CHAPTER NINE

"Hey! Can You Show Me How to Do This?"

Digital Games Mediating Family Interactions

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Introduction

As digital media, virtual worlds, and online games gain traction in the daily lives of children, scholars have begun debating the affordances and constraints of these kinds of digital environments (Black & Reich, 2011; Critcher, 2008; Lankshear & Knobel, 2008; Linebarger & Piotrowski, 2009). A common anxiety surrounding children's media use is displacement of family time and a concomitant loosening of bonds within families. In this chapter, we take a sociocultural approach to understanding children's virtual world and game use within the context of their daily lives and how it relates to family connections. Using qualitative analyses of interviews with children (aged 4–12), siblings, and parents, as well as observations of young children's engagement with digital media over time, we show how games, virtual worlds, and media artifacts are creatively used to mediate interaction and foster social relationships among siblings, parents, and other family members.

Researchers and commentators that inquire into young people's leisure and social practices note that technology has come to play a much larger role in them than ever before. Children's play increasingly involves digital toys (Kafia & Giang, 2008), such as talking animals, interactive board games, and toy laptops. More and more young children in the United States have access to video games that can be played on a television, video player, console, computer, handheld device, or a portable device such as a mobile phone, Nintendo DS, or iPad. Some of the newer technologies allow video games to

be purchased or loaded by users as add-on applications to a mobile wireless tool. Furthermore, the toys, play platforms, and online games are becoming increasingly interlinked, where possession of one kind of artifact might come with access to another, such as stuffed animals with corresponding digital avatars online. In this chapter, we are particularly interested in play connected to digital games and virtual worlds.

"Virtual worlds" are defined for the purposes of this chapter as graphically rich, online environments users navigate by taking on the form of an avatar, or digital character, that represents them in the world. Unlike many online and console games, play in virtual worlds is not driven by a coherent goal or narrative but instead takes the form of exploration, interaction, and navigation of the online space. Club Penguin, Webkinz World, Neopets, and Whyville are popular virtual worlds where children can engage in a variety of activities, such as playing games, communicating with other avatars, dressing up their avatars, buying virtual goods such as furniture or accessories to decorate their virtual homes, and caring for their virtual pets. In recent years, virtual worlds for elementary school–aged children have been an area of rapid development. Some reports suggest that the fastest growing demographic of virtual world users is children between the ages of 5 and 9, a group that will see 27% growth in the use of these sites over the next 5 years (Gilbert, 2009). At the end of the third quarter of 2008, there were at least nine virtual worlds for children with more than 15 million registered accounts worldwide, namely Habbo, Neopets, Stardoll, IMVU, Poptropica, Club Penguin, Second Life, Barbie Girls, and Gaia (KZero, 2008).

Much of the popular and educational discourse surrounding digital media reflects an assumption that there is a clear binary between children's online lives (including computer gaming, social networking, or online messaging) and their "real" worlds. However, if we observe children "in action," we note that they seamlessly go in and out of these "worlds," often intertwining one with the other, and challenging the notions that they can be analytically separated. Further, research has found large overlaps between children's online and offline social networks (Reich, Subrahmanyam, & Espinoza, 2012). The social embedding and effects of digital media exist on multiple levels of interpersonal relations. Some researchers argue that it is the social interaction and participation between "real world" participants or those that know each other in real world settings that, to a large extent, foster their digital media and game enjoyment and time investment (Bryce & Rutter, 2003; Carr, Schott, Burn, & Buckingham, 2004). These effects are reported for settings ranging from public (arcades), to semi-public (cybercafés), to private (living room at home) contexts. A recent research report (Nielsen, 2005) details that two-thirds of the gamers they sampled (N=2000) play video games with other people for at least an hour a week. Moreover, when probed for their motivations to play digital games, the number one motivation, supported by 60% of the gamers, was the social component, such as being able to play with friends (Nielsen).

