PARALLELS BETWEEN THE GAMING EXPERIENCE AND ROSENBLATT’S READER RESPONSE THEORY

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The world of literacy has expanded alongside technology, and new literacies are being used as an alternative or an addition to traditional text. By including video gaming as literacy, the connection can be made between students’ multimodal world outside of school with the world of literacy they encounter in school. This study took two approaches of a content study and a case study. A collective case study was used to examine the gaming experience of participants with three commercial video games falling into three separate genres: Sims FreePlay (simulation); Halo 1 (first person shooter); and World of Warcraft (role playing game). The 15 gamers were placed into three sets of five participants for each video game, and interviews were conducted to explore the gaming experience in relation to stance and transaction, which are major components of Louise Rosenblatt’s reader response theory. Limited research has been conducted regarding reader response theory and the new literacies; by using the reader response lens, the gaming experience was compared to the reading experience to add the new literacies to the existing literature on reader response. As a way to look at both the text and the experience, a content study examined three mainstream video games to establish literacy content by using Zimmerman’s gaming literacy theory. Even though this theory is useful by detailing elements found in video games and not traditional literature, literary value cannot be fully assessed unless the theory is developed further to include other components or discuss how the depth of the components can relate to literary value. The literature does not currently contain substantial research regarding how to assess the literary value of video games, so this study begins to add to the present literature by demonstrating that at least for these games the presence of the
components of the theory can be evaluated. This analysis of both the game and the experience demonstrated substantial parallels between the gaming experience and the reading transaction as well as looking at the viability of using gaming literacy theory to evaluate literacy value.
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CHAPTER 1

INTRODUCTION

Books and magazines and newspapers were once considered the modes of literacy, but with the advent of e-readers, gaming, blogging, the examples of literacy are now encompassing various forms of technology. Embracing multimodal texts is how the modern person interacts with literacy on a daily basis (Bearne, 2005).

Defining terms such as reading and text has substantially changed within the realm of literacy in the past decade and is ever-changing as technology and multimodal options evolve. The New London Group (1996) recognized that a change of paradigm was occurring for literacy and the connected pedagogy. This change included recognition of the “multifarious cultures that interrelate and the plurality of texts that circulate” as well as the text forms connected to multimedia technologies (New London Group, 1996, p. 62). The New London authors comprised ten experts (in the fields of multimedia, workplace literacies, and cultural diversity) who met for a week in September 1994 in New London, New Hampshire, to begin a process of reviewing and discussing literacy pedagogy. The defining term, resulting from the full year of discussions by this group of experts within the field of literacy and learning, was “multiliteracies,” meaning the additional aspects of traditional literacy pedagogy. “Mere literacy” was a term coined for language-only communication contrasting with multiliteracies since it “focuses on modes of representation much broader than language alone” (p. 63).

Additionally, leading educational organizations in the field of literacy have established the importance of including in the school curriculum technological advances along with mere literacy. The International Reading Association (IRA, 2009) strongly encourages the use of information and communication technologies (ICTs) into literacy. The National Council of
Teachers of English (NCTE) has established initiatives to define 21st century literacies (“NCTE Position Statement”). Those initiatives encourage teachers to provide opportunities for students who are creating original works with multimedia and technology tools.

Redefining Literacy

By defining New Literacies, an understanding can be formed about how literacy, which has historically included only reading and writing, is morphing. New Literacies (uppercase) is defined broadly by encompassing the various aspects of the new literacies (lowercase) (Coiro, Knobel, Lankshear, & Leu, 2008; Leu, Kinzer, Coiro, & Cammack, 2004). The new literacies do share commonalities (Coiro et al., 2008) that have been used to help explain New Literacies as:

1. New skills, strategies, dispositions, and social practices that are required by new technologies for information and communication
2. Central to full participation in a global community
3. Changing as defining technologies change
4. Multifaceted; thus an understanding comes from multiple points of view

The expansion of literacy to include technologies is at the core of the new literacies. The New Literacies can include areas of concentration on modes such as the Internet, e-mail, instant messaging, avatars, virtual worlds, blogs, wikispaces, web page design, text messaging, multimedia applications, and gaming. These are just a few examples of the various specific new literacies included under the broad umbrella of New Literacies. The list could go further and is constantly changing as technologies are changing in the area of information and communication.
technologies (ICTs). A precise identification of new literacies is somewhat impossible because the technologies shaping new literacies are rapidly changing (Leu & Kinzer, 2000).

To fully define New Literacies, then literacy must be able to include more than traditional print text. And, the concept of literacy must expand to include more than simple comprehension (Leu et al., 2004). Leu (2001) argues that the definition of what it means to be literate is constantly changing since our technologies are constantly changing. And as technology transforms, the definition of the New Literacies will grow and evolve. Information and communication technologies (ICT) are rapidly changing; for example, the technology available for a student when s/he enters kindergarten will be drastically different by the time the child enters middle school. Thus the definition must be able to change alongside technology (Leu et al., 2004; Leu, 2001).

Students will begin their schooling immersed in certain literacies that will be advanced or morphed before their formal educations have been completed. As a result, static and traditional definitions of literacy and pedagogy to accompany literacy instruction are not feasible if the new literacies are to be appropriately included in instruction. The New London Group (1996) identified, “the burgeoning variety of text forms associated with information and multimedia technologies” (p. 61). The focus of discussion was how media has drastically changed literacy pedagogy to establish a need for exploration of multiliteracies and pedagogy to incorporate them. The group explored the definition of multiliteracies, defining it as going past “mere literacy” which is only focused on traditional language. Multiple literacies can be used in conjunction with New Literacies, but the two terms are not interchangeable. Multiliteracies include modes in addition to language. Print, gestures, visuals, or talk can be included within multiple literacies. The term of “multimodal” has evolved from that original concept of multiliteracies. Modes can
vary by culture and context, and meaning is derived and influenced by the use of such modes with language. Multiple literacies - “involve many literacies and modalities beyond print literacy and a heightened awareness of culture” (Cervetti, Damico, & Pearson, 2006, p. 379). The group calls for literacy pedagogy to move past, “formalized, monolingual, monocultural, and rule-governed forms of language” (p. 61). The work resulting from the New London Group impacted the study of the New Literacies in academia, as well as in K-12 classrooms.

The National Council of Teachers of English (NCTE) has established initiatives to define 21st century literacies (“NCTE Position Statement,” 2008). Initiatives are designed to connect reading and writing in and out of school. The definition of 21st century literacies established by NCTE states that 21st century readers and writers need to:

- Develop proficiency with the tools of technology
- Build relationships with others to pose and solve problems collaboratively and cross-culturally
- Design and share information for global communities to meet a variety of purposes
- Manage, analyze, and synthesize multiple streams of simultaneous information;
- Create, critique, analyze, and evaluate multimedia texts
- Attend to the ethical responsibilities required by these complex environments

Just because new literacies are now included in literacy does not mean that traditional literacy practices are obsolete. They still provide a foundation for what new literacies need, such as decoding skills, word recognition, vocabulary knowledge, inference skills, and comprehension (Leu et al., 2004). The more traditional and historical definition of literacy has certainly included the mechanics of reading and decoding as well as interaction between the reader and the text, but as communication evolves with technologies, that definition becomes quite limited. Leu
et al. (2004) recognize a broad definition in their work: “ability to communicate, to present one’s message, and to understand and evaluate another’s message is part of reading, and that an interaction and transaction into one’s experiences as well as personal response and meaning-making is part of the goal for literacy instruction” (p. 1584). Within this definition comes recognition that the inclusion of text is not mandatory; with that simple recognition, the definition far surpasses the archaic world of literacy we have previously known.

Personal Connection to Research

As the researcher for this qualitative study, I must examine my own story in how it relates to my study (Stake, 1995). I have been an avid reader for most of my life, and as a result, I have experienced a connection with text on various levels of the continuum between strictly gaining knowledge and pure enjoyment and have come to realize the significance of my response to the text as a reader. As an English teacher, I quickly realized that helping readers make the type of connection Louise Rosenblatt discusses would typically help to motivate reluctant readers. But my connection to reading has not remained embedded in traditional print text. As technology has advanced in my lifetime, I have been receptive to the ways in which technology can enhance or just simply change my reading experience, whether through an e-reader or tablet or seeking a different visual experience. Going outside the realm of traditional print text is often an uncomfortable venture for educators, but since my personal experience has extended far outside print text, I am willing to encourage my students to have various literary experiences that do not necessarily include a hardbound book. I have come to believe these nontraditional literary experiences can include gaming.
My interest in video games began with the Atari 2600 – my birthday gift when I turned 10 years old. I can vividly remember walking into a local discount store with my parents to buy my very first gaming system. For many months prior to that day, I had been playing with the gaming system at friends’ houses and became consumed with wanting my own Atari. The Atari 2600 came bundled with a pair of joystick controllers and a set of paddle wheel controllers as well as one video game. My bundle included the game Pac-Man, and I was beyond thrilled that I would be able to recreate the experience of playing Pac-Man at home anytime I desired instead of only having access to the game in the local arcade at the mall.

Once I started playing, I sat mesmerized by Frogger, Kaboom, and several other favorite games, but I was particularly drawn to the games that had a narrative attached. Obviously the games of that time period were not nearly as advanced as modern video games, but by the time I started gaming, some games had been developed enough to have at least a brief narrative attached to the game. I learned the rules of the games; I had long conversations with fellow gamers in my neighborhood about game play; I became immersed in the world of the games I played. Since my first gaming system, I have owned numerous others. Currently, I have two gaming systems in my home: XBOX 360 by Microsoft and Wii by Nintendo.

When I started teaching, I was always interested in talking with students who were gamers to find out what games they were interested in playing. I had numerous conversations after class with students who were gamers, and all of those conversations had a commonality – sheer excitement for the gaming experience. I could connect with students and understand that type of experience. Eventually, I began to realize that the excitement about the gaming experience that gamers were having seemed to be strikingly similar to the experience my students were having when reading. Once I realized there could be a parallel between these two
experiences, I started trying to understand how my own gaming experience was similar to my reading experience. I found numerous instances where my experiences of gaming and reading were resulting in the same type of responses.

Almost three decades later, I still have that original Atari 2600 gaming system as well as the joysticks and paddle wheels and all my game cartridges safely boxed up; that box has traveled with me through each and every move I have made during my adult life. Another personal possession that I have been vigilant about keeping with me throughout each move has been my books. I believe that my attachment to these artifacts is more than simple coincidence; the response to gaming can be connected to what we already understand about the response to traditional text.

Theoretical Framework

**Transactional Theory**

Louise Rosenblatt’s transactional theory is one theoretical lens to use in viewing the reader’s response to various new literacies. Rosenblatt (2005b) chose the term “aesthetic” for her landmark term, “the aesthetic stance,” because of the word’s Greek roots of “perception through the senses, feelings, and intuitions” (p. 11). In contrast, the “efferent stance” is focused primarily on what can be gleaned from the reading to use afterwards: “the information to be acquired, the logical solution to a problem, the actions to be carried out” (Rosenblatt, 1978, p. 23). The distinction between aesthetic and efferent reading is based in the reader’s particular stance; for instance, in the pure efferent stance, the reader is concerned with the knowledge or information s/he will have after the reading, but the pure aesthetic stance allows the reader to have an actual experience with the text while reading (Rosenblatt, 1978).
Rosenblatt (2005b) encourages teachers to use both stances together at different levels depending on what is needed. She uses poetry as an example of a literary experience usually taught with an efferent focus when an aesthetic stance should also be encouraged (Rosenblatt, 2005a). Often poetry is taught from an efferent stance of understanding the details of rhyme and meter when the aesthetic stance allows for the reader to make a connection with the artistic beauty being created during the reading of the poem is overlooked.

Typically, Rosenblatt’s reader response theory has been used in relationship to print text, yet Hancock (2008) suggests that additional insight into Rosenblatt’s work can be made through “technological reading, writing, and conversations about literature” (p. 103). The complement of the image to composition can add to the overall experience for the reader/viewer as Rosenblatt describes in this theory. That experience can include learning from the visual accompanying the text as well as the visual helping increase the overall experience.

Additionally, a connection must be made to the text or rather video game in this study. Rosenblatt (2005) discussed the merit of literature and explained “a strong emotional response to a book does not necessarily prove its literary merit” (p. 70). Whatever framework is employed to determine or evaluate literary merit, Rosenblatt believes that we must also include one fundamental aspect: “the problems should be phrased in terms of the transaction between the reader and the book” (p. 71). To look only at the experience does not allow for the full view of literary merit, so the text (or video game) should be included when evaluating literary merit.

**Gaming Literacy**

In order to understand the text leading to the gaming experience occurring between the reader/viewer and the video game, the theory of gaming literacy was applied to video game play
to help understand and explore the games’ literary merit. Since games function quite differently from text, a different theory must be used with video games, and one leading theory in the field is gaming literacy theory. The major contributor is Zimmerman (2009) who has detailed the basic components of gaming literacy and how those components work together for students to learn; he also argues that gaming literacy might not overtake traditional literacy practices but will certainly become necessary in order to understand the new literacies that are becoming integrated into the daily lives of our students.

Gaming literacy works on the premise of three main components as seen in Figure 1: systems, play, and design (Zimmerman, 2009). Each component is integral and vital to the way gaming literacy operates, but each area has a very specific focus for literacy learning. Ultimately, what must be understood is that gaming literacy “is literacy – it is the ability to understand and create specific kinds of meanings” (p. 24). Systems are foundations of gaming literacy in that this is where the boundaries are set and defined as well as other rules of play. Design is the area where context is created in order to produce meaning. Play is working with the rules of the game and breaking the rules of the game, which is where innovation comes from in the theory.

Systems relate directly to play and design because they provide a foundation or framework on which everything can operate. Design contributes to play because as the meaning is created and shifted, then play can ensue. Play is crucial to this literacy theory because as players work through the rules and meaning then they begin to transform the game altogether and move outside of what was prescribed into what is being created (Zimmerman, 2009). As learning within the new literacies begins to be explored in a world of ever-changing technology,
one way of understanding the gaming experience and how that experience is actually considered literacy is through this model.

![Diagram of Gaming Literacy](image)

*Figure 1. Gaming literacy (Zimmerman, 2009).*

_Gaming and Learning_

Gaming is such a popular phenomenon in our culture that the world of the classroom has begun to open its doors for gaming and discover its educational incentives for students. Even though video games are a part of our popular culture, this does not mean they can be deemed trivial in terms of learning. A clear connection between gaming and children is demonstrated in a 2010 report on Americans and their use of electronic gadgets. In a 2008 Pew Institute Report, 42% of Americans owned a home gaming device, but the percentage almost doubled (64%) for parents owning a gaming device over non-parents (33%) (Lenhart, Arafah, Smith, & Macgill, 2008). Even though these statistics relate to the use of gaming among students outside of school, the New Literacies include gaming as a form of literacy that can be used within the classroom.
The Problem Statement

Games put gamers in a world that is both an auditory and visual in which designers have set up a situation for gamers to be placed in novel experiences, which can provide insight and knowledge. The gamer must develop a role, interact and collaborate with others, and make critical choices while gaming. In spite of gaming’s entrance into the world of education, the effects of its use have not been fully explored - not gaming viewed from the perspective of a literacy-learning model. Theories of literacy, and how students learn through literacy, must come to include the different new literacies, such as gaming, in order to fully realize how the modern student is learning. Separation between the multimodal world students experience in their everyday lives and the traditional modes of curriculum, results in “an increased alienation of pupils from what schooling has to offer” (Millard, 2003, p. 4).

I am interested in understanding what the gaming experience looks like for the player. Previous research has explored how reader response theory operates with readers and print text, but limited research is available focusing on how reader response theory might relate to new literacies, specifically gaming. Traditionally, research has used reader response to explore the transaction occurring between the reader and the printed text. When involving various new literacies, these terms will take a new shape. A reader becomes a gamer, and the text becomes the video game, while the transaction becomes the “gaming experience.” The purpose of this qualitative study was to analyze mainstream video games for literary content and then examine how the gamer (reader) has a gaming experience (transaction) with the video game (text). The analysis will explore parallels between the gaming experience and the reading transaction.
Research Questions and Method

This study addresses the following research questions:

RQ1. How is gaming literacy theory demonstrated in a current mainstream video game?
   
   A. How are the three principles of gaming literacy theory (play, design, and systems) found to be present in current mainstream video games that fall into one of three genre categories?

RQ2. What aspects of reader response theory are displayed through video game play in the gaming experience?

   A. What similarities are found between the gaming experience as described by gamers and the key components of stance and transaction found in Louise Rosenblatt’s transactional theory?

This study took two approaches. The first approach explored the gaming experience that involved examination of play of video games. In order to fully understand how the game can operate as literature, Zimmerman’s (2009) gaming literacy theory was used in a content study of 15 participants’ primary video games with participants selected to limit the number of games studied to three. Participants had their game play video-taped for thirty-minute sessions and analyzed for aspects of system, design, and play. I also played the selected video games and recorded instances of system, design, and play. The three video games selected were Halo 1, World of Warcraft (WoW), and Sims FreePlay. Halo 1 is considered to be in the genre of first-person shooter (FPS) meaning all game play for the player is conducted in first person mode of the main character. WoW is considered a role-playing game (RPG) where players take on the role of a character within a narrative and must act accordingly to the character’s traits. A category of RPGs is massively multiplayer online role-playing games (MMORPG), and WoW falls into this category because players interact with other players in a virtual world. The third game, Sims FreePlay, is a simulation game because it copies or simulates activities found in actual daily life.
The second approach used a collective case study of three cases involving 15 participants (5 participants per case); the study looked at how elements of Rosenblatt’s (1978) reader response theory were evident in the gaming experience. Participants were selected from volunteers responding to an advertisement posted at video game stores in the North Texas area. The participants were interviewed regarding their view of the gaming experience. Rosenblatt’s reader response theory guided this part of the study as themes emerged from interview responses after descriptive coding was used with interview transcripts. The Core Elements of Gaming Experience Questionnaire (CEGEQ) created by Calvillo-Gamez (2009) was taken by participants and then coded with value codes defined by Saldana (2009) to help determine more information about the gaming experience. Each question on the CEGEQ was labeled as value, attitude, or belief based on the definition.

Definitions of Terms

Terms listed in this section are intended to provide a general understanding of frequently used terms in the study. Definitions particularly important to understanding this study include those terms related to Rosenblatt’s reader response theory including aesthetic and efferent stance and transaction. Terms related to Zimmerman’s gaming literacy theory, such as play, design, and systems are included to provide a basis of understanding for his theory. The definition of gaming experience is provided since this term is used in a specific way with the study.

- **Aesthetic stance**: A focus on the combining of the private or personal contributions to the meaning; the pure aesthetic stance allows the reader to have an actual experience with the text *while* reading (Rosenblatt, 1978; 1995).

- **Attitude**: Way we think about oneself, another person, thing or idea (Saldana, 2009).
• **Belief**: Part of a system that includes values and attitude plus personal knowledge, experiences, opinions, prejudices, and morals (Saldana, 2009).

• **CEGEQ**: Core Elements of Gaming Experience Questionnaire (CEGEQ) helps determine if the CEGE are present during the gaming experience. (Calvillo-Gamez, 2009a)

• **Design**: Creating a context within a video game and producing meaning Zimmerman, 2009).

• **Efferent stance**: Major concern in reading on the knowledge or information s/he will have after the reading (Rosenblatt, 1978).

• **First-person shooter (FPS)**: A subgenre of the major video game genre of action. The game is played through the player’s viewpoint, and the player must perform and engage in actions (Apperley, 2006).

• **Gaming experience**: The result created during the interaction between the game player, or user, and the video game (Calvillo-Gamez, Cairns, & Cox, 2010).

• **Gaming literacy theory**: Explanation of gaming by Zimmerman (2009) uses the basic components of gaming literacy to demonstrate how those components transform a video game into literacy.

• **Genre (for video games)**: A grouping of video games that share similarities in narrative and visual elements as well as their interactivity. Major genres include simulation, action, and role-playing games (Apperley, 2006).

• **Massively multiplayer online role playing game (MMORPG)**: A game system in which a large number of gamers play within the same world and take on certain roles within the community of the game as a way to interact with one another and be productive in the game (Gee & Hayes, 2011).
• **New Literacies**: New skills, strategies, dispositions, and social practices that are required by new technologies for information and communication (Coiro et al., 2008)

• **Play**: Innovation is produced during play when rules are used and adapted for the video game (Zimmerman, 2009).

• **Poem**: The reader and the text coming together in a particular moment in time results in the meaning or poem (Rosenblatt, 1978).

• **Reader response theory**: A literary theory that emphasizes the reader’s experience (Rosenblatt, 1978; 1995).

• **Role-playing games (RPG)**: RPGs are closely related to the literature genre of fantasy. This genre includes the accumulation and development of characteristics and characters built in specific context. The context of the game comes from the collective of players who are playing and forming a discourse (Apperley, 2006).

• **Simulation**: This genre of video games simulates such activities as sports, flying, and driving. Simulation games include the simulation of “the dynamics of towns, cities, and small communities” (Apperley, 2006, p. 11).

• **Stance**: The reader’s focus when reading text.

• **Systems**: Systems are the basic rules of the video game (Zimmerman, 2009).

• **Transaction**: A coming together of the reader and text where each contributes (Rosenblatt, 1978).

• **Value**: Attributed importance toward oneself, another person, thing or idea (Saldana, 2009).
Significance of the Study

The definition of literacy must be inclusive of the expansive horizons technology is offering to students. Street (1995) defines literacy practices as referring “to both behavior and the social, and cultural conceptualizations that give meaning to the uses of reading and/or writing” (p. 2). In order to fully understand how gamers can learn within the world of video games, that learning can be viewed through the lens of literacy. But to look at gaming through a literacy lens, the definition of literacy must evolve. This particular aspect of gaming literacy is not being recognized by schools or teachers but has valuable lessons for literacy of multimodal texts.

