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Expanding Family Literacy through Video Game Playographies

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Abstract:

The aim of this article is to broaden traditional views of what is considered home and family literacy through the exploration of video game connections to literacy learning. Specifically, this autoethnographic study examines the researchers' personal play biographies or "playographies" as they relate to video game experiences. Through considered reflection of individual playographies, each researcher noted a shift in perception through their interactions with video games as teachers, parents, researchers, and gamers. As a result, each felt they were able to further appreciate and understand literacy learning connections through video game play at home and with family.

Keywords:

literacy, video games, home literacy, family literacy, playography

Introduction

James Gee's gaming biography sparked a line of intrigue and inquiry for understanding learning and literacy through video game play (2007, 2012, 2017). Through observing his son, Sam, and engaging in his own video gameplay, he identified 36 principles of learning incorporated and leveraged by good video game design. His experiences with games such as *The New Adventures of the Time Machine* and *Deus Ex* were also the foundations for his well-known research focused on situated cognition, New Literacy Studies, and connectionism, a pattern-recognition view of the mind (Gee, 2007).

Other researchers have made discoveries about video games and gamers by examining their own play biographies, or "playographies", as well as those of others (Mitgutsch, 2011; Rice, 2014). Although Rice (2014) was the first to use the term "playographies", she did it in reference to Mitgutsch's narrative inquiry into play histories. He found players developed meaningful learning patterns that connect and transfer the virtual worlds of games to the realities of lived experiences in the physical world. Considering the influence of his own playography on his learning, Mitgutsch interviewed young adults about their play histories finding meaningful learning patterns beginning as early as ages four years to six years. Although each playography is unique, patterns emerged that included:

- interacting with others
- developing gaming strategies
- repeating game play to perfect levels.

Rice (2014), who acknowledged her limited game playing history, recognized the pull, or enchantment, of games and used her own playography and the playographies of her students to better understand how she might leverage the use of video games in her middle school English class.

In the authors' multiple roles as teachers, parents, teacher educators and school leaders, their playographies have shaped their thinking about video games' influence on literacy. They have witnessed and experienced firsthand video games as home and family literacy. Furthermore, they believe that video games, specifically narrative and role playing games, should not be dismissed as a distraction, rather they should be valued as multimodal texts that can be a support by and for users' culture and context. Therefore, the goal of this article is to offer a deeper understanding of how video games can be useful in navigating and supporting literacy learning as well as broadening traditional views of what is considered home and family literacy.

Defining Home and Family Literacies

While formal literacy learning around books and digital media happens in classrooms, research from the past three decades has established strong relationships between *home literacy environment* (HLE) and success in school-based literacy (Puglisi, Hulme, Hamilton, & Snowling, 2017). The HLE describes the literacy interactions and encounters with resources and attitudes about literacy that children experience in their homes in active ways, such as interacting with print and passive ways such as observing the behaviors and attitudes of others in the home (Bracken & Fischel, 2008; Burgess, Hecht, & Lonigan, 2002). Hamilton, Hayiou-Thomas, Hulme, and Snowling (2016) state that home-based literacy "interactions provide a social context for children's earliest encounters with the printed word, and much research on the HLE assumes an important role for experienced others (most often parents) in children's early literacy development" (p. 1).

Family literacies go beyond books and reading activities and well beyond the traditional tools utilized by educators in the K-12 setting. Souto-Manning and Yoon (2018) share that "family literacy practices may include singing hymnals from memory as an intergenerational practice" (p. 85). Cultural and family ways of communication and expressions surround the

children as they are growing up and influence literacy development. However, these critical first literacies that are tied to the family values are often undervalued by the traditional education system. When educators allow the family culture to have a place in the literacy learning process at school, literacy engagement and focus may increase.

Redefining Home and Family Literacy

Interestingly in the most recent *Handbook of Family Literacy* (Wasik, 2012) there is not a single chapter devoted to either technology or video games as part of the family literacy fabric. One independent research center that conducts ongoing research on children and media, produced their first reports on touch screens and games a month prior to the launch of the iPad in 2010 (Chiong & Shuler, 2010; Welling & Levine, 2010). Soon after these reports, the popular press referred to toddlers and preschoolers as “the touch-screen generation” (Rosin, 2013) pointing to the advent of smartphones in 2007 and the introduction of the iPad in 2010 as pivot points.

