Sarah Bishop

Dr. Libby Allison

Thesis A

04 December 2012

Thesis Proposal: A Fantasy Existence: Addiction, Social Identity, and Technical Communication in the Massively Multiplayer Online Role Playing Game

Introduction

Digital technology has broken barriers between reality and imagination. This is especially true of video games because they take the idea of fantasy a step farther than a novel or a film by allowing the user to directly influence a false reality. Online games even allow players to develop their own identities and adapt to entirely new worlds. Despite the growing visual complexity of online environments, the internet has been and will likely continue to be seeped in written language. It is also the gateway to understanding online games from technical tutorials that require the user to interact directly with the computer to social forums where players collaborate to construct vivid fantasies. The video game or "gaming" industry has achieved remarkable financial success, especially considering the fact that less than 50 years ago, games were nothing more than shaded pixels moving across the screen. In 2011, consumers spent $24.75 billion on games and related accessories and budgets for popular games have reached millions of dollars ("Industry Statistics"). The industry will continue to grow in the future, especially as current generations of gamers become older and newer generations of gamers enter the market. Because gaming culture has become so prevalent, concerns about the industry's effects on players range from implications that video games cause aggression and violence to possible health risks from players spending all of their free time playing games when they could

be engaging in physical and social activity in the real world. The common term for these worries is “gaming addiction.” It is the culmination of fears shared by family members, friends, and gamers themselves because this kind of addiction encompasses the notion that games change the way people think and react to their environment, subsequently endangering their physical and mental health. A number of shocking news stories in the past few years describe incidents related directly to gaming, most involving dangerously neglectful parents such as the case in Colorado in 2011 when a mother was apparently so involved in her game that her one-year-old child drowned tragically in the bathtub while she played (Gallagher). Stories like this only fuel anxiety about gaming among gamers and non-gamers alike and they make it even more apparent that this is a problem that needs examining for the health of the community as a whole.

For my thesis, I will focus my research on the use of language in Blizzard Entertainment’s popular Massive Multiplayer Online Role Playing Game (MMORPG) *World of Warcraft* to discover whether excessive, problematic gaming can lead to addiction, what messages and features about the game and its community can contribute to gaming addiction, and whether the technical communication present in the game and its forums either enables users to spend more time with the game, or if it attempts to instruct and warn users about the dangers of discarding their real lives in favor of digital identities. I will consult rhetorical and technical communication theory along with psychological research done on gaming addiction to discover the inherent messages in the game and its public forums (*Battle.net*), especially those that encourage harmful gaming habits. As ethical communicators, it is the duty of the game developers to circulate information and warnings about possible mental and physical health risks associated with prolonged play in the same way casinos must provide information on the dangers of gambling addiction (Rooij et al. 490).

Examples of negative behavior by gamers such as the news stories about outrageous neglect speak to the issue that many scholars and psychologists refer to as “loss of time” (Wood 171). Games are so “immersive” that players can lose track of time and devote themselves to gaming rather than keeping social obligations, working, or attending school. Thus, negative outcomes of gaming addiction include degradation to one’s social life, school and work performance, sensitivity to violence, and physical health. Social concerns about gaming are more varied than parental worries about violence or subjective concerns about how a child or adult spends his or her free time because they encompass a range of obligations to include necessities like school and work, and more voluntary, pleasant outlets such as relationships with friends and family (Young 356). Generally, the degradation of social ties in the real world overlaps with social networking on the Internet. In games and in many other environments online, players are able to create and perpetuate fantasy identities and live entirely different lives digitally. Partners, parents, and friends worry that excessive time online in games, in particular, will damage real relationships (Snodgrass, Lacy, Dengah, and Fagan 1213). Inherent social outlets in online games like marriages, holiday celebrations, user-run marketplaces, friending, and dress up exacerbate this problem because they closely resemble real world interactions and hobbies and, in essence, replace their real-world counterparts. There are also concerns about addiction, when taken to the extreme, being related to violence (Elliott et al. 2). The loss of time, in this sense only aggravates immersion, and it is theorized that excessive play can lead to desensitization to violence and gore. Concerning physical health, physicians have also expressed apprehension about excessive video game playing worsening a sedentary lifestyle and contributing to obesity and other health problems.

Conceptualizing the features of games that lead to addiction has proven to be difficult for gamers and researchers. Even the term itself is constantly under scrutiny (Liu and Peng 1306). Some scholars typify "excessive" gaming as distinct from "addiction" (Griffiths 120). The issue is further complicated by a myriad of social factors to include a generational divide in the playing and understanding of video games that fuel non-gamer parental concerns. This is the notion that parents who do not engage in video game play do not "get it" and solely blame games for their children's social withdrawal because they lack experience with them. The video game industry and community are also generally hostile to studies about gaming addiction because gaming is almost always framed in negative terms ("The Psychological Study of Video Game Players" 559). The underlying fear seems to be that researchers will conclude that there is no such thing as "healthy" gaming.