These findings are in stark contrast to the image of social isolation digital gaming has for many people. In spite of concerns and criticisms raised against virtual gaming and other computer engagement by teachers, parents, researchers, and policymakers (Bryce & Rutter, 2003), empirical research in this area does not provide convincing evidence to show that computer use has an alienating effect on young people. On the contrary, there are a number of studies demonstrating that games often elicit beneficial effects in affective, cognitive, and social terms (Calvert & Wilson, 2008; Gunther, 2005). In looking at social communication online, a growing amount of research has found that the social aspects of media (e.g., sending messages, chatting, sharing interests and personal details) strengthen children's feelings of emotional connection, trust, and commitment to others (Blais, Craig, Pepler, & Connolly, 2008) as well as increase their positive perceptions of friendship quality (Desjarlais & Willoughby, 2010; Valkenburg & Peter, 2007, 2009).

In this chapter, we discuss how children's family relationships often enable their use of games and virtual worlds and, conversely, how their play in virtual spaces often facilitates family relationships. In our interviews with siblings, we frequently see younger siblings enchanted with a particular online space or game that his or her older sibling is playing, oftentimes, watching, cheering, and commenting on the older sibling's success and failure. Moreover, the older sibling or a parent is often the keeper of the password for the younger child and the expert of the game who supports the younger child's play. The "real world" relationship, thus, serves as the entry point and source of mediation for these children's engagement with the "online" worlds. Far from the image of a solitary player, what we saw in participant observations included families playing together, with online games and virtual worlds providing the rich sociocultural context for these interactions. Online play mediated family interactions and provided opportunities for supported relationships and scaffolded activities ranging from parents helping young children create usernames and passwords to tech-savvy children explaining gameplay to parents and other relatives who were unfamiliar with the sites.

Theoretical Framework

Sociocultural Theory

From a sociocultural perspective (Vygotsky, 1978), virtual worlds and online games provide the cultural context for interactions with family members. Through these interactions, children's and adults' participation alike is guided (Rogoff, 1990) as those with greater expertise scaffold less experienced users through play. It is interesting that expertise is not determined by age or power, but through familiarity with specific sites, levels of technical adeptness, and desires to connect with family

members. While these virtual worlds and games provide the sociocultural context, the computer, mouse, iPad, iPhone, Nintendo DS, Wii, and real-world merchandise (e.g., Webkinz plush toys, Topps Football playing cards, Lego Ninjago building block sets) are the cultural tools that mediate these interactions. .

Looking at learning as socially co-constructed between collaborating partners within a cultural context (Vygotsky, 1978) gives a fundamental role to interaction in the cognitive and language development of children. This, in turn, provides a framework to describe young people's practices as they learn to play games, teach others to play them, talk about them, or play together, whether they occupy the same physical space or not. Sociocultural theory also draws attention to the active nature of children's own efforts to participate and observe the skilled activities within their environment.

Scaffolding

Foundational to sociocultural theories of learning is the idea of scaffolding in which novice learners, supported by more experienced others, gradually develop the ability to do certain tasks without help. This transition through the zone of proximal development (ZPD) is described in Vygotsky's writing as

> the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance, or in collaboration with more capable peers. (1978, p. 86)

In this vein, the more capable other assists the novice in reaching his or her problem-solving potential through "recruitment of the child's interest, reduction in degrees of freedom, maintaining goal orientation, highlighting critical task features, controlling frustration, and demonstrating idealized solution paths" (Stone, 1993, p. 193). In essence, the adult or more capable other structures the learning experience and provides incremental guidance to support the novice's success at a given task.

Guided Participation

In a cognitive apprenticeship framework, novice users gain knowledge from more experienced others in the course of participation in daily routines and activities (Rogoff, 1990). The concept of guided participation involves the "processes and systems of involvement between people as they communicate and coordinate efforts while participating in culturally valued activity" (Rogoff, 1995, p. 142). Important to this theory is that children learn not just from the expertise of others, but from the rich social milieu in which theses interactions occur. From this perspective, the interac-

tions between novices and more knowledgeable others is inseparable from the culturally valued context in which these exchanges occur (Rogoff, 1990).