According to Souto-Manning and Yoon (2018) “we engage in expanding the concept of home literacies to the ways in which language and communicative practices come to life in home and across interactions with family members” (p. 86). Video games often have communication and interaction embedded into the game to provide key focus on family literacies. Parents and guardians are children’s first teachers and can influence the level of print or digital reading materials that are in the home. These first teachers also have the power to influence the level of normalcy attached to video games for the children. Gaming families may have video gameplay throughout the week and the vocabulary and literacy exposure for the children in these homes can be seen by educators from kindergarten through high school (Haas, 2012). As teachers and educational researchers, the authors reflected on observed changes in their own families related to video game play, their understanding of home and family literacies, their initial biases toward video game play, and their introduction to looking at

player histories, or playographies, as a lens for exploring new understandings of video games as part of home and family literacies.

Method: Examining Playographies

Over the years three of the authors' experiences with video games as both observers of their own children, their students, and as players themselves reshaped their thinking about video games, literacy, and learning, and specifically, home literacy experiences. While their method is primarily collaborative autobiography, it was inspired by Mitgutsch's (2011) qualitative work exploring the player histories of seven university students and looking for meaningful learning patterns. This study also utilized a small purposive and homogenous sample of individuals with similar characteristics and traits (Patton 1990), which offers the potential opportunity for further research using a multistage purposive sample. The resulting design is an application of collaborative autoethnography. Collaborative autoethnographic research teams typically consist of two to four researchers examining a social phenomenon together through their autobiographical data. This type of analysis recognizes the importance of ‘data on the self’ (Chang, Ngunjiri, and Hernandez, 2012, p. 18) and uses concurrent autobiographical ethnographies in the context of a collaborative group. The authors focused these autobiographical writings on their player histories, or playographies, written independently of each other.

Next the authors examined their own and each other’s playographies looking for commonalities and differences while searching for meaning and patterns in relation to literacy and learning. Their initial analysis was independent of each other. However, as they found interesting insights and additional questions of a particular story or playography events, discussions occurred. This caused additional writings as they asked questions of each other’s writing and stories. They came together for comparison and combining codes and working

toward consensus on themes looking for intersections of traditional literacies as well as being open to new possibilities of home literacies.

Leslie's Playography

Leslie, who is an educator and parent, was asked to play *World of Warcraft* with her adult niece who lives several states away. Having immediate reservations about playing a game whose very name sounded violent was unappealing, Author 1's desire to bond with her niece overshadowed her misgivings. Unaware of how to play, her niece scaffolded the experience by sitting next to her as she learned how to create a character, join a guild, complete quests, and participate in the auction house. Continuing to scaffold the gaming experience, Leslie's niece would often talk her through the experience such as battle grounds and raids via phone conversations, in-game messaging, and later in-game voice chats. As she began to enjoy gaming and become more proficient, her children developed an interest in playing as well. Previously against having her children involved in a game like *World of Warcraft,* she began to understand the embedded educational opportunities and joy associated with the game. Each child seemed to enjoy the video game in a unique way. Her son liked testing his strategy and skill against other players in one-on-one and group scenarios; her oldest daughter liked the challenge, exploration, the adventure of the questing system, as well as the social interaction of meeting and chatting with other players online; while her youngest daughter loved to continuously create new characters, collect virtual pets, and change her character's hair color and style. Leslie's husband was the last family member to join, and became a huge fan of the game very quickly. As a family, they established rules around gaming much like those already established within their home involving other activities incorporating technology and screens. Additionally, they created a family guild within the video game that allowed the children to play online while always being connected to a trusted friend or family member.

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Living in distant geographical locations in the U.S., Leslie, her husband, and three children began having scheduled family game nights with cousins in the Midwest and a grandmother in the northern United States. This family time allowed members to go on adventures, build relationships, and solve problems in unique and engaging ways. Family game night became more than just a board game across the table, rather it became a cross-cultural, multigenerational shared experience across worlds. These experiences developed literacy interests for her children that acted as a "pull" into educational discovery rather than the "push" they were receiving in the school setting.

Sheri's Playography

While teaching in her third and fourth grade multiage classroom, Sheri recounts the following experience. During a class discussion on food chains, the topic of decomposing was introduced. While explaining the process of decomposing, she mentioned her own backyard composting. One student said, "Oh, that's like in *Runescape* when we compost veggies...." and other gamers chimed in confirming. This was a turning point in her thinking about the value of video games. Considering this knowledgeable discussion on composting from her suburban students that brought schema to the science content under study, she was intrigued about the potential of this virtual world game. Like many educators, she initially saw little value in gaming and was concerned that this play usurped time that could be spent reading or more physical play. This dismissive view could be rooted in her early playography of video games. The summer before heading off to college in 1977, some friends then played the 2-year-old home version of Atari's arcade game, *Pong*. The simple, two-player ping-pong paddle board game was fun enough for a social gathering, but not compelling enough to miss once she arrived at her college campus.