Additionally, the American Psychiatric Association (APA) has not included gaming addiction as a legitimate diagnosis in publication or in the *Diagnostic and Statistical Manual* (DSM) (Freeman 43). The difficulty in classifying and recognizing gaming addiction has led to problems treating it and various models to include those for sufferers of impulse control disorders have been attempted for treating patients (Freeman 43-4). My research indicates that the problems surrounding classifying gaming addiction involve various conceptions of what is good or bad for the individual, whether hours spent playing equals addiction, and theories about if the games themselves are addictive or if excessive playing is merely a symptom of a social difficulty or disorder. Video games cover many different genres and player activity levels from simple, interactive games that encourage preschoolers to develop literacy skills to dance simulators used for exercise and real life social interaction, so it can be difficult for gaming outsiders to distinguish between what kinds of games are more likely to encourage players to

lose time. Though concerns about violence and loss of time find their origin in games played solely for entertainment value, addiction in particular is usually attributed to the world of online gaming. This has direct ties to the construction of a social identity within an online environment, and it is my intent to discover how the formation and reinforcement of this identity in an online game can contribute to addiction.

Problem Statement: Gaming Addiction and How Technical Communication Can either Facilitate or Mitigate Negative Behavior

Video game addiction is a pertinent issue that has been identified with the popularization and spread of gaming culture around the world. Texts from popular and academic sources have highlighted the issue as, primarily, a struggle of definition and classification. Treatment is hardly ever mentioned; and when it is, descriptions are not specific. Scholars, psychologists, and physicians have conducted research on video game addiction and have come to different conclusions. Some researchers conclude that gaming addiction is a behavioral addiction based on case studies and surveys relating to the issue. Others link it directly to the types of symptoms and outcomes associated with gambling addiction or substance abuse (Freeman 45-6). There are also scholars who wish to focus on the perceived number of people suffering from problematic gaming. Richard T. A. Wood, a scholar who has contributed to research in gaming addiction, acknowledges that addiction is a problem worthy of concern but not necessarily as rampant as the media presents it to be because the time spent gaming may be unhealthy in one user but perfectly acceptable in another (Wood 172).

The features of online games may contribute to addiction, but there has been relatively little research into the specific interactive features between the game, the user, and the online

community that make them susceptible to overuse. Therefore, studying a particularly popular Massively Multiplayer Online Role-Playing Game and how the game rhetorically encourages the user to develop an ideal personal identity, engage with the game literally and socially, and subsequently "lose time" in the real world could help game developers, concerned family members, and the gamers themselves understand the risk of addiction they face when playing an MMORPG.

There are plenty of examples of instructive writing in the game, and the forums provide a number of resources about how to technically engage with the game and socially interact with the community such as the "Game Guide" section for *World of Warcraft* in *Battle.net* and the "Gameplay and Guides" forum. The virtual spaces include technical communication texts that have ethical implications if users and developers of *World of Warcraft* are actively encouraging players to play without providing any warnings about the dangers of gaming addiction. Furthermore, some scholars have noted a lack of social responsibility in the gaming community, especially on behalf of the developers, about circulating information about addiction in contrast to the governmental restrictions surrounding gambling addiction (Rooij et al. 490). This relates to my field of study, Technical Communication, because the discipline's scope is constantly expanding to mirror the growth of technology and communication. Exploring highly technical, specialized visual and textual language is an appropriate way to tie together technical communication and gaming addiction. It falls partially under the category of "digital literacy," especially because I plan to evaluate technical documents including in-game tutorials and forums that provide new terminology and explain skills to help a player's immersion. Saul Carliner refers to this kind of technical communication work as "e-learning" and remarks that the shift to

digital technologies has meant that technical communicators have had to learn to use technology, not merely write about it ("Computers and Technical Communication" 43).

The idea of constructing a new reality and identity brings many implications to include the personal value and struggles in any given user's real life. The support available in the online community and how this community makes its own digital reality can help clarify the concept of addiction, and perhaps even allow the players to recognize the difference between healthy, positive play that encourages a balance between real and online worlds and problematic play that encourages the player to avoid the real world. One particularly poignant question related to the idea of technical communication and gaming addiction is whether or not technical language provided by makers of the game and users facilitates or mitigates negative behavior. In this case, "negative behavior" indicates language that is geared toward drawing players into the game without noting the aforementioned health risks associated with spending endless hours playing.

Research Questions

My research questions include:

- Why is it difficult to define video game addiction?
- What interactive and rhetorical features of an MMORPG can contribute to video game addiction?
- How does a player construct a social identity within the game and the community?
- What strategies does Blizzard use to keep players interested? To draw in new players?
- What important terms are native to the *World of Warcraft* community?
- What examples of technical communication can be found in *World of Warcraft* and in its forums?

- Among the technical guides and documents available in the game and in the forums, do any of these encourage excessive play?
- How can technical communication help users understand gaming addiction and improve their playing habits?