While we have previously considered how technology and design features can serve as a scaffold for children's online media use (Black & Reich, 2011), this chapter focuses on how family members provide support for successful play. At times these are adults helping children or older children helping younger children (cousins, siblings). At other times these are children supporting less tech-savvy parents. The key is that novice users are supported and that guidance through the zone of proximal development enables richer and more sophisticated ways for family members to interact. Further, joint play and the sharing of digital devices (computers, Nintendo DS, iPads) provide a rich social context for guided participation through the use of digital media and the learning of normative behaviors within these virtual spaces (e.g., how to clear a level, interact with other avatars).

Mediation

Another hallmark of sociocultural theory is the notion of mediation and how meaning is transmitted through the use of symbolic tools (Vygotsky, 1978). These tools, such as language and artifacts, derive their meaning from "the cultural conventions that engendered them" (Kozulin, 2003, p. 26). As such, mediation is a social process. In considering online games and virtual worlds for children, symbolic tools include the mechanisms for accessing these sites, such as computers and merchandise, as well as the discourse around these activities and the repertoire of behaviors associated with their use. These behaviors and discussions encompass conversations about online games with parents and siblings, the passing of Nintendo DS handheld game systems back and forth in order to successfully clear a challenging level of a game, or the comments from a younger sibling or parent about the best choice of clothes and hair color for an avatar.

In exploring how children and families engage with online games and virtual worlds, we consider how novices are scaffolded into successful play, how more experienced others (experts) benefit from their support of these mediated interactions with novices, and the ways in which online sites, activities, gadgets, merchandise, and technologies are symbolic and cultural tools that promote meaningful interactions and support family connections.

Media Mixes

As Ito (2002) points out, today's children are embedded in a "media mix" where the content of comic books, animation, games, and toys constantly cross-reference each other. It thus becomes difficult to separate computational media into its own

research domain, but is instead possible to see new media as an emerging hybrid relation between digital and analog media. For our study participants, the hybrid media mix also involved physical objects, such as toys, codes, and game blocks and figurines, in the "media mix."

Another germane illustration of this hybridity of play objects and domains can be found in Wohlwend's (2009) analysis of children's engagement with the Disney Princess franchise, in which she looked at Disney toy-game hybrids as identity texts or *anticipated* identity texts laden with messages that

> circulate through merchandise that surrounds young consumers as they dress in, sleep on, bathe in, eat from, and play with commercial goods decorated with popular culture images, print, and logos, immersing children in products that invite identification with familiar media characters and communicate gendered expectations about what children should buy, how they should play, and who they should be. (p. 57)

More and more, toy companies are tapping into multiple markets at the same time; that is, a toy comes with a physical artifact, an entry code into a virtual world, and associated television shows, movies, and consumer-generated content. Users do not always navigate these spaces in linear fashions: they might start with a toy and move on to the show, or vice versa. Webkinz—used by several of our young informants—provides a good example of the hybridity of these play objects, or the ability to engage with several dimensions of the toy objects (physical, virtual, media-commercial). To illustrate, each Webkinz toy comes with a code to unlock the Webkinz virtual world. Members play in this online community through animated avatars that match the purchased stuffed animals, producing hybrids that represent children and their toy pets. Once online, children can play games, buy food, clothing, or furniture, furnish their avatars' bedrooms, or communicate with other players through simplified chat and email functions (cf. Black, 2010; Black & Reich, 2011; Reich & Black, 2012; Wohlwend, Vander Zanden, Husbye, & Kuby, 2011).

