

Journal of Virtual Worlds Research

jvwr.org ISSN: 1941-8477

Volume 3, Issue 2

December 2010

Virtual Worlds for Kids



Volume 3, Number 2

Virtual Worlds for Kids

December 2010

Editor-in-Chief

Jeremiah Spence

Guest Editors

Sun Sun Lim
National University of Singapore

Cover illustrator

Lynn Schofield Clark
University of Denver, USA

Editorial Assistants

Lim Su Pei
National University of Singapore

Cao Yuanying
National University of Singapore

Shobha Vadrevu
National University of Singapore

Reviewers: Denise Anthony, Iccha Basnyat, Anne M. Burke, Leanne Chang, Pin Sym Foong, Sara Grimes, Elizabeth Hayes, Jackie Marsh, Alex Mitchell, Elmie Nekmat, Alvin Saw Teong Chin, Becky Herr Stephenson, Shobha Vadrevu, Karen Wohlwend, Joshua Wong Wei-Ern



The Journal of Virtual Worlds Research is owned and published by the Virtual Worlds Institute, Inc. – Austin, Texas, USA. The JVWR is an academic journal. As such, it is dedicated to the open exchange of information. For this reason, JVWR is freely available to individuals and institutions. Copies of this journal or articles in this journal may be distributed for research or educational purposes only free of charge and without permission. However, the JVWR does not grant permission for use of any content in advertisements or advertising supplements or in any manner that would imply an endorsement of any product or service. All uses beyond research or educational purposes require the written permission of the JVWR. Authors who publish in the Journal of Virtual Worlds Research will release their articles under the Creative Commons Attribution No Derivative Works 3.0 United States (cc-by-nd) license. The Journal of Virtual Worlds Research is funded by its sponsors and contributions from readers. If this material is useful.

Journal of Virtual Worlds Research

jvwr.org ISSN: 1941-8477

**Volume 3, Number 2
Virtual Worlds for Kids
December 2010**

Penguin Life: *A Case Study of One Tween's Experiences inside Club Penguin*

By Diana Burley

Department of Human and Organizational Learning, The George Washington University

Abstract

Although we are increasingly aware of what young people do online and perhaps even why they do it, we are less clear about how particular affordances of an online environment enables identity formation. Accordingly, this case study sought to explore how one tween's experience in Club Penguin influenced the development of her social identity and community relationships. Reflecting on her experiences, we draw 3 tentative conclusions. First, because Club Penguin enables tweens to change typically static elements of their persona, the scope of generally accepted identifiers is broadened while the perceived boundaries between them is reduced. Second, the integration of virtual and physical spaces further complicates the social interactions that inform tween identity. Third, whereas many adult participants in virtual worlds use their participation as an opportunity to deconstruct the various aspects of their personality (Suler, 2002), tweens may use the virtual environment as an integration space.

Keywords: tween, virtual world, Club Penguin, identity

Penguin Life:

A Case Study of One Tween's Experiences inside Club Penguin

By Diana Burley

Department of Human and Organizational Learning, The George Washington University

Many of today's tweens (preteens aged 9-14) are digital natives (Prensky, 2001) who have had knowledge of, if not access to, the Internet and associated technologies since birth. They are as comfortable online as their parents and grandparents were offline. In fact, as a recent survey of digital media usage among tweens reported, this age group spends more time online than watching television, with 83% of tweens spending at least one hour per day online (DoubleClick Performics, 2008). Online activities include searching for information, playing games, watching videos, sending email, social networking and blogging.

Although some of their online activities occur through traditional (Web 1.0) websites, an increasing proportion of them seem to be occurring through participation in virtual or synthetic worlds. According to some estimates, the Internet is populated with nearly 200 virtual environments designed to engage children (kids, tweens and teens). Whether called Massively multiplayer online role-playing games (MMORPGs), shared virtual environments (SVEs), or virtual or synthetic worlds, these graphical, three-dimensional, computer-generated environments are intended to accommodate the many individuals who participate in them as avatars. And although the avatars range from brightly colored penguins in Club Penguin to cartoon children in Whyville, children logon to share information and engage in social, competitive, and economic activities with other participants located around the globe (Castranova, 2005).