Another experience that pushed this change in thinking about video games occurred near the same time she mused over *Runescape* as she watched her then 12-year-old son play

The Legend of Zelda. When he became stuck at a particular level, he would run to the computer to search for "cheats," read a screen full of dense text, and then run back to the game to make his next more knowledgeable play. Watching her own son and listening to her gaming students, compelled her to re-enter the world of video games in this more storied genre, in which boys, in her case, were spending lots of their out-of-school time. Since *Runescape* is a free popular online video game, she decided to engage in play with her students. As a novice, she relied on both her students and her son to guide her through learning how to navigate this virtual world. Through her experiences with observing her son, listening to and engaging in play with son and her students, she learned more about the amount of reading done within RPGs and outside of them to build more expertise in gameplay. She also experienced reading the video game world to discover the material intelligence of objects within these enchanting places through playing that iPad game, *Lily.* She learned that clicking in the environment offered clues and commodities that helped move forward in the game. This gaming experience helped her be more prepared when she later played *Wizard101* with her grandsons and *World of Warcraft* with Leslie and her younger daughter. It also helped her form stronger social connections with game-playing students in acknowledging their play as valuable and too often draw them into traditional literacies by making academic connections with their game play.

Julie's Playography

In fact, the complex pedagogical practices of video game play was Julie's turning point in her perceptions of the value of gaming. In one of her doctoral courses on advanced instructional design, a part of the coursework was devoted to studying the learning principles embedded in video games. To begin the study, she spent some time in class playing several different games. She came home and began talking to her children about games, what motivated them to play, and how she could enter the gaming world. They willingly spent hours teaching over her

shoulder and playing next to her. From this gameplay, she discovered the self-directed, deep thinking and learning that is fostered when children's curiosity is piqued.

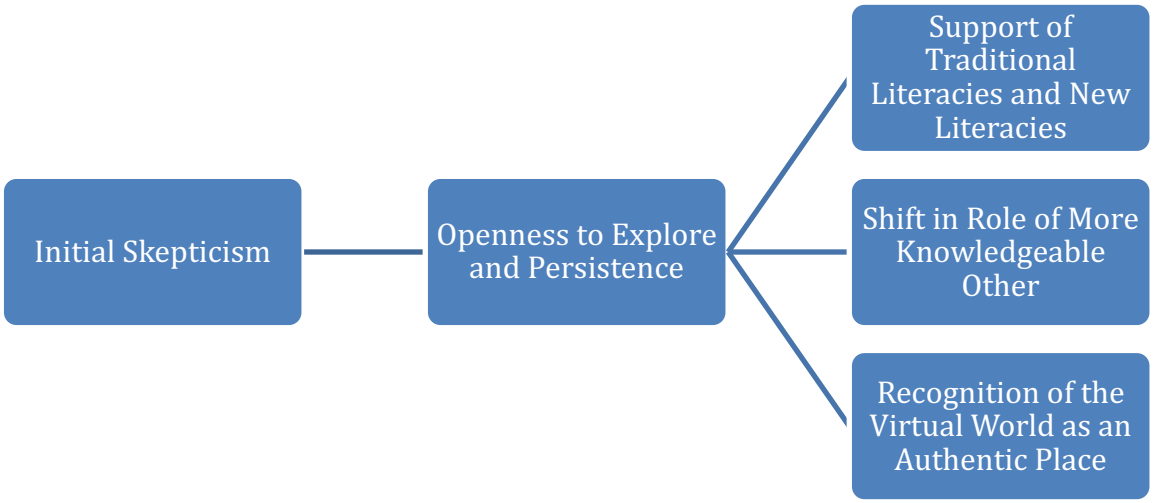
Julie began her gameplay with immersive, simulation games. In her coursework, she played *Rise of Nations* on the computer. She also quickly began playing *The Sims*. As she began thinking about games with a new understanding of their allure for children, she also began to study and evaluate the pedagogical aspects of those games that made them so compelling. Believing in the idea that there are "good" video games and "bad" video games, she steered herself and her children toward the good games - the ones that had little to no violence and had other redeeming qualities. The family purchased a Wii gaming system and *Wii Sports* was a favorite along with *Guitar Hero* and *Minecraft* on the computer was a huge hit in her house. She was incredibly surprised when reading Gee's (2007) work and the way he defended violent video games. While it was not time for her own children to embrace first-person shooter games, she developed an understanding and appreciation for what all video games have to offer educators, if they take the time to explore.

