involving computers. Her mother recently came to see me and while thrilled that her daughter was connecting with me at school and was having fun, the mother’s one request was that I help her daughter to find some friends. Her mother says that she has none.

In all cases, the students I have encountered who are interested in computers are also highly competent users of computing technology. They have a love for the computer and have pursued it as an area of specific interest. In their school lives, they have found that teachers lack a similar technical background. As a result, the students have come to rely on the Internet and on each other for learning about computers. The computer has become a symbol of power for them. It is, in many cases, the one area in which they can demonstrate tremendous knowledge and skill. In all other areas, these students struggle. Once online, they are connected, invisible, and in control of their experiences.

The students I interviewed could be labeled as marginalized. They live their lives in school on the periphery, going quietly through the halls, making few friends, gathering fewer accolades, and just trying to survive. However, when they go online, they move from the margins to the center of a world. They are, by virtue of their nick and the channels they choose, at the center of conversations. This is an interesting inversion to others in society who may feel marginalized when they go online. The majority of us, online may not know how to act, what to say, and may not have the technical competence to participate fully. But for these boys, in the real world, do not know how to act, what to say, and do not have the social competence to participate fully. In some cases, they have clinical diagnoses that actually may prevent them from being able to participate fully in
“normal” social circles. When they go online, they are free from their cultural and historical burdens that label them. They can be who they choose to be.

One of the themes that has emerged during the interviews is safety. Students go online because they feel safe there to be who they are and to say what they want. In school, we try to provide a safe environment for these boys. We try to place them in supportive classrooms and to work with teachers to understand these students’ needs. We want the students to feel comfortable and to have a chance to succeed. I have come to realize that these students have few, if any, fresh chances. In the physical world, our cultural and historical background forms part of our identity. Walking into any classroom, these students encounter other students who already know them and who may have for several years. It is impossible for these boys to have a fresh start. There may be already several students in the class with whom they cannot or will not work and because the origin for the issue might reside in a classroom of years ago, the current teacher will be oblivious to the problem.

It is true for all of us that our identity has been constructed over time and is embedded in our culture and history. But many of these boys have had years of issues with a number of students and teachers. They have been hurt often and have hurt others. It may be impossible for us, in our schools, to create an environment of safety for students who carry so much historical baggage. As a result, the complete anonymity and safety of IRC must be a wonderful respite. No one knows or cares who they are offline. They are simply taken as text and interpreted line by line. There are no links to their past. The Internet may present to them the one area in which they are completely free to express themselves honestly without worrying about what people will think. As a result,
there may be a second interesting inversion at work. The online person may actually be their real identity and the identity that we know in school may be a muted and cautious version of their true self.

These boys have learned, through years of experience, that “being who they are” in a school gets them into trouble. They often have had confrontations with peers and with teachers. When one has Asperger’s syndrome which carries with it an inability to read and respond appropriately to social cues, how does one function normally in social settings? Asperger’s may actually prevent one from taking the role of the Other and noting how to respond to a particular situation. The other people with whom you are interacting would have to know that you had Asperger’s and would have to understand and accept the difficulties it presents before making allowances for your behaviour. Virtually no sixteen year-old is going to inform his peers that he has a disability that works against him in social settings. Adolescents are brutally honest and harsh with those who do not conform. The end result for these students is a further withdrawal to the margins of social life. The computer and IRC become a welcome escape from routine social expectations.

This freedom from social constraints is one reason that students go online. But there is another reason and it has implications for education. These boys

**Educator:** So the things we are seeing on IRC are actually drawing these boys deeper into IRC and further away from their life in traditional social settings. If the purpose of the study was to find out if existing online could help these boys learn to function more appropriately offline then it seems to be failing miserably. We are finding that the very inability to respond to the social constraints of the school environment simply isn’t a factor on IRC. In a world without social rules, they are, in effect, receiving reinforcement for their inappropriate skills. The participation in IRC may actually result in weaker social skills and not stronger ones.
seek the acquisition of knowledge. When motivated, despite their behavioural and learning difficulties, they can be very capable and powerful learners. In the online world, they have discovered that when they want to learn something, they simply have to ask and then explore and experiment. The role of the teacher as a holder of knowledge is therefore being undermined. Students are discovering that they can access very detailed knowledge about computers online and there are many forums specifically designed to share such information. As they grow in their competence and skill, these students become important and powerful members of these communities. On IRC, no one cares about social graces. All participants care about is what you know and what you can contribute. In virtual worlds, knowledge truly is power.

Perhaps, as they realize that there are ways to gain knowledge that are quite separate from those available in school, they will see formal education as less relevant and import. Interviews suggest that despite their significant difficulties, these students believe that they will be successful in life. As their bonds to virtual worlds increase, their bonds to schools decrease. The result is increasing amounts of time online and continued difficulty in the school setting. These difficulties may continue to manifest themselves in life offline as the student grows older and moves to adulthood.
Manifestation of Self Online/Self Offline

I am sitting in the line-up at the ferry terminal. Sointula is a small fishing village of about 700 people and the ferry only comes a few times a day. It takes you to Port McNeill, a logging community of about 2500 people with a few amenities that Sointula cannot offer. There is an older truck in front of me and two men are leaning against it. I suspect that they are simply socializing but I cannot hear what they are saying.

Another truck pulls up and parks across the street. A man gets out and crosses the street to speak with the men by the truck. I watch the man as he approaches the other two. He is about forty-five, tall and thin and is wearing working clothes. His pants and shirt are saturated with grease and grime. They are the working clothes of a mechanic. I wonder if the dirt would come out in a wash. I know the town well. There are no car mechanics in this small fishing village. It is more likely that he works on the ways, fixing and maintaining boat engines.

I see his hands. They are the hands of a labourer. His fingers are short and strong and dark with dirt and grease. He obviously washes them but much of the staining appears permanent. A well-worn ball cap sits on his head. It has a Caterpillar logo on it. Many of the boats in town run “Cats” for diesels and so this reaffirms my thoughts about his working on the ways. Earlier, when I drove by the largest ways in town, there was a tourist boat on it. Perhaps it is one of the new boats that takes tourists to see the killer whales in Robson Bight. In an era of rapidly diminishing fisheries, many fishers are turning to other industries; labour is cheap in this town because so many people are looking for work. Maybe he is working on this fancy new tourist boat.
His face is unshaven and he smiles when he speaks. He stands almost in the middle of the road as he talks with the other men. His ease on the street and conversation with the older men leads me to believe that he lives in the town. He is not a transient or a visitor. The lady from the gas station comes over to say hi to the men. They obviously know her well.

If he is a mechanic for the fishing fleet, many will know him well. They will have relied on him from time to time, using his expertise to keep their boats running and ready to go at any announced fisheries openings. At forty-five, he will have been doing this for perhaps twenty-five years. He will be highly skilled and, as a town member, he will be someone others can trust and count on in a pinch. He is an important man in the village.

All of the above I assume from watching a man on the street. I do not know who he is, what he does, or the nature of his conversation with the other men. In considering his identity, I draw on his age, clothing, manner, appearance, and any other clues that suggest who he is. The fact that the lady working at the gas station came to say hi was an important event. It means that he is known; he is local. Such greetings only occur in Sointula after you have lived here a few years. His interactions with others tell me something about who he is. My observations also reveal to me that my assumptions about identity are deeply rooted in my historical understanding of the community and my participation in it.

The way he stands, his body language, gestures, and the texture of his skin all are clues to

Researcher: In addition to the observations I realized how applicable the research was. In a physical social world, the literature makes sense. In a virtual world of text and anonymity, the theoretical pieces are so much harder to apply.
an identity. I have formed an impression of the man before ever exchanging a word. I may be wrong in many of my assumptions but we have all honed these skills through years of practice. First impressions at the very least give important clues to identity.

I realize that I have drawn on the culture and history of the town in order to help me understand who he is. I see his identity as being embedded in the town, in its history and industry. He is an extension of Sointula. He is part of the community.

The theoretical framework discussed supports my observations and assumptions of identity. The plurality of life-worlds that make up this small community come together to help form identities for individuals. That identity is embedded in the culture and is reaffirmed through interactions with the environment. While we display personal symbols (clothing, gestures) that indicate who we are, we are also a mirror of the societies in which we live. The man on the street, when I consider his identity, is a being-in-the-world. His lived experiences are worn on his clothes, marked on this face and hands, and are clear symbols representing who he is.

\[\text{Educator:} \text{ Often, with students in difficulty, we talk of a "fresh start." Given my observations in this chapter and given the comments from students I wonder if there really ever is such a thing as a fresh start for these kids. They wear their identity and history to each classroom and to each interaction.}\]
Beings-in-the-Online-World: Virtual Constructions of Self

In virtual worlds, many of the frameworks or clues that we use to construct identity are unavailable to us. For example, what is the culture of a text-based conversation in which all participants are anonymous and which may only last a few lines? There are no physical clues; no clothing, no age, and no gender. There are gestures but they are extremely limited in that they are only textual comments.

Dalang is a channel operator in IRCHELP. The reason he participates in the channel is to help people who are new to IRC and/or who may have specific technical questions. With many of the important and usual clues to identity absent in virtual worlds, we have to rely solely on text to determine someone's identity. Dalang participates in the IRCHELP channel on a regular basis. To try to determine some of the aspects of his/her identity, it is necessary to consider the text that is written and the clues it gives us to his/her personality.

As an Op, Dalang answers questions and ensures an appropriate tone is maintained in the channel. Dalang's answers to questions are to the point and usually brief.

<Zbug> how do i see who is in a channel?
<Dalang> zbug, you go there
<Dalang> and if anyone there isn't +I you might see something more than end of who

The +I is a reference to an IRC command that allows users to be invisible or not. To an IRC user, Dalang's message is very helpful. If you want to see who is in a channel,
you go to that channel. Any user who is not invisible will be listed by using the command “who.” “End of Who” refers to the culminating statement when a “who” command is used.