Methods

Data for this chapter stem from comparative case studies of young children's media use in the context of everyday lives. In this chapter, we focus on 5 sibling pairs and 1 only child (aged 4–12). Three families were brother-sister sibling pairs, one was a boy pair, and another had two girls. The only child was female (total: 6 females and 5 males). Data consist of multiple 30–60 minute audio interviews with parents, focal

participants, and their siblings, multiple 30–60 minutes videotaped sessions of participant and sibling gameplay, and computer-captured log files of the aforementioned gameplay. Almost all of the interviews occurred in the children's homes, with the exception of 2 families that were interviewed at their mother's place of employment or a coffee shop near mother's work. Data analysis was an iterative process in which 2 professors and 2 graduate students, each bringing distinct disciplinary lenses of education and literacy studies, developmental and community psychology, and anthropology, individually coded the data to identify topics and themes related to children's media use. The research team used a combination of HyperResearch, a qualitative software program, Microsoft Word, their individual interview notes, and the transcripts in order to generate and clarify their coding scheme. The researchers then met to discuss salient patterns and discrepancies in their analyses and to refine their codes. The researchers then returned to the data to focus on the refined codes and generate any additional themes, topics, and subtopics.

Analysis

During the analysis process, the overarching thematic-topical categories of scaffolding and mediation emerged as salient features in family interactions focused on digital media and their accompanying artifacts. While scaffolding and mediation are presented in distinct sections with distinct examples for reasons of clarity, it is important to note that they are nearly inextricable in the data. Instances of scaffolded activity are mediated through digital and material media artifacts, and by the same token, instances of mediated activity generally involve some form of scaffolding between family members.

In every discussion we had with families and observations of gameplay, there was evidence that novice users were supported in their digital media use and that more experienced users embraced their role as supporters and teachers. The forms of scaffolding varied with different relationships and online activities, and the characteristics of the novice user and expert other varied greatly. Nonetheless, these scaffolded interactions were highly prevalent and appeared to promote interaction between relations and provide opportunities for connection and shared time for family members. In the following sections, we discuss distinct manifestations of scaffolding and guided participation in the data.

In our recordings of gameplay, we saw scaffolding and guided participation occurring most frequently between children during gameplay. For most families, children shared a device for play such as one computer, iPad, Wii, or Nintendo DS. While the home might have one or sometimes more than one of each of these types of devices, children typically selected one electronic tool and shared. At times,

this sharing involved cooperative gameplay, but most often one child played while the other watched. However, this observation was not passive. Rather, children cheered, commented, and asked questions throughout the process. Additionally, the child actively using the digital media source narrated his or her play and answered questions about the choices made.

Older Family Members as Experts

The most common novice-expert relationship was between siblings, in which the older one served as the more capable other, supporting their younger siblings' gameplay. The most frequent form of support was explicit scaffolding, with older siblings creating accounts and assisting the younger sibling with finding specific websites and logging in. While older siblings often served as the keeper of account information, they created usernames and passwords that were connected to their younger brother or sister rather than using phrases that were more familiar to them. For instance, when 8-year-old Naomi (all names used in this chapter are pseudonyms) created a Webkinz account for her 6-year-old brother Colton, she created a username that was based on their father's affectionate nickname for him. Similarly, when we were observing 5-year-old Jessica attempting to log onto the Club Penguin site, she had to ask her older brother Keavin for the password. Like Naomi, Keavin had selected a password that, in theory, could have been easy for his younger sister to remember, although clearly in practice it did not turn out to be so.

In discussing online activities, all of the older siblings were well acquainted with their younger siblings' digital media use. They knew how often he or she played on the computer, which sites were visited, and within specific virtual world accounts, what the younger sibling played, owned, or used. Their expertise in their younger brother's or sister's play was clear when, during interviews and observed gameplay, older siblings answered for or corrected their young siblings' responses. For example, when talking with 5-year-old Jessica and her 8-year-old brother Keavin about their account on Club Penguin, it was clear that Keavin not only logged in for his little sister but also watched her play and was familiar with her interactions, purchases, and activities on the site. When Jessica stated that she had been playing since kindergarten, Keavin noted that she was actually 4-years-old when he created her account, which was prior to kindergarten. Similarly, when asked how many buddies Jessica had in the virtual world, Keavin again corrected her, noting that she actually had more than she stated. He was familiar with what her penguin avatar was wearing, what its home (igloo) looked like, and how many pets (puffles) lived in the igloo.