A key characteristic of these virtual environments is the penetrable boundary that allows individuals to move between their physical lives and the synthetic worlds while carrying their behavioral assumptions, attitudes, and relationships with them (Castranova, 2005). The blurry boundaries between the physical and synthetic spaces offer users a synergistic awareness of their co-existence with others inside and outside of the environment (Burley, Savion, Peterson, Loetrecchiano, Keshavarz-Nia, 2010). No longer can we examine participation in one world without giving consideration to participation in the other - they are inextricably connected (Baym, 2009).

Given the large number of tweens engaging in online activities through these shared virtual environments, it is not surprising that their participation in virtual worlds is the subject of an emerging body of literature (e.g. Crowe & Bradford, 2006; Meyers, E., Fisher, K. & Marcus, E., 2006; Meyers, 2009; Valentine & Holloway, 2002). Studies of online tween behavior examine information seeking (e.g. Meyers et al., 2009), literacy (e.g. Meyers, 2009), and the development of social identity within the online community (e.g. Crowe & Bradford, 2006; Valentine & Holloway, 2002). Acknowledging the complexity of the phenomenon, Meyers (2009) proposes that tween behavior in these virtual environments be examined as contexts for four things: the shaping of their identity, or as a space where they can define a sense of self; the shaping of literacy, or their ability to communicate through a unique method of discourse that requires the integration of technical skill and the ability to convey appropriate ethos; the shaping of problem-solving capabilities, or their ability to work with others in individual and collective learning; and the shaping of community, or their involvement in online spaces as a socialization environment.

This case study builds upon this previous work by exploring how one tween's participation in a virtual environment shapes, and is shaped by, the interplay of personal, behavioral, and environmental factors within and outside of the virtual environment. Using a

case study method (Yin, 2009), this research brief considers how the virtual environment shapes and informs the context of one young girl's identity development and community relationship formation.

This article chronicles the experiences of the author's tween daughter within Club Penguin. Following a brief introduction to the Club Penguin environment, the case study examines how her identity and social relationships are shaped by her experiences in Club Penguin. The article concludes by drawing inferences from her experiences within the community of Club Penguin, placing her practices within a broader conversation on how children's participation in shared virtual environments shapes their opportunities for identity formation and negotiation.

Club Penguin

Club Penguin is an online virtual community for children aged 6 to 14 in which users navigate the snow covered Club Penguin island using a brightly colored cartoon penguin avatar. Introduced to the public in late 2005, the Club Penguin community was estimated to have more than 12 million user accounts by late 2007. The Disney Corporation purchased the site that year, and by the end of 2009, Disney had significantly expanded the Club Penguin audience by launching French, Portuguese, and Spanish versions of the world.

To participate in Club Penguin, users must register and create a penguin avatar. Users may participate using free registrations or paid memberships at \$5.95 per month. Membership is no small issue for the children who use Club Penguin. Although all penguins can participate in Club Penguin activities, free registrants face many constraints that impact their personal identity development and relationship formation. For instance, free registrants are limited to two puffles (fluffy, colorful penguin pets) whereas members can adopt up to 18 puffles. Free registrants are unable to purchase costumes or wigs, leaving their penguins nude and hairless and visibly marked as different from the avatars of members, who can purchase an unlimited number of outfits. Non-members are also not afforded the opportunity to purchase specialty items like flags or dance floors for their igloos, leaving their homes quite small and undesirable.