From time to time, gestures or environmental clues will be given. These comments usually refer to the world outside of IRC but also may add additional colour or flair to the conversations going on inside IRC.

<Dalang> good thing i have a fire goin

There is no way to know for sure if Dalang has a fire going or not. In addition, we don’t know if it is cold in his/her area. All we have is the reference and inside the world of IRC, people rarely ask for clarification. The comment stands alone.

Often, when people are watching a conversation, they may add a gesture to the channel. A gesture is identified from a normal comment in that it usually is in the form of nickname-action. In a recent conversation, a user from Brazil was commenting on how fortunate they were to live in a country where women were free to bare their breasts.

Dalang gestures:

* Dalang bares his breast also, just to be friendly

The comment identifies (but is unconfirmed) for the channel that Dalang is a male. The gesture is meant as a joke.

The Brazilian in the channel has made an impact and it spurs the following scenario. The conversation (or scenario) is a mixture of gestures and commentary. The gestures (marked by *) are separate from the comments (<nickname> comment).

<Dalang> how do i become a brazilian please?
<neednick> First become a fanatical soccer fan
<neednick> Begin to dress in green and yellow...
* Dalang waves his Pele’ shorts
<heimi> Packers!
* Dalang heads the football to heimi
<neednick> bang on drums and chant during sporting events...
* heimi takes it and runs.
* neednick steals it from Heimi and breaks down the wing...
* Dalang bangs the drum and swings the rubber chicken vigorously
* Doverz laffn!
* neednick centers the ball...
* Doverz punts
<Doverz> oh gawd...

Such impulsive and humorous dialogues are commonplace. However, their contributions to a notion of self are somewhat limited. For a more detailed understanding of self, it is more useful to refer to the analysis of conversations between participants.

Dalang often uses sarcasm in answering questions. Time and time again, Dalang responds in a way that, while helpful, also is condescending, sarcastic, and potentially hurtful. Following are four excerpts from Dalang’s interactions with other channel members.

Drewz has a reasonable question about the advantages and disadvantages of using two different methods of file transfer. Dalang’s response is not helpful.

<Drewz> what is the biggiest addvantage [sic] to IRC file transfer or chat?
<Dalang> drewz you can do both
<Dalang> actually, the biggest advantage is the vast amount of time you can waste

Klyu4 demonstrates an approach that is not looked upon favourably. He/she asks a question by first saying “can anybody help me?” In IRC this is frowned upon. Users are strongly encouraged to simply ask the question. In a help channel, to ask if someone can help you is redundant. The purpose of the channel is to help. However, Klyu4 they may not be aware of this etiquette and Dalang’s response doesn’t educate or help the user.
<klyu4> can anybody help me?
<Dalang> klyu4, probably not
<Dalang> klyu4, then again, if you ask a question, who knows what might happen

Speaking in private is another breach of protocol. It simply isn’t done. Often someone will want to chat in private and there is no real reason since everyone in a channel is anonymous anyway. In the following dialogue, X is a bot.

<Dalile> can i talk to any of you in pvt?
<Dalang> Dalile try x
<Dalang> of course x will ignore you in private, but then
<Dalang> so will the rest of us
<Drewz> interesting channel
<Dalang> drewz, irc is just like real life except, you see a lot more artificial stupidity

Educator: When I look at these little exchanges they are so similar to exchanges that I often hear in the computer lab. The same sort of sarcastic banter.

In the following exchange, a new user asks a straightforward question. Dalang helps but then when the user persists, Dalang shows his sarcastic and intolerant side.

<Kari> can sum1 help me wit something?
<Kari> I got banned from this one chat room and the only reason was because I woudnt send this person my picture, is there anyway like if you could get in that room and get Ops and unbann me plz, if so i would appreciate it and thankx
<Dalang> If you should get banned or kicked from a channel, you are always free to start your own channel and decide what is appropriate content there. Imagine channels as houses. The owner of the house can decide to share ownership with someone else and can decide to prevent any individual from entering his house. In your own house, -you- call the shots. :-) Feel free to Create your own channel, and set up your own rules for it.

Researcher: We have seen this text before. It is a popup and Dalang uses it often.
<Kari> well I know that but I want to get back in the chat and talk to my friends and now i cant :-(
<Dalang> in otherwords, kari, no, no one is going to get you unbanned
<Kari> hmm ok thankx anyways
<Dalang> you dont have to be in that channel to talk to your friends
<Dalang> create a channel and use /msg nick come to #kari or something
<Dalang> kari, its a fact of IRC, only the Ops in that channel in question can unban you
<Dalang> forget unbanning yourself, or getting someone from outside that channel to unban you, its NOT going to happen
<Kari> i know but the ppl wont unbann me cuz they are friends with the person that did it
<Kari> ok ok dont need to yell at me im new at this stuff
<Billy-> kari there is NOTHING we can do about it
<Kari> ok ok
<Dalang> THIS IS YELLING, i'm not, i'm trying to help you understand a simple fact
<Kari> no need to yell at me i was only asking for help and i didnt get ne where with it
<Dalang> want to be banned here too? Keep it up
<Dalang> when i'm yelling, you will know, its unmistakable
<Dalang> and speak english [sic], sumhow, ne1 and kewl are not english [sic]

Through the above dialogues, we have come to see Dalang as bordering-on-rude and temperamental. The only information we have used to come to that conclusion is his text. In contrast to these qualities, however, Dalang has a side that is extremely knowledgeable and helpful. In the following excerpt, Dalang enters into a dialogue with Sharnae, a complete beginner. He is trying to help her/him find the menu items and input a number on her computer. He shows patience that is commendable.

<Dalang> look at the top of this program, it has a menu
<Dalang> the first thing on the menu is FILE
<Dalang> go from there
<Sharnae> dalang, r u there?
<Dalang> look at the top of this program, it has a menu
<Dalang> the first thing on the menu is FILE
<Sharnae> yes
<Dalang> Sharnae’s Local Hostname
(d108.meldas4.access.net.au) resolves to »
(210.8.214.109) « use this IP for DCC
<Sharnae> only says connection, options and exit
<Dalang> under options/local info
<Dalang> put the ip i gave you in the ip box
<Sharnae> hang on...ur going to fast.
<Dalang> it doesn't go anywhere, feel free to scroll back

In this case, Sharnae is not repeating her question and is simply showing that she/he is a beginner and needs help. This time, Dalang is more than willing to help.

In addition to clues from conversations, during his time online, Dalang gives some indications of a life outside of IRC. He also indicates a deeper relationship with Billy, one of the longtime channel participants.

<Dalang> how you doing bill?
<Billy-> pretty good Dalang
<Billy-> you?
<Billy-> how’s the kids?
<Dalang> not bad, they’re fine, playing basketball
<Billy-> getting in shape for spring baseball :-)
<Dalang> the girl is playing indoor soccer on Thursdays, practicing basketball later on Thursdays, and playing basketball games on Saturday
<Dalang> she should be ready.
<Dalang> she’s playing soccer and softball this spring
<Dalang> she’s going to be busy
<Billy-> so are you I would guess :-)
<Dalang> yeah, well. i only coach softball. just a fan at the soccer games
<Billy-> heheh
<Dalang> usually, unless pressed into service as a gofer or something

Researcher: Such extended dialogues on IRC are extremely rare in the channels that I frequented. What would appear to be a normal conversation in the physical world is quite abnormal in IRC.
<Billy-> kids manage to get their parents roped into more
stuff :-(
<Billy-> thats how I got into scouts 12 yrs ago
<Billy-> and then they quit 3 yrs later
<Billy-> I am still active though
<Dalang> heh

Dalang indicates that he has children and is an active and supportive parent. The
conversation is short, but give glimpses of his life offline. We are left to wonder the ages
of the children and the many other questions that come to mind.

A sense of humour creeps in from time to time. In carrying out his “duties” as a
channel Op, Dalang has been helping Dalile. Dalile asks the same question several times
and finally Dalang is fed up. At the same time, he wants to go to dinner. When Dalile
asks the same question again, Dalang kicks him from the channel. Dalang’s actions show
a healthy sense of humour.

<Dalang> gonna go eat
<Dalile> question is: i need to know the nick with code
“zeze@127...on ptnet #portugal
*** Dalile was kicked by X ((Dalang) i’m tired of answering you,
bye)
<Doverz> That was Kick No. 466 I’ve seen… Wheeeeee X
Kicks Dalile outta her
<Dalang> and now, i’m going to go eat
<rooot> Dalang lol
* Doverz cracks up
<Dalang> ptnet? What is that supposed to be?
<Dalang> i’m supposed to go to pnet and look this guy up
while my potatoes burn?
<Dalang> sheeze

In addition to the qualities we have seen, Dalang gives some indications of his
physical surroundings. He comments that he has a fire going in his house and that his
Internet connection is poor and costs too much. Dalang also indicates that he lives “in a
disadvantaged area.” In another dialogue, he calls his hometown “nowheresville...near nothingtown.”

The above information is gathered from over 230 individual comments from Dalang and several hours of online conversations with him. To extract the above narratives and to isolate the particular conversation involving Dalang, I had to delete many lines of text that constantly emerge in IRC. While certain traits and characteristics emerge, it is much harder to get an understanding of self online than it is in the offline world. In the absence of all physical, auditory or visual clues, text proves to be quite limiting. Text may, however, in the long run and in certain contexts, provide you with a deep understanding of someone’s core values and beliefs. These understandings may be difficult to unveil in the physical world as people may remain guarded. Online, people readily speak without restrictions, but such conversations are difficult to piece together into a notion of “self.”

