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STUDENT LEARNING AND LITERACY PRACTICES WHEN VIDEO GAMES ARE
INCORPORATED INTO A SECONDARY CLASSROOM

AMY S. SMITH

218 Pages

This qualitative study explored high school students' engagement with a unit where video games and video game materials were incorporated into an English Language Arts classroom. Over several weeks, students engaged with video game content and composed their own video games using the free online platform, Scratch. The purpose of the study was to examine students' learning during the unit, focusing on students' products, individual interviews, and whole class and small group discussions. The research questions were:

1. What can be learned about secondary students' learning and literacy practices when video games as a text are incorporated into the secondary ELA classroom?
2. What discourses do secondary ELA students engage when deconstructing and constructing video games as a text within a literacy unit of study?
 - a. How do secondary ELA students disrupt and/or reinforce power laden discourse?

This study drew upon inductive qualitative research design (Creswell, 2015) and followed Fairclough's (1995) methods of Critical Discourse Analysis. Data analysis yielded key findings. First, students transferred learning from traditional print text to video games to other forms of media that they engage with outside of the classroom. Second, students challenged dominant discourse when centered as thinkers in classroom discourse. The research findings provide insight into how students learn when they engage with video games as a text in the high

school setting. The findings have implications for bridging students outside of the classroom practices with learning inside a classroom and provide thought on developing and incorporating critical literacy units that incorporate multiple and varying media and texts within classrooms.

KEYWORDS: video games, multiliteracies, critical literacy

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AMY S. SMITH

A Dissertation Submitted in Partial
Fulfillment of the Requirements
for the Degree of

DOCTOR OF EDUCATION

School of Teaching and Learning

ILLINOIS STATE UNIVERSITY

2023

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STUDENT LEARNING AND LITERACY PRACTICES WHEN VIDEO GAMES ARE
INCORPORATED INTO A SECONDARY CLASSROOM

AMY S. SMITH

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I dedicate this dissertation to my family, my husband Jason, and my children, Maggie and Molly. Thank you for your unwavering support, guidance, and love.

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A.S.S.

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CHAPTER I: INTRODUCTION

As an educator for over twenty years, I spent the majority of the school days with students. Like many teachers, I strove to develop positive relationships with youth by getting to know who they were both in and out of the classroom. I attended extra-curricular events that students participated in and also incorporated classroom practices that acknowledged students' interests. I would often overhear students discussing the latest movie and join in discussion with them about the winning shot of the basketball game on Friday night. Overtime, however, I began to notice students talking about online and video games more and more when they were provided the chance. Hot topics included Minecraft in my 6th grade classroom and Grand Theft Auto and Halo in the hallways at the high school.

Although I was a teacher who found the value in bridging students' lived experiences with learning in the classroom, gaming or participating in the action of a game was something that I never considered bringing into my practices beyond an opportunity for students to play on a Friday afternoon during study hall (Gee, 2008). I lacked knowledge and understanding about the affordances of using games as text in relation to student learning and only recently started to consider possible connections between literacy practices and gaming. This exploration had been due in part to experiences that spanned several months and occurred on professional and personal levels. For instance, four summers ago I was enrolled in a doctoral course that asked students, as one of the learning experiences, to engage and reflect on game play. After my reflection was returned to me, the instructor posed questions that asked me to critically consider learning with games through different lenses. The purpose behind this was for me to explore new possibilities with student learning. In addition, I was encouraged by another faculty member to begin reading more scholarship on literacies that included technology due to a collaborative research

partnership that I had with this faculty member. These events inspired me to continue diving into gaming literature as a pedagogical tool in literacy learning. As such, I began to have discussions with educators about my thoughts surrounding student learning with gaming within the classroom space. Most were intrigued with the ideas of studying student learning practices in relation to digital games but would mention that they were unsure how that would work within their own classrooms and expressed feeling unprepared or daunted by such an endeavor. Through these conversations, I felt that fellow colleagues were interested in bringing different forms of media into classrooms, but challenges such as a lack of knowing how to incorporate learning with digital gaming in the classroom and possible administration and community backlash, would impede actual implementation.

Coincidentally, gaming also became a part of my personal life. My daughter had become increasingly interested in gaming to the extent that she spent hours watching other people play video games that were streamed online, researched how to make her own videos, and found the equipment needed in order to do so. Recently, I overheard her having a conversation with my other daughter about someone named Ninja. Being curious, I decided to look up the alias to find out more about this person. Ninja is 30-year-old multimillionaire professional gamer named Richard Blevins, who during 2019, was the most followed streamer and maker of video game play in the world (Padilla, 2019). In 2019, he averaged over 50,000 online viewers per week and earned more than \$500,000 per month from online streaming platform companies such as Twitch, YouTube, and Mixer (Kim, 2018). Blevins continues to be a top-rated gaming streamer with over 18 million followers (Katsarova & Woodrow, 2022).

Blevin's success is one example of how online gaming trends continue to grow. The global gaming market is projected to be worth \$256 billion by 2025 (Anderton, 2019; Talevski, 2023). In 2018, more than 90% of teens said they played video games "on computer, game console, or cellphone" (Anderson & Jiang, 2018, para. 1). Currently, smartphones are estimated to be the main gaming module by 2028 (Zion Market Research, 2022). Thus, as an educator and researcher, I have begun to pay more attention to student learning and gaming. At the same time, I am encouraged by the possibilities that student engagement with games can offer to the field of education and more importantly, to student success and learning outcomes.