This study adds to the emerging research on gaming and provide a framework based on the gaming literacy theory to use when assessing mainstream video games for literary content since the quality of literature is important when working with different aspects of literacy. Additionally, this study contributes to the established field of reader response research with a focus on the new literacies and more specifically gaming. Research with such a focus on gaming in connection to reader response theory is not prevalent in the literature. While the literature provides a rich body of research about reader response theory and how it can enrich teaching strategy in the classroom with print literacy, a view of understanding how reader response theory can be used in connection to gaming is needed.

Limitations

The limitations of the study include the lack of time provided for the study since only one interview was conducted with participants. Interview data were limited to volunteer participants. Another limitation of this study is a lack of observational data since only one gaming session was
observed. The findings are limited in generalizability due to the small sample size of 15 participants and a small selection of three mainstream commercial video games. The researcher had not previously played the three selected video games, so evaluation of the games for gaming literacy content could be limited.

Organization of Review of Literature

Chapter 1 presented an introduction to the study of the gaming experience in relationship to Rosenblatt’s reader response theory as well as an overview of important terms to be used throughout the study. In chapter 2, a review of the literature is explored explaining Rosenblatt’s transactional theory as well as the gaming experience and how to appropriately assess video games as literacy. By providing a basis in the literature, the methodology explained in chapter 3 and results in chapter 4 provide insight into how gaming performs as literacy and how the gaming experience explained by these participants connects to Rosenblatt’s idea of transaction.
CHAPTER 2

LITERATURE REVIEW

The review of literature related to this study is organized to first provide a brief history of reader response theory with focus on Rosenblatt’s (1978) reader response theory among other reader response theorists. I then discuss the connection between new literacies and reader response theory with particular consideration to examining the research connecting gaming and reader response theory. Since my study examined gaming literacy theory in relation to reader response theory, I review the literature that considers this emerging theory in relationship to study of the content of video games as literacy. Because my study examined Rosenblatt’s reader response theory in relation to the gaming experience, a review of literature analyzing the gaming experience is included with attention to possible connections between the gaming experience and the key tenents of Rosenblatt’s theory (stance and transaction) which occur during the reading experience.

Reader Response

New criticism emerged in the 1920s as the dominant theory used when teaching literature. The theory placed an emphasis on meaning residing solely in the text. Followers of new criticism believe “the meaning of a text is ‘in’ the language of the text. The reader’s task is to carefully explicate the use of techniques such as figurative language, point of view, meter, and rhyme” (Beach, 1993, p. 164) to illuminate meaning. I.A. Richards is considered the founder of new criticism, although others have modified the theory (John Crowe Ransom, Rene Wellek, and W.K. Wimsatt). Teaching literature through the perspective of new criticism means “the analytic procedure becomes the focus of instruction” (Langer, 1991, p. 3). This theory remains a popular
perspective for teaching literature, but reader response theory has emerged in contrast to new criticism.

One foundational component of reader response theory is that the literature is not considered in isolation from the reader. Instead the reader brings experience and knowledge to the text and produces a meaning. The role of the reader is to be a producer of meaning instead of simply a consumer of the meaning of the text. Reader response theorists believe the reader is integral to the reading experience (Lye, 1996). Beach (1993) divides reader response theories into five categories: textual, experiential, psychological, social, and cultural. Beach’s categorizing gives a sense of organization to the different areas of reader response theory.

Of those five categories, Rosenblatt is considered a major theorist in the experiential category. Even though reader response theories cover the spectrum that Beach (1993) describes, this literature review focuses on Rosenblatt’s transactional theory. The reading experience is so critical in Rosenblatt’s transactional theory that she believes meaning from the text is not created until the reader actually connects with the text: “a novel or poem or play remains merely inkspots on paper until a reader transforms them into a set of meaningful symbols” (Rosenblatt, 1983, p. 24). The reading transaction is not passive but a very active event because meaning is created when the text and reader come together. The reader and the text have a particular effect on one another to create an experience. The text is not single in meaning; the text and the reader combined create meaning and a transaction that is unique to that reading. Because of this connection, the experience is a vital aspect of Rosenblatt’s theory.
Louise Rosenblatt established the transactional theory, which moves literacy instruction away from prescribed answers that the teacher or experts have established into more of an experience with literature. In order for the piece to be literary, the work must be experienced; the text must then relate to the reader to produce an experience (Rosenblatt, 2005b). Transactional theory explores the transaction of the reader and the text while making meaning. The transaction produces meaning, and its manifestation is the response of the reader to the text (Rosenblatt, 1978).

Rosenblatt argues that text must be read and interpreted by the individual; the reading will be influenced by the individual’s experience and stance. If the text is more than a literal piece, “the reader must have the experience, must ‘live through’ what is being created during the reading” (Rosenblatt, 1995, p. 33). The transaction is what happens between the reader and the text during the reading event. The creativity of the reader affects this transaction as well as the personal experience of the reader. Because of this personal aspect, the context greatly influences the transaction; a reader can have a very different experience with the text at different times in life due to changes in circumstances (Rosenblatt, 1995). The response comes from what is in the text but also what is in the reader. The growth of a reader comes from sorting through the “ideas and emotions relevant to the work” in relation to life and literacy experiences (Rosenblatt, 2005b, p. 71). Instead of simply relying on or only regarding the knowledge of a critic or expert, the transactional theory gives credence to the average reader and what s/he brings to the text. Whatever the reader brings to the text builds the foundation for the reading, which is particularly significant because the “reader needs to honor his own relationship with the text” (Rosenblatt, 2005b, p. 71).
1978, p. 141). Quite simply, the text is read (and experienced) by the reader, not a literary expert.

The transactional experience is influenced by the stance of the reader, which can be established by the reader or an outside person, such as a teacher. The practical purpose of reading is regarded primarily as an efferent stance; Rosenblatt used this term of efferent because of the word’s Latin root meaning “to carry away.” The opposite of the efferent stance is the aesthetic stance. The more literary or aesthetic stance focuses on the combining of the private or personal contributions to the meaning (Rosenblatt, 1995). The experience flows through this transaction that is created when the reader melds text and personal experience together. But the two stances do not have to exist totally void of one another. Instead, the stances are located on a continuum with efferent and aesthetic at each polar end. The interaction that occurs between the two ends of the continuum has been demonstrated in the literature (Irwin & Mitchell, 1983).

The “poem” is Rosenblatt’s term for the culminating event happening as a result of the transaction. The poem is “an event in time” (Rosenblatt, 1978, p. 12). Once a reader brings personal aspects from that moment in her/his life, the experience forms into the transaction. Through true motivation and engagement, an individual response is elicited from the reader. That individual response and transactional experience transforms into the poem. The reader and the text coming together in a particular moment in time results in the poem (Rosenblatt, 1978).

Rosenblatt (1995) contends that students are functioning on two separate levels of thought in the English classroom. On one level, students are learning ideas about literature that are established by and accepted by educators; the other level is where students are reacting to the literature from a personal standpoint. By not having a personal connection, students will simply be learning content about literature and “only a vague, feeble, or negative response will occur”
A connection to past experience must happen; otherwise, the reader will not be prepared to fully absorb and digest the text. She explains that the reader must have the connection or “the work will not come alive for him, or rather, he will not be prepared to bring it to life” (p. 77).

Historically the reader has been left out of the reading equation, or at the very least, the reader is sanctioned to a backseat position. To contrast this passive position of the reader, Rosenblatt suggests the reader be moved into a much more active and visible role in reader response. In order for a reader to have a transaction with the text, s/he must be motivated – motivated to read – motivated to connect past experiences – motivated to bring in personality qualities. Without that level of motivation, the reader would not begin to engage, and engagement is the key to the transaction occurring within the reader.

**Reader Response Connection to Gaming**

Rosenblatt’s reader response theory has a long history in the literature of a connection to print text. Often teachers use reader response theory as a way of approaching literature within the classroom (Close, 1990; Evans, 1987; Greco, 1990; Vine & Faust, 1993). A common theme across the research is using reader response theory as a way to work with students’ responses to novels read in the classroom (Cox & Many, 1992; Eeds & Wells, 1989; Leal, 1993). But as the language arts classroom evolves and technology broadens the realm of literacy, theory must adapt as well. The same kinds of connections reader response theory has to print text can be made to the new literacy of gaming. Alberti (2008) points out: “Aren’t novels, after all, seen as ‘games’ that readers ‘play?’ They require active participation, hours of work, and result in experiences that range from the amusing to the disturbing to the tedious. As with all forms of
‘serious play,’ from aesthetic experiences to hobbies to even scholarship itself, novel reading complicates and enriches the notion of ‘fun’” (p. 263).

As students work with different new literacies in their lives outside of school, teachers are trying to incorporate some of the new literacies in the classroom. Research is also starting to make this link between new literacies and reader response theory (Aguilar, 2001; Carico, Logan, & Labbo, 2004; Larson, 2009; Larson, 2008). The link of image and language is the primary type of connection students are making with literacy outside of school, and this type of literacy connection will be necessary to function in a rich multimedia world. Students come to school with the ability to make meaning using their available resources, which will include various new literacies. Writing teachers encourage students to write from their experiences; therefore, students will begin to include various digital technologies in their writing due to prior experiences. These prior experiences are what Rosenblatt (2005b) refers to as “raw images” that the reader can use to help make meaning (p. 65). As this inclusion of new literacies occurs, engagement with learning can be strengthened by encouraging students’ connection and transaction with new literacies. That encouragement is crucial for teachers to establish because efferent and aesthetic reading are necessary: “knowing how to use a text in the right place and time is as important as knowing how to ‘decode’ it” (Gee, 2010, p.18).

Connecting reader response theory and gaming has been evident in research about creating and playing games (Curtner-Smith, 1996; Gaudart, 1999). Typically, these studies focus on more efferent stances related to learning, such as recalling specifics, memory, and noticing differences in text, and the text is seen as the center of learning. Even though there are not numerous studies about gaming and reader response, the literature regarding such a connection is starting to be established.
Developing Literacy Through Gaming

Before exploring how reader response theory is being used with gaming in the research, I establish a basic foundation of how gaming works, including an overview of visual literacy and semiotics, which provide a basis for underlying principles used in gaming.

The average age of a gamer is 34 years old (Entertainment Software Association, 2010). But a much younger generation has become known as Generation M, a title given for being a media-saturated generation (Kaiser Foundation, 2005). This label shows that not all gamers are in that older age range; in 2003, 69% of teenagers reported they spend time every week playing video games, with 25% playing at least 11 hours per week (Gallup Poll, 2003). Many gamers are men, but more women play The Sims, which is the best-selling video game to date (Lockwood, 2007). This fascination with video games is turning into a mainstay of the culture with those in their mid-thirties and younger, who are reporting they now devote time to gaming that once was given to television, movies, and books (Zane, 2005). Overall, gaming is becoming wildly popular in modern culture: “Since 1992, according to some studies, the computer game industry has outgrossed the Hollywood movie industry on a regular basis” (McAllister, 2004, p. 18).

Even though traditional print literature holds great academic value, gaming has grown into a medium that holds tremendous personal value for both current and future generations.

Teachers may be reluctant to use gaming in the classroom simply because of its connection to entertainment, and the gaming industry may not be fully marketing to schools because of their connection to “learning,” which could be translated into “boring.” Most research involves study of simplistic games that are not equal to commercial video games (Cordova & Lepper, 1996); the majority of studies on gaming before Squire (2004) did not even include commercial games. Complexity and difficulty also play a part in how integral gaming
can be in school learning. Typically games used by teachers have not been very complex so that students could learn the games quickly and easily in short periods of time. Most quality video games can take 30-100 hours of play in order to win (Gee, 2007). Gee (2003) has explained that games are powerful systems imparting knowledge and teaching rules, yet there is more to the game than simply learning the rules.

Language arts classrooms should be incorporating games as texts because they actually are texts. A gamer can find insight into narrative structure as well as interpret the text. We can take aspects of the ways gamers are learning in the virtual environment and transfer them into how readers are learning from traditional text (Gee, 2007). Just because gaming is in a medium different from that to which teachers are accustomed does not mean that the value decreases: “Young people’s literacy activities in the semiotic domain of gaming may prepare them to operate, communicate, and exchange information effectively in a world that is increasingly digital and transnational – and in ways that their formal school does not” (Selfe, Mareck, & Gardiner, 2007, p. 30). Thus the world of literacy is changing, and with such a change, literacy is now inclusive of video game play. Adding gaming to the language arts classroom and the world of literacy means that games must be evaluated in all their complex splendor, meaning the visual and semiotic and interactive nature of the game must be considered wholly as text instead of looking at only one part of the game as text. Even though a game may be a narrative and contain characters much like print text, gaming as its own structure works with additional aspects such as images and interactive play. Thus, the way we view traditional print text as literacy cannot be the complete lens through which we view this new area of literacy.
Visual Literacy

In order to explore the ways gaming can have merit as literacy, the connection between visual literacy and gaming must be established. A limited amount of research has explored the value of the connection of visual image and text. Visual literacy does not replace traditional literacy; instead “the use of images supplements and complements the linguistic composition” (Zoss, 2009, p. 187). The New London Group (1996) has highlighted the connection of the visual images in relationship to written words as significant for literacy teaching and learning. Traditionally, text has been defined as “a passage of print or a slice of speech, or an image” (Lankshear, 1997, p. 45). But text has now been broadened to include much more; students are now involved in reading/viewing from a multimodal perspective, which calls for teachers to include the new literacies in the classroom literacy experience (Bearne, 2005). As visual literacy makes its way into the defining structure of literacy, the research must include it also. Just as the decoding of text has always been an important component of literacy, the decoding of graphics, charts, maps and other aspects is now considered significant. Consequently, researchers have been giving attention to structures for visual decoding (Leu et al., 2004).

Aristotle believed images are connected to knowledge. In order for a reader to experience the text, s/he must have some level of knowledge as a basis for the experience (Thompson, 1988). Some educators fear that visual media detract from text. However, teachers have observed struggling writers constructing text with much more vivid imagination when a visual is included in the assignment. Thompson (1988) finds in her own experience with low-performing high school writers that these students wrote more fluently about a picture than a traditional prompt. The students needed an image to assist them in finding “their own internal flow of images as material to write about” (p. 48). Colby and Colby (2008) suggest an English
course focusing on the game World of Warcraft (WoW) where students would write and conduct research based on the game. The students would write documents that they determined to be important and create text that was meaningful within a community of gamers.

The visual arts have been studied in connection with struggling readers. Students who discussed the meaning of visuals accompanying text found this connection gave the reader/viewer a stronger ability to enter and participate in the world of the text (Zoss, 2009). The connection provided a stronger understanding of the text. Beach and O’Brien (2009) studied 7th and 8th grade students participation in a Literacy Lab, a media-based program for students who were at risk of failing in reading. One of the important skills taught to these students was the ability to work with multimedia tools in connection with their reading and writing assignments. Students are able to critically examine text by juxtaposing images. Other assignments had students examining the meaning of images in relation to text; images were found to be important to the development of their reading skills.

Most classrooms do not connect image and language, yet that type of connection is how most students function outside of school and will need to function as adults in a very rich multimedia world. A 2006 study found that college students spent an average of 11 hours per day using some type of media or digital communication, which meant that they were engaged in communication combining image and language (Beach & O’Brien, 2009). Modern literacy should embrace the visual and language connection that is now normal and commonplace in the structure of society’s communication.

The incorporation of both image and text does not confuse or bombard the reader/viewer. Instead that combination reflects the modern student’s way of life. Neural scientists suggest brains are changing to increase efficiency in accommodating the increase in multi-visual images
Students are easily able to multi-task between texting, listening to MP3 files, and skimming a website; “students are accustomed to communicating through the combination of print with visual, sound, and tactile texts” (p. 778). Adding another sign system to language can expand the dimension of resources for the student and teacher; images can be valued as much as text (Zoss, 2009).

**Social Semiotics**

Images are a central foundation to the field of semiotics. Social semiotics investigates the ways semiotic resources produce communication and then interpretation. The three schools of social semiotics consist of the Sydney Semiotics Circle, the European or Critical Discourse Analysis Group, and the North American Network. An unchanging system of codes and rules used for making meaning is the basis of thought for the Sydney Semiotics Circle. The Critical Discourse Analysis Group (Faucauldion version) believes an imbalance in power creates discourse because power and meaning cannot be separated. Sociologists who combine social semiotics with post Marxist ideas comprise the North American Network (Myers, 2003).

A background of semiotics is needed to understand how social semiotics evolved. Saussure (1918/1972) founded structuralism, which includes the sign, the signifier, and the signified. He defined a sign as being composed of the signifier (form the sign takes) and the signified (concept it represents). “Sign” was chosen over “symbol” based on how “symbol” implies motivation, and the “sign” has arbitrary meaning (Barthes, 1964). When the signifier and the signified come together, then a thought is formed; this link between the two is where meaning is derived. Language is a code, and the signs (words) have meaning when brought together (Saussure, 1972). Jakobson (1971) explains the idea of code and meaning more in
depth; the sign’s meaning is situated within a created framework. Meaning can be formed only when one has familiarity with the particular system or framework built with the codes.

Both Saussure and Peirce were pioneers in this field and believed language could mediate between the individual and the environment (Rosenblatt, 1993). Rosenblatt (1993) argues that Saussure’s theory lends to the concept of writer and reader as “simply conduits for arbitrary codes, conventions, and genres” (p. 381). By describing the individual as a conduit, Rosenblatt asserts the loss of the individual’s response as crucial and significant to the process of making meaning. Meaning is not constructed from just the text or just the reader; both must be part of the process (Rosenblatt, 1995).

Social semiotics involves the inclusion of interpretation influenced by cultural contexts. Pierce’s view includes this third aspect of making meaning. Rosenblatt (1993) has strong echoes of this view of making meaning in her work because she includes the social component in her theory and “saw that it [language] is always individually internalized in transactions with the environment at particular times under particular circumstances” (p. 381). She further contends that the individual brings not only the particulars of that moment in time but also a past of transactions that influence the meaning-making process.

Finding Meaning in Gaming through Semiotics

Semiotics is one avenue for providing meaning within the context of the different new literacies. Gaming can provide rich meaning making through the semiotic use of context and symbols. Although the definition of text is changing to include artifacts different from traditional print, there is still an ability to use those artifacts as text to help construct meaning. Multimedia constructs, such as gaming, can serve as multimodal texts that allow the
reader/viewer to use semiotic resources both to produce and interpret within the context of specific situations and practices. Social semiotics focuses on meanings in context or situated practices of communication instead of simply on the formal and structural associations. As a result, social semiotics is a good way of understanding the different modes of expressing and developing meaning within the New Literacies.

Gaming has employed semiosis to create an environment with meaning, yet the way in which it is used varies based on game genres. Gee (2007) defines semiotic domain as “any set of practices that recruits one or more modalities to communicate distinctive types of meanings” (p. 19). Creating meaning in this digital environment leads to what Gee (2007) has termed “critical learning.” In critical learning, the learner has to create meaning within the semiotic domain as well as produce meaning “seen as somehow novel or unpredictable” (p. 25).

Semiotic domains can operate on two levels – internally and externally (Gee, 2007). The internal domain contains the content, which can be thought of as the actual content of a video game or as knowledge within an academic domain. The external level is how people are engaged within that practice, so players in video games will actually engage the content by playing and can even connect with others who are operating on that external level. By playing on the external level, players begin to develop the content further. The content, in turn, is transforming the players’ identities (Gee, 2007). There is a relationship between the internal and external through which meaning is created.

Video games are a family of semiotic domains comprised of various genres. Just as in literature, video games have genres (role-playing, adventure, etc…) (Myers, 2003). Apperley (2006) defines genre for video games as games that share similarities in narrative and visual elements as well as in the area of interactivity. The way the action is perceived and performed
plays an important role in determining genre. Within genres, the particular types of games employ a semiotic system. The relationship between the signified and signifier is significant in the meaning making process, and the various genres of video games create that relationship differently. In action games, the signified is actually within the game, but simulation games place the signified elsewhere (Myers, 2003). For example, flight simulation games make reference to other semiotic systems instead of establishing a unique system within the game. Role-playing games emphasize symbol transformations with the signification process as the same in the game as in social interactions. Since this genre involves multiple players, contextual significations are required. Action games use denotative signs to create a common context for players. Many oppositional relationships exist in this genre, and meaning can be immediately understood (Myers, 2003).

Codes for social semiotics include the cultural reference as a code within itself. Danesi (1994) defines culture as a macro-code: “consisting of the numerous codes which a group of individuals habitually use to interpret reality” (p. 18). Ranker (2006) found that specific content and codes were used within various genres of video games. The participant, Adrian, talked about his drawings with Ranker to share video game knowledge but also for Adrian “to put his meaning into words so that he might go on to write about it” (p. 23). The meaning was derived because Adrian was able to use codes with which he was familiar as the basis for the discussion. The codes being used in the particular game were context-based for that game; Adrian derived meaning from his video game experience in the way Rosenblatt discusses deriving meaning through particular times under particular circumstances. For example, in one conference, Adrian made reference to the term “warp,” which Ranker must explain as a function in the game that
allows a character to be moved to another location in the game. Meaning for this term is different for a player who has contextual knowledge within the culture of the game.

Ranker (2006) discovered that video games include a narrative component. Because of this, Ranker could relate aspects of traditional literature to gaming; Ranker asked Adrian to discuss characterization within his video game, and Adrian used drawings to begin this conversation. Only Adrian (or a player steeped in the culture of the game) could read those drawings appropriately because specific signs and codes were used that depended on the cultural connection. By using the participant’s specialized knowledge about a particular video game, Ranker developed suggestions for use by the student in writing conferences. The suggestions were meaningful because they were working with “images informed by video games” (p. 23).

Rosenblatt (1995) discusses words as “merely inkspots on paper until a reader transforms them into a set of meaningful symbols” (p. 25). Meaning is created and a transaction can occur because the reader is able to construct meaning from the signs just as Adrian constructed meaning about characterization through the familiar codes of his game.