What we have learned about Dalang is that he is a helpful individual who has little tolerance for repeated simple questions. He has a good sense of humour and deep technical knowledge. In the context of an IRCHelp channel, he is very willing to share his expertise. In doing so, however, he does not seem to care if he hurts your feelings. He is a father of at least two children, probably lives in a lower middle class home and is supportive of his children’s extracurricular activities. He enjoys the sarcastic exchanges in IRC and is a

Researcher, April, 2002: Dalang is gone. I went to find him and after asking some people found out that Dalang has become gj. What does that mean where an identity can disappear, but the person behind the identity is still online. Who now is gj and what is the relationship between gj and Dalang. Is Dalang dead? Was he ever alive?
regular user who has established some important relationships online. He is an important part of the history and culture of IRC help.

**Why Students Go Online**

During the interviews with participants, strong commonalities emerged. These commonalities were separated into thematic areas. The themes provide an explanation of why participants go online.

**Safety: Personal and Social**

"Because I'm not worried about anything. I can be me and not worry about what anyone has to say."

One reason that the Disboys go online is to be able to socialize without the constraints of the physical world. In many cases, after years of negative social experiences, they have withdrawn into protective shells of isolation and consciously limit their interaction with others. Yet, online, these same students may be verbose and gregarious.

In school, these withdrawn boys have few opportunities to escape to new social settings. They enter even a new classroom well aware that probably what awaits them is ongoing ridicule or conflict. Their experiences have taught them that they are different and should attempt, wherever possible, to conform to conventional social norms. But this conformity is difficult as it inhibits their true self. As a result, the true self is marginalized in some settings and perhaps can only emerge in their lives online. The safety of exhibiting who they are in a social setting without any preconceived notions is tremendously empowering.
Student: In society it's a lot tougher. There's always the whole thing about don't judge a person based on whatever they are so, it's just inevitable. You've got a one-time shot at making a right impression and it just leads on from there.

Interviewer: But when you are online, every time you log on you have a different shot.

Student: Yeah.

If a student is unsuccessful in any particular channel or topic area, he can simply move on. He is not compelled to apologise, to linger, or to withdraw when his ego is damaged or when he wounds someone else with his words. He can simply remove himself in any way he chooses. No one will really care about his departure. Such entrances and exits occur rapidly and constantly in virtual worlds. He can move himself to a channel where he is more comfortable, or he can choose a different identity and try again to change the setting to his liking.

Many of these boys have had difficulty following societal rules. In some cases, there are physiological or psychological barriers to their conforming to socially acceptable norms. Virtual worlds present freedom and few, if any, rules. In fact, the rules that do exist change from channel to channel so it is just a matter of finding the channels that will let the student get away with what he wants. The end result is a feeling of control that allows individuals to be who they cannot be in the offline world. In addition to the freedom they encounter, there is plenty of reinforcement for their unusual behaviour. Whenever you believe you have found the extreme in virtual worlds, something else appears that stretches the limit even further. These boys have lived for years in settings where they are the extreme, the discarded. Online, they encounter a whole new breed of intolerance and disrespect. It is almost a point of power to see how
obnoxious one can be. As long as you have operator status in a channel, no one can do anything about your behaviour except register an objection by leaving.

Student: It’s not just like sitting there and watching TV or you just click channels and watch programmed stuff and have to watch somebody else’s idea of television, it’s your own. You’re totally in charge. There’s no rules online, there’s none, zero, I’ve seen it all, it just boggles the mind.

Students visit virtual worlds because they are accepted there for who they are. They find complete safety in the anonymity and lack of social conventions. They do not need to be cautious about their language or behaviour; they simply can say what they want, when they want. To boys who know they have difficulty functioning in social settings and who feel they do not fit within the norms of society, Internet Relay Chat offers a completely new and different experience.

Living Online: Alternatives to physical existence

Whenever my brother’s not at school or not sleeping, he’s online.

Life online is addictive. Like any entertainment forum or seductive drug, it attracts the user through constant positive reinforcement. Such reinforcement, for these boys, is simply being accepted at text-value for who they are. In addition, their ability to control, by their selection of a channel, the environment that best suits them results in their favouring life online over life offline.

In the interviews, more than half the boys indicated that they spend between three and five hours online each weekday. On weekends, their time online increases. In a few cases, even on a weekday, the boys are online for up to nine hours. Since a normal
weekday morning would allow them only the time to get dressed and ready for school, their online time is restricted to the hours between the end of school and bedtime. The amount of time they manage online, therefore, is shocking. At least three of the boys indicated that they regularly stay up until 4 or 5 a.m. before they catch a couple of hours sleep and then get ready for school. The correlation was evident in all cases: the longer the boys habitually stay online, the worse they are doing in school.

When asked, many of the boys said that they preferred interactions on IRC to spending time with friends. When asked if they had increased their time on IRC over the past year, the answer generally was “yes.” In two cases, the boys indicated that they were cutting down on the amount of time they were spending on IRC. In both cases, the boys were becoming more successful in school and in finding friends at school. They had realized that the time spent online was impacting on their ability to succeed in other settings.

In general, however, the boys were either continuing or increasing the amount of time they were spending online. In several cases, they had taken elaborate steps to protect their time online by, for example, indicating to friends that they preferred online chat to a telephone call because the chat channels were more like a conference call. They keep these chat windows open beside their homework at home or in some cases, while using a computer at school, they also keep a chat window open. They manage to use every opportunity to stay connected.

School: Relevance and Avoidance

I found for me that school was slow, like I don’t like having to prove that I know it. I don’t like having to write it down and having to prove that I know everything.
Many of the students in this study felt that school wasn’t allowing them to be successful. In their perception, the main problem was not the social context of the classroom, but the apparent irrelevance of the material they were being asked to learn. In addition, the boys had very specific learning objectives for themselves in computing. This highly technical and specific knowledge was not going to be obtained in a classroom so they devalued the learning that was going on in school and went in search of their own knowledge. Online, their search proved successful, reinforcing their belief that they could find any knowledge they wanted online and in their own time. They saw little need for school.

In addition, they perceived that only the knowledge being gained in content areas was valuable. They did not realize, or chose not to acknowledge, the importance of being able to navigate a variety of social settings. They had a detailed vision of where they were going in the computer industry and saw the acquisition of specific knowledge from hacking or other sites as the pathway to a career. Online, talented hackers are referred to as “leet” (short for elite). To be “leet” online was, to these boys, an obvious and important stepping stone to a successful career. While they agreed that the acquisition of detailed technical knowledge was important to them, they reveled in the fact that to be able to fake one’s abilities was also a great skill they could use the online jargon, they might soon be considered “leet” regardless of their true ability. Becoming a channel operator or earning the “leet” epithet is a true indication of status in the world of IRC. No one can refute your skill and importance if you reach such a level.

The perceived inflexibility of the classroom seemed to confine the students who had become so comfortable with obtaining information online. They viewed the
irrelevance of school with disdain and in many cases began a process of gradual withdrawal from school. Poor attendance is one of the students’ first responses to the difficulties they have with the social contexts presented at school and eventually they decide to stop going. This results in failure, which gives them even less reason to attend. The circle of reinforcement is complete and their dropping out of school is almost inevitable once the pattern begins. In only one case was the school successful with a long series of interventions that kept one study participant in school. At the time of publication, he is doing fairly well, much better than he was in the previous three years. His success is due, in large part, to his being strongly supported by our Behavioural Support Program.

Participants in the study have had a great deal of difficulty in school. Their stories are of isolation, fear, conflict, denigration, and in many cases, failure. These stories did not begin in secondary school. In each case, their histories are rife with problems in school. It appears that the empowering nature of adolescence allows them to take greater charge of their lives. They see the possibilities that living virtual lives presents and, in many cases, they make decisions to continue their non-conformity rather than make a final push for success in high school.

Search for an Identity

Part of it is that I can be a different person because they can’t see me and they don’t really know me.

People who traditionally have had difficulty in social settings often live on the periphery of many social contexts. In schools, the Disboys become marginalized. They live on the edges of the classroom. They wander the halls quietly, edging along the
lockers so as not to be seen. They keep their eyes low to avoid contact and if they are engaged in conversation, they abbreviate it as much as possible. They have learned that they do not really fit in so they are better to remain alone. They are not ashamed of who they are and in many cases have huge egos that complement their intellectual skills. However, they choose not to associate with the "regular" students. They have chosen a life-world that is different from most.

Interviewees often spoke of how being online was a fresh start. With each login they could assume a new identity or they could build on existing connections with other people online. They did not have to worry about angering anyone. If they behaved in a manner that was unacceptable or if they were cast from the channel, they simply went to another and tried again. If they were recognized and harassed, they could change names and start again. There was no way to track them. Virtual life is one of anonymity. It is a dream come true for anyone who has lived a life where adherence to strict rules is difficult. The participants in this study did not wish to remain anonymous online; they wished to create a new identity that would not have to live life on the margins. They wanted to build their reputation to become significant and powerful. They wanted to become elite. These boys, accustomed to living on the margins of life found that online they could emerge to the center. It was an experience that drew them back again and again.

Power: Control of Life-Worlds

I started teaching myself everything I could possibly learn.

In virtual worlds and especially in IRC, the acquisition and trading of knowledge is key to building an identity. The gathering of knowledge is usually done through a
series of blunt question and answer exchanges. In these exchanges, one demonstrates his knowledge and gains power. In any channel, being the operator is symbolic of power. However, anyone can become an operator simply by opening his own channel. The key to real power is to become an operator in an established channel. Acknowledgement and a promotion to the status of an operator are granted to those who help people online and who demonstrate their knowledge. Many participants expressed that one of the main reasons they go online was to share their knowledge and skill. They found that helping others was extremely rewarding and often resulted in an elevation of their status.