Strategies for Data Collection and Analysis and Privacy Considerations

Research for my thesis will involve a literature review on key articles addressing video game addiction. The majority of my study will include playing Blizzard Entertainment's *World of Warcraft* to catalogue the persuasive elements and to fully describe how interaction and feedback contribute to a new, positive identity and encourage the user to spend more time with the game than he or she can afford in real life. I will also extensively read Blizzard's official forums (*Battle.net*) and any guides connected with *World of Warcraft* to analyze the language used by the community in these social venues and the types of communication that take place in the forums and in the game. Before I describe my research strategies, I will provide a brief description of *World of Warcraft*.

Blizzard Entertainment, founded as Silicon & Synapse in 1991, is a game developing company that has received critical acclaim for its many titles. *World of Warcraft*, one of its most famous games, was initially released in November of 2004 and soon became a commercial success, boasting 4 million subscribers within a month ("Blizzard Timeline"). Today, *World of Warcraft* could still be considered the most popular online role-playing game in the United States. It currently has over 10 million subscribed users, which is significant because a subscription entails paying a consistent monthly or yearly fee. If they are paying, players are more likely to be spending at least part of their free time engaged in the game (Ziebart). The game is set in the

fantasy worlds of “Azeroth” and “Draenor.” The player has the option to join the “Alliance” or the “Horde,” two warring factions, and based upon this decision, he or she will create a character of a certain race and class with which to play the game (Branger et al. 3). Playing consists of building a character through the acclimation of “experience” or “XP” through battle with antagonistic monsters or by engaging in non-violent actions like exploring new areas (170). How the player wishes to spend his or her time is completely open-ended; some focus on gameplay, others on social interaction, but many find a combination of the two to be the best way to get the most out of the game in terms of personal satisfaction and rewards earned from playing harder sections of the game itself (193).

Concerning technical communication, I will focus on language usage; how the game itself communicates with the player and how players communicate with each other to perpetuate their in-game identities and to convey technical information about gameplay strategies and how to properly interact. To a certain extent, this type of communication could be considered a “negotiated exchange,” which is when many authors produce a single text that unites both of these parties (Johnson 93). I will also use the theory of “information design” as it is presented by Saul Carliner in "Physical, Cognitive, and Affective: A Three-Part Framework for Information Design" in my thesis. I will focus on his definitions of user-centered design, human performance technology, task-oriented writing, and writing as a problem-solving activity to evaluate technical communication present in *Battle.net* (“Physical, Cognitive, and Affective”). Theoretically, audience analysis will be another interesting angle to use while exploring Blizzard’s official documentation, guides for the game, and what the users generate. Ann M. Blakeslee’s “Addressing Audiences in a Digital Age” is especially helpful because she situates the technical communicator as an agent who ideally interacts with the audience and that the focus should be

on what users actually need rather than what the writer thinks they want (217). While there are no guarantees that the writers from Blizzard are gamers themselves, the users who produce guides and help for the community have the unique perspective of being part of the process of understanding, internalizing, and designing knowledge for an audience they already understand.

Bernadette Longo offers some guidance about how to study technical communication by viewing it through cultural studies in her article "An Approach for Applying Cultural Study Theory to Technical Writing Research," which takes a postmodern approach to the discipline. She states that the particular culture of any environment legitimizes certain types of writing and knowledge while limiting others. Looking at factors within and outside any particular organization can help shed light on how we form knowledge and legitimize technical writing ("An Approach" 55). I think it would be helpful to consider Longo's idea of viewing technical communication within a particular organization as being influenced by scientific and culturally accepted discourse outside one particular group because the *World of Warcraft* community clearly takes its cues in design and instruction from the real world. To this end, I plan to look at the guides and examples of technical communication in *World of Warcraft* to discover how models of technical communication and the privilege of what is considered scientific, objective knowledge influence these kinds of documents in the *World of Warcraft* community. Longo also offers some insight into "activity theory" in her article "Human + Machine Culture: Where We Work." Activity theory explores the individual writer and the social community at large by exploring the "activity" or communication that the author generates. The end result is to describe the relationship between a single writer, the social community, the work produced, the tools used, and the process involved ("Human + Machine Culture" 160). Activity theory would also be a useful theoretical framework to use while reading *Battle.net*'s forums and I think these theories

can connect the writing found in Blizzard's gaming community to the field of technical communication at large.

I will consult authorities on visual rhetoric and behavioral psychology focusing on addiction for my analysis of the particular language of the *World of Warcraft* community, the formation of personal identity, obligation, the idea of fulfillment, and how all these elements can contribute to harmful gaming habits. To analyze visual aspects of the game, I will refer to visual rhetoric theorists such as David S. Birdsell and Leo Groarke and their articles about the validity of visuals and images as persuasive and capable of making reasoned arguments (313). Keith Kenney's myriad text about the many uses of visual rhetoric is also helpful, particularly the theories he includes about crossing boundaries and how discovering common interests between different cultures and groups makes persuasion possible (333). To visually appraise forums and electronic guides, I will look to resources such as Stephen A. Bernhardt's identification criteria of key features of electronic texts and their implications for transmitting technical information. Of course, as I will fully explore over the course of my project, gaming addiction is not as clearly defined as media warnings and reports often assert. The focus of my thesis is not to attempt to prove that these factors will result in a gaming addiction, but to explore how the sense of community and identity a player fosters in a game like *World of Warcraft* can increase the risk of developing unhealthy playing habits.