One teenage boy who participated in a three-year study created meaning through a specific cultural experience and semiotics (Burn, 2008). During the first year, the participant was interviewed about his gaming experience. In the second year, he created a game using provided software, and in the final year, he created a second game. The participant’s created games demonstrated that he included elements that are typically connected to traditional literacy. Burn found that semiotic analysis must be connected with the cultural world of the student, which in this case was the world of gaming, because the creation of the game (or the text) is connected to the individual’s experience.
Boys were successful readers and writers (contrary to some research) in Sanford and Madill’s study (2007) in less traditional areas of literacy not recognized by schools nor teachers. The study focused on adolescent males involved in literacy through video game play. The participants were instructors (ages 11-16) at a summer video game camp who participated in focus group interviews. The study revealed that the participants found numerous opportunities to learn in the areas of operational and cultural literacy. Implications from this study demonstrated that more research about learning with the new literacies was needed of the extent to which students are entering the classroom with prior experiences from this realm.

Ranker’s case study (2006) focused on an eight-year-old boy who used his experiences with the video game Gauntlet Legends in his writing and drawings. The participant was resistant to traditional literacy; he preferred drawing to writing. Several insights were discovered through Ranker’s interactions, which consisted of writing conferences with the participant. Visual modalities are a strong component of video games, so the participant used drawing as part of his writing process. Inclusion of visuals suggested that the writing notebook could be considered a design notebook to allow students to explore meanings in different modes. Also, video games are written in a nonlinear format, but narratives written in school settings are written almost exclusively in a linear format. Video games are interactive with the gamer, who can make decisions about action and characters to affect the path of the game and narrative. The study suggested that a nonlinear format can be explored with students in writing. The nonlinear format is familiar to gamers and used effectively when they begin to write and make meaning within their own narratives. This familiarity with non-linear experience can make all the difference in being able to have a full transaction. Rosenblatt (2005b) argues that a standard literary diet does not meet the needs of our heterogeneous grouping of students. To combat standardization,
educators should find literary works that “hold out some link with the young reader’s own past and present preoccupations, emotions, anxieties, ambitions” (p. 65). Ranker (2006) does just what Rosenblatt suggests by connecting traditional literacy (writing) with the participant’s own world (gaming) in order to produce a transaction.

An interesting connection between gaming and traditional schooling is made in a case study by Abrams (2009). The participants of this case study were advanced video game players who played at least one hour per day and at least four days a week. The students did not recognize themselves as strong students at school. Descriptive coding was used to track when students connected academics to their video gaming experiences. The coding was organized into four areas: prior knowledge, remembering, comprehension, and past experience. Abrams found that the participants’ game play contributed to building the schema needed for their traditional work at school. For example, one student was able to draw upon his understanding of the Normandy invasion from a video game sequence about World War II with which he was very familiar. All three participants discussed their distaste for school, yet they all showed excitement about classes and projects they could connect to their gaming experience. The context of the academic information had to be related to the gaming environment in order for the students to fully grasp the educational content in the classroom; the key to grasping is connection to experience. Gaming does not have to be a part of the traditional school day in order for students to call up those experiences and build them into schema that can further their knowledge and excitement about learning.

Just as a reader uses semiotics when reading, a gamer uses semiotics when gaming. The connection between gaming and reading is apparent through the use of semiotic domains and can help establish the beginnings of the parallel between the gaming experience and the transactional
experience when reading. The similarities between gamers and readers was detailed by Journet (2007) who says that both groups must “find patterns among details, to organize information in relevant ways, and to map relationships using a range of semiotic systems” (p. 106). The clear use of semiotics leads into how gaming literacy theory operates.

Gaming Literacy Theory

As gaming gains a more prominent place in the lives of a young generation of students, the connection between literacy and gaming should be explored. Robison (2008) points out “video game designers and developers discuss and approach their design processes in many of the same ways writing teachers do” (p. 360). Video games have greatly evolved over the past decades, and games have complex narratives, rich characters, and detailed worlds. These additions of characters, narratives, and backstories can provide continuous content within the video games. Video games are multimodal (Kress & Van Leewen, 2001) and must be assessed as a literacy that includes aspects of the gaming process that are not necessary to print text, such as knowledge of visual images, sounds, and text (Buckingham & Burn, 2007). The need for gaming literacy springs from this concept, and for gaming literacy to be considered equal with other types of literacy, it must be able to require both functional and critical literacy. The functional aspect of game literacy includes the ability to use controls successfully as well as navigate throughout the game; critical literacy involves analysis, evaluation, and reflection (Buckingham & Burn, 2007). Zimmerman (2009) details the basic components of gaming literacy and how those components work together for students to learn; he also argues that gaming literacy may not, in the future, overtake traditional literacy practices but will certainly become necessary in order to understand the new literacies that are becoming integrated into the
daily lives of students. When these three areas of gaming literacy theory work together, they create a new set of skills leading to “a new paradigm for what it will mean to become literate in the coming century” (Zimmerman, 2009, p. 25).

Johnson (2005) suggests that our culture might view reading print text quite differently if video games had been widely adopted before books. His thought experiment entertains the ideas that reading would, as a spin-off of gaming, be seen as understimulating, isolating, and following a linear path instead of having the interactive narrative of a video game. Johnson’s idea is interesting because it shows that there are similarities between books and video games, but ultimately, they exist as two different kinds of literacy. Johnson (2005) points out that to completely judge video games with the expectation that they will be exactly like books “colors your vision of the emerging form, highlighting the flaws and imperfections” (p. 18). To view video games in the literacy context of print text does not work due to the interactive nature of gaming. For example, gaming requires that players make decisions and prioritize steps of a strategy when playing; print literacy does not require such interactive activities (Johnson, 2005). But this does not prevent gaming from being considered literacy. Gaming literacy theory helps us understand game design and assess the game design as a literacy.

Gaming literacy works on the premise of three main components: systems, play, and design (Zimmerman, 2009). Each component is integral and vital to the way gaming literacy operates, but each area has a very specific focus for literacy learning. Ultimately, what must be understood is that gaming literacy “is literacy – it is the ability to understand and create specific kinds of meanings” (p. 24). Systems are foundations of gaming literacy in that this is where the boundaries are set and defined, as are other rules of play. Design is the area where context is created in order to produce meaning. Play is working with the rules of the game and breaking
the rules of the game, which is the source of innovation in the theory (Zimmerman, 2009). There is no real need to connect each of these three components to a component of print literacy because the two literacies function somewhat differently, so gaming literacy theory is a more appropriate way to assess gaming as literacy.

Systems relate directly to play and design because they provide a foundation or framework on which everything can operate. Design contributes to play because, as the meaning is created and shifted, play can ensue. Play is crucial to this literacy theory because as players work through the rules and meaning, they begin to transform the game altogether and move outside of what was prescribed into what is being created (Zimmerman, 2009). Video games create a world in which there are both freedom to create and constraints in the parameters of the rules. As learning within the new literacies begins to be explored in a world of ever-changing technology, one way of understanding the way gamers learn and how that learning is, in fact, a literacy is through this theory of gaming literacy.

_Systems_

The system of a game is the backbone or foundation of the game; a system “is a set of parts that interrelates to form a whole” (Zimmerman, 2009, p. 25). Our world is becoming dominated by systems. For instance, the way we socialize is through a social network system. So, learning how to understand and navigate systems is becoming crucial for people as they navigate the world, whether it is researching or socializing or working. Having the ability to understand systems is realizing that they are a set of discrete parts that have constantly changing relationships with one another. Since these relationships are changing, the key to working within a system successfully is to view the system as a process instead of seeing it simply as a fixed set
of rules. There are certain fixed rules maintained in the system, but that is not the entire structure. The relationship among the parts of the system is being modified and redesigned (Zimmerman, 2009). Even though the system is comprised of rules, those rules are not quickly evident. Rules of play must be discovered during play. Video games are actual systems based on rules that are put into play by the players (Juul, 2003; Salen & Zimmerman, 2004). By working through the system, players are able to think about how they are working through the design of the system to gain particular outcomes (Salen & Zimmerman, 2004; Salen & Zimmerman, 2005). Even though the relationships of the parts of the system are morphing at times, the rules provide a constant, and this constant allows games to be a strong example of system literacy (Salen, 2007). To be successful with systems, the player must understand how the system of the game works with the player (Galloway, 2006). For that reason, systems can be assessed only through play. When working with systems, a distinction must be made between the actual skills of playing the game and understanding how systems operate; instead, a video game system can be appropriately viewed only through play (Walsh & Apperley, 2009). And the need for play in order to form understanding shows how gaming literacy is different from traditional literacy: “learning to read a game system in order to play with it points toward a specific kind of literacy connected, in part, to the ability of a player to understand how systems operate, and how they can be transformed” (Salen, 2007, p. 307)

Even though video game systems are not seen in print text, a crossover of understanding can occur. Harushimana (2008) connected the writings of males in an urban high school setting to various video games to show how gaming was influencing written discourse, such as with plot and character development in writing. Harushimana had students write a narrative, and nine of the twelve students wrote narratives that could be related directly to specific video games. Those
nine narratives were then analyzed more specifically for literary structure and development, which resulted in showing that all the narratives contained the same literary constructs as were used in classic literature. The student writers were not directed to use the particular video game or video games in general as sources of inspiration. Instead, the students, who were obviously familiar with specific games, naturally used the structures with which they were accustomed to innovate and produce a piece of writing. After Harushimana (2008) analyzed the students’ writings with respect to gaming, they were shown, also, to use very classical literature constructs, but that is not where the students drew their inspiration. They mimicked the system in which they had been playing – their video games.

Hsu and Wang (2010) worked with the premise that gaming was equal to reading, and game design was equivalent to writing. As in writing, game design allows the student to design a new world that employs specific language and structure. Students must become literate with games, which means an understanding the language and rules of the game. Once students are literate with gaming, teachers can structure learning to connect gaming to traditional instruction and learning.

Even though students can make a crossover from video game systems into traditional learning, studying the video game systems as an end to itself is also worthwhile. Walsh (2010) presented two case studies where video games were inserted into the English curriculum with great success. Students were asked to work with video games as systems. Walsh (2010) used Zimmerman’s (2009) view of gaming literacy in these case studies, but he preferred the term “systems-based literacy practices” to gaming literacy theory because “digital games are an example of one kind of systems-based assimilation or virtual world that informs these practices” (p. 27). Walsh believes that systems are so vital to gaming literacy that it should be included
directly in the term. Within the case studies, the teachers were able to incorporate video games into the curriculum of the class successfully by using the systems as a way for students to understand the game structures as well as how to study the games. In one case study, the students were able to design games and make meaning through this process based on the knowledge of systems (Walsh, 2010). Even though the games had rules, the students were able to understand the systems and transform the gaming experience.

*Learning within a System*

Learning that takes place within a system and as a result of a system’s structure can be quite complex. One such example of how complex learning takes place within a system is with the massively multiplayer online role-playing game (MMORPG) titled World of Warcraft (WoW). A MMORPG is a game system where a large number of gamers play within the same world and take on certain roles within the game in order to interact with one another. These roles are taken on through the creation of specific avatars, and players can work through many different choices to create their avatar (such as name, gender, class, and specializations within class). As the description of *WoW* continues through play, the system of the game becomes clear. Players can progress through the game by acquiring talents as they accomplish goals; players typically work toward acquiring the skills of one particular talent tree (Talent trees contain specific talents or skills), but skills may be garnered off any talent tree because specialization is not required. Other talents or skills, such as learning how to use certain types of weapons, may be gained throughout the play of the game. Using weapons or casting spells requires that the player have resources available, and different levels of resources are needed depending on the particulars of what is being used. Many of the spells and use of weapons
require a time period before they take effect and a downtime afterwards ("cool down"). Players must work together in order to defeat various enemies because enemies are not vulnerable to every type of attack. To be successful, a player must have an understanding of their class structure (as well as others), their chosen and gained talents and skills and how to integrate all of these together, and how to use their specific equipment. At the same time, players must understand how to work with others. Typically, WoW players are on a team of five players and combine their abilities as a team unit to progress. It is not unusual for a player to have an alternate identity that is played from time to time just to understand how other characters or classes operate within the game; by having this information of how another functions in the world of the game, the player can work better on the team (Gee & Hayes, 2011).

This brief description of WoW demonstrates the complexity of the system as well as how the game is a defined structure. The rules of the game do not require that players work off skills gained only from one talent tree, but players typically also specialize because they believe a specialization will afford them an advantage in the game as well as on their specific team. Players work within the fixed rules of the game to show how relationships among the fixed rules can exist and change. Learning within the system and as a result of the system begins to take place.

WoW players have created places online to work together and share information and knowledge about the system of the game in order to be better scholars, for lack of a better term, of the game. For example, players have developed a complex tool that can calculate a player’s damage per second within a battle, as well as other tools. Blizzard Entertainment, the company that makes the game, does allow for some of these tools to be used within the game itself, showing that the system is evolving and allowing for changing relationships to occur within the
fixed rules (Gee & Hayes, 2011). Forums and websites have been created for players to work together to share information they have gained by studying the system of the game. In one such forum, “Elitist Jerks,” contributing players must follow their rules, such as not asking redundant questions and adhering to research conventions that prevent simply listing opinions; thought and analysis are required before posting an idea (Boethius, 2009). Players must work within the system and learn that system well before contributing knowledge, which is a hallmark of traditional learning. The study of the system of WoW has been termed theory crafting. This theory crafting is studying the design and desiring to become expert in game play. Players who are engaging in theory crafting are employing the same level of research and analysis to study the complexity of WoW’s design as in used in fields such as science (Steinkuehler & Duncan, 2008).

According to Gee and Hayes, (2011) theory crafting and studying game systems may be equal to traditional learning. Theory crafting brings together players of different ages and experience levels; the only requirement is an understanding of the game, so it is open to everyone interested. Amateurs are engaging in theory crafting and working with experts within these forums much like students in the classroom are amateurs working with teachers who are experts. These players can contribute or consume as much or little as needed or wanted in forums devoted to theory crafting. To test the ideas, players are expected to work out theories within the play of the game, producing hands-on learning. As players work through aspects of the system, they begin to mod the game. Blizzard Entertainment has used some of these modifications to redesign the game. When such redesigning happens, the players are able to take ownership of the game and their learning because they see their contributions evolving. That WoW is not a real-world system should not affect the level of learning that is taking place in
theory crafting because players are using real-world skills (research, mathematics, technical jargon, analysis, collaboration) to develop and gain knowledge. Players must build on one another’s learning in order for theory crafting to be successful. One cannot engage in theory crafting in a vacuum without others to learn from, build off of, and collaborate with. Ultimately, the players always have choice; they may work within different forums that have rules they can work under, or they can build their own forum (Gee & Hayes, 2011). All of these aspects of theory crafting relate directly to how gamers are learning within a virtual world due to studying the system of a game and becoming literate.

**Design**

Design is a crucial aspect of gaming literacy because it is a process that builds contexts that provide meaning, and this brings gaming literacy perfectly in sync with how traditional print literacy works (Zimmerman, 2009). Understanding the design of a game is much like understanding the design of a piece of literature. Gee (2007) discusses how gaming is a contextual process of knowing what to do in a particular context. Players learn to use strategies within the context to be successful. Salen and Zimmerman (2004) define design as “the process by which a designer creates a context, to be encountered by a participant, from which meaning emerges” (p. 41). This area of gaming literacy may be highly complex because meaning is built through the game itself as well as being created from the outside culture. Within a game, parts of the game are designed to represent specific meanings, but more importantly, design is about providing possibilities. Holland, Skinner, and Caine (1998) explain how important design is to constructing meaning even when that meaning is in a virtual world: “By ‘figured world,’ then, we mean a socially and culturally constructed realm of interpretation in which particular
characters and actors are recognized, significance is assigned to certain acts, and particular outcomes are valued over others” (p. 52). For example, *The Sims* is a game designed for the player to have possibilities within the designed context of meaning (Salen & Zimmerman, 2004). In order to create such possibilities of meaning through context, a collaboration of approaches must be included. Games consist of a narrative structure much like a piece of text would be constructed. Journet (2007) discusses how playing a video game is similar to reading a text because the players are responding to the narrative experience of the game. Journet further notes: “There is within literary studies a ‘hermeneutic’ strand of theory that focuses on interpretation and reader-response and on narrative as rhetoric, as well as a robust theoretical discussion, much of which has been located in the human sciences, that examines narrative as a form of action rather than as a mode of discourse or representation” (p. 95). Narratives within gaming work just as narratives in text, but the gaming narrative is interactive.

**Design and Discourse**

Interaction within the narrative produced in the video game can be displayed through discourse. Gee (2001) defines discourse (with a small “d”) as language in use. Discourse (with a big “D”) begins when individuals “can produce languages and not just consume them” (p. 719). More than merely language is incorporated by Discourses; social language is immersed in language and has meaning constructed within that language. Discourse (with a big “D”) can then be defined as integrating “ways of talking, listening, writing, reading, acting, interacting, believing, valuing, and feeling (and using various objects, symbols, images, tools, and technologies) in the service of enacting meaningful socially situated identities and activities” (Gee, 2001, p. 719). “Critical learning” is what Gee (2007) calls learning how to create meaning
in a digital environment. Meaning is created when a relationship is formed between the internal and external domains; internal domains consist of game content, while external domains focus on how players engage with the content (Gee, 2007). When a player engages with the content, s/he must learn “how to innovate in the domain – how to produce meanings that, while recognizable to experts in the domain, are seen as somehow novel or unpredictable” (Gee, 2007, p. 25).

Abrams (2009) uses Gee’s Discourses to examine how players (particularly of Rock Band) are using their bodies as text, and their actions are reflecting the meaning-making taking place as they develop identities. The players are learning while interacting within the gaming environment and creating a gaming Discourse, and this information about how this meaning making develops can be applied to the classroom. By understanding how students are making meaning outside the classroom, educators may gain a greater sense of what can be applied to the classroom for options in making meaning. When players are operating within the virtual environment (VE) and their Discourse includes both virtual and real activities as part of the character development, then students could possibly do the same in a classroom environment (Abrams, 2009). This technique is similar to how theatre and dramatic exercises work where students begin to inhabit a character. In Full Spectrum Warrior, the player is taught how to become a soldier by adopting the appropriate Discourse for the game play. The player may not simply bring game skills learned in any other game; s/he must learn specific skills for this game – it has its own particular Discourse (Gee, 2005). Just as players begin to understand and develop certain behaviors in the VE, students can learn much the same way and create Discourse in their classroom’s learning environment (Abrams, 2009).

Gee (2005) argues that this concept of Discourse development is exactly what makes a video game a quality video game. In addition to Full Spectrum Warrior, other games, such as
Tony Hawk’s Underground and Thief: Deadly Shadows, use the same technique of transforming a player’s learning by providing a VE where the player’s Discourse is within the VE and in real life. Another aspect of Discourse development within gaming is how players learn a specific Discourse of what is acceptable and not (Abrams, 2009).

**Discourse and Meaning**

Steinkuehler (2006) applied Gee’s D(d)iscourse theory to massively multiplayer online games (MMOGs), which are online video games (2- or 3-D) that allow gamers to interact in a virtual world of avatars. This D(d)iscourse theory is different from other models of meaning because the theory is not just how we gain meaning from a symbol; instead, the theory focuses on how meanings of symbols are situated within a context (Gee, 1999). From the situation comes the formation of meaning, and these meanings are drawn from prototypes of stories created within certain groups of people (or cultures); Gee (1999) calls these well-traveled stories Discourses.

Even though the use of language in gaming seems to be quite equal to language in print text, some key differences can emerge within gaming, which can be seen when studying the component of design. Steinkuehler (2006) found, through an extensive study of interviews, transcribed observations of game play, collections of player communications, and instructional documents, that the language use in the game Lineage equaled the complexity of offline language. Meaning of language – of specific language – was actually found to be central to the development of identity within the game. Within Lineage, players range from what is termed a newbie to a beta vet. These terms for players give them specific identities within the game, and
such an identity can be learned through the player’s use of language and how other players interpret the meaning of that language. For example, a newbie might call moving around the VE of the game as teleporting, while a beta vet would call such moving around “venzing.” Beta vets use terminology that was used or developed during the beta-testing period of the game (Steinkuehler, 2006). Through the design of the game, whether it be the beta-testing phase or the actual release period of the game, players are situated within a specific context of language and terms that help create meaning – their identity.

Steinkuehler (2006) parsed a selection of communication between players to find that the meaning of the statements made were understood only if one were familiar with Lineagese and had actually played the game; game manuals would not have been enough to relate the meaning of territories or the characteristics of class structure within the game as players could. One particular utterance Steinkuehler (2006) uses can be roughly translated: “just a minute, I have to go to the Elven Forest to regenerate. I’m out of manna potions” (p. 42). The meaning conveyed to the player’s team was construed from understanding pledge hunts within the game and roles and responsibilities within that aspect of the game. The derived meaning paid homage to the distribution of labor and had an impact on the activity of the other players on the team by signaling that the hunt would continue for a significant period of time. Through this simple communication, the player is showing how “the meaning of those practices is done with and through language-in-use” (p. 42). Meaning is assigned based on cultural understandings developed within the design (and thus the context) of the game.

Play

Salen and Zimmerman (2004) define play as “free movement within a more rigid
structure” (p. 304). Play is not just about following the rules created within the system; instead, play is about bending or modifying (Gamers refer to this as the ability to mod) the structure. Within the area of play, the focus shifts from the game to the player and how the player works within the designed system to create, thus innovating. During play, the gamer “transcends the immediate needs of life and imparts meaning to the action” (Salen & Zimmerman, 2003, p. 31). Social interaction becomes part of play – interaction with the system and interaction with the game – just as in traditional print literacy. The structure of the game and the design come together in play to bring meaning alive. Meaningful play is of great importance for a game to be successful, and this level of play does not result just from the game itself. The player working within the context of the game can produce meaningful play. To assess play, actual game playing is required in order to see what is happening within the context of the game (Salen & Zimmerman, 2003).