While helping others was rewarding and in turn helped participants feel a sense of worth in the channel, the most important aspect of gaining power in virtual worlds was the sense of control that it gave participants. When one is existing in virtual worlds, there is an overwhelming sense of control. You can decide to participate or not to participate. You can be kind, rude, honest or dishonest and it makes no difference. You can choose to be visible or invisible and helpful or not helpful. In any case, you are and will remain, anonymous and without physical presence.

Interactions: Relationships in Virtual Spaces

I don't even see the people I'm talking to as real people. They're just words getting typed. It's not a real person.

During interviews, participants were asked to comment on the characteristics of other participants in a channel. When interviewees were asked if they viewed other participants in a channel as real people, answers were mixed. They often indicated that online all they saw was text. They had few thoughts or feelings about the person on the other side. Respondents felt little if any emotional attachment to another character. In
only one of the interviews did participants indicate that they had formed any close
relationship with any other identity online. The interactions indicate that while there is
extensive interaction online, no real “friendships” form. The participants in a channel
while they may co-exist in the window, often for extended periods of time, do not interact
outside of IRC and do not make any further regular contact with those they meet online.
The life that is lived online exists only for the window of time that the computer is on.
Each new login brings a new set of interactions and expectations. While a channel’s
culture may be well-known, there is no guarantee that anyone familiar will be met. This
world facilitates a culture of non-attachment. This may be quite particular to IRC since
there are other studies that indicate people grow quite attached to specific characters or
cultural worlds online. However, the world of IRC is very basic, very technically
oriented, and is organized into small bites of time. Interactions are designed to be very
brief. There is little room (or time) for niceties. Participants in a channel get quickly to
the point or are chastised for wasting time with pleasantries. In fact, many users agreed
that the exchange of greetings and other social niceties were so frowned upon that using
them was one way to get banned from a channel. They were also a telltale sign of a
“newbie.” An experienced participant would not want to do anything that would lead
others to believe he was a “newbie”; to someone seeking the power of elite status the
assumption would be the worst possible insult. The language you use in a channel is key
to success. It is interesting to note that while participants want to help others they don’t
actually see the other users as people.

<k4y0> I wil [sic] say stuff to ya here
<k4y0> that i [sic] would never say to your face
<neendnick> because I don’t know who you are?
<k4y0> no cause yer not real
Navigating between Life-worlds

There is IRC life and then there’s real life and they’re just two separate things for me.

Participants in the study found the transition between life online and life offline seamless. It was as if they were simply walking from one room to another. Since there are no physical constraints or social graces to gain initiation to a channel, one simply appears and enters the conversation. There also are, in every channel, several users who are “lurking” or not participating. In many situations, lurking is how users spend the majority of their time. In addition to lurkers, any user may also decide to be invisible in a channel. So anyone can enter any channel at any time and be invisible or choose to be visible and lurk. Such users are, in essence, participating by being available but they are not speaking in the channel.

While the physical act of navigation is seamless, heavy users of IRC experience some difficulty establishing the balance in their lives between time online and time offline. Several of the participants in this study were spending several hours a day online. This time online was impacting seriously on the amount of time they had for offline socializing. In every case, the participants were making a conscious choice to spend time online rather than spend time with friends. One is left to wonder about the long-range impact of extended periods of time online. The nature of the conversations, the changes in social cues and contexts that are required to navigate in virtual worlds are much different than those needed in the physical world. While participants said that they did not feel that living online was hurting their social life in the physical world, they also
overwhelmingly agreed that life online was not helping them find out how to solve some of the social difficulties they encounter in their time offline.
Chapter 5: Summary, Results, Discussion, Implications and Concluding Remarks

Summary

The central focus of this study was adolescent boys who were spending extraordinary amounts of time online. The purpose of the study was to explore who the boys were, why they spent extraordinary amounts of time online and what implications this life online had for educators. The study included selection and interviews of eleven students at a secondary school and the first-hand documentation of this researchers’ participation in virtual environments. The volunteer male students were spending between four and nine hours a day online and were primarily spending time in a virtual community called Internet Relay Chat (IRC). The boys’ self-reported perceptions were cross-referenced against the researcher’s actual experiences with these IRC communities.

The literature reviewed for the study focused on computer applications in education and on theoretical frameworks for the social construction of self. The earlier review of computer applications in education and a preliminary exploration of informational technologies in schools lead the current investigation of IRC users. From the current literature review of self, it was argued that self is a product of social discourse and language and so hermeneutics was judged to be an appropriate methodology for the study with its emphasis on language and discourse. The resulting methodology emphasized informal unstructured interview protocols and direct IRC experience. The interviews revealed thematic areas that helped explain why students went online and what impact it had on their lives. The interpretation of these thematics was enriched through the researcher’s experience in the virtual worlds and interaction with the populace of these worlds.
The virtual world of Internet Relay Chat and how self may unfold in a text-based virtual world is presented through the eyes and fingertips of the researcher and his lived-experience in these worlds as a participant. As the study progressed, it was clear that significant theoretical and methodological challenges emerged when existing theoretical and methodological frameworks were used to describe virtual worlds were used. One of the major implications of this study is the presentation of an alternative interpretive framework. The addition of dialogue boxes at the side of the text helped readers understand context and grapple with key questions throughout the document. It also helped the researcher reflect from different perspectives on the important aspects of the study. The purpose of the summary is to revisit the major aspects of the research and to provide the reader with an understanding of key findings and the researcher the opportunity to focus on the collective findings separate from details and pressures of the study. In the following sections, I will revisit the problem statement in depth and consider the related questions. In the succeeding sections, I will discuss these boys who are attracted to spending so much time online. They spend almost as much time online as they do in school and in some cases they spend more time in a week online than they do in school. I will describe the specific themes that attract them to spend time online and how they create their virtual identities. I will also explore other findings. There are limits to a virtual existence and I will explore those limits, discuss how these boys negotiate their identities online and offline, and consider what implications their lives online have for their lives in the physical world. Finally, I will conclude this chapter by considering the educational implications for the lives of these boys.
Results

The results of this exploration reveal the composite identity of these frequent IRC users, their motives for being involved in these virtual worlds, and the impact that such usage has on their lives. This section is organized around the initial research questions that influence the inquiry. Specifically, I will explore the identity of these boys and why they are attracted to going online. Next, I will consider what implications this attraction to life online has on the lives of these boys and what implications there are for educators.

Who are these boys?

The participants in this study were a small group (n=11) of adolescent boys, aged 15 to 19 from one secondary school. They were selected because of their participation in IRC communities and because of the large amount of time that they spent online. The selection process for the researcher focused on those boys who were spending the most time online and who used IRC as opposed to solely working in gaming environments. While the participant group was small and an opportunistic sample, it may be indicative of many other students who are in similar situations. A random survey of several classes in the secondary school revealed that about 30% of students in the school are using a chat program similar to IRC as one of their prime means of communication with friends.

With the exception of two boys in my study, all of the participants had experienced great difficulties in school. This was not a criterion for selection but it was clear that as participants came forward, a pattern of behavioural and academic problems was emerging. The difficulties ranged from minor behavioural or social issues to extended and complex problems that eventually caused the students to leave school.
During the school year in which participants were interviewed, three of the eleven boys in the study withdrew from school.

From my work in the school I know that in the regular classroom, the boys' interactions were abrupt or coarse and they struggled with getting down to the task at hand. They seemed to put little value on schooling as they did little homework and did not do well academically. All but two of the participants in my study had failed courses at school.

Confrontation with others was another repeating pattern. Of the eleven participants, seven had a history of significant conflicts with adults or students in the school. These conflicts ranged from overt disagreements to physical altercations. It should be noted that only one of the participants had a physical altercation yet verbal sparring was quite common.

Parents were often concerned about the boys. Not only did they express concern about their child’s lack of academic and social success at school, but also about the amount of time that the child spent on the computer. In my work with parents, they often showed little understanding of what the students were doing on the computer, but were aware that their sons were showing signs of having some social difficulties at school. For a few of the parents, this was an ongoing theme that had existed for years.

I observed the boys over a period of more than a year and it did not appear that they resolved their academic and social difficulties. It was my observation that they persevered despite the difficulties they experienced but they did not find resolution to their issues. While they may have learned to focus a little more academically in senior grades, the social difficulties continued to exist.
Our Behaviour Support Program is designed to support and address the needs of students who are in serious jeopardy of dropping out of school. These students are considered the most seriously at-risk students in our building. Seven of the eleven participants in my study received support from our Behaviour Support Program. This was an indication of the boys’ level of risk for dropping out of school. They were among our most needy students requiring constant and prolonged intervention to deal with a wide variety of issues from violence and drugs to social isolation and depression. In stark contrast, interviews with participants often showed that, in their lives online, these boys wanted to learn and that they wanted to help others.

The frequent IRC-use boys were adolescent males with interpersonal difficulties and interest in traditional education settings and experiences. Clearly these boys were not unwilling to devote time to tasks and ideas in which they were interested, but their lack of success, their histories and current personal situations, or their priorities and agenda for the future does not ascribe high priority to face-to-face teaching and learning or the prescribed curriculum of the traditional secondary school.

What is the attraction to going online?

Interviews with participants revealed themes that indicated why they went online. The single most consistent theme that emerged during interviews was that going online gave students the freedom to be who they wanted to be. Participants reported that, in their lives offline, they were constantly under pressure to conform and had to cope with significant social pressures. In many cases these students had documented and diagnosed physiological constraints, such as Attention Deficit and Hyperactivity Disorder, that made negotiation of social situations difficult. Despite moving from classroom to
classroom, these boys wore their history like an irremovable backpack and it tainted many situations for them. For most of their day they were forced to negotiate the typical social settings in which they had difficulty. When they went online, they experienced none of the same pressures. They were free to cast off their backpack and be anyone they wanted to be. This could be seen as moving from an actual identity to a desired identity.