When one enters Club Penguin, a penguin avatar appears in one of the 13 island locations. Users navigate their penguin avatars through the many locations on the snow covered island by clicking on the desired destination. The dock, beach, ski slope, ski village and town occupy the left side of the island. The plaza, cove, forest, and mine, along with user igloos, are located on the right side of the island. The fort and ice skating rink are in the center of the island and the dojo training palace is in the far back of the island. All of the locations have gathering places, a variety of activities, and games that allow users to win coins to purchase personal items. Members can win money or earn it by working in jobs like waiter in the pizza shop, and can then make purchases with that money.

Penguin avatars interact with other users via moderated, text-based chat that appears on the screen in a speech bubble above the penguin's head. When spaces are crowded, bubbles are often hidden from view as chat bubbles get overlaid on top of each other until the penguins begin to disburse. Adult monitors who have passed the special agent test observe all activities and conversations. Day or night, the island is activity filled with penguins of all colors (red, blue, black, yellow, green, purple and orange) and dressed in a variety of different outfits, playing games, shopping for specialty items and socializing with groups of other penguins.

Penguin Life

Shaping her identity

My introduction to penguin life started on June 8th, 2008 when, at the insistence of my then-8 year old daughter, I joined Club Penguin along with her. For several months I had listened to her discussing the world with her classmates at school, her cousins, and her brother. I had watched my daughter play games, earn coins, buy goods, decorate her igloo home, and make friends (platonic and love interests) on Club Penguin. Yes, love interests. My 8 year old daughter, whose alter ego was created as a male penguin, has gained and lost more girlfriends than I can count. Romantic relationships on Club Penguin are fairly simple to establish and break. The heart emote along with a simple text message exchange connects you. Breakups are even easier as they usually are just a matter of no communication.

In Club Penguin, as in any virtual world, a participant can create the characteristics of his or her avatar. My daughter chose to be a boy because, as she put it, “I wanted to see what it would be like to be a boy.” Her interest in ‘being a boy’ was not unique. Indeed, many of her friends made similar cross gender avatar choices in Club Penguin.

It’s 4pm and we have just arrived home from school. She is already logging onto Club Penguin and arrives in the plaza right in front of ‘The Stage’ - a theatre showing the latest Club Penguin feature. The plaza is filled with red, blue, green and even black penguins. Some are walking with their puffles. Many are wearing some sort of costume; a colorful wig, long ponytails with earmuffs, a polkadot dress with a baseball cap. My daughter immediately opens up her ‘closet’ to adjust her appearance for the day. She has twelve body color options, and an equal number of headgear items that range from bunny ears and antlers to a pirate scarf and a knight’s helmet to green spiked hair and a single, long pony tail. She is struggling with her wardrobe choice.

Me (M): What’s wrong?

Daughter (D): My friends and I decided to be green today. I don’t like the green body and my green hair is boy hair. I wanna be a girl today.

At that point I realize that what she is considering is not a mere wardrobe decision, but rather an identity decision. For whereas in the physical world her gender, race, and physical appearance are, for the most part, outside of her control, here she is able to explore and experiment with the typically fixed aspects of her identity. The ability to construct multiple expressions of her avatar facilitates the creative construction of identity in the virtual space (Crow & Bradford, 2006; Turkle, 1995).

Finally, she dons the green coat she found in her closet, chooses to be a black penguin with a long brown ponytail, and runs off to the plaza to find her friends. She takes a look in the nightclub where she finds two red penguins dancing and urging others to convert to red and dance.

Penguin 1 (P1)/texting: Everyone turn red and dance.

D/texting: Why?

Now there are 4 red, dancing penguins.

P2/texting: Omigosh, epic.

P1/texting: Turn red and dance.

D/texting: Woo hoo!

She has turned red and is dancing. Now there are 6.

P1/texting: Turn red and dance. Make the dance floor red.

Seconds later there are 12 red penguins dancing and the dance floor has turned red... Ten seconds later, the dance floor is back to the normal, multicolor pattern, and the 12 red penguins have either dispersed or changed to another color. My daughter has returned to her black penguin body and has resumed her search for her friends.