As a player mods the design through play, new meaning can be created; in fact, learning occurs through this component of play as the gamer becomes more literate (Zimmerman, 2009). Gee (2007) describes learning through play in the video games as: “they situate meaning in a multimodal space through embodied experiences to solve problems and reflect on the intricacies of the design of imagined worlds and the design of both real and imagined social relationships and identities in the modern world” (p. 40-41). This level of play can be quite intricate, but due to content being discovered by the player, learning is happening during the play (Gee, 2007). The play can even bleed over into the real world of other literacies. Steinkuehler, Black, and Clinton (2005) discuss how MMOGs can have “fuzzy boundaries that expand with continued play” because what is initially only contained within the realm of the game (talking within the game) can move over into a virtual environment (websites) and then over into real life (actual
meetings or discussions) (p. 98). This is where play can become innovation by leading to more learning outside the original world of the game. Likewise, reading traditional print transfers over into other areas of life outside the original world of that text.

Gaming Experience

Preece, Rogers, and Sharp (2002) define experience as how the play feels to the gamers. Such a definition is too broad and vague, yet Dewey defines experience as the result of the interaction between an individual and the environment at a given time. Dewey’s (1938) definition is much more in line with Rosenblatt’s view of the transactional experience. When discussing the meaning of experience with gaming, Dewey’s (1938) perspective of experience is the most applicable in that the experience is when the individual has interaction with the environment. In gaming, the player must be involved in an interaction with the game.

Rosenblatt’s transactional theory is key to understanding the reader’s engagement with literary texts as well as providing the reason such responses are significant (Soter, Wilkinson, Connors, Murphy, & Shen, 2010). The video game is vital to the experience just as a piece of text is vital to the transactional experience. Likewise, the gamer is also essential in the experience. Again, a connection with reader response theory exists because Rosenblatt (1995) explains that the transactional experience is personal and varies for each individual based on what the individual brings to the reading experience. The gaming experience operates similarly by combining the player and the context of the game; thus the experience is formed once the different pieces are put together, with the player deciding if the experience was positive (Dix, 2003; Hassenzahl, 2003). Attempts have been made to compare the gaming experience with the reading experience (Aarseth, 1997; Murray, 1997; Rush, 2005; Ryan, 2002), yet an exact comparison is difficult.
since reading and playing video games have important differences. Instead, a parallel can possibly be made between the transactional experience in reading and the gaming experience.

One way to view the gaming experience is to realize that the experience is based on the outcome of what transpires between the individual and technology (McCarthy & Wright, 2004).

Considering this view, one avenue to understand the gaming experience is to use evaluation methods that look directly at the interaction between the player and the game. The relationship between the gaming experience and reader response theory is evident because the meaning of playing the game “resides in the relationship between action and outcome” (Salen, 2007, p. 317).

Calvillo-Gamez, Cairns, and Cox (2010) define experience as it directly relates to gaming as “the experience of playing video games on a one-to-one basis of the interaction between player and game” (p. 48). Their work is based in Dewey’s definition of experience: “Experience is both the process and outcome of the interaction of a use with the environment at a given time” (p. 50). When studying the gaming experience, Calvillo-Gamez, Cairns, and Cox (2010) look specifically at the relationship between the gamer and the video game and the elements “present in the process of the interaction” (p. 51). The theory for the study is built around the core elements of the gaming experience (CEGE). Using value codes with the questions, this instrument is used in this study to help understand the gaming experience. The CEGE are the foundational elements that must be present in a video game in order for the gaming experience to not be negative. The CEGE do not detail how positive an experience the gamer will have, but if the CEGE are present, the gamer will not have a negative experience (Calvillo-Gamez, Cairns, & Cox, 2010). The main areas of the CEGE are puppetry and the actual video game details (game play, rules, scenario, environment, graphics, and sound). From the CEGE, the Core Elements of
Gaming Experience Questionnaire (CEGEQ) was developed, and it helps determine if the CEGE are present during the gaming experience.

Calvillo-Gamez (2009) created the CEGEQ due to the need for an instrument to measure the gaming experience. He developed the CEGE and CEGEQ after conducting a series of exploratory pilot-studies where the participants were asked to play video games using different devices or methods. The first two studies asked participants to play games using different devices, and the third study focused on the experiences that differentiate between playing a video game from watching it played (Calvillo-Gamez, 2009a). The three studies lead to articulating key elements found in the gaming experience. The CEGEQ identifies the differences in players’ experiences by showing which of the CEGE are missing. There is no overall score for the CEGEQ; instead, it provides an understanding of which elements are present during the experience.

Puppetry

The metaphor of puppetry is used in the CEGEQ as a way to see the outcome of the gaming experience. The gamer has control over the game much like a puppet master has control of a puppet. When used with reference to gaming, puppetry consists of control (basic game actions), ownership (responsibility for actions), and facilitators (external factors in the game). Each of these three elements has multiple aspects (see Table 1) that when working in concert, produce a positive gaming experience (Calvillo-Gamez & Cairns, 2008).
Table 1

Elements of Puppetry

<table>
<thead>
<tr>
<th>Elements</th>
<th>Descriptions of Elements</th>
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| Control  | Mechanical: controllers, memory, point of view  
          | Virtual: small actions, goal, something to do |
| Facilitators | Aesthetic value, previous experiences, time |
| Ownership | Big actions, rewards, personal goals, you but not you |

Note. Adapted from Calvillo-Gamez & Cairns (2008).

Assessing Response

Rosenblatt’s (1978) theory looks at how the aesthetic experience with the text helps form meaning; thus stance and transaction are key tenents of the theory. When viewing responses with reader response theory and understanding the meaning making, great importance must be placed on the relationship between the text and the reader (Rosenblatt, 1995). Soter et al. (2010) conducted a study of over 300 “scholarly products…to identify parameters of productive small-group discussions” (p. 204). Rosenblatt’s aesthetic and efferent stances were included in the parameters for understanding descriptors in the responses to enable identification of the stances in readers’ responses to text. The reason for such a study was to gain clarity when looking at readers’ responses: “appropriating Rosenblatt’s concept of ‘aesthetic response’ to account for the personal connections that readers make to literary texts was, and still is, not without difficulties, one of which is the enduring debate regarding the nature and qualities of response” (Soter et al., 2010, p. 209). Not all responses include a reflection on the role the text has played in their response, but Rosenblatt (1978) is clear that this should exist for the aesthetic response. Rosenblatt (1978) explains that when the reader is in an aesthetic stance, a reflection on the
personal response to the literature will occur, which is what she calls the poem: “Sensing, feeling, imagining, thinking under the stimulus of the words, the reader who adopts the aesthetic attitude feels no compulsion other than to apprehend what goes on during this process to concentrate on the complex structure of experience that he is shaping and that becomes for him the poem, the story, the play symbolized by the text” (p. 26).

Rosenblatt cites Ingarden (1973) in *The Reader, The Text, The Poem* as insisting on knowing how the text affects the aesthetic experience. Soter et al. (2010) detail the primary features between aesthetic responses and expressive responses to literature (see Table 2). Expressive responses are in response to the text, but they do not meet the definition of an aesthetic response that occurs during the transactional experience. A true aesthetic response is going to “describe responses in which students relate[d] events and characters they read about to incidents and people in their own lives” (Soter et al., 2010, p.218).

**Table 2**

*Distinguishing Features of an Aesthetic and an Expressive Response to Literature*

<table>
<thead>
<tr>
<th>Primary Features of an Aesthetic Response to Literature</th>
<th>Primary Features of an Expressive Response to Literature</th>
</tr>
</thead>
<tbody>
<tr>
<td>A sense of the work as well as one’s response to it</td>
<td>The work sparks a personal connection or memory</td>
</tr>
<tr>
<td>An appreciation of the craft of the work</td>
<td>Personal experience parallels or takes off from the connection</td>
</tr>
<tr>
<td>Interaction between the perceived and the perceiver</td>
<td>The response is primarily in terms of content, as opposed to form, or even a mix of content and form</td>
</tr>
<tr>
<td>Engagement with the work</td>
<td>Engagement with the work is “translated” into personal experience</td>
</tr>
</tbody>
</table>

*Note. Adapted from Soter et al. (2010).*
Classification systems designed by Cox and Many (1992b) attempt to chart responses as more aesthetic or more efferent, and the descriptions used for the assessments echo the findings of Soter et al. (2010). Cox and Many (1989; 1992b) assert that the case study format of reader response theory should be expanded to include a more systematic way of “analyzing responses in terms of the degree to which responders demonstrate a particular stance” (1992b, p. 40). Even though much research has been conducted using Rosenblatt’s theory, Cox and Many (1992b) establish there is “a need for research which examines Rosenblatt’s concepts of efferent and aesthetic through a systematic analysis of students’ responses to literary works of art” (p. 40).

The classification system they created (the five point efferent/aesthetic continuum) was based on Rosenblatt’s work as well as Corcoran and Evans (Cox & Many, 1989). Corcoran and Evans’s (1987) work describes mental processes at work during a reading with an aesthetic stance. Responses could then be charted as falling somewhere on the continuum between fully efferent and fully aesthetic. The second system of classification (levels of personal understanding) was “devised to characterize an individual’s creation of an interpretation of a personally meaningful literary experience” (Cox & Many, 1992b, p. 44). This chart was based on the work of Ricouer (1976) about interpretation theory and Applebee (1978), which discusses level of meaning (Cox & Many, 1989). The two classification systems were created to provide a way of describing and analyzing the differences between stances as well as responses; additionally, they provide a vocabulary to use when analyzing responses with reader response theory (Cox and Many, 1989; 1992b).

Cox and Many (1992b) conducted a study for one year with 38 fifth-grade participants. The five point efferent/aesthetic continuum used for measuring reader stance (Cox & Many, 1992b) was created for use with their participants’ responses to nine pieces of fiction (both text
Participants read four novels and viewed five films and wrote responses to open-ended prompts twice a week. Cox and Many’s (1992b) participants had a primarily aesthetic response to the literature. Percentages of students responding to each level on the levels of personal understanding as was a comparison of mean percentages of responses to books and films. Over half of the participants were able to go beyond the literal level of understanding. The comparison of mean percentages between books and film for the levels of understanding demonstrated similar results suggesting both have potential as forms of literacy: “If film or other media will offer students the same potential opportunities to expand their understandings about themselves or the world, they should have experiences with them as well” (Cox & Many, 1992b, p. 62). A cross tabulation of stance and level of understanding offered further evidence of differences between the continuum of aesthetic and efferent responses with levels of understanding. Higher levels of understanding were reached when operating with an aesthetic stance. When reviewing responses, Cox and Many found that aesthetic responses to literature contained three characteristics: students’ tendencies to (1) picture a story in their heads; (2) extend the story or hypothesize about it; and (3) relate associations or feelings evoked while reading and responding. These characteristics all trace back to Rosenblatt’s insistence on the clear connection to the text in the response.

An additional study, Many (1991) explored differences in stance according to age level (4th, 6th, and 8th grade levels) using the same instrument. Responses are not necessarily uniform; thus detailed characteristics are provided within the systems of classification. The descriptors used in the classification systems had to accommodate that responses would vary (Cox & Many, 1992a). Many (1991) had participants read three stories and write a free response. The responses were classified according to the Levels of Understanding and the 5-point continuum.
Means and standard deviations for were reported by grade level for each story read. Higher levels of understanding were demonstrated with a primarily aesthetic stance.

Nance (2000) conducted a case study of four adult readers enrolled in an English course and used the five point efferent/aesthetic continuum and levels of understanding charts as a way to help demonstrate the readers’ transactions with text. The participants were given texts during each class meeting, and they each completed a personal reflection after reading. After the class discussion, participants were asked to write another reflection. As a way to look closely at the specific responses, Nance (2000) chose Cox and Many’s (1992) assessment charts: “this analysis provided better understanding of the effects of text and task upon the response of the readers” (p. 12).

Other studies using these classification systems show similar results. Penn (2000) used the classification systems with responses from fifth grade students responding to picture books and a novel. Responses were collected orally through journal writings and categorized by stance and level of understanding. Results showed that stance is significantly related to level of understanding. Hanson (1993) used Cox and Many’s (1989; 1992b) instruments with special education students to find a connection between aesthetic stance and a higher level of understanding. Davidson (2000) used only the continuum with grade 12 students to chart responses to questions about literary preferences and personal writing and found that the aesthetic stance increased written responses.

Summary

Throughout this chapter, the literature reviewed discussed ways of understanding gaming as an actual literacy that may have similarities to traditional literacy but should be assessed
differently based on key differences between gaming and print text. The parallel between the gaming experience and reading experience was demonstrated as well as an understanding of ways to assess the gaming experience while keeping in line with the foundations of how the transactional experience is assessed. The methodology of the study is further explained in the next chapter.
CHAPTER 3

METHODOLOGY

This chapter details the research procedures that were used to conduct a qualitative research study examining how the participants’ primary video games demonstrated the main aspects of an evolving theory of gaming literacy and the aspects of reader response theory that were evident in the video game playing experience. The two approaches of content study and collective case study are defined as well as discussing how the approaches are used in this study. The combination of the two are necessary because both the video game and the gamer’s experience must be explored, and only examining one of the two would be remiss of the connection Rosenblatt makes between text and experience: “The patterns of signs on the page remains the same; the difference is in relation to those signs” (2005, xxiii). In order to discuss the relationship to the game, an examination of the game itself must be included as a part of the study. Detailed information about the participants and the three chosen video games is provided as a way to understand the similarities and differences among participants. Summary information about the video games is provided so that details about the games used in the results section will be clear. Data collection and the process of analysis used are explained in order to lay the foundation of the results discussed in the following chapter.

Study Overview

This study examined participants’ primary video games (a total of three games for the study) to understand the gaming literacy content and then detailed how participants perceived their gaming experiences during video game play in order to examine the response to gaming as connected to Louise Rosenblatt’s concept of reader response theory. Literary value is important
to note so that the games can be related to reader response theory, so the specific video games played most frequently by participants were assessed for aspects of gaming literacy theory to better understand the games’ literacy value. Zimmerman’s gaming literacy theory was used to assess the video games. Assessing the textual framework of video games is important to the study because video games must be established as literacy in order to make a claim for parallelism between reader response theory and the gaming experience. The gamer and the video game were studied to understand the transaction, which becomes the “gaming experience.” This study examined how a gamer’s experience with playing the video game may be parallel to the transaction in reader response. The main research questions will include the following, and more specific research questions that this study addressed are listed as sub questions:

RQ1. How is gaming literacy theory demonstrated in a current mainstream video game?
   A. How are the three principles of gaming literacy theory (play, design, and systems) found to be present in current mainstream video games that fall into one of three genre categories?

RQ2. What aspects of reader response theory are displayed through video game play in the gaming experience?
   A. What similarities are found between the gaming experience as described by gamers and the key components of stance and transaction found in Louise Rosenblatt’s transactional theory?

Research Design

Since this study examined participants’ gaming experiences, a qualitative design was judged appropriate to understand variables that, at this point, cannot be quantified, although certain variables in the study are presented objectively. This study is most closely related methodologically to Merriam’s (1988) definition of a qualitative study in that assessing the gaming experience cannot be measured fully in the format of the positivist quantitative inquiry.
This study addresses an understanding of the gaming experience as described by the participants and is approached without a measurable hypothesis. Ultimately, this research documented and examined the participants’ gaming experiences, which falls in line with Stake’s (1995) view of qualitative research as, “not necessarily to map and conquer the world but to sophisticate the beholding of it” (p. 43). I constructed a descriptive case study showing, “all its particularity and ordinariness” (p. 445). The paradox of the case study is the view that the individual leads to the ability to understand the universal. This paradox lends a creative element to research by studying the truth of the unique in order to grasp a more comprehensive (or generalized) view (Simons, 1996). A multiple case study is used to see the differences between cases with a goal “to replicate findings across cases” (Baxter & Jack, 2008, p. 548). Stake (2005) uses the term collective case study when more than one case is being examined instead of the term multiple case study. This is a collective case study of three cases that can be viewed in relationship to each other. Each case consists of the five gamers within each group.

Participants

The participants were considered experts regarding their gaming experiences. The sample of participants was selected from those responding to a public flyer advertising the study at several video game stores located in the North Texas area. Participants ranged in age of 18-25 and self-identified as gamers. The age range was chosen so that all types of games could be considered. A younger group of participants would mean that games with mature content could not be included in the study. Once potential participants contacted me by email, I verified that they met the criteria of age and self-identification as a gamer. Potential participants were also asked to supply the name of the video game they play most frequently when gaming. I identified
those games according to genre and made a final selection of participants based on game and
genre. Responses to my request to participate in the study identified 18 potential participants.
One potential individual declined participation soon after initial contact citing schedule conflicts.
Two potential participants were declined participation because their most frequently played
video game did not correspond with any of the other games provided by potential participants.
The remaining 15 people were selected for participation in the study. The study focused on three
video games that fell into three separate genres: Sims FreePlay (simulation); Halo 1 (FPS); and
World of Warcraft (RPG). The 15 participants were placed into three sets of five participants for
each video game based on the game they played most frequently. The multiple case study
(Baxter & Jack, 2008) is divided into three cases according the gaming groups.

Participants were protected under Internal Review Board (IRB) procedures. Participants’
anonymity was guaranteed by using pseudonyms instead of actual participant names.
Participants signed a consent form allowing them anonymity and the ability to end participation
at any point in the research process.

Profile of Video Games in Content Study

Halo 1

Halo 1 is first-person shooter (FPS) video game designed originally by Bungie and
played on an Xbox console. The player is put into the role of the Master Chief Petty Officer
John-117 who is an enhanced soldier set in the 26th century. Master Chief has help from
Cortana, who is actually an artificial intelligence addition to his interface. A ground force of
marines called the United Nations Space Command (UNSC) also helps Master Chief. The
primary enemy is the Covenant, which is a group of aliens with a common religious belief. In
this futuristic setting, humans have colonized other planets, and the Covenant has started a war with humans whom they believe are a threat to their gods. Through a series of events, Master Chief arrives at Halo, a space station, and must confront the Covenant in order to protect the location of Earth being given to the Covenant.

*World of Warcraft (WoW)*

WoW, a massively multiplayer online role-playing game (MMORPG), was created by Blizzard Entertainment for Microsoft Windows or OS X. Players control and create avatars in either a first-person or third-person viewpoint. Even though it is possible to play the game in first person, WoW is not known for that nor do players typically choose that view. Players begin by developing a character from one of two opposing groups: the Alliance or the Horde. Once a group is chosen, the player must then choose the character’s race and class. Characters evolve, and their special abilities are further developed throughout game play. In order to go through such an evolution process, the characters work through quests, which usually require the character to deliver goods, kill various creatures, gather resources, etc. Quests primarily provide experience, which allows the character to level. Every level up (1-90) provides the character with the ability to buy new skills or spells. Gold or money is also made while questing; this helps to buy items the character needs later in the game. Some challenges within the game require characters to group with other characters to accomplish the challenge. Groups are usually comprised of about five characters and depend on the different roles each character plays. Challenges on a higher level of difficulty can require more characters to work together in a raid; in the original WoW, up to forty characters were needed to collaborate in a raid, but in the
subsequent expansions, only twenty-five are needed. Once characters reach level 60, they can then enter new areas of the game and encounter more content.

_Sims FreePlay_

Sims FreePlay is a simulation video game played primarily on Apple or Android mobile devices and designed by Iron Monkey. The game focuses on the player’s creation of a city containing businesses, workplaces, recreational places, and homes. The game begins with the creation of one Sims character who lives in a partially furnished home. From that point, the player can create more Sims characters and add to the city; characters are played from a third-person perspective. In order to add to the city (buildings, homes, Sims characters, etc…), the player must acquire Simoleons or Lifestyle Points to purchase additions. Goals are provided for the player, and once accomplished, the payoff for the player is to receive Simoleons or Lifestyle Points. The goals, which are fairly simplistic in nature, are centered on making additions to the city or helping the player understand how to work different aspects of the city. Experience points (XP) are also gained as the player “inspires” Sims characters, which means that characters are kept healthy by players checking in often with them and making sure they are regularly fed, entertained, showered, etc… Characters’ basic needs must be kept at a high level (demonstrated through a chart displayed on screen) in order for them to earn Simoleons by farming or baking or going to work. The player can create numerous Sims characters and develops each character’s life in the game.

Profile of Participants in Case Study

Before interviews and video recording of game play began, all participants were
informed of the purpose of the study and signed consent to participate. Participants were placed into three groups according to their preferred video game; each group consisted of five participants. The results were reported according to how the emergent themes were demonstrated in each case study, which is grouped according to chosen video game, and a brief overview of each of the individual participants within each of the three case studies is provided (see Tables 3, 4, and 5). Participants were asked to provide age, ethnicity, and gender at the beginning of the interview. The majority of participants were White, with five non-White participants. Females outnumbered (total of 9) male participants (total of 6) in the study. Two groups of siblings were involved in the study, although each group played different games. The Sims Freeplay participants had been playing for at least one year; Halo 1 participants had been playing four to six years; WoW participants had been playing for three to eight years.