In another of our sibling dyads, the older sibling, 12-year-old Ben, would conduct Internet searches to find virtual worlds and games that would fit the emerg-

ing interests of his younger sister, 9-year-old Lacey. Also, similar to Jessica and Keavin, Lacey often queried Ben for her log-in information and, when presented with complex in-game obstacles and hurdles, appealed to him for assistance. Another participant, Anabel, who had just turned 6-years-old, discussed receiving support and companionship in her digital play from all of her family members. For instance, she played a counting game, which she referred to as "Coins," with her father and the virtual worlds Girls Go and Poptropica with her 14-year-old sister.

Of the 6 families in this pilot study, we found only 2 parents who participated in collaborative gameplay with their children. Six-year-old Anabel's mother would play Plants vs. Zombies (a PC-based video game that was later released as an app for phones and tablets), with her, and 9-year old-Amelia's father played challenging literacy-based games in Webkinz World with her and helped her to earn in-game currency when she first began playing in the virtual world. Amelia's father would also search the web for cheats to help his daughter complete difficult games and activities in the virtual world.

During the interviews, children often talked about a more distant family member, most often an older cousin, who served as the more experienced other. While contact with cousins was less frequent than siblings, there was evidence that these interactions were quite salient in supporting children's digital media use. For instance, 8-year-old Davi's online interests were largely shaped by the recommendations and interests of his older cousin Sardar. An avid Pokemon player, Sardar loaded Davi's Nintendo DS with Pokemon games and taught him the basics of gameplay. Sardar also allowed Davi to play Poptropica with him, which was interesting enough to prompt Davi to create his own Poptropica account. Learning about online games and virtual worlds from older cousins and uncles was mentioned in interviews with 5 of the 6 families.

During the course of our interviews and observations, it became clear that guided participation rather than direct instruction also played a role in younger participants' acquisition of digital media skills. For example, during our first interview with the family, then 4-year-old Nassim's mother explained that the Lego website was one of his favorites, because in order to navigate the site Nassim "doesn't have to type in anything, you know, he just.... He does it himself. He'll turn the computer on, log in, and then he'll draw down to '"favorites' and click on Lego, and he'll navigate the website himself without any supervision and he's been doing that since he was two and a half" (Interview, 2011). When queried about how Nassim learned to access and navigate the site, his mother explained that he had received no explicit instruction but rather had learned from watching and playing with his older brother and figuring it out. These skills were never explicitly taught to him, but he was able to pick them up by participating and observing other family members in interactions with digital media.

As another example of developing digital media skills through guided participation, as mentioned earlier, Nassim's 8-year-old brother Davi learned to play Poptropica primarily through watching and playing with his older cousin Sardar. According to his mother, Sardar and Davi would perch side by side on the sole stool in the computer room and play Poptropica together for hours on end. Davi, as a novice, spent a great deal of time observing Sardar's strategies for play within the game until he was able to begin playing independently.

Thus, many of our participants learned the ins-and-outs of particular games and virtual worlds through a combination of modeling behaviors of more knowledgeable others and engaging in gameplay along with family members with greater expertise. For instance, Davi learned how to play several games on the Wii and Nintendo DS by watching his cousins play and then attempting the games on his own. He noted that when visiting their house, his cousins would offer help when he got stuck but otherwise just let him play with them and on his own. This growing knowledge was then shared with his younger brother Nassim. For instance, when Davi played Lego Star Wars on the Wii, he talked and explained each move and strategy that he was using in order to teach Nassim the principles and winning strategies within this particular game. Then Nassim would attempt play on his own, imitating some of Davi's actions and also testing the boundaries of the site through trial and error. Likewise, Colton also discussed watching Naomi play games in order to learn how to master them. He also would explicitly ask for help. As an example, he is not yet a good typist so he often called on Naomi to help him with games that require typing.

Younger Family Members as Experts

While less prevalent in our analysis, it also became clear that greater knowledge of media and digital games was sometimes held by younger family members who taught older family members about games and/or encouraged them to engage with digital media. For example, 8-year-old Keavin created Topps Football, an online fantasy soccer game, accounts for all of his family members including his parents. Creating these accounts and introducing his family members to the game was a means by which Keavin could use his expertise with and interest in popular digital media to extend the family's shared passion for soccer into the online realm.