Peer pressure to alter appearance and behavior is not unique to the online environment. Offline, tweens are similarly encouraged to experiment with their physical appearance. Much to the dismay of many parents, they change their hair color and style, and go from one end of the clothing spectrum to the other to ‘go along’ with the crowd. In the virtual environment, identity development occurs in much the same way but with one key difference. In the virtual space tweens can safely follow the crowd, indulge in the fad, and then go back to their preferred identity without enduring consequence. Indeed, their closest friends may not have even noticed the temporary diversion.

Similarly, they can experiment with multiple personalities (as manifested through styles and behavior), gauge the reaction of others, and decide what fits and what doesn’t based on public appeal (Winder, 2008). For instance, when a new penguin enters the area and asks for friendship, the following exchange occurs.

P2/texting: Anybody wanna be my friend?

P2/texting: Please. I like your outfit, you are so cool, wanna be friends.

P1/texting: I don't like your hair. [Walks away]

D[to me]: I feel bad. That was mean.

P2/texting: Meanie. [Emote] Angry face.

D/texting: I'll be ur friend. Hair's ok. Do u have a ponytail?

P2/texting: [After a quick change to a long brown ponytail] Like this?

P3/texting: Me too. All 3 of us.

P2/texting: Ok

D/texting: Let's go shopping. Follow me.

The process of shaping one’s social identity over time is complex and is informed through the reciprocal influence of personal, behavioral, and environmental factors (Bandura, 1986). The expanded environment offered by the integration of the virtual and physical spaces further complicates the identity formation process because it alters the relative importance of these factors. Identity, and the beliefs and expectations that form its basis, are constructed through social interactions that activate emotional reactions to behavior (Bandura, 1986). In this instance, my daughter’s offer of friendship was based on a sympathetic reaction to the other penguin’s denial of friendship. Her emotion on Club Penguin was no different than it would be in a similar situation on the playground at school. Her reaction, however, was different, as it was more immediate and unencumbered by concerns about what her friends thought. Whereas on the playground her reaction might be more measured and would occur after consultation with her friends, in Club Penguin, she freely acted on her sympathy for the new penguin as an individual. She felt empowered to act based on her own feelings. Interestingly, and without consultation, her friend followed her lead.

Community Relationships – Mothers, Brothers and Friends

Part of the appeal to Club Penguin is that my daughter's school friends are members too. In this way, Club Penguin is not a new community. Rather it is an extension of her existing social environment. She and her school friends make play dates in school to meet virtually for coffee, go sledding, attend events and visit with mutual friends. Some of the mutual friends are known in the physical world, others are not. In fact, she makes play dates with virtual friends as well.

*P: Shall we play tomorrow
D: Maybe
P: Pls
D: What time?
P: Right now
D: Ok, meet me at Yeti Server
P: Plaza*

In this example another difference between the real world and virtual contexts for identity is apparent. Whereas my daughter's plans to see her friends after school are limited by the reliance on adults for transportation to and from selected locales, they can choose more freely where and when they will interact in the online environment.

A Family of Penguins

On June 8th and after months of begging, when she looked at me and said, “Mommy, when are you going to join Club Penguin?” I said, “Today.” Dutiful as ever, and thrilled that my daughter wanted to play with me, I registered for a free penguin so that I could participate in Club Penguin with her. For a short while things were good. We experienced the virtual world together and she showed me how to navigate through the island, how to win games and receive more coins, and how to express my feelings through the emotes. Most often we participated in Club Penguin while physically sitting in the same or adjacent rooms. We talked while virtually walking together as penguins, conversing via text-based chat messages.

Our desire to stay in touch through the virtual world is something that Club Penguin encourages. On the website’s FAQs, for instance, the following explanation of the site’s utility for family life is mentioned: “Many families use Club Penguin as a communication device between kids and grandparents, or aunts and uncles, who aren’t living close by in the real world.” Clearly, the intent is to support communication between distant family members, although the distance between us at that time was no more than 20 feet.