Games are best defined by their ability to literally involve the user as a part of the action. As opposed to many games played offline, Massively Multiplayer Online (MMO) games of any genre tend to have looser plot structures and the implementation of various add-ons and expansions keeps the players coming back, at least for gameplay. In my analysis, I will use Shang Hwa Hsu, Ming-Hui Wen, and Muh-Cherng Wu's "Exploring User Experiences as

Predictors of MMORPG Addiction" as a framework for some of the specific features of the game to explore addiction, namely "motivation" and "attraction" factors (Hsu, Wen, and Wu 991). "Motivation" factors refer to game mechanics that are designed to capture the player's attention and encourage striving for new and greater accomplishments. They include challenge, fantasy, curiosity, control, and reward (992-3). "Attraction" elements consist of more inclusive social features that are especially unique to MMORPGs and will be the most viable for exploring community and identity. These include competition, cooperation, audience, belonging or obligation, and the roleplaying factor (993). It will be interesting to note how technical works play into attraction and motivation factors.

I will also attempt to compare what I see in the game and in the forums with Iain Brown's "components" model of addiction as he presents it in "A Theoretical Model of the Behavioural Addictions – Applied to Offending." Though his article is from a book published in 1997, gaming addiction scholars Daniel L. King, Paul H. Delfabbro, and Mark D. Griffiths cite it as an important work for analyzing gaming addiction ("Recent Innovations" 4). The language differs slightly from King, Delfabbro, and Griffiths' article, but the core components Brown lists remain the same. The first component is *Salience*, or when gaming becomes the most important part of a person's life to the point of preoccupation. *Mood Modification* refers to changes in mood that result from playing games, most notably an increase in attention or a sense of tranquility when playing the game. *Tolerance* or *Relief* refers to the need to spend more time with the game to achieve mood modification. *Withdrawal* occurs when the player suffers adverse mood or physical effects after being unable to play the game. *Relapse* is when the player returns to earlier, harmful playing habits after a period of either playing less or eliminating play altogether. Finally, *Harm* or *Conflict* describes the negative consequences of excessive game play to include a

degeneration of social relationships and activities as well as distress from the sufferer ("Recent Innovations" 4) (Brown 42-4). I will not physically interact with the players to ask them these questions, but I will point out features of the game that could encourage a user to fall into this detrimental behavioral cycle and see if the language used by the community potentially illustrates any part of this cycle.

I will also evaluate any available Blizzard publications mentioning time management or dangers of video game addiction from an ethical standpoint with a focus on social responsibility when conveying technical information. This is a complex issue because the psychological research behind gaming addiction is not only new, but contains a variety of opinions ranging from an objectivist standpoint that directly equates time spent playing games to addiction to a more inclusive stance that points to social factors and overall dissatisfaction with real life as the issue; in this model, excessive game playing is merely a symptom of larger problems. Because I am focused on Blizzard's *World of Warcraft*, I will look for messages from the developers about addiction and see if there are any warnings or messages in the game or its manual discouraging players from spending too much time in the game. I will keep in mind the idea of audience analysis to note texts that frame the issue positively, negatively, and emphasize the complication of identifying gaming addiction.

To be specific, I plan to explore the following factors in *World of Warcraft*:

- The process of character creation to include the versatility of the aesthetic and gaming elements available to a new player.

- The physical construction of the game and the many ways to interact socially (is it text based alone, or is voiced chatting encouraged? What are the different ways of communicating in-game and do they mirror real life-interaction?)
- How character customization is handled (does a player need to devote time to this, or will money suffice?).
- How the different types of realms (Normal, Player versus Player, Roleplaying, Roleplaying Player versus Player) contribute to different kinds of communities or playing styles.
- The "Beginner's Guide" that comes with the *World of Warcraft* "Battle Chest" (the basic game, the first month's subscription, and an expansion) in terms of its visual appeal, rhetorical strategies for getting the player involved, and any advice it gives about time management.
- *Battle.net*'s extensive support forums and guides about how to get started with the game and understand gameplay elements with special attention to information about health risks and gaming addiction.
- Group dynamics and the notion of collaboration to teach the community in the forums through conversation and guides. These resources are examples of technical communication and they contribute to the growth of individual and collective players and showcase their obligation to the community.
- Official and fan guides to understand basic terminology, the class system, and how the game's developers and moderators encourage users to participate in the social community and how these guides are technical communication with a purpose that either aggravates or mitigates developing harmful gaming habits.

- The visual and textual classification of players within the forums to understand how a player is defined by their role, race, and guild.
- *Battle.net*'s recommended fan sites to understand the reach of the community.