Similarly, siblings Naomi and Colton taught their father how to play some of their favorite games, like Temple Run, on the iPad. While their father privately noted that he did not understand their excitement over the games, he liked to learn about what they were doing. This same sibling pair also created avatars (Mii's) for both of their parents on the Wii so that the family could play games together. In a similar example, 6-year-old Anabel guided her mother through the process of cre-

ating an avatar for herself in the PS3 game Little Big Planet. Again, the scaffolding of adult game use by children was done in the spirit of promoting family interactions that enabled all members to either play together or share the enjoyment of the game.

Although younger siblings scaffolding older siblings' play was infrequent, there was evidence of younger brothers or sisters providing verbal guidance for their older sibling's gameplay. For instance, while 8-year-old Davi played Lego Ninjago, 4-year-old Nassim watched over his shoulder and not only offered encouragement but also provided blow-by-blow commentary and warned Davi when his character was in danger. It may be that Davi did not necessarily need this support from his younger sibling; however, this form of participation and play offered a means by which the younger Nassim could demonstrate his knowledge of this game space, even though he was not yet skilled enough to play the game on his own. Moreover, because Davi attended rather than objected to Nassim's commentary and warnings, it is possible that Davi found them to be beneficial or a positive aspect of his gameplay.

Mediation

Although intertwined with scaffolding, our observations and interviews with children, siblings, and parents found the virtual space, social media activities, language use, and other cultural artifacts to be essential for mediating family relationships. In particular, we saw evidence of these cultural and symbolic tools (1) facilitating learning and collaboration through media, digital, and physical tools or "media mixes" and (2) mediating social connections with close and extended family members through media and digital gaming practices and related discourse.

Physical-Virtual Play Hybrids and Media Mixes

Across participants, we found that their virtual play was tied to mixes of digital and material artifacts. As an example, for brothers Davi and Nassim, the media mix Lego Ninjago was a multifaceted practice that carried across physical materials and digital media. The canonical plastic Lego figurines, of which they had an extensive collection, were only one small part of their engagement with this media. For example, before playing the Ninjago game, the brothers visited YouTube (www.youtube.com) to watch several short episodes of the Cartoon Network series *Ninjago: Rise of the Snakes*. These videos provided a narrative accompaniment for the franchise's digital games, and even though both boys were clearly well acquainted with the storyline, Davi watched with rapt attention and shushed Nassim when his comments were deemed disruptive to our enjoyment of the videos. As a next step,

Davi, relying on Google's autofill function, navigated to the Ninjago section of the Lego website (http://ninjago.lego.com/). Once there, he played a series of games (Spinball Spinjitsu—based on Beyblades, Smash Party, and The Four Paths) while Nassim watched over his shoulder, providing commentary and support.

As a media mix, the Lego Ninjago enterprise that captured the interests of Davi and Nassim includes board games, films, TV series, video games, and a virtual world that is currently under construction. Other examples of media mixes in our interviews are Moshi Monsters (which feature small plastic figurines of online avatars), played by Anabel, and Webkinz (which, as mentioned previously, have stuffed animal versions of online avatars), played by several of the informants. Interestingly, the movement from one artifact of the media mix to another seems fluid in nature. That is, some young people start with owning the physical toy and then move to discover the connected online games and television shows, while others start with a digital artifact and then acquire the physical artifact. Also worth noting is that in our observations and interviews, we did not see children using the real-world artifacts as an extension of the online activity. For instance, no children talked about their Webkinz stuffed animal as the visually similar online avatar nor did children's play with Lego figurines mirror the plot of the online Lego Ninjago or Star Wars games. Thus, while media mixes were prevalent with these families, the children we observed seemed to differentiate the digital representations from the physical world.