It’s Saturday evening around 5PM and we’ve just come in from walking the dog and are preparing for dinner. We log on to the site. She is on the desktop computer in the family room while I am typing on the laptop now sitting on the dining room table where I have easy access to the kitchen and meal preparation. The following exchange occurs through a mixture of verbal and text-based dialogue:

*M: That was fun, you’re getting really fast on your scooter.
D: Yeah, I’m getting good at sled racing too. Watch me.
I walked over to her computer.*

D: No mommy, bring your penguin over to the ski slope. Watch me beat you.

M: Oh, ok. How do I get there

D/texting: Follow me.

M/texting: Ok.

We arrive at the sledding hill and begin to race. I lose, of course.

D/texting: Let's go for coffee. Follow me.

When we arrive in the town center, the area is filled with colorful penguins. By my count there are at least 25 penguins and they are loosely clustered by body color. Red penguins are standing in front of the coffee shop, blue penguins are gathering in front of the gift shop. I am yellow. She is red.

D: Turn red, mommy.

M: I can't, I don't have a red body.

D: You really need a membership so you can buy things and have more fun. Now you can't be with me and the red penguins. You can go ahead and cook dinner.

I logged off. No more than a few weeks after entering her space, she had begun to express her disappointment with me. The exchange below followed not long after the above. She was online, I was not.

D: You don't have any friends, mommy. I'm embarrassed.

I was silent for a moment, puzzled by her statement, and then I responded.

M: What do you mean? I have friends.

...and I proceeded to name them, but after the third name, she stopped me.

D: No, I don't mean those friends. I mean friends on Club Penguin.

So there it was: I was embarrassing her virtual penguin and was at risk of losing her virtual friendship because she was my only virtual friend. Not wanting to lose her virtual friendship and dutiful as ever, I logged on and began asking every penguin in proximity to be my buddy. Of course, most of those I asked said no. I wondered if perhaps they were refusing my friendship because I didn't have any hair, or special clothes, or fancy decor in my igloo. Perhaps my invitation or some other indicator had given away my age. Without any other way to determine friendship, appearance, verbal exchanges and the display of possessions are the primary determining factors for friendship. Interestingly, the freedom afforded by the ability to change appearance at will is counterbalanced by the limited spectrum of how one can express one's own worthiness for friendship. This tension illustrates the complexity of identity construction in virtual worlds. As in the physical world, those you interact with are as important to your identity as who you are. In fact, one might argue that community affiliation and relationships become increasingly important in the virtual world because other factors that might contribute to identity construction are unavailable for assessment. Ultimately, I was able to gain a few friends, many of whom were non-members like me.

M/texting: Be my BFF

P/texting: Me?

M/texting: Please

P/texting: Are you a member?

M/texting: No

P/texting: Same. Ok

Not surprisingly, my daughter was still disappointed with me because these friends were not sufficient and were not the ‘right’ friends. They were not members. Now, however, I realized her embarrassment was based on the opinion of her school friends. Word was out: they knew that I was on Club Penguin, that I was not a member, and I did not have many friends. Initially, my daughter was proud that her mother had joined Club Penguin and she told her friends. But now, her peers (physical and virtual) wondered why she walked around Club Penguin with a largely friendless, naked penguin with a one room igloo.

P/texting: Who's that? [Referring to me]

D/texting: Dunno

P/texting: Why's he following us?

D/texting: Let's go to the Coffee shop

D: Mom, don't follow us. Ok

M: Ok

My daughter’s friend had been unable to identify me in the virtual world, and my daughter had at first decided to pretend that she did not know me, either. Such a denial would not have been possible in a physical setting, where her friend would have recognized me immediately. Yet in the virtual space, my daughter interpreted her friend’s question as a challenge and as a result, she chose to first deny, then direct me away. Such subtle conversational miscues may be fairly common among young people who are just beginning to sort out the complexities of how they evaluate one another as a result of their relationships with others, but such misunderstandings are augmented in virtual space because of the lack of visual and verbal cues.