Table 3

_Halo 1 Participants Included in the Study_

<table>
<thead>
<tr>
<th>Participant</th>
<th>Iris</th>
<th>Anna</th>
<th>Alex</th>
<th>Brett</th>
<th>Sherry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>24</td>
<td>21</td>
<td>19</td>
<td>20</td>
<td>23</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>White</td>
<td>Hispanic</td>
<td>White</td>
<td>White</td>
<td>Hispanic</td>
</tr>
<tr>
<td>Gender</td>
<td>Female</td>
<td>Female</td>
<td>Male</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Playing History</td>
<td>6 years</td>
<td>4 years</td>
<td>6 years</td>
<td>4 years</td>
<td>4 years</td>
</tr>
<tr>
<td>Average Playing Time</td>
<td>2-4 hours per day for 4 days a week</td>
<td>3 hours per night (up to 6 hours a night when playing with friends)</td>
<td>4 hours each day</td>
<td>8 hours per week</td>
<td>4 hours per day for 5-6 days a week</td>
</tr>
<tr>
<td>Time Spent Researching Game</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Print Literacy Connections to Game</td>
<td>0</td>
<td>Read all Halo Books</td>
<td>0</td>
<td>Read all Halo Books</td>
<td>Read all Halo Books</td>
</tr>
<tr>
<td>Connection to Other Participants</td>
<td>Friends with Sherry; Sister of Alex</td>
<td>None</td>
<td>Brother of Iris</td>
<td>Brother of Nick</td>
<td>Friends with Iris</td>
</tr>
</tbody>
</table>
Table 4

*World of Warcraft (WoW) Participants Included in the Study*

<table>
<thead>
<tr>
<th>Participant</th>
<th>Age</th>
<th>Ethnicity</th>
<th>Gender</th>
<th>Playing History</th>
<th>Average Playing Time</th>
<th>Time Spent Researching Game</th>
<th>Print Literacy Connections to Game</th>
<th>Connection to Other Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nick</td>
<td>18</td>
<td>White</td>
<td>Male</td>
<td>6 years</td>
<td>4-6 hours per day for 5 days a week</td>
<td>1 night per week</td>
<td>Regularly reads websites connected to game</td>
<td>Brother of Brett</td>
</tr>
<tr>
<td>Jordan</td>
<td>24</td>
<td>Hispanic</td>
<td>Male</td>
<td>7 years</td>
<td>3-4 hours per day for 5 days a week</td>
<td>1 night per week</td>
<td>Regularly reads websites connected to game</td>
<td>None</td>
</tr>
<tr>
<td>Mark</td>
<td>24</td>
<td>White</td>
<td>Male</td>
<td>3 years</td>
<td>3-4 hours per day for 6 days a week</td>
<td>1 night per week</td>
<td>Regularly reads websites connected to game</td>
<td>None</td>
</tr>
<tr>
<td>Lisa</td>
<td>21</td>
<td>White</td>
<td>Female</td>
<td>5 years</td>
<td>4-6 hours per day for 5 days a week</td>
<td>1 night per week</td>
<td>Regularly reads websites connected to game</td>
<td>None</td>
</tr>
<tr>
<td>Billy</td>
<td>22</td>
<td>White</td>
<td>Male</td>
<td>8 years</td>
<td>3 hours per day for 5 days a week</td>
<td>1 night per week</td>
<td>Regularly reads websites connected to game</td>
<td>None</td>
</tr>
</tbody>
</table>
### Table 5

**Sims FreePlay Participants Included in the Study**

<table>
<thead>
<tr>
<th>Participant</th>
<th>Mia</th>
<th>Cindy</th>
<th>Danielle</th>
<th>Rhonda</th>
<th>Laura</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>20</td>
<td>23</td>
<td>23</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>White</td>
<td>White</td>
<td>African-American</td>
<td>African-American</td>
<td>White</td>
</tr>
<tr>
<td>Gender</td>
<td>Female</td>
<td>Female</td>
<td>Female</td>
<td>Female</td>
<td>Female</td>
</tr>
<tr>
<td>Playing History</td>
<td>1 year (7 years playing different versions of Sims)</td>
<td>1 year (10 years playing different versions of Sims)</td>
<td>1+ years (10 years playing different versions of Sims)</td>
<td>1 year (5 years playing different versions of Sims)</td>
<td>1 year</td>
</tr>
<tr>
<td>Average Playing Time</td>
<td>2 hours per day for 7 days a week</td>
<td>16 hours per week</td>
<td>2-3 hours per day for 7 days a week</td>
<td>2-3 hours per day for 6 days a week</td>
<td>2-3 hours per day for 5 days a week</td>
</tr>
<tr>
<td>Time Spent Researching Game</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Print Literacy Connections to Game</td>
<td>None</td>
<td>None</td>
<td>Receives monthly email newsletter</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Connection to Other Participants</td>
<td>None</td>
<td>None</td>
<td>Friend of Rhonda</td>
<td>Friend of Danielle</td>
<td>None</td>
</tr>
</tbody>
</table>
Data Collection

Data were gathered from various sources to support my construction of an understanding of what occurs during the gaming experience. Data collected included results from the core elements of the gaming experience questionnaire (CEGEQ), transcripts from interviews, and notes detailing instances of gaming literacy theory in specific video games played by the researcher as well as being noted in videos of participants’ game play. Initially, each chosen video game was assessed in regards to how the three foundational aspects of gaming literacy theory are present within the game. Additionally, participants’ game play was video taped, and they completed the CEGEQ and participated in a recorded interview about their gaming experience. Each component of the data collection process is discussed with a more detailed description of the data collection procedures later in the chapter. Results from a pilot study were used to help construct data collection procedures for this study.

Pilot Study

In a pilot study conducted over a two-week period in February 2010, two participants completed the computer games inventory (CGI) (Jones, 2007), and were observed for approximately 45 minutes during game play of Halo 2 and interviewed afterwards. The CGI provided information regarding the participant’s attitude toward gaming and how frequently the gamer played. The CGI was found to not be as useful as the CEGEQ. Discovered after the pilot study, the CEGEQ gives more insight into the actual gaming experience instead of just establishing that the gamer has a positive attitude toward video games. A structured interview with pre-determined questions was used in the pilot study, but further questions asking for
clarification were needed to provide more information about the gaming experience, so semi-structured interviews were used when interviewing the main study’s participants.

Analysis and Play of Video Games

Content analyses of the three video games were conducted before and after the interviews took place. The three chosen games for the study were played by the researcher to understand the basic content and rules of play of the video game, as well as to provide data regarding gaming literacy as detailed in a matrix (Appendix A). A 30-minute videotape of the participant playing her/his selected video game was recorded to view aspects of gaming literacy theory. Videos of game play were conducted at each participant’s home or a mutually agreed public space. Notes were recorded regarding the three main components of gaming literacy theory present in the game.

The data provided insight into the literacy value of the game as well as providing the researcher with sufficient background about the game before interviewing participants about their gaming experience. By playing the games, I was able to develop questions for the interviews, facilitating my ability to investigate the gaming experience from an emic perspective posited as experience “to discover and to describe the pattern of that particular…culture in reference to the way in which the various elements of that culture are related to each other in the functioning of that particular pattern, rather than an attempt to describe them in reference to a generalized classification” (Pike, 1954, p. 8). Data collected during the game playing helped to construct questions asked during the interviews in order to understand each participant’s gaming experience as completely as possible: “for understanding a gaming experience it is important to
understand how a player experiences a game and interprets events in it” (Lankoski, 2004, p. 140).

**Questionnaire**

After playing the game for the video recording, the participant was asked to complete the core elements of the gaming experience questionnaire (CEGEQ) (see Appendix B). The questionnaire is based on the core elements of the gaming experience (CEGE) theory, which posits that if the CEGE are present then the gaming experience is not negative (Calvillo-Gamez, Cairns, & Cox, 2010). The CEGE theory is focused on assessing the interaction between the gamer and game, and the CEGEQ is designed to present an understanding of the gaming experience in a way that shows differences between the experiences; “we call this one-to-one relationship between player and video game, the gaming experience” (Calvillo-Gamez, 2009b; Calvillo-Gamez, et al, 2010, p. 54). Before taking the CEGEQ, participants took a general survey asking for basic demographic information, such as age and gender. The CEGEQ has 38 items with a 7-point Likert scale. The participants’ scores were connected to the responses provided in the interview to further understand the nature of the gaming experience.

**Interviews**

Once the game play and survey were completed, I interviewed the participants; the interviews lasted approximately one hour and were conducted either at the participant’s home or at a local restaurant. Each interview was preceded with an explanation of the study, and interview notes were taken during the recorded interview to gain information provided by the participant. Afterwards, I transcribed each interview verbatim before analyzing.
The participants were interviewed using questions regarding their gaming experience when playing the specific video game of their choice as well as questions about their general gaming experiences; thus, the interviews were semi-structured (see Appendix C). The established interview questions were developed from Alberti (2008) who poses questions to understand the “gaming experience,” and those questions were used while interviewing the participant to demonstrate how a gamer views her/his gaming experience (see Appendix C). Alberti (2008) poses these questions as rhetorically to consider the connection between the gaming experience and the reading experience. I used these questions as a foundation for the semi-structured interview, as a way to connect the two experiences for the participant. Three other questions were adapted from reading inventory questions (Vacca, J., Vacca, R., & Gove, M., 1991) to give a sense of the history of the gaming experience for the participant. Further questions were developed that might relate the gaming experience to the levels of personal understanding and efferent/aesthetic scale. Since the interviews were semi-structured, follow-up questions were used to encourage the participant to add depth to answers given to the established interview questions. By playing through the games and understanding the content and rules of the game, I wanted to develop an emic perspective (Pike, 1954) with the interview questions in order to understand the gaming experience within the context of the gaming culture.

Data Analysis

The research questions about the connection between the gaming experience and Rosenblatt’s transactional process as well as the presence of gaming literacy components are answered through qualitative methodologies (Green & Thorogood, 2004). A clear hypothesis and expected results do not spring from the question. The use of multiple case studies “(a)
predicts similar results (a literal replication) or (b) predicts contrasting results but for predictable reasons (a theoretical replication)” (Yin, 2003, p. 47).

Coding Process for Video Games

The three selected video games were labeled by a specific video game genre: Sims FreePlay as simulation, Halo 1 as FPS, and WoW as RPG. I played each game making notes according to the designed matrix (Appendix A) and noted when examples of gaming literacy theory (play, design, and systems) were evident in the game. I wanted to categorize data according to the gaming literacy components, so structural coding (MacQueen, McLellan-Lemal, Bartholow, & Milstein, 2008) was used with the data. Game play could then be labeled and categorized according to the three gaming literacy components: systems, play, and design (Zimmerman, 2009). Structural coding can both code and categorize data and “acts as a labeling and indexing device” (Namey, Guest, Thairu, & Johnston, 2008, p. 141).

I played the selected video games for either 25 hours or until completion of the game. Videos of participants playing in a thirty-minute segment and the researcher’s game play were coded for each of the three gaming literacy components identified by Zimmerman. During breaks in game play, I listed actions taken and the game level. Afterwards, I coded each action to the three components and grouped them accordingly along with any notes of explanation I might need later when reviewing the results. An example of this chart and procedure is provided (see Appendix F). This same procedure was used when viewing the participants’ game play. The data provided on the charts was then used for data analysis.
Coding Process for Interviews

The interviews (Spradley, 1979) were recorded and transcribed verbatim. Using the descriptive coding method (Miles & Huberman, 1994; Wolcott, 1994), each transcript text was read three times, and participant responses were given descriptive codes summarizing their responses. Descriptive coding “summarizes in a word or short phrases – most often as a noun – the basic topic of a passage of qualitative data” (Saldana, 1994, p. 70).

All of the participants answered similar questions in their interviews, so themes found after the descriptive coding of transcripts were connected to the questions asked during the interview. Additionally, importance was given to any prominent themes emerging from the texts with regard to a relation to Rosenblatt’s reader response theory. A list of emerging themes was constructed from the descriptive codes and then connected to Rosenblatt’s transactional theory in order to understand how the gaming experience is similar to the reading experience.

As a second layer, transcript texts were also labeled with emotion codes (Goleman, 1995). Emotion coding is appropriately used when participants are discussing their experiences (Saldana, 2009). When using emotion codes, the emotion recalled by the participant when discussing an experience is recorded. Emotion codes were used to put the descriptions of the gaming experience into a related context between participants: “One can’t separate emotion from action; they are part of the same flow of events, one leading into the other” (Corbin & Strauss, 2008, p. 7). When a participant recalled an emotion, I marked the transcript accordingly. I used emotion coding to analyze the emotional responses participants expressed regarding their gaming experiences to view patterns in the participant responses, and descriptive coding analysis was used to report the results of the theme labeled emotional response to the game.
CEGEQ Process

Participants rated the statements on the CEGEQ on a Likert-scale of 1 to 7 with seven being total agreement with the statement (see Appendix B). This method illuminates participants’ perceptions of their gaming experience: “Values coding is the application of codes onto qualitative data that reflect a participant’s values, attitudes and beliefs representing his/her perspectives” (Saldana, 2009, p. 89).

Each question on the CEGEQ was labeled as value, attitude, or belief based on the definition. I sent the CEGEQ questions and definitions to four graduate students at the University of North Texas and asked them to label each question according to the definitions of value, attitude, and belief. A limited number of questions were not similarly labeled, so I talked through the labeling process with the graduate students until we reached complete consensus on the labeling of all questions. The value codes, derived from Saldana (2009), used with the survey are value, attitude, and belief.

Trustworthiness

By using data from various sources (video of game play, questionnaire, interviews, researcher’s game play), trustworthiness was established in the study so that an in-depth case could be described (Smith & Glass, 1987). The triangulation of data (Merriam, 1988) included the following sources: interview transcripts, CEGEQ responses, and the matrix for coding video game content. These data provided depth when constructing the case.
Summary

This chapter detailed the methodology used to conduct this study about participants’ gaming experiences and the connection between participants’ most frequently played video game and gaming literacy theory. The research design, data collection procedures, and data analysis were addressed.
This chapter reports the results of this gaming literacy study of three video games (Halo 1, World of Warcraft, and Sims FreePlay) and the collective case study results for the three groups of participants who played these video games. More specifically, this chapter addresses the research subquestions so that the larger research questions can be discussed in more depth in the following chapter. The results from the two sections of the overall study connect by illuminating the literacy of the games (content study) as well as the response of the gamers (case study) in terms of Rosenblatt’s transactional theory. The connection is needed because just working with either the game or the gamer does not give a full understanding of the transaction and “you can’t explain these differences by simply looking at the text” (Rosenblatt, 2005, p. xxiii).

Content Study

Since a difference does exist between video games and print literacy, gaming literacy theory was used to determine the literary value of the three video games selected for the study. As a way to categorize data according to the gaming literacy components, structural coding (MacQueen, McLellan-Lemal, Bartholow, & Milstein, 2008) was used with the data. Game play was labeled and categorized according to the three gaming literacy components: systems, play, and design (Zimmerman, 2009).

The researcher’s game play was coded during frequent breaks while playing, and participants’ videos of game play were viewed twice and coded to answer the following research question:
RQ1. How is gaming literacy theory demonstrated in a current mainstream video game?

A. How are the three principles of gaming literacy theory (play, design, and systems) found to be present in current mainstream video games that fall into one of three genre categories?

More specifically, results reported in this chapter address the subquestion by examining data generated by applying each of the three principles of gaming literacy separately to each of the three games. The three gaming components are posited to work together to form a full picture of gaming literacy, but a separate analysis of each game is needed to understand any connections to one another.

*Systems*

The system of a game includes a set of parts within the game that connect to create a whole (Salen & Zimmerman, 2003). Salen and Zimmerman (2003) use Stephen Littlejohn’s description of four main elements that all systems share:

1) Objects: parts, elements, variables within the system
2) Attributes: system properties
3) Internal relationships: relationships among objects
4) Environment: surroundings that affect the objects

Games containing these four main elements will exhibit that the elements having a particular relationship to one another within the system of the game. The different relationships among and between these elements function within the system to form the game. Essentially, the relationships formed within the system create a context in which the different elements can be connected to one another in a meaningful way.

Since I coded each game strictly according to play within the game, the systems will be framed as formal systems. Gaming theorists view formal systems as closed and self-contained
systems and do not consider the outside environment or what the player brings into the system (Salen & Zimmerman, 2003). Another option would be to view the four main elements of a game as either an experiential system or cultural system. The cultural system examines how the game fits into the greater culture, but my data collection did not include information about the greater culture. Experiential systems look at the system of interaction between the player and game. While recording game play, information was not collected about how the player was interacting with the game. The video was intended to only view the game itself. For these reasons, the formal system was used when viewing the four main elements of a game’s system.

Each game contains the four elements to varying degrees (see Table 6). Objects available to Halo 1 players are somewhat limited and basic to warfare. Sims FreePlay has the basic objects of homes and characters, but an extensive list of products is provided to the player to use, and as the player’s level increases, more products are revealed. WoW has an elaborate range of objects used in the game; these objects are too numerous to list. Players will acquire various objects based on the type of character. The attributes of Sims FreePlay are quite basic in developing characters, building houses, building relationships, and acquiring products. In contrast, Halo 1 and WoW have detailed attributes that are based in each mission or quest provided. The internal relationships built in WoW are crucial to the player’s moving forward; players must work together in order to accomplish certain aspects of the game. The relationships built in Sims FreePlay are important to the player’s moving forward in the game because relationship development provides for points that can help move the player to higher levels. Relationships within Halo 1 are fairly nonexistent; a relationship exists between Cortona and Master Chief, but that interaction is based on providing mission information. The environments of Halo 1 and WoW are incredibly complex fantasy structures of other planets or lands with
numerous structures and areas the player can explore while playing. Sims FreePlay’s environment has a more generic look, and the city is limited in size and scope of buildings and houses.

Table 6

*Results of Four Elements of Systems in Selected Video Games*

<table>
<thead>
<tr>
<th></th>
<th>Sims FreePlay</th>
<th>Halo 1</th>
<th>WoW</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objects</strong></td>
<td>Sims, Simeleons, homes, products</td>
<td>Gun (alien &amp; human), grenades, Master Chief, marines, aliens, ammunition</td>
<td>Various items of value placed in bags</td>
</tr>
<tr>
<td><strong>Attributes</strong></td>
<td>Relationships and professions should be created and fostered to increase gain of Simeleons; buy products to increase lifestyle</td>
<td>Follow details of each mission</td>
<td>Follow directions of quests</td>
</tr>
<tr>
<td><strong>Internal Relationships</strong></td>
<td>All Sims can create negative or positive relationships with one another and move homes based on those relationships</td>
<td>Master Chief is clear leader with following marines, Cortona (AI) gives direct help and direction to Master Chief</td>
<td>Relationships among players is key to moving forward (raiding together) in the game</td>
</tr>
<tr>
<td><strong>Environment</strong></td>
<td>City and homes of the Sims</td>
<td>Halo – a ring-shaped planet run by the Covenant, outdoor areas similar to Earth</td>
<td>Azeroth – fantasy land inhabited by two fighting races (Alliance and Horde)</td>
</tr>
</tbody>
</table>

*Play*

The relationship between the player’s action and the system’s reaction offers a descriptive definition of play; to go more in depth, Salen and Zimmerman (2003) understand play by using an evaluative definition. An evaluative view of play defines the relationship
between player action and game outcome but goes further to describe both discernable and integrated aspects of play. Discernable play refers to the player’s perception of the immediate outcome, and integrated play refers to outcome as it is integrated into the system as a whole.

Meaningful play results when both discernable and integrated play are working within the larger context of the game.

Meaningful play in both descriptive and evaluative ways is detailed for each game (See Tables 7, 8, and 9). Sims FreePlay has discernable play resulting in gaining Experience Points (XP) or Simoleons (currency) with integrated play focused on increasing the ability to fulfill needs more quickly or to acquire products or increase game level (See Table 7).

Table 7

<table>
<thead>
<tr>
<th>Major Actions</th>
<th>Discernable</th>
<th>Integrated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working/School</td>
<td>Gain Simoleons</td>
<td>Increase ability to purchase items to fulfill needs</td>
</tr>
<tr>
<td>Planting/Baking</td>
<td>Gain Simoleons</td>
<td>Increase ability to purchase items to fulfill needs</td>
</tr>
<tr>
<td>Building Relationships</td>
<td>Gain XP</td>
<td>Increase level of game; move in together, marry, have children, combine assets</td>
</tr>
<tr>
<td>Gaining Work Skills/</td>
<td>Gain XP</td>
<td>Increase level of game; gain more Simoleons at work or school</td>
</tr>
<tr>
<td>Studying</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participating in Leisure</td>
<td>Gain XP</td>
<td>Increase level of game</td>
</tr>
<tr>
<td>Activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fulfilling Basic Needs</td>
<td>Gain XP</td>
<td>Increase level of game; gain more Simoleons based on level of fulfillment</td>
</tr>
</tbody>
</table>

In Halo 1, the discernable play is about accomplishing checkpoints in order to move forward to the ultimate mission of blowing up the planet of Halo, which is the integrated play (See Table 8).
Table 8

**Results of Discernable and Integrated Aspects of Play in Halo 1**

<table>
<thead>
<tr>
<th>Major Actions</th>
<th>Discernable</th>
<th>Integrated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kill Covenant Aliens</td>
<td>Move to next checkpoint and/or level</td>
<td>Works toward ultimate mission</td>
</tr>
<tr>
<td>Kill humans (marines) infected with virus</td>
<td>Move to next checkpoint and/or level</td>
<td>Works toward ultimate mission</td>
</tr>
<tr>
<td>Maintain ammunition</td>
<td>Kill more enemies</td>
<td>Allows player to keep guns of choice and feel prepared when going into different scenarios</td>
</tr>
<tr>
<td>Follow directions for specific missions</td>
<td>Complete mission and given next mission; at times this leads to immediate completion of a checkpoint or level</td>
<td>Building toward ultimate mission of blowing up Halo</td>
</tr>
<tr>
<td>Check RADAR</td>
<td>Locate enemies</td>
<td>Keeps Master Chief alive and quickens game play because enemies can be found quicker</td>
</tr>
</tbody>
</table>

The major actions in WoW provide discernable play that is about gaining items, currency, or honor. The integrated play leads to character development for more intense game play (See Table 9).