Rebecca Eynon, Ralph Schroeder, and Jenny Fry state in their article "New Techniques in Online Research: Challenges for Research Ethics" that conducting research on the Internet definitely has ethical implications because of the inherently unique issue of context (188). The best way to respect online users is to understand the context in which they are communicating and which utterances are private and which are clearly meant to be viewed by the public. This can be difficult to determine because most communication is in text and is accessible. This is especially true of *Battle.net* because Blizzard's forums are public. Registration is not required to view conversations in the community, only to post and participate in them. Players' words are on display for anyone who would wish to view them, so every player should ideally be aware of the difference between personal and public content. Additionally, the boards belong to Blizzard Entertainment and, legally, any discourse generated is technically the company's property.

The issue of privacy has been and will continue to be a major concern for me as I go forward in my research because I plan to extensively read through public forums and see how interactions take place in the game itself. I will be fully aware of the context and do my part to fully understand the immersive online environment so that I will approach my research without being a complete outsider to the game. Enyon, Schroeder, and Fry mention that quoting or using online interactions, even when made anonymous, may still carry ethical implications if the words can be easily traced back to the real user (191-2). This is not an easy ethical matter, especially because I do not wish to harm the community. I will respect the players' privacy by not including any real user names in my thesis, nor will I single out or follow any particular user. When I use

player-generated posts, I will summarize or present partial quotes in my findings rather than using entire posts to avoid players' words being easily traceable. I will also not include any real user names whenever I quote or mention player language in my thesis. King, Delfabbro, and Griffiths point out that "blending" is an additional issue when conducting research because gamers in their environment are less likely to trust or be willing to interact with an outsider to gaming culture, especially one with a psychological or academic purpose in mind ("The Psychological Study of Video Game Players" 558). To quell these types of worries, in the event that I engage with users in the game itself or in the forums, I will interact with the online community positively because my focus is as much on the idea of social identity and community as it is on risk of addiction.

The notion of exploring how technical communication, social identity, and digital technology merge in *World of Warcraft* is exciting to me as a researcher. Tying all of these studies together with research on gaming addiction makes it relevant and potentially useful to both gamers and scholars. One of the most fascinating aspects of the online gaming community, especially from the perspective of an outsider to that particular culture, is the extensiveness of the community. There are local celebrities in *World of Warcraft*, members hold weddings and holiday celebrations online, they speak of their roles and play styles in terms that are completely incomprehensible to a new player, and most players approach the game with an earnestness and honesty that is both admirable and remarkable. Many players do live completely different lives online, and it is my goal to understand how language, visual and textual, generates such a varied community.

Resources

Baer, Susan, Elliot Bogusz, and David A. Green. "Stuck On Screens: Patterns Of Computer And Gaming Station Use In Youth Seen In A Psychiatric Clinic." *Journal Of The Canadian Academy Of Child & Adolescent Psychiatry* 20.2 (2011): 86-95. *Academic Search Complete*. Web. 5 Oct. 2012.

Baehr, Craig, and Susan M. Lang. "Hypertext Theory: Rethinking And Reformulating What We Know, Web 2.0." *Journal of Technical Writing and Communication* 42.1 (2012): 39-56. *ERIC*. Web. 5 Dec. 2012.

Barry, Ann Marie. *Visual Intelligence: Perception, Image, and Manipulation in Visual Communication*. State University of New York Press, 1997. eBook Collection (*EBSCOhost*). Web. 2 Nov. 2012.

Bernhardt, Stephen A. "The Shape of Text to Come: The Texture of Print on Screens." *Central Works in Technical Communication*. Eds. Johndan Johnson-Eilola and Stuart A. Selber. New York: Oxford UP, 2004.409-27. Print.

Birdsell, David S. and Leo Groarke. “Toward a Theory of Visual Argument.” *Visual Rhetoric in a Digital World: A Critical Sourcebook*. Ed. Carolyn Handa. Boston: Bedford/St. Martin’s, 2004. 309-20. Print.

Blakeslee, Ann M. “Addressing Audiences in a Digital Age.” *Digital Literacy for Technical Communication: 21st Century Theory and Practice*. Ed. Rachel Spilka. New York: Routledge, 2010. 199-229. Print.

Blaszczynski, Alex. "Commentary: A Response To “Problems With The Concept Of Video Game “Addiction”: Some Case Study Examples”." *International Journal Of Mental Health & Addiction* 6.2 (2008): 179-181. *Academic Search Complete*. Web. 5 Oct. 2012.

"Blizzard Timeline." *Blizzard.com*. Blizzard Entertainment, n.d. Web. 1 Dec 2012.

Bogost, Ian. *Persuasive Games [Electronic Resource]: The Expressive Power Of Videogames*. Cambridge, MA : MIT Press, 2007. Texas State - Alkek Library's Catalog. eBook Collection. 9 Nov. 2012.

Branger, Joe, Michael Lummis, Jennifer Sims, Kenny Sims, and Andrew Vassallo. *World of Warcraft: Beginner’s Guide*. Indianapolis: BradyGames, 2011. Print.