Interestingly, this same scenario repeated itself one year later. This time her younger brother, who had taken over my penguin alter ego (but upgraded with a paid membership) was the source of her embarrassment. I felt a sense of *déjà vu* when she (or rather, her penguin avatar) told her younger brother (in the form of his penguin avatar) to “go find his own friends.” Interestingly, she did this through typing messages on the keyboard while sitting two rooms away from him, and then by yelling across the room when that did not work. True to form, he ignored her, lurked in the background of her social interactions and continued to engage both her and her penguin friends until he got bored and went outside (in the physical yard) to play ball.

Conclusion

Identity construction always takes place within particular contexts, and in relation to other people. In this case study, I have explored how my daughter’s involvement in Club Penguin illustrates some of the ways in which the context of that virtual world provides for certain identity formation practices whereas it limits or complicates others. I have noted that there are three important ways in which this occurs.

First, because Club Penguin makes it easy for tweens to change typically static elements of their persona in their presentations to others, the site effectively broadens the scope of generally accepted identifiers and reduces the perceived boundaries between them. In the virtual world, where tweens are able to adjust their appearance instantaneously, their sense of what it means to be a boy or a girl (in the social sense) brings gender into question.

It is no longer something that is fixed and physical or easily ascribed to another, but rather gender is something that can be chosen in relation to how one wishes to act. Certain characterizations travel from the physical world into the virtual space, such as the assumption that boys might be more competitive than girls or more likely to play certain online games than girls would. Yet because girls can experiment with these roles, they can explore what it feels like to enact a gender that differs from the one that is usually assumed or ascribed to them.

Racial identification similarly changes, so that young people are challenged to see that race may not be solely related to appearance but may also be related to one's choices and particularly to the affiliations one chooses. In Club Penguin, race as manifested through the penguin body color is seen as a legitimate reason for gathering and for exclusion. My daughter saw no problem with changing her color in order to participate in the 'red' gathering even though I was unable to change to red and engage with her. In the physical world, however, she questions race-based gatherings and often wonders if single-race gatherings are exclusionary and racist. Indeed, today's physical reality of tweens is one that encourages a mixed-race existence and her group of school friends is fairly diverse. They are taught to respect diversity and to embrace what makes each person unique. The virtual world echoes the choice-based nature of how today's young people are encouraged to approach gender and race, then, as greater emphasis is placed on inclusion and on an ability to change oneself in order to enjoy that inclusion in any manner of diverse forms. Race and gender can be viewed as less fixed and can come to be understood more in relation to affiliations, or how one chooses to interact as a member or ally with differing groups. As virtual worlds such as Club Penguin make changing one's appearance easy, and as children opt to change their appearances so as to create new affiliations that they then invite others to join, they are playing out the implications of this shift in how their generation approaches differences in identification and inclusion.

A second way in which virtual worlds afford new avenues for identity formation involves how individuals interact with others within these sites. One example of this occurred in my daughter's sympathetic offer of friendship to the rejected 'new kid.' As noted earlier, had she observed the rejection of someone in physical space, she may have looked to her friends to observe their reactions before reacting herself. Yet in the virtual space, she was free to act according to her own best self, expressing sympathy and offering friendship. Although the ultimate behavior demonstrated by a tween online may mirror that displayed in the physical world, the virtual space affords an initial freedom of expression and action because it may be free from the usual contexts of social pressure. Even though her school friends were present online, the virtual space provided sufficient distance from the influence of peer pressure for her to react based on personal emotions and values. Although a great deal of attention has been focused on how the online environment may encourage young people to embrace a callous attitude toward others, therefore, this example illustrates that virtual worlds may also afford children with opportunities to embrace opportunities to act out of good intentions apart from fear of social criticism. Such acting may be good practice for those who wish to take similar action in their own physical spaces.