The second strong theme was control of self and others. In virtual worlds, these boys were in control of their environment. They chose when to participate, when not to participate and which worlds to inhabit. They were also, in many cases, able to wield significant power over others by becoming a channel operator or by sharing information. Many of the participants said that they went online to help others. The ability to control or help others was dependent upon the technical knowledge base of the boys. These boys often went online to acquire knowledge that then could be used to exercise power over others in a variety of situations. They then used this knowledge at their discretion giving them even more control over their environment.

Discussion

How these boys created their identities in online communities and how they negotiate between these differing identities had an impact on their lives offline. This section will explore how these boys created a sense of self online, how they negotiated their lives in virtual and physical worlds, and what implications these creations and negotiations had for their lives both online and offline.
Beings-in-the-Virtual-World: Creation of Identities Online

During the interviews, participants commented on their notion of their self online and how it emerged. They also commented on the importance of their online identity and how it differs from their offline identity.

When you encounter someone in your daily life whether on the phone, online, or in person, you form a notion of the identity of that person. Many participants in this study agreed that when they were online, they presented themselves differently than if they were in the physical world. Some were more aggressive and some less. In each case, the identity the boy chose for the online world was not the one he had chosen to present in his life offline. In addition, the boys disagreed that they had multiple identities when they were online and each said that he chose to stick with two or at the most three.

The boys spent a lot of time “building up” an online identity and took great care with its life. They were mortified if someone “stole” their nickname or if somehow they were banned from a channel that they had frequented. They saw a great deal of status attached to their nickname and the associated identity. Nonetheless, no nickname lasts forever and when it was lost or taken, they simply started again. Each time they were forced to once again develop their identity online. They could choose to seek a new, desired, identity by behaving in certain ways or simply exist as naturally as possible and once again attain an acquired identity through extensive interactions.

If the students appeared to be so different online from offline, then who was the real person? Many participants indicated that they were more like their “real” self online. The self they wanted or desired to be. They felt that they needed to be cautious offline and therefore kept more to themselves. Online, they could be more forthright or more
aggressive in asking questions or talking. They did not need to worry about how they were viewed by others. They felt they were free to be themselves.

Though they navigated effortlessly between online and offline worlds, it was clear that these boys were most comfortable in virtual worlds. They were fully aware of the need to be successful in society offline but they found the simplicity, freedom, and control of life online quite alluring. They certainly were completely fluent in living life online and the computer and Internet were a seamless part of their daily lives. They navigate from world to world without any difficulty. The computer and Internet access are simply a normal part of their daily lives. They navigate to worlds online as easily as stepping into a room. Just as we navigate between different roles in our lives, they navigate between identities in different virtual communities.

**Impacts of a Virtual Existence**

For many of today's youth, the proliferation of technologies is allowing them to be more connected than ever to other people. In some ways, it is also allowing them to be more disconnected than ever. The limits to a virtual existence may be having a significant impact on their lives offline.

Many of today's youth are spending enormous amounts of time plugged into digital worlds. The computer gaming industry is a multi-billion dollar business that is targeted to our youth. The time spent on IRC is just one facet of adolescents' virtual experience. In school, students regularly contact each other over cell phones in addition to running ICQ in the background whenever they are on a computer. While we have the ability to connect to more people than ever, the question of the depth of these connections...
is of concern to this researcher. When the amount of time spent interacting with each person decreases, what is the impact on the quality of interactions?

There is a cost in not communicating adequately. What does the human experience become when we decide to live it in bits and sound bytes? Living in virtual worlds is a pleasurable experience. There are no expectations, anything goes, and you can say anything you want without penalty or fear of retribution. That is not who we are as a species. Surely the human condition is meant to be experienced face to face so that one can clearly understand and benefit from the physical and interpersonal nature of communication. We are constructs of our environment and social interactions (Lacan, 1997; Mead, 1982, 1934). When we remove ourselves to virtual settings and the physical connection to the world is severed, we may become less human. Certainly this researcher believes that our communication is less effective. In my studies, interviews and observations, I have seen no evidence to suggest that living in virtual worlds helps people learn to solve social problems in the physical world.

Many of the participants in my study may be honing the skill of disconnecting from society. They are already good at it and IRC is quickly helping them become expert. If social construction of identity is a negotiation, with whom do you negotiate on IRC? The stability of characters is uncertain, it is difficult to define whether a user is a bot or a person and the entire communicative process unfolds in fragmented words and symbols that often are separated by lengths of time and a great deal of other text. The result is that there is no negotiation of social constraints. One is not even sure to whom one is attempting to relate. Users simply put out text in response to other text and observe
what unfolds. There is an exchange of discourse, but it is not a "conversation" in the normal sense that anyone in the real world would recognize.

At the same time, the lack of social constraints allows some users to be completely comfortable saying anything they want. As a result, in many channels, the dialogue is extremely open. In the Alcoholics Anonymous channel people are welcome and friendly. The sharing of experiences takes place as it would at many AA meetings. The virtual environment and the anonymity it provides can perhaps allow users to express more openly the pain they are experiencing and to seek the help they need. In the original vision of Alcoholics Anonymous one had to openly admit that he or she was helpless against alcoholism. When one admits this on IRC, he or she is still hiding behind the veil of privacy afforded by the text-only world. It is interesting to consider what the impact is of making this virtual confession as opposed to doing the same while facing your peers in the physical world.

Still the challenge remains. If a person has adequately developed social and communication skills then living part of his life online may not have a negative impact. However, the boys in this study need to learn to navigate the social complexities outside of virtual worlds. If they cannot, they will probably continue to live lives isolated from extensive direct contact with their peers in traditional social settings.

Searching for Oneself and Another: Negotiating Social Situations

To construct a sense of identity, one must be able to consider the perspective of the Other. It is this social negotiation between perspectives that is at the heart of the social construction of self. Our responses to social situations and cues are often guided by social conventions that we know to be widely accepted. We have the ability to take the
role of an “other,” to judge how our actions will be accepted and to respond in kind. In virtual worlds, identifying with the Other can be a complex task.

In IRC, the Other could be any one of hundreds of users in a particular channel and each would have an equally significant voice at any given time. Considering that self is a negotiation between oneself, the Other, and the environment, the virtual world of IRC removes some of these constraints. In a text-based world there are no physical attributes to the environment other than considering the actual interface between the user and the computer through the keyboard. In attempting to define the Other you first must begin to build a sense of who the Other is. Imagine reading a road sign and trying to understand the identity of the person who painted it.

Establishing the Other on IRC can be quite challenging. Given the difficulties presented, the chosen pathway is to accept the limited notions of environment and simply write text as you see fit. As people respond, you are in a position to evaluate their text and then adjust your responses in kind. Still, the responses will be limited and from only a few participants in the channel. The text in a channel flows in disjointed ways. It is unlikely that each response is directly connected to the text above it. In many ways, this places extreme limitations on the notion of self that are exhibited because users are not always responding to prompts. Often what is presented is simply information or comments devoid of context. The disjointed nature of text and comments makes the formation of an understanding of the Other a difficult synthesis of contextual and social clues presented over time, changing participation and textual episodes. Inquiries and probes to clarify generalizations or assertions about ‘other’ may not be possible or they may involve significant time delays since the participants addressed could be inactive.
Many of the participants in this study are completely at home in virtual environments such as IRC. While there are many different forms of virtual communities that offer rich opportunities to converse, IRC is not particularly suited to extended dialogue. If, while living in IRC, these boys have learned not to give consideration to the Other in trying to establish their notion of self, then in fact their existence online may be a serious detriment to living in the physical world. This consideration of others seems to be the exact problem that they are having when negotiating social situations in school. The way in which these boys understand their notion of self online has an impact on their life offline.

Implications

Participants in this study faced challenges as a result of their lives online. They found that they had to negotiate between different selves online and offline, to set priorities in terms of the time they choose to spend in virtual communities and to continue to learn social cues that they need to function in an acceptable manner in the physical world. The lack of success in doing this appears to drive these boys into the virtual worlds.

Navigating between identities

These boys were experts at navigating between virtual life-worlds. They were completely at home in IRC and in a variety of other virtual domains. We need to understand that they had multiple identities. In our lives we all play roles. However, the major difference is that we navigate between roles within environments that we are familiar and comfortable with. These boys navigated between quite different virtual worlds with completely different environments. In addition, the ways in which they
constructed and constituted themselves in these worlds was also different. They were used to limited negotiations in establishing social norms such as common manners in a conversation. As they got more and more affirmation for their lives in virtual worlds, they saw less satisfaction for the lives that they live offline. Many boys indicated that they were willing to be less outgoing in real life while enjoying the openness of virtual worlds in their own time. We would be wise to continue to have discussions with these boys about their identities in virtual worlds because some of the situations they encountered and some of the things they were doing were quite counterproductive in the physical world.

Prioritizing Life Online and Life Offline

These boys have made clear decisions in their lives. They have decided that time online is more valuable than time offline. With the exception of during the school day, most of the boys that I interviewed are spending more of their free time online than offline. I do not know what the long-term implications are but I am concerned that the boys are not learning how to navigate social situations outside of virtual worlds. Their career priorities are clear, they intend to pursue a career often linked in some way to technology but they do not see that they need to do well in conventional social settings to do so. In some ways it is frightening to consider that these boys may be the ones who design the next generation of virtual communities. If they are then what will these communities look like and who will they attract, and how will they relate to the real world?

Unless something prompts a reconfiguration of their priorities, it seems that these boys will continue to exist online for long periods of time. If they do, then one is left to
wonder how they will learn the social skills necessary to navigate in the physical world with any level of success.