Brown, Iain. “A Theoretical Model of the Behavioural Addictions – Applied to Offending.” *Addicted to Crime*? Eds. John E. Hodge, Mary McMurran, and Clive R. Hollin. New York: John Wiley & Sons, Inc, 1997. 13-65. Print.

Carliner, Saul. “Computers and Technical Communication in the 21st Century.” *Digital Literacy for Technical Communication: 21st Century and Practice*. Ed. Rachel Spilka. New York: Routledge, 2010. 21-50. Print.

Carliner, Saul. "Physical, Cognitive, and Affective: A Three-Part Framework for Information Design." *Technical Communication* 47.4 (2000): 561. *Communication & Mass Media Complete*. Web. 2 Dec. 2012.Chappell, Darren, Virginia Eatough, and Mark N. O. Davies.

"“Everquest”—It's Just A Computer Game Right? An Interpretative Phenomenological Analysis Of Online Gaming Addiction." *International Journal Of Mental Health & Addiction* 4.3 (2006): 205-216. *Social Sciences Full Text (H.W. Wilson)*. Web. 5 Oct. 2012.

Chen Cheng-Sheng, et al. "Brain Activities Associated With Gaming Urge Of Online Gaming Addiction." *Journal Of Psychiatric Research* 43.(n.d.): 739-747. *ScienceDirect*. Web. 5 Oct. 2012

Clark, Neils and P. Shavaun Scott. *Game Addiction: The Experience and the Effects*. Jefferson: Mc Farland & Company Inc, 2009. Web. 16 Oct. 2012.

Conner, Trey, Morgan Gresham, and Jill McCracken. "Open Source Communities in Technical Writing: Local Exigence, Global Extensibility." *Journal of Technical Writing & Communication* 41.4 (2011): 403-421. *Education Research Complete*. Web. 5 Dec. 2012.

Cooke, Lynne. "Information Acceleration and Visual Trends in Print, Television, and Web News Sources." *Technical Communication Quarterly* 12.2 (2003): 155-81. *ABI/INFORM Global; ProQuest Education Journals.* Web. 15 Oct. 2012.

Dike Van De Meheen, et al. "Video Game Addiction And Social Responsibility." *Addiction Research & Theory* 18.5 (2010): 489-493. *Academic Search Complete*. Web. 5 Oct. 2012.

Eynon, Rebecca, Ralph Schroeder, and Jenny Fry. "New Techniques in Online Research: Challenges for Research Ethics." 21St Century Society: Journal Of The Academy Of Social Sciences 4.2 (2009): 187-199. SocINDEX with Full Text. Web. 27 Oct. 2012.

Fagan Jesse, et al. "Enhancing One Life Rather Than Living Two: Playing MMOs With Offline Friends." *Computers In Human Behavior* 27.Group Awareness in CSCL Environments (n.d.): 1211-1222. *ScienceDirect*. Web. 5 Oct. 2012.

Fogg, B. J. *Persuasive Technology: Using Computers to Change What We Think and Do.* San Francisco: Morgan Kaufmann Publishers, 2003. Print.

Freeman, Cindy Burkhardt. "Internet Gaming Addiction." *The Journal For Nurse Practitioners* 4.(n.d.): 42-47. *ScienceDirect*. Web. 5 Oct. 2012.

Gallagher, Jason. “Video Game Addiction Claims Another Life.” *Yahoo News*. 2 Aug. 2011. Web. 18 Nov. 2012.

Goudriaan Anna E., et al. "Original Article: Attentional Bias And Disinhibition Toward Gaming Cues Are Related To Problem Gaming In Male Adolescents." *Journal Of Adolescent Health* 50.(n.d.): 541-546. *ScienceDirect*. Web. 5 Oct. 2012.

Griffiths, Mark D. "The Role Of Context In Online Gaming Excess And Addiction: Some Case Study Evidence." *International Journal of Mental Health & Addiction* 8.1 (2010): 119-125. *OmniFile Full Text Mega (H.W. Wilson)*. Web. 5 Oct. 2012.

Griffiths, Mark D. "Videogame Addiction: Further Thoughts and Observations." *International Journal of Mental Health & Addiction* 6.2 (2008): 182-185. *Emerald*. Web. 5 Oct. 2012.

Haagsma, Maria C., Scott E. Caplan, Oscar Peters, and Marcel E. Pieterse. "A Cognitive-Behavioral Model Of Problematic Online Gaming In Adolescents Aged 12–22Years." *Computers In Human Behavior* (n.d.): *ScienceDirect*. Web. 5 Oct. 2012.

Haugsbakk, Geir. "Technology and Teaching in Post-Modern Environments- Or Rhetoric Negotiations of Education." *Turkish Online Journal of Distance Education (TOJDE)* 10.3 (2009): 89-104. *Education Research Complete*. Web. 5 Dec. 2012.

Hawk, Byron, David M. Rieder, and Ollie Oviedo, eds. *Small Tech: The Culture of Digital Tools.* Minneapolis: University of Minnesota Press, 2008. Print.