Virtual worlds afford opportunities for extension and experimentation with one's self and one's activities, as noted in the previous two examples. Yet they also afford new avenues for complication, as they call for the development of new social cues in an environment in which visual and verbal cues are more limited than they are in physical space. This was most evident in my own interactions with my daughter in the online environment. My daughter enjoyed playing with me online at first, as it seemed that she was able to "play with" and even dictate how she was going to interact with me: sometimes as friend who goes for coffee in virtual space, at other times as daughter who tells her mother to leave the room and go

make dinner. When one of her friends observed her with me, this play with the mother/daughter identity came to an end, as my daughter interpreted her friend's question about me as a challenge to her own identity. Then, her interaction with me quickly switched, as she first denied that she knew me and then told me not to follow her. Perhaps she was embarrassed to be seen with me because I was a nude penguin with a one-room igloo. Perhaps she was embarrassed that a friend had seen her "playing" with her mother as if her mother were a friend. Had visual and verbal cues been available, our roles would have been clearer to others in her social circles, and such questions may not have been raised. Undoubtedly, she would have found other reasons to be embarrassed about her relationship with her mother, but the online environment made the social cues that much more complicated to navigate.

Penguin life has been interesting. It has presented a dynamic backdrop for the exploration of how personal, behavioral and environmental factors have influenced the development of my tween daughter's social identity, and of how the platform of Club Penguin makes it easy to experiment with identification, and more challenging to read social cues that relate to those identifications. Our days are numbered on the snow covered Club Penguin island. She and her friends are becoming bored with their penguin existence and are moving to WeeWorld. Notably, she has not asked me to join with her. She is growing up and her world is a complex interaction of identity and environment, physical and virtual. Her reality and how she develops her identity within it, continues to evolve. However, this experience has provided me with some insight on the development process, and on the role a key mediated space is playing within it.

Bibliography

- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Baym, N. (2009). A call for grounding in the face of blurred boundaries. *Journal of Computer-Mediated Communication*, 14, 3, 720-723.
- Burley, D., Savion, S., Peterson, M., Loetrecchiano, G., & Keshavarz-Nia, N. (2010). Knowledge integration in synthetic worlds. *VINE: The Journal of Knowledge Management*, 40, 71-82.
- Castranova, E. (2005). *Synthetic Worlds: The Business and Culture of Online Games*. Chicago, IL: University of Chicago Press.
- Crowe, N. & Bradford, S. (2006). Hanging out in runescape: Identity, work and play in the virtual playground. *Children's Geographies*, 4, 3, 331-346.
- DoubleClick Performics. (2008). Tweens' favorite media online, search integral to shopping. Retrieved from: <http://www.marketingcharts.com/television/tweens-favorite-media-online-search-integral-to-shopping-5447/>.
- Meyers, E. (2009). Tip of the iceberg: Meaning, identity, and literacy in preteen virtual worlds. *Journal of Education for Library and Information Science*, 50, 4, 226.
- Meyers, E., Fisher, K. & Marcus, E. (2009). Making sense of an information world: the everyday-life information behavior of preteens. *The Library Quarterly*, 79, 3, 301-341.
- Prensky, M. (2001). Digital natives, digital immigrants, part 1. *On The Horizon*, 9, 5, 1-2.
- Suler, J. (2000). Identity management in cyberspace. *Journal of Applied Psychoanalytic Studies*, 4, 455-460.
- Turkle, S. (1995). *Life on the screen: Identity in the age of the internet*. New York, NY: Simon and Shuster.
- Valentine, G. & Holloway, S. (2002). Cyberkids? Exploring children's identities and social networks in online and offline worlds. *Annals, Association of American Geographers*, 92, 302-319.
- Winder, D. (2008). *Being virtual: Who you really are online*. Hoboken, NJ: Wiley.
- Yin, R. (2009). *Case study research: Design and methods*, 4th Ed. Thousand Oaks, CA: Sage.