Learning Social Cues

In everyday life we are bombarded with social cues that guide our behaviour. If one sits in a coffee shop and simply observes the negotiations that take place between a customer and a waitress during an order it is apparent that this is a complex process. Gestures, intonation, inflection, and body language are all-important parts of the messages we communicate. These small social graces are what constitute society and our sense of social identity. In the absence of such social situations the ability to respond to such cues will become more and more limited and less automatic. In virtual worlds, such social cues are virtually non-existent. We can speak the gesture in text: “Jordan smiles and waves,” but it does not carry the same power and message as in the physical world. Gestures are a powerful communicative device. When our gestures are limited to snippets of text of less than half a dozen words, certainly we have lost something. It is up to the users of virtual worlds to find ways to replace gestures. In many ways, they do manage to find substitutes that convey the message but the text is a sad replacement for actual physical gestures.

If these boys continue to navigate in virtual worlds, they may be losing sight of the importance of social cues and gestures. In addition, they are not getting practice in receiving, relating, and responding to social cues. This may have significant implications for their navigation in physical social settings such as a school classroom.
Implications for Educators

How can we best meet the needs of these boys? Certainly it is difficult to imagine that eventually removing them from school or having them withdraw is in anyone's best interest. They could be active and valuable participants in our schools and society but first we need to know who they are. Educators need to get to know and understand the students in their classes. This takes time, but it is an important step in meeting the needs of the students. Preconceptions must be shelved as much as possible and each student taken on his own merit. Each has a narrative that is unique and each requires unique treatment. These boys may be difficult to meet and to get to know; they will be guarded. They have had much experience in withdrawing from social settings.

Teachers and administrators must also learn to accept the limitations of these students. In many cases, they have physiological challenges that make it impossible for them to respond consistently in socially acceptable ways. We must understand that it is a physiological problem and not something that they can easily change. While they have limitations in how they may be able to perform in social settings (e.g. a cooperative learning group), they often have no intellectual limitations and can be quite bright. Often the connection to these students can be established by discussing technology. Perhaps tools such as IRC can help us bring students together in ways that can appropriately support their learning rather than distance them from our social settings. This certainly is an area that requires further research.

We all play roles in our daily lives and these boys have finely honed a particular role. The role that many have accepted is that of the social misfit. They know that they often say sarcastic or annoying things to their classmates. In several interviews the
students indicated that they routinely annoy their peers. The behaviour seems purposeful. As they enter a classroom, these students may be new to the teacher but they are not new to their classmates. They have built up an identity over their past several years of school together. The students know each other well, roles have already been clearly established through years of interaction. While we may change the learning environment, we do not change these socially constructed roles. The only variables are the teacher and the new classroom. In school we often say we will give the student a fresh start but in a world of socially constructed identities and in an environment as regulated as a classroom, there are few fresh starts for these boys. Rather than fight their historical construction, many choose to accept it and its role for them as their actual identity.

Virtual worlds may have many applications for education and there is plenty of research in this domain. One of the best known of these collaborative learning environments is Computer Supported Intentional Learning Environments (CSILE) (http://csile.oise.utoronto.ca/) designed by Marlene Scardamalia at the Ontario Institute for Studies in Education. The focus of projects such as CSILE is on having students build their knowledge online by sharing perspectives on issues and problems. It would be interesting to mesh with this the concepts of identities that students choose when they go online. Certainly it appears as if many students may be far more comfortable in a learning environment like CSILE than in the regular classroom as they are free to shed their historical identity. We need to continue to explore viable learning options for disengaged students.

In addition to seeking optimal learning environments for students, we need to actively work to help those students who struggle in social situations. In a secondary
school where the curriculum drives much of what we do, our attention to the social
domain shrinks from time to time. We must realize and continue to voice the importance
of establishing emotional comfort in a learning environment before expecting any real
learning to occur. Many of our students need understanding, support, and reinforcement
in learning appropriate social skills. There may exist an adequate bridge between raw text
worlds like IRC and other supportive worlds where students can come together to learn
and to share. If we allow these students who have not obtained the appropriate social
skills to fade into a virtual existence, it is difficult to see how they or society will benefit
in the long run.
Concluding Remarks

September is upon us and the new school year is about to begin. The administrators and counselors are gathered in the office to discuss the 250 students who have just completed grade nine. The administrative team and counselors talk about the successes and challenges of this group of teenagers and they also discuss students who are at-risk. They quickly brainstorm a list of fourteen names. Of the fourteen students, twelve are boys. All the students in the group of fourteen are already seriously at risk for dropping out of school. They have started to skip out, have had confrontations with teachers, and have failed some courses in the past year. The principal reflects on the list. Four of the twelve boys he remembers seeing in the computer lab every day during lunch. He didn’t pay a lot of attention to what they were doing in the lab but that is where they spent their free time.

At one point last year, the school got a call from the School Board Office. The message was that someone within the school had set up an IRC server. School Board personnel were not concerned with the activity per se because establishing a server on the Internet clearly had educational value and the installation had been done under the supervision of a teacher. What did concern the District, however, was that the server was getting over 100,000 visitors a day and this high volume of traffic was problematic for the District’s Internet provider. They were asking us, therefore, to shut it down. The server was created by one of the participants in this study and obviously he had managed to connect to thousands of other users. Some of these users were perhaps just like himself in the struggles they encounter in their daily lives. Perhaps these were other
disenfranchised adolescents reaching out in virtual ways to form meaningful connections in their lives.

Many boys will continue to explore their lives and identities in virtual communities. They will continue to enter worlds where they can enact different facets of their personality behind the veil of anonymity. As they do this, the lines between what is real and what is artificial may become blurred. For many boys, their identity resides in various forms, by various names and in different environments. As these boys become more comfortable in virtual domains, they will have more choice than many of us in selecting the characteristics of their identity. What remains to be established is this: will those boys who are having difficulty navigating conventional social settings be able to use these explorations of the online world to help them cope in the physical world? This study suggests that the time they are spending online appears to be reinforcing the marginality that they experience in their day to day life offline and is drawing them deeper into a virtual existence rather than moving them out into the physical world. The online experience, for these boys, may simply be increasing their isolation despite the numerous connections they form with others online. The early hopes of the study were to gather glimpses of ways in which we, as educators, can make personal connections with these students. It was hoped that a better understanding of these students would enable us to create more supportive learning environments. However, it appears that the life online does little to help these boys learn the social skills to cope in our highly structured, traditional learning environments. More research is needed to discover just how significantly this withdrawal into a virtual existence impacts the lives of these boys. The
scope of this study examined life in school. What remains to be explored is the long term implications of living online.

These boys are living a life that many of us would find completely foreign. They seem to have little value for the ways in which we attempt to “teach” them and feel that they can gather knowledge to meet their needs as they choose. Secondary schools are still rooted in very traditional structures. These structures are very much based on a scientific/industrial/modern model of knowledge distribution and these boys are living what may be considered a postmodern life where their very nature of self is decentered, deconstructed, and distributed. How do our traditional educational institutions intend to meet the needs of these students? In turn, will these boys be the very adults who program and define the next generation of virtual worlds? For what audience will those worlds be designed and what purpose will they serve?

**Future Research**

There is a growing body of research that is examining online communities and environments. One of the major questions that this dissertation raised has been a concern over the inability of traditional research methodologies applied to virtual worlds. There are pockets of success by notable researchers like Turkle (1995). However, are these methodologies only applicable to virtual worlds that mirror the physical world? For example, a virtual Star Trek is based on characters, environments, and social conventions, rules, values, and vocabulary with which we are all familiar. What if the virtual environment is completely foreign? Then are these research methodologies applicable? I feel that there is a need for a whole new approach to research in online communities that honours the anonymous, temporal, distributed and decentered world in which bots, nicks,
and shifting identities emerge. I believe that studies like this one begin to give us
glimpses of frameworks that may or may not apply to such explorations.

Another strong question has emerged during this study. As a result of extensive
interactions with the boys and other online participants, I am questioning whether or not
these virtual environments that we have referred to as “communities” or “worlds”
constitute a culture. In these virtual environments, the common threads of language,
religion, social conventions, art, values, or history that constitute a culture are non-
existent in IRC. Interviews with participants both on and offline suggest that they do not
even consider other participants as people illustrated by the infusion of bots into their
IRC channels. If that assertion is true, then I believe that we need to mount a strong
critique of what constitutes a virtual community and to reconsider our acceptance of these
terms. As more and more people begin to carve out a significant portion of their lives
online, we need to strongly consider whether or not we can ever expect technology to
take us to the point of a Global Village.
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Appendix A

Application for Ethical Review of Human Research

Application for Ethical Review of Human Research: University of Victoria
Submit one original and three (3) copies to the Office of the Vice President Research
Handwritten applications will be returned immediately. Use of the accompanying Ethics
Application Guidelines is strongly encouraged in completing this form.

Applicant Information

Name of the Principal Investigator: Jordan Tinney
Your Department: Curriculum and Instruction
Are you: □ Faculty  □ Staff  ☑ Grad Student  □ Undergrad Student
If you are a student, name of your supervisor: Wolff-Michael Roth
E-mail of your supervisor: mroth@uvic.ca  supervisor’s phone: 721-7885
Your E-mail Address: jetinney@uvic.ca  Your Phone number(s):
Work 658-5221  Residence 655-6788
Your Mailing address:
8608 Echo Place East
North Saanich, BC
V8L 5C7

Project Information

Exact Title of the Project: Virtual Self: Identity and the Internet
Have you applied for funding for this project? ☑ No  □ Yes (if “yes” complete the following):
Source(s) of funding: Exact title of grant(s) (If known)
Names of other investigators on this project: Their E-Mail
Note: if investigators change, provide this information to the Chair of the Human
Research Ethics Committee. Investigators are NOT employees (research assistants etc.)