Hsi-Peng, Lu, and Wang Shu-ming. "The Role of Internet Addiction In Online Game Loyalty: An Exploratory Study." *Internet Research* 18.5 (2008): 499-519. *Academic Search Complete*. Web. 5 Oct. 2012.

"Industry Facts." *Entertainment Software Association*. theesa.com, n.d. Web. 11 Nov. 2012.

Johnson, Robert R. "Audience Involved: Toward a Participatory Model of Writing." *Central Works in Technical Communication*. Eds. Johndan Johnson-Eilola and Stuart A. Selber. New York: Oxford UP, 2004. 91-103. Print.

Johnson-Eilola, Johndan. "Relocating the Value of Work: Technical Communication in the Post-Industrial Age. *Central Work in Technical Communication*. Eds. Johndan Johnson-Eilola and Stuart A. Selber. New York: Oxford UP, 2004. 175-92. Print.

Kenney, Keith. "Building Visual Communication Theory by Borrowing from Rhetoric." *Visual Rhetoric in a Digital World: A Critical Sourcebook*. Ed. Carolyn Handa. Boston: Bedford/St. Martin's, 2004. 321-43. Print.

King, Daniel L., Paul H. Delfabbro, and Mark D. Griffiths. "Recent Innovations In Video Game Addiction Research And Theory." *Global Media Journal: Australian Edition* 4.1 (2010): 1-13. *Communication & Mass Media Complete*. Web. 5 Oct. 2012.

King, Daniel L., Paul H. Delfabbro, and Mark D. Griffiths. "The Psychological Study Of Video Game Players: Methodological Challenges And Practical Advice." *International Journal of Mental Health & Addiction* 7.4 (2009): 555-562. *Academic Search Complete*. Web. 5 Oct. 2012.

Ko Chih-Hung, et al. "Cue-Induced Positive Motivational Implicit Response In Young Adults With Internet Gaming Addiction." *Psychiatry Research* 190.(n.d.): 282-286. *ScienceDirect*. Web. 5 Oct. 2012.

Kuss, Daria Joanna and Mark D. Griffiths. “Internet Gaming Addiction: A Systematic Review of Empirical Research.” *International Journal of Mental Health & Addiction.* 10.2 (2012): 278-296. *SpringerLink*. Web. 15 Oct. 2012.

Lanham, Richard A. *The Electronic Word: Democracy, Technology, and the Arts*. Chicago: University of Chicago Press, 1993. Print.

Lamberti, Adrienne P. and Anne R. Richards. *Complex Worlds: Digital Culture, Rhetoric, and Professional Communication*. Amityville: Baywood Publishing Company Inc, 2011. Print.

Lemmens, Jeroen S., Patti M. Valkenburg, and Peter Jochen. "Psychosocial Causes and Consequences of Pathological Gaming." *Computers In Human Behavior* 27.Current Research Topics in Cognitive Load Theory (n.d.): 144-152. *ScienceDirect*. Web. 5 Oct. 2012.

Lib, Waldemar. "Technical Language as an Indicator of Technical Culture." *Informatologia* 43.1 (2010): 54-57. *Library, Information Science & Technology Abstracts with Full Text*. Web. 5 Dec. 2012.

Lipson, Carol, and Michael Day. *Technical Communication and the World Wide Web*. n.p.: Lawrence Erlbaum Associates, 2005. *eBook Collection (EBSCOhost)*. Web. 5 Dec. 2012.

Liu, Ming and Wei Peng. "Cognitive And Psychological Predictors Of The Negative Outcomes Associated With Playing MMOGs (Massively Multiplayer Online Games)." *Computers In Human Behavior* 25.(n.d.): 1306-1311. *ScienceDirect*. Web. 5 Oct. 2012.

Longo, Bernadette. "An Approach for Applying Cultural Study Theory to Technical Writing Research." *Technical Communication Quarterly* 7.1 (1998): 53. *Communication & Mass Media Complete*. Web. 29 Nov. 2012.

Longo, Bernadette. “Human + Machine Culture: Where We Work.” *Digital Literacy for Technical Communication: 21st Century Theory and Practice*. Ed. Rachel Spilka. New York: Routledge, 2010. 148-68. Print.

Martin, Peter R., and Nancy M. Petry. "Are Non-Substance-Related Addictions Really Addictions?." *American Journal on Addictions* 14.1 (2005): 1-3. *Academic Search Complete*. Web. 5 Oct. 2012.

Mehroof, Mehwash, and Mark D. Griffiths. "Online Gaming Addiction: The Role Of Sensation Seeking, Self-Control, Neuroticism, Aggression, State Anxiety, And Trait Anxiety." *Cyberpsychology, Behavior & Social Networking* 13.3 (2010): 313-316. *Academic Search Complete*. Web. 5 Oct. 2012.

Mheen Dike van de, et al. "Original Article: Compulsive Internet Use: The Role Of Online Gaming And Other Internet Applications." *Journal Of Adolescent Health* 47.(n.d.): 51-57. *ScienceDirect*. Web. 5 Oct. 2012.