Digital Media as a Space for Interaction and a Tool for Mediation

Although the majority of digitally mediated play occurred face-to-face with an older sibling looking over the shoulder of his or her younger sibling or vice versa, the virtual world itself sometimes served as a sociocultural context that mediated interaction among family members. For instance, both Jessica and Keavin would, within the same house, log on to different computers and have their avatars meet in the virtual world Zwinky so that they could interact and explore the virtual space together through their avatars. Similarly, Davi discussed using his Nintendo DS while meeting with his cousin in the same place on the DS game and sending messages back and forth. As he described, "So once I sent a bad word to my cousin on the DS and, and then he sends a bad word back and it just kept on going" (Interview, 2012).

The digital media can also be used as a tool for family interactions by providing a shared space or interest through which family members can connect. This can be seen when Lacey and Ben purchased a Webkinz pet for an aunt and uncle who lived in a different state and presented it to them as a holiday gift. This gift of a stuffed animal served as an entry point for Lacey and Ben to introduce their relatives to the Webkinz online space and provided a focus for interaction during the

holiday. As the experts on this space, Lacey and Ben helped their aunt and uncle figure out how to adopt their pet, furnish their pet's virtual room, and then met with them online to play the game together. Moreover, once the visit was over and the families were again located in different states, the Webkinz pet served as a physical reminder for these family members to meet up online and attempt to spend time together. Unfortunately, due to the challenges of interacting within this particular virtual world (see Black & Reich, 2011, and Reich & Black, 2012, for more on design limitations), these family members were not able to effectively meet and communicate in Webkinz World on a regular basis but instead continued playing separately and discussing the space via Skype, telephone, and email.

In many cases, digital media and games fostered dialogue among family members. For instance, Nassim and Davi's love of the Lego Ninjago series was shared with their mother by narrating the storyline and interesting facts about the videos, games, and toys to her, often while she cooked or worked around the house. This connection was exemplified in the humor the brothers and their mother found in the villain Lord Garmadon's naming of his son, Lloyd Garmadon. Discussing this topic induced laughter from all three members of the family.

Many of our participants used technology as an extension of offline worlds, interests, and family relationships. For example, Jessica and Keavin would often play soccer and watch soccer with their dad, as well as follow their family's favorite team, Manchester United. Connected to this family-wide love of soccer, the siblings became interested in Topps Football—a trading card game that has digital components. Since both their dad and uncle were seasoned fans of Manchester, the siblings would often use the Topps Football game as a way to mediate family interactions by creating accounts for all family members (parents and uncle), collecting playing cards, and discussing stellar players from the cards, game, and real-world Manchester team. In this instance, digitally mediated play was built on pre-existing interests for all of the participating family members and seemed to facilitate family time spent together.

Discussion

Although academics, policymakers, and educators have made claims that time spent in virtual worlds and on computer games might supplant family interactions (Cummings & Vandewater, 2007; Kaiser Family Foundation, 2003; Kline, von Feilitzen, & Carlsson, 2000), resulting in children engaged in solitary online activities, our data do not support these concerns. Rather than individualized play, we found digital media use to involve other family members and that such uses provided opportunities for scaffolded learning and mediated new ways for families to connect.

This study of children's digital play and family relationships in the context of everyday life revealed that children's use of digital media was in service of maintaining connections to their siblings, parents, and more distant family members. In using a sociocultural lens for interpreting children's use and discussion of virtual worlds and games, we found that family members of different ages and sophistication in digital media use occupied important roles in learning, playing, and connecting. Specifically, play in digital games and virtual sites was used as a springboard for dialogue and social interactions within the family. Through helping and modeling behaviors, novice-expert dynamics, and perhaps a healthy dose of playful competition, family interactions were mediated through online and offline gaming spaces.