Proposed Start Date (N.B.: 4-6 weeks required for review)

Mar. 20, 2000
C. Signatures

Your signature indicates that you agree to abide by all policies, procedures, regulations and laws governing the ethical conduct of research involving humans.

Principal Investigator: Date:

The signature of the supervisor below indicates that the supervisory committee has approved the student’s proposal and that the supervisor has assisted the student in the preparation of this application.

Student’s Supervisor Date:

The signature of the administer indicates that adequate research infrastructure is available to conduct this research

Chair/Director or Dean: Date:

Please be sure to use the Guidelines in preparing your application. The application is designed so that you will be able to easily use cut and paste in preparing your informed consent materials.

If you downloaded this file, you can complete it on your computer. You will only have to print off your final version and manually Complete the “tick-boxes”.

Level of Risk and Scholarly Review

The Tri-Council definition of “minimal risk” is the following:

The research can be regarded as within the range of minimal risk if potential participants can reasonably be expected to regard the probability and magnitude of possible harms implied by participation in the research to be no greater than those encountered by the participant in those aspects of his or her everyday life that relate to the research.

Based on this definition, do you believe your research qualifies as “minimal risk research”

☐ NO ☑ Yes  Please explain your answer below:

There is minimal risk because interviews require no sensitive information and anonymity is ensured. Much of the research is conducted online and is completely anonymous.

Please note, the designation of minimal or non-minimal levels of risk only affects the way the application is reviewed, not the substance of the review.
What type of scholarly review has this research undergone?

☐ None  ☐ External Peer Review (e.g. granting agency) ☒ Supervisory Committee  ☐ Special Review (explain below)

E. Research Project Information

The following information is required by both the Committee (to review the ethics of your research) and, where noted (*), by participants (as part of the process of informed consent). Researchers are encouraged to adapt the information provided to the Committee for the consent from and process. The use of lay language is required. **Only use the space provided.**

1. *What is(are) the purpose(s) and objective(s) of your research?*

The purpose is to explore the notion of “Self” in online communities. Students are spending a great deal of time living in virtual worlds and I am curious about the different ways individual selves are constituted through their online interactions. How is it established, how is it related to Self in the world outside the computers, and how does the establishment of identity online help us further our understanding of identity in real life?

2. *Why is this research important? What contributions will it make?*

Many adolescent boys are finding schools are not meeting their needs. For many of these boys, they are attracted to virtual communities. Why do they feel acceptance online and is the self we know in schools different from the self we see online? This study has the potential to make significant contributions to our understanding of adolescent boys and how they view their life-worlds.

3. *How will you recruit participants?*

☒ by letter (enclose a copy)
☐ by telephone (enclose the script)
☐ by advertisement (enclose a copy)
☐ through another organization or a third party (e.g. school records) Enclose evidence of permission to use these organizations or third parties in recruitment
☒ Other (please describe below)

*I will do a presentation to students and provide students with and information letter. In the presentation and in the letter, I will describe my study and ask students or their parents or guardians to contact me if they are interested in*
participating in the project. These short presentations will take place in selected classes. I also will put up posters in the school briefly describing my study and asking students to contact me if they are interested in participating.

*In the space below, provide the description you will use in the consent process to inform participants of why and how they were selected for inclusion in the study.

As students indicate an interest, I will ask about the amount of time they spend online. I will attempt to recruit students with extensive online experience where extensive means more than 1 hour per day. I will select the top 10 male students based on the amount of time they spend in online communities.

4. Describe the participants:

- [ ] Competent adults
- [ ] Incompetent adults
- [X] Competent Children/Youth
- [ ] Incompetent children/Youth
- [ ] A protected or vulnerable population (e.g. inmates, patients).

Provide details of the types of participants who will be included in the study (e.g. numbers, gender, age, position etc.)

_I wish to interview approximately 10 male students between the ages of 14-19. They are all currently, or have been, students of Claremont Secondary School._

5. If participants will/may not be able to provide consent for themselves, how will you gain consent? (Please note, in addition to receiving the consent of their parents/guardians, competent children must provide their own consent. See the Guidelines for further details).

_I will gain consent from the student and their legal parent/guardian that students have agreed to participate. See letter to parents in Appendix B._

6. *What procedures and methods will you use and what expectations do you have for participants?*

*6a. How much time will be required to participate?*

_Approximately 60 minutes for the initial interview and at a later date, 30 minutes to review the transcription of their data for accuracy._

*6b. Where will participation happen?
Interviews will commence at the student's convenience and at a time and place of their choice.

*6c* What exactly will the participants be expected to do?

- [x] be interviewed individually
- [ ] complete a questionnaire
- [ ] participate in a group interview
- [ ] be observed
- [ ] provide human tissue (blood, hair, DNA, gametes etc.)
- [ ] provide access to records or other personal materials
- [ ] Other (specify) __________________________

Provide details to your answer in 6c. below (e.g. name of questionnaire, source of documents)

Students will be interviewed and asked a series of questions as well as prompted to engage in a conversation about living online. See example questions in Appendix A.

6d What special training or qualifications are required for data gatherers?

The data gatherer is a doctoral student in Curriculum Studies. There are no special qualifications required.

7. *What are the potential or known inconveniences associated with participation?*

There are no inconveniences beyond devoting the time to be interviewed.

8. *Are there any of the following potential risks to participants: No physical Q social Q psychological Q emotional Q economic Q Other (specify)*

*Provide details to your answer in 8 below and describe how will explain the risks to participants*

9. *If there are any anticipated risks, how will they be minimized and dealt with if they occur? (e.g. provide referrals to counseling services)? Include a description of how you will describe this minimization to participants*

10. *Are there any potential or known benefits associated with participation?*
直接到参与者 | 社会 | 状态知识

*10a. How will you describe these benefits to the participant?

I have observed that sometimes the students who live online do not achieve great success in a school’s academic program. I have also observed that when using computers and living online, these students have a lot to offer. They are knowledgeable and skilled. I think that schools, and potentially society on the whole, can benefit from learning what you bring to school, where your skills lie, and how that information can be used to help schools meet your needs as individuals. I wonder why the school as an institution does not see your strengths yet online they seem to flourish.

*10b If there are any inducements (gifts, compensation etc.) to participate, what are they and why are they necessary?

No. All participants are volunteers.

11. How will you describe in the consent the voluntary nature of participation in the study and the right to withdraw at anytime without consequences?

Participation in this study is completely voluntary and you have the right to withdraw at any time with no consequences to you.

11a. What happens to a person’s data if he/she withdraws part way through the study?

☐ it will not be used in the analysis unless removal of the data is logistically impossible
☒ it will be used in the analysis if the participant agrees to this

11b. How will you explain this to the participants?

I will ask them for their approval to use their data. If they do not agree, I will not use their data.

12. Are you in any way in a position of authority or power over participants? ☒ Yes
☐ No (If “yes”, explain your relationship and how coercion will be prevented). Examples include teachers/students, therapists/clients etc.
I am vice-principal in their school. I will inform them that I am acting in my capacity as a researcher. They will be ensured that their involvement in the process is entirely voluntary. They are under no obligation to participate and may withdraw at any time. The students are old enough to understand this process. In addition, I will inform their parents so they also understand that there is no obligation to participate.

*Provide a description of how this will discussed in the consent process:

In initial contact with the students, then an information will go to parents once their son has agreed to participate. I will outline the process, anonymity, and voluntary participation. Parents will be informed of the potential for coercion and will be asked to discuss the study with their son. If there is any hesitation, I will work with parents to address concerns or withdraw the student from the process. As part of my process, students will be given the name of the school principal as a contact that they can speak to if they have concerns. In addition, as part of the consent form, parents have the name and number of my supervision and the Associate Vice President of Research who they can contact with any concerns.

13. *How will you provide for ongoing consent by participants during the data gathering period? (Note, this is primarily an issue in research that occurs over an extended period of time)

When the interviews are transcribed, I will review the data with participants. If they do not consent to any of the information, that information will be withdrawn. Two contacts are anticipated, the interview and the confirmation of transcriptions.

14. *Do you anticipate that this research will be used for a commercial purpose? [X] Yes [ ] No (if “yes”, explain how you will describe this to the participants in the consent process)

Note: Questions 15 and 16 deal with anonymity and confidentiality. While these two concepts are related, they are NOT the same. Please refer to the Guidelines and the brief definitions below to assist you in answering these questions.

15. *Anonymity refers to the protection of the identity of participants. Anonymity can be provided along a continuum, from “complete” to “no” protection (see the Guidelines for a discussion of this). Will the anonymity of participants be protected? [X] Yes (completely) [ ] Yes (partially) [ ] No
15a. *If yes, how will anonymity be protected and how will this be explained in the consent process?

All participants will be identified by an alias in both the data transcription and in the study. No participants will be identified by name. In addition, participants will have the opportunity to review the data to ensure that there are no references that may identify them. Part of your consent to this study is the recognition that your identity will remain anonymous.

15b. *If no, justify why loss of anonymity is required and explain how this will be explained in the consent process.

16. *Confidentiality refers to the protection, access, control and security of the data and personal information (see the Guidelines for more information). Will you provide confidentiality to the participants and their data?

☐ Yes  ☐ No

16a. * If Yes, how will confidentiality be protected and how will this be explained in the consent process?

No real names will be used in the transcription of data or in the publication of the study. All data will be kept in a locked filing cabinet in my home and in no other location. Once the study is complete, all data (transcriptions, tapes) will be destroyed. The master list of participants and their pseudonyms will always be in a locked filing cabinet in my home. When the study is complete, this list will be destroyed as well.

16b. * If No, justify the lack of confidentiality and explain how this will be explained in the consent process.