As her children grew, different video games came and went. She asked her children many times over the years to help her learn games, to evaluate the games for their affordances, and to further understand the games' appeal. She also drew her children in when she was evaluating a game for her students. This collaboration continues to happen, and as recently as this past summer, she convinced her adult son to play *Animal Crossing* with her so she could evaluate it for her students' use. She still plays some games periodically, but now most are small iPad games rather than immersive games, mostly due to her time constraints. In reflecting on when her study of video games began, it was when the children had become independent readers and the time that she cherished reading to them was all but gone. However, games opened a new avenue for shared family experiences that is still present in her life.

Findings: Playographies and Shifted Perspectives

Examining playography experiences provided the authors with opportunities to examine individual bias and educational literacy experiences embedded within video games. Each playography caused shifts in perspectives of video games and their value in HLE. Across each of the three playographies, three patterns emerged: the recognition of traditional literacies and new literacies, experiences of children as more knowledgeable others, and recognition of the virtual world as an authentic place (Figure 1).

Figure 1: *Authors' Shifts in Perspectives of Video Games Literacy Value and Findings*



Recognizing traditional literacies and new literacies

According to the National Literacy Trust (2020), "35% of young people who play video games believe playing video games makes them a better reader" (para. 4). Digital game-based learning lends itself to greater engagement than more traditional material such as worksheets and textbooks. Kalton (2019) found reluctant readers often have ineffective strategies for tracking and scanning print. However, "in digital games, text is much easier to visually perceive and track. Instead of having multiple paragraphs on a page without the benefit of illustration,

there is only a sentence or two on screen at a time" (para. 12). Due to these factors, video games continue to offer literacy support for students, especially struggling or reluctant readers. While educators' understanding of the value and usefulness of video games as learning tools can support in-school literacies, parents or guardians also need to adopt an understanding to support these out-of-school literacies. Livingstone (2018) outlined several methods for parents or guardians to increase their understanding of the video games that their children are playing. Parents can deepen their understanding by "talking to their children who are playing games, and listening to their answers offers an excellent resource. This can lead to parents being present during game time to see first-hand what their child is doing" (para. 12). Simply understanding the story line of games and exploring their children's choices for play can bring parents and guardians into the conversation; this further supports literacy development and engagement in the home.

Experiencing a shift in the more knowledgeable other in ZPD

Each author's playography illustrates that it took only an openness to games to begin and some persistence to engage. As Gee (2007) recounts and the authors' experiences taught them, video games are not easy. The children in each situation willingly scaffolded the authors' learning. Indeed, they relished their role as the more knowledgeable other, teaching the authors the ins and outs of their literacy in the authors' zones of proximal development (Vygotsky, 1978). Litowitz (1993) challenged the adult centric thinking behind the zone of proximal development. Her challenge does not mean any person, regardless of age, should be viewed as a more knowledgeable other; the challenge is deeper. She contends that when two people come together, it is not a transaction in which one more knowledgeable person gives and the less knowledgeable person receives. Rather, when two come together they create an experience that is a part of both of them and through that shared experience learning happens

for both people. It is this view of the zone of proximal development that most captures the learning the authors experienced while gaming with their children.

Recognizing Virtual Worlds as Authentic Spaces

While each author acted as informed consumers and gatekeepers for their families' time, access, and independence around video gameplay, they were able to recognize cyberspace as real space, a collective experiential space, with options for connecting, decision-making, and agency. Interactions within virtual worlds were full of literacy opportunities via a variety of communication modes including aural, gestural, linguistic, spatial, and visual. However, these spaces differed from traditional spaces by maintaining themselves safe places to fail. Failure was regarded as an integral part of the learning process and supported players to achieve higher levels. Leslie's family interacted in this virtual space in ways not geographically possible, yet they had common experiences, collaborations, and memories that they still refer to today. Sheri's students knew composting, not from a backyard garden space but from a virtual world that taught them about the physical world in a simulation that brought relevant examples to a content area discussion in a physical classroom. Challenging the notion that virtual worlds are not in fact the real world. Di Cesare, Harwood, and Rowsell (2016) state that digital spaces, such as those found in video games, lend themselves to the idea of a third space where "thinking can be conceived of as the intersections created by online and offline play experiences" (p. 93). Therefore, these real world opportunities through video games allowed the authors to shift their perspectives and embrace the idea that video game play can be a true and valuable form of family literacy and offer insights from the virtual world to the physical world.