Study Limitations and Missed Connections

Although our interviews often reveal that young people seek to connect with older family members by talking about their digital media and gaming interests or inviting them to play, the older family members did not always meet these invitations with enthusiasm. One of our participants, Davi, explained that whenever his little brother asked their father to engage in digital play, his requests were not always met. When he asked his dad to play, the dad sometimes replied with, "I don't want to. I don't know how." Likewise, siblings Naomi and Colton pointed out that, although they attempt to get their parents to play iPad or Wii games with them, the parents often do not demonstrate interest or simply do not have time. At play in these "missed connections" are issues of leisure time, parental interests, technical know-how, and parents' judgments about how shared time should be allocated.

The home contexts, physical settings, time of year, family dynamics, and novelty of the play artifact played an essential role in how our young participants envisioned and engaged with digital media, hybrid toys, and virtual worlds. For instance, play with digital media often took place when other types of play with usual playmates were not an option. Structural limitations also influenced children's choices of virtual or material play spaces. For example, when Davi and Nassim moved to a different house with a bigger backyard and a swimming pool, they took advantage of those play spaces, playing outside more often with their cousins. Likewise, Davi mentioned that he would have liked to play with his friends, but he was unable to connect with them during the day because of the distance between their houses.

One methodological limitation of qualitative interviews is that they give more opportunities for better-versed interviewees to express themselves than participants with less developed language skills. In our sample of children and adults, older siblings and parents often took the leading role in discussing children's online

activities and family practices around digital media. Interviewers tried to account for this issue, and we believe that younger participants were given a chance to participate in interviews equally with older participants. A second limitation is that participants' responses could have been subjected to social desirability bias, incorrect estimations, and false memories. For example, some parents could have heard common sentiments concerning negative influence of digital media on family time or children's academic outcomes. Thus, they potentially could have underestimated children's involvement with media in order to be perceived favorably as parents. Since there was a consistency between participants' interview responses and our observations, we consider the participants' accounts to be reliable. Finally, a third limitation or consideration for future research concerns family socioeconomic status. Although the six families interviewed in the study were ethnically diverse, most of the focal families came from middle- and upper-middle-class backgrounds. It could be that in comparison to more affluent families, children in less economically stable households are exposed to different types of media and that family dynamics and relationships are mediated by digital play in other ways.

Implications for Further Research

Future studies should examine how differences in family structures, cultural backgrounds, and socioeconomic conditions might moderate children's online engagement and family relations. Another direction for future research concerns examination of ways in which sibling digital play promotes different types of literacies. It is also possible that different family dynamics and relationships are mediated by digital play in disparate ways. Thus, digitally mediated relationships form a fertile ground for researchers to investigate the effects of media, digital games, virtual worlds, and toy-game hybrids in the context of everyday life.

Conclusion

Although many authors discuss the importance of supports, affinity-building, and scaffolding within videogames (Black, 2009; Gee, 2009; Steinkeuhler, 2010), there are fewer empirical studies of how real-world social relationships and interactions scaffold and support online social interactions, digital media interests, and computer usage. In this chapter, however, real-world sibling relationships and familial associations formed both the background and the foreground for children's online engagement: our young participants were initiated into play by their family members (siblings, cousins, parents), received the games and artifacts from their par-

ents, scaffolded and supported family members as they played, and discussed and enriched their relationships with each other due to their shared digital media interests, collaborative and parallel play, and ongoing discourse about their interests.

In our analyses, we did not find credence or empirical support to popular sentiments that the constantly increasing children's media use is correlated to displacement of family time and loosening of bonds within families. Rather, we find that children's family relationships often enable their use of games and virtual worlds (e.g., asking their mom to download an app on her iPhone) and, conversely, that their play in digital games virtual spaces often mediates family interactions (e.g., long discussion and trial-and-error about said app between the children and parents).

In conclusion, our analyses showed that older family members proved to be resources for younger family members to explore computer-mediated practices and digital literacies, as well as that younger children provided supports for older siblings' and parents' engagement with digital media activities. Throughout our interviews, we found ways in which digital media can facilitate family interactions and that these technologically rich environments and media are used as mechanisms for connection, rather than isolation—from parent-child conversations to sibling cooperative, collaborative, and parallel play. Thus, digitally mediated gaming practices proved to provide opportunities for within-family social interactions and points of connection between family members.

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