Table 9

**Results of Discernable and Integrated Aspects of Play in WoW**

<table>
<thead>
<tr>
<th>Major Actions</th>
<th>Discernable</th>
<th>Integrated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop Characters</td>
<td>By choosing race and class, realm of immediate play is determined</td>
<td>Race locks character into either Alliance or Horde so character can only communicate with own race; Class determines what the character can and cannot do because difference classes have different abilities</td>
</tr>
<tr>
<td>Find artifacts in the wild of Azeroth</td>
<td>Low quality items found here</td>
<td>Can help build toward a collection of resources to help with later game play</td>
</tr>
</tbody>
</table>

*(table continues)*
Table 9 (continued).

<table>
<thead>
<tr>
<th>Questing</th>
<th>Major Actions</th>
<th>Discernable</th>
<th>Integrated</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Normal Quest</td>
<td>Gain items</td>
<td>After more experience, character can complete alone and gain artifacts</td>
</tr>
<tr>
<td></td>
<td>Group Quest</td>
<td>Gain better items than in Normal Quest</td>
<td>Gains can help strengthen character for later game play</td>
</tr>
<tr>
<td></td>
<td>Dungeon Quest</td>
<td>Group is needed to complete</td>
<td>Gains can help strengthen character for later game play</td>
</tr>
<tr>
<td></td>
<td>Heroic Quest</td>
<td>Fighting powerful monsters</td>
<td>Gains can help strengthen character for later game play</td>
</tr>
<tr>
<td></td>
<td>Raid Quest</td>
<td>Most powerful items in the game are gained</td>
<td>Gains can help strengthen character for later game play</td>
</tr>
<tr>
<td></td>
<td>Daily Quest</td>
<td>Provide easy income and resources</td>
<td>Building reserves of income and resources can provide resources for further game play</td>
</tr>
<tr>
<td></td>
<td>Player vs Player (PVP) Quest</td>
<td>Can gain special reward items; Gain honor</td>
<td>Can provide exclusive access to new areas; Can gain specific weapons and armor</td>
</tr>
</tbody>
</table>

Design

Salen and Zimmerman (2003) describe design as the process of the participant’s interacting with the context to create meaning. Based on Charles Pierce’s work, I used semiotic concepts with this definition of design because signs are created and interpreted to result in meaning, while context influences the interpretation. Salen and Zimmerman also use Pierce’s work with semiotic concepts.

The most basic and fundamental signs in all the games are the various tools used to measure and show productivity or health or danger. As the player initially works through the game, the meaning of these charts becomes clear. All the games provide directions at the
beginning level, but these are not lengthy. Meaning of the signs used in these charts is better understood after playing a short time.

In order to make sure players are interpreting signs correctly, hints or explanations are provided in all the games but to varying degrees. In the beginning stages of Sims FreePlay and Halo 1, the explanatory text appears frequently. As the player progresses, this text lessens or disappears in Halo 1, but the text continues to appear in Sims FreePlay. Even though a player can actively make her own meaning, the meaning for the signs used within the games is typically well established through this process of text explanation. In the first level of Halo 1, the player must walk through a series of exams to test the abilities of Master Chief before he enters battle. These exams give the player insight into meaning of different signs as well as practice for navigating the basics of the game. Some signs are not explained in Halo 1, but they are easily understood. For instance, a white box with a red cross on it could be hanging on the wall or strategically placed on the ground. When the player runs over this box, the health bar is recharged. This medical sign of a red cross is familiar to players and does not need initial explanation. On the RADAR provided in Halo 1, red dots appear signaling aliens; again, this meaning is obvious to the player. Some signs are not as obvious but easily learned. The Overshield is a green box with the image of a brain in the middle, and when a player picks this up, it gives an additional shield to protect life but does not recharge health. Also, when a player comes across a dead marine, this is a positive sign because this means the player can acquire additional ammunition and/or guns. Those two examples are signs that are not overtly understood, but meaning is created fairly quickly once the player begins playing. Since WoW contains many layers of signs and detail used throughout the game, a tutorial is provided for beginning players through the Blizzard Entertainment website that explains some signs so that
players can begin to create meaning. Without the tutorial, a player must just learn just by working through the game. For example, an exclamation mark will appear over a non-player character’s head, and by clicking on that symbol, the player will be given a quest. A question mark sign will also provide, when clicked on, specific goals for completing quests. The meaning of this sign is quickly learned.

The structure is essentially the rules established within the game that explain how different signs can be connected or not. Much of the structure is transferred to the player through the tips and/or explanations that flash on the screen frequently when playing (especially when a novice player). When a player sees a sign, meaning results from player interpretation of the sign. In all the videos of the participants’ game play, the participants were playing with enough skill to demonstrate that meaning had resulted from their interpretations; otherwise, they would not have been able to progress through the levels of the games, which requires understanding the signs. In my own play, meaning resulted quickly in Sims FreePlay and Halo 1 (within level 1) due to the text boxes that provided clues and suggestions. Meaning resulted within level 1 of WoW as well, but this was due to participating in the tutorial before playing.

Context does shape meaning, and such context is supported in part by the surrounding structure. There is a relationship between structure and context that affects meaning. Therefore, the meaning does not lie entirely with the sign itself but depends heavily on the context, which is why design impacts meaningful play. Without the design, a relationship of play cannot be created between the player’s action and the system. The player would not have enough of an understanding of the meaning to construct valid actions. For example, a player would not understand why the graph that reflects health level is increasing or decreasing unless the player had a scenario within the game to attach to the increase and decrease.
The context of each of the three games is similar in that each is within a fantasy world that has strong ties to reality. All three games have built within them a context of valuables, relationships, and achievement or accomplishment. The signs constructed within the design of the games are connected to these three commonalities (see Table 10). Even though a layer of each game is clearly fantasy, the aspects of valuables, relationships, and achievement are directly related to what a player will experience in real life outside the game.

Table 10

Results of Context in Selected Video Games

<table>
<thead>
<tr>
<th></th>
<th>Valuables</th>
<th>Relationships</th>
<th>Achievement/Accomplishment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sims FreePlay</td>
<td>Simoleons and products</td>
<td>Help Sims</td>
<td>No ultimate accomplishment; small achievements of progressing in relationships, work, or school</td>
</tr>
<tr>
<td>Halo 1</td>
<td>Guns, vehicles, ammunition, grenades</td>
<td>Constant relationship with Cortana who helps provide information and direction for missions</td>
<td>Small accomplishments of checkpoints within each mission and mission accomplishment lead to ultimate goal</td>
</tr>
<tr>
<td>WoW</td>
<td>Inventory (bags filled with artifacts that can be used in battle)</td>
<td>It will take longer for a player to read endgame content if playing alone. Also, some powerful items will not be available to players who play alone. Different types of relationships can be formed: 1) Chat is available with other players; 2) Groups of players must band together (5 people) to complete specific quests; 3) Guilds are groups of players who share achievements and a bank – guild members have their own chat channel and work together in quests</td>
<td>Raids are designed to test skills. Players with greater skill can accomplish more difficult raids and acquire more powerful items.</td>
</tr>
</tbody>
</table>
Collective Case Study

The data from the interviews were grouped into three cases according to each game and then viewed through the reader response lens in order to see if the gamers were engaging in a gaming experience that is consistent with the reader response approach. The three cases consist of players in the following gaming groups: Halo 1, WoW, and Sims FreePlay. In the analyses of interview data, as coded discourse was added to each theme, the parameters of each theme were continually analyzed. The list of themes were identified and then reduced to those with the most data supplied from the transcripts of the interviews as seen in Table 11. The results were reported according on the emergent themes as they were found within each gaming group. Each case is grouped according to chosen video game, and a brief overview of each of the individual participants within each of the three case studies is provided in Chapter 3 (see Tables 3, 4, and 5). After the themes were identified, the events listed in each category were reviewed to evaluate any possible connections to the key components of transactional theory. The themes were then divided into a list of two major concentrations of themes (stance and the transaction) relating to Rosenblatt’s transactional theory in order to answer the following research subquestion:

RQ2. What aspects of reader response theory are displayed through video game play in the gaming experience?

A. What similarities are found between the gaming experience as described by gamers and the key components of stance and transaction found in Louise Rosenblatt’s transactional theory?

Descriptive codes were used for each line of the interview transcripts. The transcripts were then coded for connections to stance or the transaction and grouped accordingly. All the themes found after coding the transcripts related to Rosenblatt’s reader response theory. To be able to exhaust all possible themes that connected to either stance or the transaction, each text was read three times to code specific references related to each theme. In another layer of coding, the
transcript texts were also labeled with emotion codes (Goleman, 1995). By connecting the emotion and the action, the emotional coding enhances understanding of both the stance and the transaction. The stance is important because it leads to the transaction.

Table 11

*Themes Related to Rosenblatt’s Transactional Theory*

<table>
<thead>
<tr>
<th>Themes Found in Transcript Texts</th>
<th>Transactional Theory Key Tenets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Connection to Video Game</td>
<td></td>
</tr>
<tr>
<td>• Choice of Genre</td>
<td>Efferent-Aesthetic Stance</td>
</tr>
<tr>
<td>• Relationship with the Game</td>
<td></td>
</tr>
<tr>
<td>• Game Completion</td>
<td></td>
</tr>
<tr>
<td>• Distance from Reality</td>
<td></td>
</tr>
<tr>
<td>Gaming Experience</td>
<td></td>
</tr>
<tr>
<td>• Lived-Through Experience</td>
<td>Transaction</td>
</tr>
<tr>
<td>o Describing the Experience</td>
<td></td>
</tr>
<tr>
<td>o Watching as Experience</td>
<td></td>
</tr>
<tr>
<td>o Cheating the Experience</td>
<td></td>
</tr>
<tr>
<td>• Emotional Response to Game</td>
<td></td>
</tr>
<tr>
<td>o Memories</td>
<td></td>
</tr>
<tr>
<td>o Sympathy with Characters</td>
<td></td>
</tr>
<tr>
<td>o Feelings while Playing</td>
<td></td>
</tr>
</tbody>
</table>

*Interview Data*

The interview transcripts were coded with descriptive codes and read three times to code responses that connected to either stance or the transaction. Once the transcripts were coded according to these parameters, themes emerged related to either stance or transaction.

*Personal Connection to Video Game*

Choice of Genre

The Halo 1 participants believe that playing in first person gives them a better experience of actually living through the character than playing in third person where the player can see the
character from an outside view. Iris talked about how she feels more connected to the game when she can see the game through the eyes of the character. Sherry explained that playing in first person is easier for her to understand than third person play because she can “understand the spatial relation that way and how to direct the character.” She must be completely immersed in becoming the character to efficiently operate the game in order to have a good gaming experience. But Alex suggested that being in first person goes beyond operating the game: “…it’s more of an actual experience than it is just playing a game…I think that alters your perspective so that you’re experiencing something rather than just playing the game.”

In contrast to these lived-through experiences favored by Halo 1 players, the Sims Freeplay players admitted that simulation is not their favored game genre and report a much different experience while playing. Only one of the Sims FreePlay participants reported simulation as her favorite type of game; they preferred other genres, such as puzzle and logic games. They were not as concerned with living through the experience as with just accomplishing the tasks set before them in the game and described their experience as an “escape from reality.” Laura described playing Sims Freeplay as a “way to waste time like if I’m waiting for something and got some extra time.” Another commonality among all the Sims Freeplay players was that they liked this game because they can play it for a short period of time throughout the day instead of having a long gaming session, and Danielle, the only participant who identified simulation games as her favorite genre to play, specifically pointed out that being able to “play the game in bits and pieces throughout the day” is her main motivation for liking the game. The decision to play the game is not about a strong connection to the game. All of these participants reported playing simply to fight boredom or to have “a little entertainment.” When discussing the events of the game, the Sims Freeplay participants provided only literal
meanings of what happens within the game. On Cox and Many’s (1992) levels of personal understanding (LPU) chart, their responses were contained at the first level, which is in the world of the text.

WoW participants enthusiastically described RPGs as their favorite genre of game to play. One commonality found among the players when they detailed why RPG is their favorite genre was the challenging and interactive nature of RPGs. Nick plays WoW exclusively now, and he thinks the challenge the game provides is why he does not need to play other games: “You always have to play well when playing with other people because what one person does affects you, and what you do affects them and you have to adapt to their skills. That’s actually a challenging part of the game.” Another aspect to the challenge is the element of strategy because, as Mark pointed out, “there is more strategy behind the role-playing game than just the simple point and click or driving around a racetrack or whatever.” Mark further explains that RPGs are challenging because of the thinking process behind working through aspects of the game, and he prefers that in a video game genre. Another part of the challenge is the creative options provided in the game. Nick describes WoW as “an entire world so you can keep creating constantly.” The idea of creation is important to all the WoW players in the study. All the WoW participants mentioned the design and creation of characters as a reason they enjoy this game and genre; for example, Billy explained, “you have to create a backstory for your character that really keeps you interested in the character.”

Relationship with the Game

All but one Halo 1 participant had read the books associated with the lore related to the game, and the one participant who has not read the books is familiar with them and has discussed
their content with other players. Three of the Halo 1 participants described reading online information related to Halo on a weekly basis, while the other two participants read related information on a monthly basis. In similar fashion, WoW participants had a strong connection to the game that extended beyond simply playing the game. All five WoW participants spend time each week doing outside research about the game and/or reading lore associated with the game; four of the five participants even designate a specific time each week devoted to outside reading. Lisa described this connection by saying, “so even though I’m not reading the storyline or lore all the time there’s so many other things to be reading because I feel like I’m always looking things up just to stay really into the game.” Jordan is a guild master and expects everyone in his guild to research the raid before going into raid, and if the members do not do their research prior to the raid, they must leave the guild. Nick has the same rule in his guild. In stark contrast, Sims Freeplay participants do not report spending any time outside of playing the game for research or reading. One participant, Danielle, does receive a monthly e-newsletter but only spends a few minutes skimming the information. Danielle also visits a Sims website to discover new additions to the game, but she only briefly visits the site once every few months.

Game Completion

Alex explained that he is compelled to play a game until completion only if “the storyline is engaging” within the game; if not, he can just enjoy the action of the game and turn it off at any time. Brett agreed by explaining that he prefers playing games that have a “strong and interesting storyline making me [him] have to finish and beat the last boss.” Having to finish the game or reach an ending point was a common theme among the Halo 1 participants; Sherry described this push forward as “You know the game is pushing you toward something and
you’re just in the story and you have to keep going.” All of the Halo 1 players described Halo 1 as a game that engages them to the point that they must keep moving forward in the game to reach an end point.

WoW is not a game designed with an ending per se; players can reach a certain level to open up new content but not an ending. Mark explained that when he plays other types of games, he might feel compelled to get to the end, but with WoW, he just wants to move forward and discover new content. The other WoW participants focused on the same point when discussing the importance of reaching the end of the game. Nick and Jordan discussed progressing through the game (or leveling) as much more important than finishing. Jordan explained, “the beginning is the learning and then 85 comes and you really start playing. It’s another beginning.” In fact, he went on to say, “the game doesn’t start until max level.” Some of the WoW players saw reaching max level as a type of completion of the game as Billy described: “I play my character to ultimately get to the end which is being at the max level and doing max level things.” Even though the players may have seen the max level as an ending of sorts, they wanted to reach that level in order to move forward into more challenging content. And some players discussed how there is no real ending to WoW because of expansions and updates; Lisa described her desire for more content: “There’s always going to be something else…more. There’s always going to be an update. The expansion is coming out next month and there’s going to be so much more to do, so it’s like you kinda don’t want it to end in a way.” Even though they do not want an ending, they want to move forward and reach levels of accomplishment.

In contrast, the Sims Freeplay participants did not see importance in finishing the game; as Rhonda pointed out, “…there’s no reason to end because it’s just the same stuff all the
time…you’re just doing the same thing.” The other Sims Freeplay participants agreed that an ending is not necessary. Danielle explained that she normally does like to reach completion in other games, but in Sims Freeplay, “it’s just something I can always do when I need to be entertained or something.”

Distance from Reality

All of the participants specifically listed a break from reality as one of their favored aspects of their chosen games. Even though the Sims Freeplay participants were performing mundane and reality-based tasks (feeding characters, going to work, going to the bathroom, etc…), they all specifically stated that the game gives them a break from reality. Halo 1 participants talked at some length in their interviews about Master Chief and the Covenant in a very realistic manner even though the characters are futuristic and imaginary. WoW players acted in a similar manner when talking through the different characters, spells they can cast, and fantasy gear they can collect.

Gaming Experience

Lived-Through Experience

Three themes emerged from the data that were about participating in the gaming experience: describing, watching, and cheating the experience. Since all three were about the active involvement of living through the gaming experience, I decided to group them together.

Describing the Experience

The participants each discussed their own description of their gaming experience. All but
one Sims Freeplay participant mentioned briefly that the game does have a connection to the real life and described how the game requires money made at a job or tasks to buy items and create an easier life for their characters, which is much like real life. The WoW and Halo 1 players discussed such a relationship between the game and a greater meaning in much more depth. Mark discussed how he uses walk-through websites to help him when he has encountered a challenge in WoW that he cannot readily figure out. He likened facing challenges in the game to challenges in life: “Like I mean just like in everyday life if you have a problem you can’t solve there’s nothing wrong with asking for help.” Both Nick and Billy listed nerfing as the only aspect of WoW that they dislike. Nerfing is the action taken by video game creators to lessen the power or desirability of an element in the game. Nick and Billy reported that when nerfing is used in WoW it is due to less skilled gamers needing help to advance in the game. Nick explained that such an artificial adjustment to the game “just isn’t how real life goes” because in real life “working hard and being better at something is [are] good and people don’t get a break at their jobs and stuff just because they don’t know how to do something very good.” Billy echoed this idea Nick describes when he explained that nerfing takes away from the experience for him because it shows players that if they are not as accomplished at game play then the designers will step in and help them; this type of help “isn’t given to you in life and just isn’t right.”

**Watching as Experience**

All of the Halo 1 players discussed how they have watched other players play the game for at least one hour, possibly longer, and while their experience of watching does not fully equal the experience of playing, they reported having a gaming experience in that circumstance.
Several Halo 1 players remarked that they knew players who were not as skilled whom they believed could have a better gaming experience by watching a more skillful player.

WoW players echoed the responses from the Halo 1 players. All of the WoW participants discussed watching another gamer play as fulfilling even though they each added that actually playing the game supplies them their preferred gaming experience. Alex explained this best when describing a recent experience he had watching two teams play *Defense of the Agents 2*: “…and watching how they were playing the game and admire their skill I would consider that a gaming experience.” Nick, a WoW player, explained watching the game as a gaming experience: “When I’m watching a game I mean I’m having an experience because when I watch my brother play I like watching it because I like watching everything he’s doing and seeing the skills he’s utilizing and seeing all the cool stuff going on. I think it’s definitely a cool experience.” Likewise, Jordan discussed watching walk-through videos online and felt he definitely had a gaming experience watching those videos. Danielle, a Sims Freeplay player, explained why watching is a positive experience for her because “I [she] have [has] really bad hand and eye coordination so I [she] can’t always work the controllers but I [she] can watch him play and figure things out and I [she] like[s] that.” Even though Danielle (and other Sims Freeplay players) agreed that watching game play gave them a gaming experience, they did not prefer to watch Sims Freeplay; instead, they discussed watching other video games when having a vicarious gaming experience. Several participants discussed watching their siblings play a game which lead to their wanting to actually play the game because they had a gaming experience while watching the game play. Lisa believed that watching a game could provide a gaming experience depending on the knowledge base of the person watching. For example, she thought a person who was not a gamer would not have a gaming experience by simply watching;
whereas, to an avid gamer watching could because the gamer would have knowledge of what was happening during the game play. Mia, a Sims Freeplay player, talks about how she has a gaming experience when watching (although she excluded watching Sims Freeplay) because she feels a real involvement in the game: “It doesn’t matter if you’re sitting there watching it or playing it you’re still wanting to turn left or turn right or shoot this gun or that gun and you’re having the experience.”

_Cheating the Experience_

The Halo 1 players participating in the study were all in agreement that cheating should not be tolerated when it impacts another’s game play. Sherry even went so far as to describe those who do not cheat as being “legitimate players.” She also questions how a cheating gamer can even enjoy the game: “But in a game like Halo, I don’t see how gamers with cheats would really have a good experience because it is about the skill of the player instead of just running through the action.” This same idea of lack of skill was echoed in the responses of other Halo 1 participants’ responses. Brett described the connection between lack of skill and cheating by explaining “you’re really cheating yourself more than cheating another player because you’re cheating yourself out of the experience.” He went on to explain that gamers who cheat are actually having a “watered down” experience and Iris agreed saying that cheating is pointless because “it’s not really playing the game.” Anna admitted she reports players when she discovers them cheating because “cheating takes from the skills.” Alex began a website for a community that focuses on reporting cheaters and shutting them out of game play. Alex believes that cheaters are having a gaming experience “but it’s an altered synthetic gaming experience.” He described cheating players as those who could not have success any other way in the game.
WoW participants’ responses were in alignment with the responses from the Halo 1 participants. All of the WoW participants were against cheating and felt it robbed the player of an authentic gaming experience. More specifically, all of the WoW participants expressed confusion about why a player would even choose to cheat. Nick and Mark discussed how cheating does not allow the player to experience the challenges. He felt that a lack of challenges would greatly diminish the true gaming experience. Billy explained that if a player cheats in WoW, he stopped playing with that person and reported the cheater, but he also admitted that if the cheating did not affect his own game play, then he might be willing to ignore it. Jordan admitted he has known people who have cheated in WoW and been kicked out of the game, but he does not understand the allure of cheating since he believes the cheater will be caught and not be able to play. The possibility of not being able to play is too high a price for him to cheat. Lisa also expressed dismay over why players would want to cheat: “It seems like a waste of time because you’re not really experiencing the game.”