Discussion

According to the Entertainment Software Association (2020) three-quarters of United States households have at least one person who plays video games for at least an hour a week for a total of over 214 million regular game players. Of parents whose children play video

games, 92% of them “pay attention” to the games their children play, 87% are aware of the games’ rating, and 48% engage in video game play with their children for at least an hour per week. These statistics show that video gaming is no longer part of a counter- or sub- culture, rather it is part of the mainstream.

Gee (2021) draws connections between traditional book and print-based literacies. Both are forms of literacy that involve getting and creating meaning. Video games also have unique properties that distinguish them from books, and vice versa (Gee, 2012). While the games described often include a story arc as the context, they are designed as problems to solve in which the game player is co-authoring the story through their decision-making process. This type of interaction leads to more design thinking in which gamers may modify or redesign games as they become more skilled. The video gameplay that the authors describe is a social experience in which children are playing with friends or family.

New technologies are typically suspect as they enter cultural norms. Television was suspect as it was feared to replace reading and was seen as a more passive act. Video games are often stereotypically linked to violence, when many are collaborative and have been linked to prosocial behavior (Kovess-Masfety, et al., 2016). Role playing games with familiar characters, such as *Aladdin* and *The Little Mermaid*, put young players in an active decision making role when engaging with a multimedia world that is responsive to their actions (Goode & Vasinda, 2021). Cooperative games, such as *Animal Crossing* and *Bloxburg*, provide virtual online opportunities for building virtual worlds with friends, much like children have done with blocks and toys in the physical world. There are “local” options for this same type of play in which games, such as *Little Big Planet*, are played on a game system with other family members or friends and the exploration and building of worlds is played and stored locally within the game system, not online. The sense of exploration and agency contributes to the building of background knowledge students can bring to school-based literacies.

Books and video games both also involve mentoring as part of home and family literacy. We posit that the mentoring can be reciprocal in which parents may help children with texts in video games, and, as illustrated in each playography, children may have something to offer adults in terms of logistics related to making video gaming moves and material intelligence of the environment. Additionally, children who grow up in gaming families, may have mentors in older siblings and parents who are gamers (Goode & Vasinda, 2021). As Julie noted, when her children became more independent and her time for read alouds came to a close, she felt drawn to join this new literacy experience, and although her children mentored her in game play, the talk that is part of the mentoring and game playing processes is key.

Gee (2012) considers the critical role of talk as the most important variable in home literacy and its positive connection to future literacy.

> Just as for books, talking and interaction with and mentoring from adults early in life is crucial for setting games in the context of critical thinking, making ties to content knowledge and the world, problem solving, and innovative thinking. Without such a foundation, both books and games can become passive media, a form of consumption without the production of deep knowledge and the development of skills important for the future (p. 419).

Newman and Celano (2006, 2012) made similar discoveries in their ten-year study of equal access to technology in high and low income neighborhoods in Philadelphia. It was the interactions between children and caring adults that made the experiences rich and meaningful. The disparities of access and to access with careful mentoring has the potential to lead to a wider gap in the digital divide and to what researchers term the Matthew Effect (Gee, 2012; Stanovich, 1986) in which children who have success in reading, tend to read more while those who experience difficulty read less, thus the *rich become richer while the poor become poorer*. Gee (2012) believes this extends to game play, too.

Conclusions

Many educators and caregivers continue to focus on ways to embed literacy into all areas of instruction as well as real-life experiences. This autoethnographic look at playographies gave the researchers multiple lenses from which to consider video games and their place in home and family literacies. The authors viewed this type of digital play from the perspectives of parents, teachers, researchers, and game players. Their views on video games changed from each of those perspectives, as well. What was once viewed as a questionable past-time that usurped opportunities to engage with paper-based texts and literacy opportunities, was changed to the recognition and appreciation of opportunities for new literacies that support traditional literacies.

According to Salonius-Pasternak and Gelfond (2005) “[e]lectronic play is the first qualitatively different form of play that has been introduced in at least several hundred years” (p. 6). This different form of play has become more apparent and important since the onset of the global pandemic. During this unique time in history, engaged, playful, technology-based learning offers students opportunities to grow in a safe and healthy environment. Kervin (2016) suggests that “[d]igital play sets a child up to engage with literacy processes because the child is deeply involved in the play situation” (p. 72).

Cooperative and role-playing video games support narrative structures and build valuable background knowledge, facilitate communication and social interaction becoming new funds of knowledge in fun and engaging ways. When parents and educators understand and recognize this, they can leverage student interests while supporting literacy growth as well as engaging reluctant readers and writers. Examining their own playographies helped each author further appreciate literacy learning through play with family and at home. Perhaps those reading this work will consider joining in the quest to embrace all forms of literacy and engagement.

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