17. *What other uses will be made of the data?

None.

18. *When and how will the data be destroyed?

Once the study is completed, all tapes will be erased and all transcriptions and the master participant/pseudonym list shredded.

19. *How do you anticipate disseminating your results?

☐ Directly to participants  ☒ Thesis/Dissertation/class presentation  ☐ published article

☐ presentations at scholarly meetings  ☐ internet  ☐ Other (specify below)
- *How will you describe the dissemination of results to participants during the consent process?*

  The results of the study will be published as a doctoral dissertation at the University of Victoria.

20. *How will participants be able to contact you (and/or your supervisor) if they have questions or concerns about the study?*

  *My name, email address, and phone number will be attached to the consent form. Participants will be encouraged to ask questions.*

Special Questions related to additional review criteria:

21.* Other than the investigators, what are the names of individuals (employees or volunteers) who will be involved in data gathering or management? *If not known at the time of submission, provide this information to when it becomes available.*

  1.
  2.

  If these individuals require special training, skills, and/or qualifications, what are they and how will they be adequately prepared?

22. Does this study involve any form of deception? □ Yes ☒ No (If “yes”, complete a Deception Form)

23. Will this study be conducted in a country other than Canada? ☒ No □ Yes (If yes, provide details below of how this research conforms to the laws, customs and regulations of the foreign country)

24. If there is anything else you believe the Committee should know about this study, provide that information below:

25. If applicable, attach the following documents to this application (check those that are appended):

  ☒ Consent forms □ Recruitment materials □ Interview schedules □ Questionnaires
  □ Deception Form
☐ Permission to gain access to confidential documents or materials
☐ Human Tissues Form
Appendix B

Letter to Student Participants

Your are being invited to participate in a study entitled Virtual Self: Identity and the Internet that is being conducted by Jordan Tinney. Jordan is a graduate student in the Department of Curriculum and Instruction (Faculty of Education) at the University of Victoria and you may contact him if you have further questions by calling 658-5221.

As a graduate student, this research is part of the requirements for a degree in Doctor of Philosophy and it is being conducted under the supervision of Wolff-Michael Roth. You may contact the supervisor at 721-7885.

The purpose of this research project is to explore the notion of Self in online communities. People are spending a great deal of time living in virtual worlds and I am curious about the self that we encounter online. How is it established, how is it related to real-world self, and how does the establishment of identity online help us further our understanding of identity in real life?

Research of this type is important because many adolescent boys are finding schools are not meeting their needs. For many of these boys, they are attracted to virtual communities. Why do they feel acceptance online and is the self we know in schools different from the self we see online? This study has the potential to make significant contributions to our understanding of adolescent boys and how they view their life-worlds.

You are being asked to participate in this study because of your active involvement in online communities.

If you agree to voluntarily participate in this research, your participation will include an interview of approximately 60 minutes. The interview will occur in a private setting at Claremont Secondary School. You will be asked a series of questions as well as prompted to engage in a conversation about living online. Once the interviews are transcribed, you will also be asked to review the transcript of the interview so that you can make any changes. This second interview, which will take place at a later date, will take approximately 30 minutes of your time.

There are no known or anticipated risks to you by participating in this research.

The potential benefits of your participation in this research include schools, and potentially society on the whole, learning what you bring to school, where your skills lie, and how that information can be used to help schools meet your needs as individuals.

Your participation in this research must be completely voluntary. If you decide to participate, you may withdraw at any time without any consequences or any explanation. If you do withdraw from the study your data will be used only if you agree. If you withdraw, your data will be destroyed.
As you know, the researcher Mr. Jordan Tinney holds the position of vice-principal in your school. To help prevent any chance of you deciding to participate in this research because of this relationship, the following steps to prevent coercion have been taken:

- You have been informed that Jordan is acting in his capacity as a researcher.
- You are ensured that your involvement in the process is entirely voluntary.
- You are under no obligation to participate and may withdraw at any time.
- Your parents will be informed so they also understand that there is no obligation to participate.
- Whether you participate or not will not have any influence on your grades or standing in school.

In terms of protecting your anonymity all participants will be identified by an alias in both the data transcription and in the study. No participants will be identified by name. In addition, participants will have the opportunity to review the data to ensure that there are no references that may identify them. Part of your consent to this study is the recognition that your identity will remain anonymous.

Your confidentiality and the confidentiality of the data will be protected in the following way: There will be no real names in the transcription of data or in the publication of the study; pseudonyms will be used when necessary to refer to an individual participant. All data will be kept in a locked filing cabinet in my home and in no other location. Once the study is complete, all data (transcriptions, tapes) will be destroyed.

Data from this study will be disposed of once the study is completed. All tapes will be erased and all documentation from transcriptions shredded.

It is anticipated that the results of this study will be shared with others in the form of a Dissertation. I will send all participants a brief summary of the dissertation.

In addition to being able to contact the researcher [and, if applicable, the supervisor] at the above phone numbers, you may verify the ethical approval of this study, or raise any concerns you might have, by contacting the Associate Vice President Research at the University of Victoria (250-721-7968).

Your signature below indicates that you understand the above conditions of participation in this study and that you have had the opportunity to have your questions answered by the researchers.

________________________  ____________
Participant Signature Date

________________________  ____________
Parent/Guardian Signature Date
Appendix C

Example Interview Questions

1. How often do you go online?
2. Why do you go online?
3. When you go online, what types of worlds do you frequent?
4. When you visit different worlds, do you assume different identities?
5. How would you describe the differences between virtual and real worlds?
6. Please describe some of the identities you assume online.
7. Please describe your identity in the real world.
Appendix D

Parent/Guardian Notification of Consent

Dear Parent/Guardian;

As part of my program in Doctoral Studies at the University of Victoria, I am doing research at Claremont. I require the consent of both you and your son before I may begin my research. Your son has agreed to participate in my study. Here is a copy of the letter of consent that they have signed indicating that they are volunteering to participate in my study. Please take the time to read the letter of consent below and if you have any concerns or comments about my study, I can be contacted at 658-5221. Again, I will not proceed until I also receive your consent.

Human Research Ethics Consent

You are being invited to participate in a study entitled Virtual Self: Identity and the Internet that is being conducted by Jordan Tinney. Jordan is a graduate student in the Department of Curriculum and Instruction (Faculty of Education) at the University of Victoria and you may contact him if you have further questions by calling 658-5221.

As a graduate student, this research is part of the requirements for a degree in Doctor of Philosophy and it is being conducted under the supervision of Wolff-Michael Roth. You may contact the supervisor at 721-7885.

The purpose of this research project is to explore the notion of Self in online communities. People are spending a great deal of time living in virtual worlds and I am curious about the self that we encounter online. How is it established, how is it related to real-world self, and how does the establishment of identity online help us further our understanding of identity in real life?

Research of this type is important because many adolescent boys are finding schools are not meeting their needs. For many of these boys, they are attracted to virtual communities. Why do they feel acceptance online and is the self we know in schools different from the self we see online? This study has the potential to make significant contributions to our understanding of adolescent boys and how they view their lifeworlds.

You are being asked to participate in this study because of your active involvement in online communities.

If you agree to voluntarily participate in this research, your participation will include an interview of approximately 60 minutes. The interview will occur in a private setting at Claremont Secondary School. You will be asked a series of questions as well as prompted to engage in a conversation about living online. Once the interviews are
transcribed, you will also be asked to review the transcript of the interview so that you can make any changes. This second interview, which will take place at a later date, will take approximately 30 minutes of your time.

There are no known or anticipated risks to you by participating in this research.

The potential benefits of your participation in this research include schools, and potentially society on the whole, learning what you bring to school, where your skills lie, and how that information can be used to help schools meet your needs as individuals.

Your participation in this research must be completely voluntary. If you decide to participate, you may withdraw at any time without any consequences or any explanation. If you do withdraw from the study your data will be used only if you agree. If you withdraw, your data will be destroyed.

As you know, the researcher Mr. Jordan Tinney holds the position of vice-principal in your school. To help prevent any chance of you deciding to participate in this research because of this relationship, the following steps to prevent coercion have been taken:

- You have been informed that Jordan is acting in his capacity as a researcher.
- You are ensured that your involvement in the process is entirely voluntary.
- You are under no obligation to participate and may withdraw at any time.
- Your parents will be informed so they also understand that there is no obligation to participate.
- Whether you participate or not will not have any influence on your grades or standing in school.

In terms of protecting your anonymity all participants will be identified by an alias in both the data transcription and in the study. No participants will be identified by name. In addition, participants will have the opportunity to review the data to ensure that there are no references that may identify them. Part of your consent to this study is the recognition that your identity will remain anonymous.

Your confidentiality and the confidentiality of the data will be protected in the following way: There will be no real names in the transcription of data or in the publication of the study; pseudonyms will be used when necessary to refer to an individual participant. All data will be kept in a locked filing cabinet in my home and in no other location. Once the study is complete, all data (transcriptions, tapes) will be destroyed.

Data from this study will be disposed of once the study is completed. All tapes will be erased and all documentation from transcriptions shredded.

It is anticipated that the results of this study will be shared with others in the form of a Dissertation. I will send all participants a brief summary of the dissertation.
In addition to being able to contact the researcher [and, if applicable, the supervisor] at the above phone numbers, you may verify the ethical approval of this study, or raise any concerns you might have, by contacting the Associate Vice President Research at the University of Victoria (250-721-7968).

Your signature below indicates that you understand the above conditions of participation in this study and that you have had the opportunity to have your questions answered by the researchers.

________________________________________  ____________
Participant Signature                     Date

________________________________________  ____________
Parent/Guardian Signature                Date

A COPY OF THIS CONSENT WILL BE LEFT WITH YOU, AND A COPY WILL BE TAKEN BY THE RESEARCHER