In contrast, the Sims Freeplay participants did not take issue against cheating in the game. In fact several participants admitted to cheating. Danielle said she encourages other players to cheat because she thinks that players need more money to buy more things in the game. Laura and Rhonda were the only Sims Freeplay participants to classify cheating as wrong because it takes from the experience, but they did not have a problem with other people’s cheating as long as the cheating did not affect their own game play. Cindy expressed a similar stance by saying “if you’re playing by yourself, I see no problem with it.” She admitted to using cheat codes frequently in the game to move ahead. Mia believed players who cheated for their own gain and did not affect others should be allowed to cheat. She did not approve of using cheat codes to hurt another player, “but if you’re using it for your own personal game then that’s fine.”
Emotional Response to Game

Three themes emerged that all focused on emotional responses to the game being played. I connected these themes together because they each had data that discussed emotion when gaming.

Memories

The WoW participants had many similarities in their emotional responses to the game. The emotion codes present throughout all of their responses were “joy” and “happiness.” Lisa discussed that she recalls memories from childhood when she plays WoW; the different areas that she explores within the game make her think of the fairy tales she read and enjoyed as a young child. All of the WoW participants except Lisa talked about memories of playing with friends that come to them when they are playing. They remembered playing with their first group of friends that played WoW, and these were special memories to each of them. Mark talked about how he thinks of a former roommate and good friend who has recently moved away when he plays. He and this friend played for hours together, and their connection through WoW helped them survive a bad roommate situation with a former friend. He explained that playing WoW now is bittersweet at times because he recalls their good times and misses his friend. The other participants talked about how they always think of the fun times they had in the past playing with their first group of WoW friends.

Halo 1 participants also recalled memories of playing with friends. Their responses demonstrated positive emotional codes of “fun” and “joy” when describing their memories when playing. Sherry explained that she automatically thinks of her first years of college when she plays Halo 1 because she had a close-knit group of friends that always played the game together.
Iris was a part of that group of friends, and she also described how she always thinks about that time period of playing Halo 1 with friends is a memory she always thinks about when playing. Brett reported always thinking about a high school computer class where he and group of friends would play Halo 1 together. Three of the Halo 1 participants (Brett, Anne, and Iris) discussed how playing Halo 1 made them think of playing with a sibling. Alex explained that he started playing Halo 1 to have a common interest with his sister, Iris, who was already an avid player: “I almost always think of good times bonding with my sister when playing it.”

Danielle was the only Sims FreePlay participant to discuss having memories of playing with her brother and father when she was a child: “Anytime I play a game in general, but especially when I play Sims, I remember my dad because he got me and my brother into playing forever and a day ago, and he’s not here anymore.” The other Sims FreePlay participants reported having positive memories of playing various games as children, but they did not recall specific situations. The emotion code of “happiness” was present only in Danielle’s responses. The other Sims Freeplay participants described their game play as an escape and did not use emotional descriptions.

*Sympathy with Characters*

Jordan described connection with characters due to the time he spent developing them by saying, “You work so hard for everything that you don’t want to lose it.” Mark explained that he does not see his characters as unique but as different extensions of himself – different roles for him to play. Jordan said, “I feel like I become them, and that’s my identity online.” All of the WoW participants discussed this same connection with their characters.
Halo 1 players all felt sympathy with the main character of Master Chief. Anna explained that “everyone sympathizes with him” since he is the main character of the game, and it is shoes of Master Chief that the player fills when playing. Iris says, “You play as the Master Chief and so, therefore, I mean that’s who you become one with.” Iris and Sherry commented that they also felt some sympathy for the grunts because they seemed to be expendable characters in the battle. But their sympathy only went so far because both reported they would not hesitate to kill the grunts. Even though Halo 1 is a very action-packed game, Brett explained that there is something more than just action that holds his attention: “When the story mode is really good, then it’s like reading a good book and you get emotionally attached to the characters.”

All of the Sims FreePlay participants reported having a self-based character, and that character garnered the most sympathy from them. Most commented that they spent the most time, resources, and attention on this particular character. Overall, they did not discuss strong sympathy or connections to their characters. Rhonda even commented, “I base my people off their jobs, so I don’t have a lot of personal connections to them.” When discussing a possible connection to characters in the game, the Sims FreePlay participants simply detailed the storylines associated with their characters instead of discussing any emotional connections.

**Feelings while Playing**

All of the WoW players reported feeling frustrated while playing due to the difficult challenges they faced while playing, but they all described this frustration as a positive feeling. Several expressed fear of making mistakes while playing and looking foolish in front of other players. In spite of this fear, they all pointed out the extreme happiness they felt once they had
achieved their accomplishments within the game. Halo 1 participants reported these same feelings with the addition of a strong feeling of achievement in their gaming. Additionally, all of the WoW players described having a feeling of camaraderie while playing because they had to connect to other players and work with them; these other players became their good friends over time, and when they played, they talked about how the bond of friendship is present. Halo 1 players did not report feelings of camaraderie, but their chosen game does not have the same element of teamwork present in it as WoW. Unlike both WoW and Halo 1 players, the Sims FreePlay participants said the only feelings they had while playing were based on escape and fantasy, and Laura remarked, “I’m doing it for fun, and I don’t feel emotionally invested in the game.” The emotion codes present in all responses were “happiness,” and “frustration.” “Fear” and “accomplishment” were also present in the Halo 1 and WoW responses. “Camaraderie” was the only emotion code used only in the WoW responses.

CEGEQ Data

Additionally, value coding was used with the CEGEQ responses, and the results are reported here as an additional layer to the descriptive coding results in order to point out discrepancies or offer validation. The analysis of the responses as categorized through the value codes demonstrates the participants’ values regarding their gaming experience. Each question on the CEGEQ was labeled with a value code of value, attitude, or belief based on the definition derived from Saldana (2009). The complete listing of labels for the CEGEQ is provided (See Table 12). Definitions for each code are as follows:

- **Value:** attributed importance toward oneself, another person, thing, or idea;
- **Attitude:** way we think and feel about oneself, another person, thing, or idea;
Belief: part of a system that includes values and attitudes plus personal knowledge, experiences, opinions, prejudices, and morals (Saldana, 2009).

Table 12

CEGEQ Data

<table>
<thead>
<tr>
<th>Question</th>
<th>Value Code</th>
<th>Sims FreePlay</th>
<th>Halo</th>
<th>WoW</th>
</tr>
</thead>
<tbody>
<tr>
<td>I enjoy playing the game</td>
<td>Attitude</td>
<td>33</td>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td>I am frustrated at the end of the game</td>
<td>Attitude</td>
<td>8</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>I am frustrated while playing the game</td>
<td>Attitude</td>
<td>6</td>
<td>12</td>
<td>20</td>
</tr>
<tr>
<td>I like the game</td>
<td>Value</td>
<td>35</td>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td>I choose to play this game repeatedly</td>
<td>Value</td>
<td>35</td>
<td>34</td>
<td>33</td>
</tr>
<tr>
<td>I am in control of the game</td>
<td>Belief</td>
<td>35</td>
<td>27</td>
<td>31</td>
</tr>
<tr>
<td>The controllers responded as I expected</td>
<td>Belief</td>
<td>32</td>
<td>30</td>
<td>34</td>
</tr>
<tr>
<td>I remember the actions the controllers performed</td>
<td>Belief</td>
<td>32</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>I am able to see in the screen everything I need during game play</td>
<td>Belief</td>
<td>30</td>
<td>24</td>
<td>31</td>
</tr>
<tr>
<td>The point of view of the game that I have spoils my gaming</td>
<td>Attitude</td>
<td>9</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>I know what I am supposed to do to win the game</td>
<td>Belief</td>
<td>32</td>
<td>33</td>
<td>34</td>
</tr>
<tr>
<td>There is a time when I do nothing during the game</td>
<td>Attitude</td>
<td>23</td>
<td>9</td>
<td>29</td>
</tr>
<tr>
<td>I like the way the game looks</td>
<td>Belief</td>
<td>31</td>
<td>35</td>
<td>31</td>
</tr>
<tr>
<td>The graphics of the game are plain</td>
<td>Belief</td>
<td>12</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>I like to spend a lot of time playing this game</td>
<td>Value</td>
<td>32</td>
<td>29</td>
<td>32</td>
</tr>
<tr>
<td>I get bored playing this game</td>
<td>Belief</td>
<td>13</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>I usually do not choose this type of game</td>
<td>Belief</td>
<td>18</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>I do not have a strategy to win the game</td>
<td>Belief</td>
<td>31</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>The game constantly motivates me to keep playing</td>
<td>Belief</td>
<td>28</td>
<td>30</td>
<td>33</td>
</tr>
<tr>
<td>I feel what happens in the game is my own doing</td>
<td>Attitude</td>
<td>33</td>
<td>28</td>
<td>32</td>
</tr>
<tr>
<td>I challenge myself even if the game does not require it</td>
<td>Belief</td>
<td>29</td>
<td>32</td>
<td>34</td>
</tr>
<tr>
<td>I play with my own rules</td>
<td>Belief</td>
<td>33</td>
<td>12</td>
<td>20</td>
</tr>
<tr>
<td>I feel guilty for the actions in the game</td>
<td>Belief</td>
<td>8</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>I do not like the music of the game</td>
<td>Attitude</td>
<td>15</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>The graphics are appropriate for the type of game</td>
<td>Belief</td>
<td>34</td>
<td>35</td>
<td>33</td>
</tr>
<tr>
<td>The game is unfair</td>
<td>Attitude</td>
<td>6</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>The game is difficult</td>
<td>Attitude</td>
<td>5</td>
<td>30</td>
<td>28</td>
</tr>
<tr>
<td>The game is challenging</td>
<td>Attitude</td>
<td>11</td>
<td>31</td>
<td>32</td>
</tr>
<tr>
<td>The scenario of the game is interesting</td>
<td>Belief</td>
<td>32</td>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td>I do not like the scenario of the game</td>
<td>Attitude</td>
<td>8</td>
<td>5</td>
<td>7</td>
</tr>
</tbody>
</table>

*(table continues)*
Table 12 (continued).

<table>
<thead>
<tr>
<th>Question</th>
<th>Value Code</th>
<th>Sims FreePlay</th>
<th>Halo</th>
<th>WoW</th>
</tr>
</thead>
<tbody>
<tr>
<td>I know all the actions that could be performed in the game</td>
<td>Belief</td>
<td>29</td>
<td>27</td>
<td>28</td>
</tr>
<tr>
<td>I know how to manipulate the game to move forward</td>
<td>Belief</td>
<td>26</td>
<td>22</td>
<td>27</td>
</tr>
<tr>
<td>I understand the rules of the game</td>
<td>Attitude</td>
<td>35</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>The sound of the game affects the way I play</td>
<td>Belief</td>
<td>8</td>
<td>29</td>
<td>32</td>
</tr>
<tr>
<td>The sound affects of the game are appropriate</td>
<td>Attitude</td>
<td>28</td>
<td>31</td>
<td>34</td>
</tr>
<tr>
<td>The graphics of the game are related to the scenario</td>
<td>Belief</td>
<td>33</td>
<td>35</td>
<td>33</td>
</tr>
<tr>
<td>The graphics and sound effects of the game were related</td>
<td>Belief</td>
<td>34</td>
<td>35</td>
<td>33</td>
</tr>
</tbody>
</table>

The CEGEQ data shows that Halo 1 and WoW participants have a positive gaming experience and enjoy the game and its challenges. Sims FreePlay players report enjoying the game but do not feel challenged or have a high frustration level when playing. All players report enjoying their game and spend a lot of time playing, but Sims FreePlay players report they would often choose another game to play. The data will be detailed more in Chapter 5 when discussing the connections between the CEGEQ data and the interview data. These results connect to the research subquestion about Rosenblatt’s key tenents of reader response theory because it provides insight into the basic experience of the video game. Calvillo-Gamez, Cairns, and Cox (2010) want to see what is “present in the process of the interaction” (p. 51). When the foundational elements are present, then the gaming experience will not be negative. Sims FreePlay participants experienced boredom, yet they report enjoying the game play; all participants felt in control of their gaming; and only Halo 1 and WoW participants experienced frustration while playing. Even though the players felt some frustration, the Halo 1 and WoW participants overwhelmingly enjoyed the game play and classified it as their favorite type or genre of video game. Rosenblatt (2005b) discusses how the reader must be able to relate to the
text before the individual can have an experience with the text. The CEGEQ data shows that the players are relating to the video game and having a positive experience. Such experience must exist, according to Rosenblatt, for the piece to be considered literary.

Summary

Throughout this chapter, the results were provided for both the content study and case study. A summary was provided of the data relating to the research subquestions by detailing the individual components of gaming literacy theory and each of the themes found in the collective case study results. Further conclusions and implications for the study are included in the next chapter.
CHAPTER 5

IMPLICATIONS

This final chapter discusses conclusions of the results presented in the previous chapter and how they answer the major research questions. Limitations of the study are considered and its implications for further research are detailed using the limitations of the study as a starting point for recommendations for further research. Stepping away from discussion of the research by subquestions, particular attention is given in this chapter to the broader landscape of how this study connects to the established field of literature on new literacies and the significance of this research for both theorists and educators.

Conclusions

Content Study

Relating literary value to video games proves somewhat different from applying such value to written works, but Rosenblatt points out that “absorption in the quality and structure of the experience engendered by the text can happen whether the reader is enthralled by the adventures of the Hardy Boys or by the anguish of King Lear…in either case…the text has given rise to a literary work of art” (Rosenblatt, 1978, p. 27). The researcher’s game play and participants’ videos of game play were used to answer the following research question:

RQ1. How is gaming literacy theory demonstrated in a current mainstream video game?

A. How are the three principles of gaming literacy theory (play, design, and systems) found to be present in current mainstream video games that fall into one of three genre categories?

Notes taken about both video recordings of participants’ game play and my own game play showed how play, design, and systems are present in the chosen video games. In chapter 4, I described the presence of the four main elements that all systems share:

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1) Objects: parts, elements, variables within the system

2) Attributes: system properties

3) Internal relationships: relationships among objects

4) Environment: surroundings that affect the objects (Salen and Zimmerman, 2003)

The four elements of systems are present in the three video games (Sims FreePlay, WoW, and Halo 1), but Sims FreePlay does not have as detailed and elaborate elements in each of the four elements. Sims FreePlay has a very simplistic approach to accomplishing the four elements because there is little to no variance presented and the internal relationships are basic and not integral to game play. The system created in WoW has the most detailed elements. The environment is an elaborate fantasyland with many areas to explore, and tools used within the game are extensive. Additionally, the attributes of the game seen through the quests are detailed in nature, and players commented in their interviews how they research aspects of the quests to be successful. The internal relationships in WoW are not there to provide help or extra points, as is the case with Halo 1 and Sims FreePlay, but they are completely necessary for the player to advance or even participate in the game. All three games do have elements of the system, but WoW is clearly the most advanced in this area.

Looking at the major actions of each game showed that all three demonstrated meaningful play in both descriptive and evaluative ways. Descriptive play is simply the connection between the player’s action and the system’s reaction; evaluative play contains this same connection but goes further to describe both discernable (immediate outcome) and integrated (far-reaching outcome) aspects of play. Even though Sims FreePlay does have both descriptive and evaluative play, Halo 1 and WoW offer much more extensive examples of play in those areas. Sims FreePlay is concerned with increasing the level for the player, while the
other two games provide detailed missions for players to accomplish that work toward a greater goal for the player. The greater goal of Sims FreePlay is simply to gain more, whether that is currency or products; stockpiling goods or currency is discernible but not integrated play. Halo 1 and WoW have both discernable and integrated play embedded in their frameworks of meaningful game demonstrated meaningful play while Sims FreePlay has descriptive play but no real substance to enable evaluative play because integrated aspects of play are just not substantial in the game.

Design is evident in each of the three video games because the player is working within the context of the game to create meaning. Each of the three video games has a very established structure. The meaning of signs is created fairly quickly once the player begins playing. An important point to note in the game design of the three selected games is that the explanatory text for understanding signs lessens or disappears in Halo 1 and is only evident in WoW during the initial tutorial, but the text continues to appear in Sims FreePlay. This demonstrates that the context of Halo 1 and WoW is one where players are expected to learn and understand signs quickly and then continually apply this knowledge. The design of Sims FreePlay does not have the same expectation of players because sign explanation is provided even in very advanced levels of the game. Meaning is also generated through the overall context of the game in relation to the signs. Without context, the players would not understand the meanings of the signs as quickly. All three games have a common context of valuables, relationships, and achievement or accomplishment, which is easily understood because players find these constructs in real life. Reality-based understandings help the player to quickly construct valid meaning within the game. Even though all three games do have aspects of this common real context, Halo 1 and
WoW have much more advanced detail while Sims FreePlay offers a more basic representation of each of these areas of context.

The study only used the components of gaming literacy theory as a way to examine literary value of the games. The theory is limited in that all video games will contain each of the components; games are designed in such a way to always contain these aspects. As a result, literary value cannot be truly assessed with this theory unless the theory is developed further to include other components or discuss how the depth of the components can relate to literary value.

Understanding the research subquestion of how gaming literacy components are present in the games suggests that a broader conclusion can be drawn to answer the main research question: RQ1. How is gaming literacy theory demonstrated in a current mainstream video game?

The video games used in this study each contain a narrative and characters, which is similar to print text, but there is a structure at work within each game that is very different from traditional literacy. This difference is based in the use of images and interactive play, so a new lens must be used to understand and define literacy in the world of video games. By using gaming literacy theory and seeking examples of the three components of the theory, I attempted to understand the literacy value of the video games. Using the gaming literacy theory was helpful in defining aspects of gaming that just are not present in traditional literature, but the theory is not fully able to measure literacy value because the three components of play, systems, and design are present in all video games. There is a need to recognize the extent to which each is present, as discussed for the chosen games in chapter 4 to determine literacy value. By using gaming literacy theory as an indicator of literacy value, we find that parts of all the components
are essential in video games, so the theory must be further developed to discuss the implications of video games’ containing greater or lesser degrees of the components. Sims FreePlay does not have the same depth of any of the gaming literacy components compared to Halo 1 and WoW, but the current development of gaming theory does not provide for evaluation at the depth necessary to provide educators with the ability to judge literary value in a video game.

*Collective Case Study*

Interview and CEGEQ data were used to develop themes relating to Rosenblatt’s transactional theory in order to answer the following research subquestion:

RQ2. What aspects of reader response theory are displayed through video game play in the gaming experience?

A. What similarities are found between the gaming experience as described by gamers and the key components of stance and transaction found in Louise Rosenblatt’s transactional theory?

Aesthetic and Efferent Stance in the Gaming Experience

Rosenblatt explains that to look only at the elements within the text to understand the difference between aesthetic and efferent will miss the mark because we must incorporate the reader’s relationship to the text to avoid “partial or arbitrary answers” (1978, p. 23). Different events occur during efferent and aesthetic stance readings with the efferent stance more focused on the information that will remain after the reading while the aesthetic stance is concerned with what is happening during the reading event. Cox and Many’s (1992) efferent-aesthetic continuum helps to define how responses to text are more efferent or more aesthetic; this continuum is not used as an instrument in the study but as a way to provide additional insight. Cox and Many (1992a; 1992b) designed the five point efferent/aesthetic continuum as a five-
point continuum based on Rosenblatt’s work. Responses can fall either at one end of the continuum indicating a purely efferent stance, or the other end as a purely aesthetic stance. The continuum consists of five points with the first point as the most efferent stance focusing on what was learned. The second point is a primarily efferent response with a retelling of the story. The third point allows for both the efferent and aesthetic stance to be evident in the response. The fourth point is a primarily aesthetic response, and elaboration of the story or story details contains judgment or preference. The fifth point is the most aesthetic stance demonstrating a connection with the text and a lived-through experience that connects emotions and associations with the transaction with the text. A detailed description of the points on the continuum that Cox and Many designed is listed in Appendix D. This description shows the broad categories that are used with the instrument. The categories of the continuum can be used with a variety of responses and allow the reader to incorporate past experiences with the text in order to make meaning (Cox & Many, 1992). Cox and Many (1992b) use this classification system in their study of responses to both print text and film. As a further implication of their study of reader response with text and film, Cox and Many (1992b) suggest the scope of the literary world will broaden to include formats other than print text.

Rosenblatt believes that a piece of text cannot merely be assigned to one end of the spectrum or the other; “we should think rather of most reading as hovering near the middle of the continuum” (Rosenblatt, 1978, p. 37). As readers respond to a piece of text, their response can range from the middle toward one end of the continuum to the different ends of aesthetic and efferent. Rosenblatt (1978) cautions “we are not always ‘enthralled’” when reading because different aesthetic transactions (even with the same text) can “produce different kinds or levels of experience, depending on the nature, state of mind, or past experience of the reader” (p. 27). In
fact, moments of an efferent stance may appear during a primarily aesthetic stance, but the reading experience must be evaluated as a whole experience. An overall evaluation of the gaming experience is provided to answer the research question by examining the reoccurring themes related to both stance and the transaction.

When in the aesthetic stance, the “reader’s primary purpose is fulfilled during the reading event, as he fixes his attention on the actual experience he is living through” (Rosenblatt, 1978, p. 27). In this study, players’ CEGEQ statements consistently reflected the enthusiasm WoW players portrayed in their interviews about how greatly they value playing this game. Attitude statements on the CEGEQ about challenges present in the game showed overwhelmingly agreement among WoW participants – more so than the other two groups. The Halo 1 players pointed out that the reason FPS is their favorite genre is that they are able to completely step inside the main character and play from that viewpoint. The CEGEQ statements connected to how Halo 1 players value playing the game and spending time playing the game demonstrated very high scores. These players consistently rated favorably all attitude and belief statements in the CEGEQ. Each of the participants who prefer FPS games liked the ability to play in first person because this viewpoint helps them actually live through the experience of the game, suggesting that these players have a stronger aesthetic than efferent stance. The results from the CEGEQ show that Sims FreePlay participants have a stronger belief than the Halo 1 and WoW participants that they choose other game genres over simulation. Even though it is not their favorite genre, Sims FreePlay participants do enjoy the game and value it enough to want to spend time playing, although the value they place on playing the game could be directly related to the desire for an escape as shown by CEGEQ responses. In fact, the Sims Freeplay participants’ responses demonstrated they are not continually enthralled even when playing.
Their inability to have an application of the game to their lives could explain why they do not choose simulation as their preferred gaming genre.