Mirko, Pawlikowski, and Brand Matthias. "Excessive Internet Gaming And Decision Making: Do Excessive World Of Warcraft Players Have Problems In Decision Making Under

Risky Conditions?." *Psychiatry Research* 188.(n.d.): 428-433. *ScienceDirect*. Web. 5 Oct. 2012.

Oggins, Jean and Jeffrey Sammis. “Notions of Video Game Addiction and Their Relation to Self-Reported Addiction Among Players of World of Warcraft.” I*nternational Journal of Mental Health & Addiction*. 10.2 (2012): 210-230. *SpringerLink.* Web. 15 Oct 2012.

Olivia, Metcalf, and Pammer Kristen. "Attentional Bias In Excessive Massively Multiplayer Online Role-Playing Gamers Using A Modified Stroop Task." *Computers In Human Behavior* 27.2009 Fifth International Conference on Intelligent Computing (n.d.): 1942-1947. *ScienceDirect*. Web. 5 Oct. 2012.

Rigby, Scott, and Richard M. Ryan. *Glued To Games: How Video Games Draw Us In And Hold Us Spellbound.* Santa Barbara: ABC-CLIO, 2011. Web. 16 Oct. 2012.

Schrier, Karen and David Gibson, eds. *Designing Games for Ethics: Models, Techniques and Frameworks*. Hershey: Information Science Reference, 2011. Print.

Shang Hwa, Hsu, Wen Ming-Hui, and Wu Muh-Cherng. "Exploring User Experiences As Predictors Of MMORPG Addiction." *Computers & Education* 53.(n.d.): 990-999. *ScienceDirect*. Web. 5 Oct. 2012.

Spain, Judith W., and Gina Vega. "Sony Online Entertainment: Everquest Or Evercrack?." *Journal of Business Ethics* 58.1-3 (2005): 3-6. *Business Source Complete*. Web. 5 Oct. 2012.

Sublette, Victoria, and Barbara Mullan. "Consequences Of Play: A Systematic Review Of The Effects Of Online Gaming." *International Journal of Mental Health & Addiction* 10.1 (2012): 3-23. *SpringerLink*. Web. 5 Oct. 2012.

Thurlow, Crispin and Kristine Mroczek, eds. *Digital Discourse: Language in the New Media*. Oxford: Oxford University Press, 2011. Web. 5 Dec. 2012.

Tyner, Kathleen. *Media Literacy: New Agendas in Communication*. New York: Routledge, 2010. Print.

Vitanza, Victor J., ed. *CyberReader*. 2nd ed. Boston: Allyn & Bacon, 1999. Print.

Wan, Chin-ShengChiou, Wen-Bin. "The Motivations Of Adolescents Who Are Addicted To Online Games: A Cognitive Perspective." *Adolescence* 42.165 (2007): 179-197. *MasterFILE Premier*. Web. 5 Oct. 2012.

Warnick, Barbara. *Critical Literacy in a Digital Era: Technology, Rhetoric, and the Public Interest*. n.p.: Lawrence Erlbaum Associates, 2002. *eBook Collection (EBSCOhost)*. Web. 5 Dec. 2012.

Warnick, Barbara. "Looking to the Future: Electronic Texts and the Deepening Interface." *Technical Communication Quarterly* 14.3 (2005): 327-33. *ABI/INFORM Global; ProQuest Education Journals.* Web. 15 Oct. 2012.

Williams, Sean D. "Interpretive Discourse and Other Models from Communication Studies: Expanding the Values of Technical Communication." *Journal of Technical Writing & Communication* 40.4 (2010): 429-446. *Communication & Mass Media Complete*. Web. 29 Nov. 2012.

Wood, Richard T. A. "Problems With The Concept Of Video Game “Addiction”: Some Case Study Examples." *International Journal Of Mental Health & Addiction* 6.2 (2008): 169-178. *Academic Search Complete*. Web. 5 Oct. 2012.

Worsham, Lynn and Gary A. Olson, eds. *Plugged in: Technology, Rhetoric, and Culture in a Posthuman Age*. Cresskill: Hampton Press, 2008. Print.

Young, Kimberly. "Understanding Online Gaming Addiction And Treatment Issues For Adolescents." *American Journal of Family Therapy* 37.5 (2009): 355-372. *Academic Search Complete*. Web. 5 Oct. 2012.

Zachry, Mark. "An Interview with Bonnie A. Nardi." *Technical Communication Quarterly* 15.4 (2006): 483-503. *ABI/INFORM Global; ProQuest Education Journals.* Web. 15 Oct. 2012.

Zachry, Mark. "An Interview with Donald A. Norman." *Technical Communication Quarterly* 14.4 (2005): 469-87. *ABI/INFORM Global; ProQuest Education Journals.* Web. 15 Oct. 2012.

Ziebart, Alex. "World of Warcraft Subscriber Numbers Remain Over 10 million." *WoW Insider*. 7 Nov. 2012. Web. 10 Nov. 2012.