Just as in the reading of traditional print text, the aesthetic stance provides the gamer with a sense of being connected to the video game through a relationship with the text. The Halo 1 and WoW gamers participating in this study highlighted through discussing their experiences that they have a relationship with the game and thus a strong connection. The existence of outside connections to the game through researching and additional reading demonstrates the participants’ relationship to the game. By participating in a level of outside research and/or reading, the players are creating a deeper relationship with the game. This relationship that the Halo 1 and WoW players have with the game shows that they have a primarily aesthetic stance, while the Sims Freeplay participants do not demonstrate as strong a relationship with the game. This lack of relationship lessens the aesthetic stance.

Rosenblatt (1978) uses a quote by Coleridge about how poetry should carry the reader forward and provide an attraction to the journey provided by the piece. This explanation helps to give foundation to the idea of the reader turning “his attention inward to his experience of ‘the journey itself’” (p. 28) to create the aesthetic stance and eventually the transaction. The Halo 1 and WoW participants, unlike the Sims FreePlay participants, were focused on the journey provided by the game; they were moving forward in the journey to reach an ending or a level of accomplishment. The Sims FreePlay participants simply exist within the entertainment of the game. The CEGEQ results show that Halo 1 and WoW participants have a much stronger belief about the importance of game completion than Sims FreePlay participants. WoW and Halo 1 players strongly agree with statements about having a clear strategy and having a desire to move
forward in the game, but Sims FreePlay participants do not strongly agree with such belief and attitude statements.

The aesthetic stance allows the reader distance from reality. This distance from reality is aligned with Coleridge’s concept of “suspension of disbelief,” which Rosenblatt (1978) believes “is felt as an escape…an experiencing of alternative possibilities” (p. 32). When describing the gaming experience, the participants detailed how they were also distanced from reality even when very reality-based concepts were being played out in the game. The participants fully accept a distance from reality as players within their chosen games demonstrating a more aesthetic stance.

The Gaming Experience as the Transaction

Through the transaction, meaning is constructed: “A novel or poem or play remains merely ink spots on paper until a reader transforms them into a set of meaningful symbols” (Rosenblatt, 1995, p. 24). Just as readers can have a transaction with text, the gamer can have such a transaction with a video game. The stance created lends to the occurrence of the transaction and eventually the poem. Rosenblatt (2005) explains that the stance is aligned with the reader’s purpose, and by selecting a particular stance, the reader will have a different kind of relationship with the text.

The literary experience begins with marks on the paper connected with knowledge and emotion to result in meaning for the reader. The gamer walks down a similar path when creating a gaming experience. Such meaning gained for a reader, which results in a literary experience, goes beyond a literal meaning of the text and connects what is experienced when read to a greater meaning outside the text and applies to the reader’s life. Rosenblatt describes how we
must go beyond the text: “The patterns of signs on the page remain[s] the same; the difference is in the reader’s activity in relation to those signs” (p. xxiii). Cox and Many (1992) relate this idea in their levels of personal use (LPU) chart to the more aesthetic end of the chart described as a general belief or application to life opposed the more efferent end of the chart described as a literal meaning of the text. The LPU (see Appendix E) has a four-point scale to further demonstrate if the response is more aesthetic or efferent. The first and second points demonstrate the world of the text while the third and fourth points show application to life. Points one and two connect to responses that show a more literal meaning of the text. Points three and four rate responses that show a personal connection with the text. Responses on the third point will demonstrate understanding the story with an analogy to self or the world. The fourth point responses show an understanding of relating the story with a belief about life (Cox & Many, 1992).

Rosenblatt does not list gaming specifically but does discuss that “literature makes comprehensible the myriad ways in which human beings meet the infinite possibilities that life offers” (Rosenblatt, 1995, p. 6). Such a connection to the outside world can apply to generalizations about society and/or to more personal connections to the individual’s life. Rosenblatt believes this level of application cannot be avoided: “Even if the teacher desired to, he could not evade transmitting certain generalized concepts concerning character and the ways in which it is molded and motivated” (Rosenblatt, 1995, p. 14). When the reader is in a more predominately aesthetic stance, s/he is able to make a personal application to the literature or relate it to the outside world. The complexity of combining both the social awareness and pure enjoyment is what Rosenblatt (1995) calls a “more fruitful understanding and appreciation of literature” (p. 23). The participants discussed this concept of application to their lives and
greater understanding in their interviews about the gaming experience. The meaning of the challenges faced in the game provided an understanding of how to operate in life when dealing with obstacles.

During an aesthetic transaction, the text is particularly important to the reader. A rephrasing of the material is not appropriate for a reader in the aesthetic stance. In contrast, the reader in an efferent stance can gain an equal experience from a rephrasing of the text given to her/him (Rosenblatt, 1978). Each of the participants discussed their views regarding the gaming experience when they were not actually playing the game but just watching. The participants did not believe that hearing about game play would equal a gaming experience. On the other hand, the participants did believe they could have a gaming experience from watching game play. This idea of watching another player as evoking a gaming experience falls in line with Rosenblatt’s transaction when in an aesthetic stance because watching the game is not a rephrasing of the game play. The players (especially the Halo 1 and WoW gamers) who were watching saw themselves as actually engaging in the game play even if they were not actually controlling the play. Rosenblatt explains that the transaction occurring in an aesthetic stance cannot be rephrased or paraphrased for another because a listing of ideas or even feelings “elicited by the text would not be mistaken for a statement of its ‘meaning’” (Rosenblatt, 1978, p. 87). By watching the game play, the players were involved directly, and thus could have a transaction.

Meaning is created during the transaction and is an organic process occurring as the reader and the text connect in a specific moment in time. “A novel or poem or play remains merely ink spots on paper until a reader transforms them into a set of meaningful symbols” (Rosenblatt, 1995, p. 24). Since meaning is creating through the transaction process, meaning cannot be separated from the transaction; they are intertwined (Rosenblatt, 2005). Throughout
the gaming experience, gamers are also creating meaning, but cheating can impact and possibly interrupt such creation of meaning and thus affect the transaction. Rosenblatt (1995) describes the transaction and meaning creation as a “give and take” (p. 26) between the symbols on the page and the reader; the Halo 1 and WoW participants viewed cheating as a one-way street where players are not giving (of their genuine skills) and only taking. As a result, those participants saw the gaming experience of those who are cheating as inauthentic. The belief and attitude statements in the CEGEQ about cheating reflected these results with WoW and Halo 1 participants scoring directly opposite from Sims FreePlay participants.

Emotional Response to Game

The emotional response to text is important to Rosenblatt’s transactional theory because the reader brings a unique personal experience to the reading to create a meaning that is particular to that time and place. By combining individual experience with the symbols on the page, the reader can then begin to have a transaction with the text resulting in an emotional response (Rosenblatt, 1995). The same type of emotional response can result when a gamer has a transaction while gaming. All of the Halo 1 and WoW participants talk specifically about their emotional responses to gaming, while the Sims Freeplay participants have a different type of response. Cox and Many’s (1992) efferent-aesthetic continuum chart details how these types of response differ and how those differences relate to a more efferent or more aesthetic response. By detailing the emotional responses to the video games in relation to the Cox and Many chart, the presence (or lack) of the transaction is evident. When feelings are evoked through a transaction with the text, the response is a more aesthetic response.
None of the WoW participants felt particularly sympathetic with the characters in the game; instead, they all discussed feeling deeply tied to characters based on how much time they had put into the character. The more time they had spent developing the character, the more connected they felt with that character. In fact the emotional attachment to the characters was so strong because most of the WoW participants discussed how the characters were a true part of them. The Halo 1 players obviously had a strong connection to Master Chief. On the efferent-aesthetic continuum chart (Cox & Many, 1992), the response to the game of Halo 1 players clearly falls in the range of the most aesthetic response because the participants’ responses regarding their connection to Master Chief shows clear evidence of living through the experience of the work. The focus on storyline as opposed to connection to the characters described by the Sims FreePlay participants demonstrated a primarily efferent response on the efferent-aesthetic continuum chart (Cox & Many, 1992).

Implications

The literature does not currently contain substantial research regarding how to assess the literary value of video games. Gaming literacy theory cannot fully assess the value of video games without more development of theory to move that explores the depth of its components. This study begins to add to the present literature by demonstrating that at least for these games in these genres there is substantial evidence that the components proposed by Zimmerman are present and well developed in two of the selected games. The theory does not afford an understanding of how that presence or development establishes the literary merit of the video games. Further development of theory as well as research with other video game genres could add to this understanding.
Just as the New London Group (1996) recognized a change of paradigm with literacy and connected pedagogy, educators are also beginning to understand such a change is happening in the field of literacy. Video games are beginning to be recognized on a small scale by schools and teachers as providing valuable lessons in reading multimodal texts. The definitions of terms such as reading and text is substantially changing as technology and multimodal options evolve; video games are going to become more a part of the world of literacy. NCTE has established initiatives to define 21st century literacies that encourage students to evaluate multimedia texts (“NCTE Position Statement”). Such an evaluation lends to the need to establish theory that educators and students can use to assess the literary value of multimedia texts such as video games. This study’s use of gaming literacy theory offers a beginning point for understanding how gaming literacy theory or other relevant theory can and should transform to include video games in the discussion of literary merit. Gaming literacy theory may not be complete enough to help us understand the literary value of video games, but it is a point from which to begin further research in this area. A possible starting point for future research could focus on one particular game and exhaust all depths of the game to examine the extent of the components of gaming literacy theory. Another avenue of future exploration could be a look at games within one specific genre to see commonalities of components or similar depth. By delving deeper into video games, the gaming literacy theory components could be detailed further to provide degrees of the components present, and the depth of the components could demonstrate literary value.

Even though reader response theory is historically based in print literature, a natural progression of the theory’s application can be made into the world of gaming. Since the aesthetic responses to literary texts are the primary way that readers experience a transaction in
Rosenblatt’s reading response theory, the specificity of looking for an aesthetic response present in the gaming experience is crucial to making a parallel between the gaming experience and reader response theory. This study adds to the growing literature involving reader response and new literacies. Research specifically pinpointing gaming and reader response is not presently substantial, but with video gaming becoming a common part of American life, a real need does exist to expand research in this area.

Rosenblatt’s reader response theory is a good pairing with video gaming because the reading transaction is an active event where meaning is created as the text and reader come together. Gaming connects well with this theory because it is such an active event where meaning is creating within a certain context between the game and the gamer. Just as in reader response theory, the gamer and the game have a particular affect on one another to create an experience. Since the connection is evident, more research should explore how the transaction in video games occurs and how this transaction can relate to motivation for learning. The spark between the reader and the text that Rosenblatt (1995) discusses must happen for reader to fully understand and experience the text is happening for gamers, and this study provides insight into how these cases show the importance of that experience for these participants.

The incorporation of video games in the classroom may prove difficult for educators. More research is needed to understand exactly how video games can be included in curriculum due to the complexity of video games and the time and effort that must be put into understanding and mastering a video game (Gee, 2003). Video game content is certainly a factor that educators must consider when including games in the classroom. Different levels of violence can be present in video games, and the entire genre of FPS is based on the player assuming the role of a shooter. Playing the role of a shooter is a part of the game that educators and parents might not
be comfortable with when it comes to young players. In addition to violence, some RPGs do require the players to use and become familiar with magic spells and potions. Parents could have a problem with their children learning about magic and/or committing violent acts while playing the game. Curriculum developers have to be aware of these types of features present in games so as to avoid the inclusion of such controversial topics. Additionally, some video games are going to be largely based in trivial actions. Sims FreePlay is a good example of a game that does not have any level of depth with meaningful content and does not require players to think through strategy or do any kind of research. Games with this type of play are easy to learn and navigate, but the content is not intellectually demanding.

Strong motivation provided by video games could be used in the classroom to help teachers better incorporate strategies already used in the language arts classroom like researching and collaborating. Inclusion of gaming in the classroom is not an easy addition, but curriculum developers could begin to build upon what is evident with gamers of certain games because there are positive components that can be integrated into curriculum development. For example, the Halo 1 participants provided insight into how they were more successful when playing in the format of first person, and WoW participants discussed the extensive hours of outside research done to prepare for the game based on their relationship with the game. This type of insight could help curriculum developers either tap into the techniques used in the games to garner such conditions or use these or similar games paired with curriculum content to result in increased motivation and a stronger connection to the learning experience. By combining a theory that has been typically paired with traditional print text with video gaming, the implication is the boundaries of literacy are widening to include much more than traditionally considered.
Limitations of the Study

Findings of this study should not be generalized to all gamers since a small convenience sample of gamers was selected who played only three commercial video games. Also, this study was advertised as a gaming study and may have drawn a population of gamers with a predominantly positive gaming experience. The gamers were also experienced with gaming; most had even played their chosen game for many years. Gamers with less experience might yield different responses or perspective about the gaming experience.

An ethnicity variety among participants was not present in this study, and future studies could include a larger sampling with participants from different ethnic backgrounds. The age of the participants could have limited the study because younger participants might offer different insight into the gaming experience. By including younger participants, the results could have more direct implications for curriculum development.

This study provided for only one interview with each participant, so future studies could include additional interviews with participants to explore the gaming experience as well as the gamers’ reading experience. The one interview focused solely on the gaming experience of the participant. Additional interviews could have explored a greater connection between reading and gaming. The theoretical lens of Rosenblatt’s reader response theory was used, but other reader response theories could be used as well with possibly different results.

The study may have been limited due to other factors. The researcher had not previously played the three selected video games, so future researchers with in-depth knowledge of the games might be able to detail the games more extensively when evaluating the games for gaming literacy content.
Summary

In this study, the data from the interviews were viewed through the reader response lens in order to see if the gamers are engaging in a gaming event that used the reader response approach. The key components of stance and the transaction were examined in the interviews about the gaming experience. Data demonstrated that the Halo 1 and WoW players tended to have a more aesthetic response to their gaming experience than the Sims FreePlay participants. To understand the literacy value of the selected video games, the presence of gaming literacy theory components were examined in each of the games. The data from the content study of the selected games demonstrated that a greater depth of the gaming literacy components were present in Halo 1 and WoW than in Sims FreePlay. A correlation could be made between the two parts of the study that the greater depth of gaming literacy components creates a video game where players can have more of an aesthetic stance and experience a transaction. By studying the literacy of video games and how the gaming experience can mirror the reading experience, this research attempts to understand the literacy of the modern student.
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APPENDIX B

CORE ELEMENTS OF THE GAMING EXPERIENCE QUESTIONNAIRE (CEGEQ)

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The Experience of Playing Video Games

Please rate the following expressions according to the experience you have when playing your most frequently played video game.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
<th>No Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>I enjoy playing the game</td>
<td></td>
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<tr>
<td>I am frustrated at the end of the game</td>
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<tr>
<td>I am frustrated while playing the game</td>
<td></td>
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<tr>
<td>I like the game</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>I choose to play this game repeatedly</td>
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<tr>
<td>I am in control of the game</td>
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<tr>
<td>The controllers responded as I expected</td>
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<td></td>
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<tr>
<td>I remember the actions the controllers performed</td>
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<tr>
<td>I am able to see in the screen everything I need during game play</td>
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<tr>
<td>The point of view of the game that I have spoiled my gaming</td>
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<tr>
<td>I know what I am supposed to do to win the game</td>
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</tbody>
</table>
The Experience of Playing Video Games
Please rate the following expressions according to the experience you have when playing your most frequently played video game.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
<th>No Answer</th>
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</thead>
<tbody>
<tr>
<td>There is time when I do nothing during the game</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<tr>
<td>I like the way the game looks</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<tr>
<td>The graphics of the game are plain</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<tr>
<td>I like to spend a lot of time playing this game</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<tr>
<td>I get bored playing this game</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I usually do not choose this type of game</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I do not have a strategy to win the game</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The game constantly motivates me to keep playing</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<tr>
<td>I feel what happens in the game is my own doing</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<tr>
<td>I challenge myself even if the game does not require it</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I play with my own rules</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
The Experience of Playing Video Games
Please rate the following expressions according to the experience you have when playing your most frequently played video game.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
<th>No Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel guilty for the actions in the game</td>
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<tr>
<td>I do not like the music of the game</td>
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<tr>
<td>The graphics are appropriate for the type of game</td>
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<tr>
<td>The game is unfair</td>
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<td>The game is difficult</td>
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<tr>
<td>The game is challenging</td>
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<tr>
<td>The scenario of the game is interesting</td>
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<tr>
<td>I do not like the scenario of the game</td>
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<tr>
<td>I know all the actions that could be performed in the game</td>
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<tr>
<td>I know how to manipulate the game to move forward</td>
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<tr>
<td>I understand the rules of the game</td>
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</table>
The Experience of Playing Video Games

Please rate the following expressions according to the experience you have when playing your most frequently played video game.

<table>
<thead>
<tr>
<th>I understand the rules of the game</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
<th>No Answer</th>
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<tbody>
<tr>
<td>The sound of the game affects the way I play</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
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<tr>
<td>The sound affects of the game are appropriate</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
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<tr>
<td>The graphics of the game are related to the scenario</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
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<tr>
<td>The graphics and sound effects of the game were related</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
</tr>
</tbody>
</table>
1. How did you learn to play video games?

2. What video game experiences at home do you recall?

3. Which person was most influential in your gaming experience?

4. Do you consider (insert genre of frequently played game) your favorite type of game to play? Explain.

5. What is the frequency and duration that you are playing your most frequently played game?

6. How would you describe a “gaming experience”?

7. Do you believe you have to make it through to the final level and complete the mission of the game? Please explain your answer.

8. When players just do a sample playing of a game (playing for a short time), do you believe they are having a gaming experience? Please explain.

9. What do you think about gamers who rely on cheat sites and other supplements for game play?

10. Do you consider using cheat sites as really cheating? Explain.

11. Are gamers who rely on cheat sites having a gaming experience? Please explain.

12. Is the gaming experience limited to only those who hold controllers in their hands? (For example, could someone who reads about the game but never actually plays still have a gaming experience?)

13. What feelings does the game evoke in you?

14. What do you like or dislike about the game?

15. Do you ever feel emotionally involved in the game? Explain.
16. Which one of the characters in the game do you sympathize with most? Explain.

17. What personal memories does the game ever evoke in you?
APPENDIX D

FIVE POINT EFFERENT/AESTHETIC CONTINUUM

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<table>
<thead>
<tr>
<th>Defining the Response</th>
<th>Point 1</th>
<th>Point 2</th>
<th>Point 3</th>
<th>Point 4</th>
<th>Point 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most Efferent Response</td>
<td>Primarily Efferent Response</td>
<td>Elements of Both Aesthetic and Efferent Response</td>
<td>Primarily Aesthetic Response</td>
<td>Selection of story events or characters to elaborate preference, judgment, or description. These responses involve selective attention to the story world and a possible re-telling of the story part which drew their attention.</td>
<td>Clear evidence of the lived through experience of the literary work (the world created while reading and the emotions or associations resulting from the experience)</td>
</tr>
<tr>
<td>What was learned or information gained, structure of work, genre or elements (plot, setting, mood, characters), identification of the theme or moral, evaluating works in terms of social or historical contexts</td>
<td>Clear evidence of efferent analysis. Analysis of elements according to outside structure (what was learned, literary elements, production analysis, realism)</td>
<td>Focus on re-telling by concentrating on relating the storyline and plot.</td>
<td>Responses include portions of both efferent analysis and aesthetic experience of work without a primary emphasis on either</td>
<td>Mixture of either efferent analysis or re-telling as well as selective attention to specific story parts or characters or an aesthetic emphasis on the lived-through experience of the story</td>
<td>Ideas, scenes, images, associations or feelings called to mind during the transaction with text - often include focus on imaging and picturing, relating associations and feelings evoked, and/or hypothesizing, extending, and retrospecting</td>
</tr>
<tr>
<td>Focus of the Response</td>
<td>Storyline - recounting the narrative by either simply re-telling or re-telling with preference or judgment statement</td>
<td>Statement of preference, judgment of the quality of the characters' behavior, or an impression about story events or people in the story</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX E

LEVELS OF PERSONAL UNDERSTANDING

Reproduced with permission from Joyce E. Many.
<table>
<thead>
<tr>
<th>World of Text</th>
<th>Application to Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Literal Meaning</td>
<td>Interpretation of Story Events</td>
</tr>
</tbody>
</table>
APPENDIX F

EXAMPLE OF GAMING LITERACY CODING PROCEDURE
<table>
<thead>
<tr>
<th>Example of Systems</th>
<th>Level of Game</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening comments about welcome to Sims and start with moving in first Sims</td>
<td>1</td>
<td>moves through town with aerial view to familiarize player with town</td>
</tr>
<tr>
<td>Goal: Find lost dog</td>
<td>1</td>
<td>Lost dog - tap on it to shake hands</td>
</tr>
<tr>
<td>New Goal</td>
<td>1</td>
<td>Cloud with directions of how to work through goal</td>
</tr>
<tr>
<td>Sims have needs Chart</td>
<td>1</td>
<td>Areas of need for Sims: Hunger, bladder, energy, hygiene, social, fun (see photo)</td>
</tr>
<tr>
<td>Goal: Buy a garden patch</td>
<td>1</td>
<td>suggests that gardening is a good way to earn more Simoleons</td>
</tr>
<tr>
<td>Directions</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Told to spend 600 on wallpaper and flooring</td>
<td>1</td>
<td>By doing this, the player learns how to navigate the menu to buy items</td>
</tr>
<tr>
<td>Home icon begins flashing</td>
<td>1</td>
<td>Lets player know to click on icon to add flooring and wallpaper</td>
</tr>
</tbody>
</table>
REFERENCES