Statement of the Research Problem

In this section, I provide comparisons of youth out-of-school technology practices with school and educator approaches to technology use. Also, I outline theory and expanding definitions of literacy that have impacted my understanding of literacy and detail how the definitions include more robust literacy learning engagements than what is observed within ELA classrooms that enact traditional pedagogical practices. Lastly, the research rationale and significance of the study are addressed.

Youth Practices & School Approaches to Technology

It is not difficult to see a teenager using technology in the United States. A recent Pew Research Center survey showed that 35% of teens are on the social media platforms YouTube, TikTok, Instagram, and Snapchat almost constantly (Vogels et al., 2022). Teens are on their phones in public playing digital games, posting on social media, and taking photographs to send to friends through an app such as Snapchat. In their social environments, many young people are engaging with other youth around the world by participating in online games and fanfiction sites and are occupying affinity spaces where they come together either in person or virtually due to

an interest or passion for “some shared identity connection to some shared activities, values, and norms” (Gee, 2017, p. 111). Within affinity spaces, youth develop skills that enhance their personal knowledge and the affinity space collectively. Thus, they foster engaging, socially constructed learning (Gee, 2003; Steinkuehler, 2007; Zaidan, 2019). For example, when someone has an interest in a video game, they may pursue more knowledge about it in digital affinity spaces. This could include reading blogs to learn more about the game and discussing aspects of the game online with other people who have similar interests.

Teens are comfortable with using technology and view technology as a method of communication, a way to meet people and create relationships, a means to gain support during difficult periods of time, and a method to access information and entertainment (Sum et al., 2008; Agosto et al., 2016; Schaeffer, 2019; Anderson et al., 2022). For instance, Anderson et al. (2022) found that teens expressed positive sentiments towards using technology as they feel technology allows them to stay connected with friends and provides a creative outlet. Additionally, a study conducted by Schaeffer (2019) found that teens considered technology essential to their lives, and Anderson and Jiang (2018) showed that 45% of youth between the ages of 13 and 17 are online almost constantly.

The approach to technology within schools has been for different reasons. According to a 2021 report published by the University of Virginia’s EdTech Evidence Exchange, U.S. states and school districts spent between \$26 and \$40 billion dollars per year on technology to prepare students for their college and career aspirations before the pandemic (Epstein, 2021). This expenditure is justified by empirical data linking technology to improving instruction, reducing economic costs associated with instructional practices, and formalizing assessment procedures for accountability purposes (Ito et al., 2013). Although these may be considered worthy aspects

of using different forms of technology within the learning space, it doesn't parallel youth practices with technology in their everyday lives (Gee, 2007).

Educators use technology daily to support student learning (Ruggiero & Mong, 2015; Kuzembayeva et al., 2022); however, technology integration in the classroom has been shown to be for more traditional academic assignments and assessments (Hutchison & Reinking, 2011; Peterson & McClay, 2012; Piotrowski & Witte, 2015; Appova et al., 2022) such as utilizing software for typing papers or completing worksheets that have been posted online. Therefore, one could conclude that classroom technology use doesn't necessarily equate to "meaningful instructional tasks" (Kellner & Share, 2007, p. 306). Integration of technology within the classroom is necessary; however, some argue that technology needs to be utilized for deep understanding and critical learning (Luke, 2012; Dwyer, 2016; Kellner & Share, 2019). As David Buckingham (2008) explains:

The internet, computer games, digital video, mobile phones and other contemporary technologies provide new ways of mediating and representing the world and of communicating. Outside school, children are engaging with these media, not as technologies but as cultural forms. If educators wish to use these media in schools, they cannot afford to neglect these experiences; on the contrary, they need to provide students with a means of understanding them. (p. 74)

Digital technology integration into classrooms can expand print based literacy practices as youths' meaning is created with multimodalities (Kress, 2005; Pahl & Rowsell, 2006; van Leeuwen, 2021). Multimodality can be understood as an approach to meaning that includes modes or semiotic content such as the visual, gestural, and aural (Kress, 2009). Students combine modes and media to make meaning and communicate their understanding to others (Kress,

2003). Truly, multimodality is “communication in its widest sense” (Pahl & Rowsell, 2006, p. 6). An example may include creating a webpage and determining which images and coloring to use on the page. Another example includes gathering feedback from an affinity space to assist in considering new possibilities with stories and “gain situation” which may promote deeper understanding for the learner (Lankshear & Knobel, 2008, p. 13). Thus, youth enact diverse meaning-making practices that do not mirror methods of understanding from decades ago. As such, students need to not only apply strategies for understanding verbal language, but must also apply strategies to understand animation, visual images, and the like (Serafini, 2012). Consequently, new instructional strategies and pedagogies are required to support youth’s learning within the classroom space (Millard, 2003). Some may argue that these new strategies may ask educators to consider broader definitions of literacy and what it means to be literate. Thus, I will discuss definitions of literacy and my position on what constitutes being literate within the next section.

Expanding the Definition of Literacy

Utilizing different forms of technology as text in the classroom for student learning is tied to expanding understandings of literacy and what constitutes literacy (Gee, 2003). Although there is not one specific definition of literacy, many people and organizations have provided thoughts on what literacy and being literate means and include. On the one hand, there is the fairly traditional definition of literacy that has been provided by the National Institute for Literacy (n.d.) where literacy is defined as “an individual's ability to read, write, speak in English, compute, and solve problems at levels of proficiency necessary to function on the job, in the family, and in society” (para. 1). Although this definition does go beyond the mere ability to read, one could argue that the emphasis remains on privileging print-related activities and texts

in a singular national language. Definitions such as these can be problematic (Heron-Hruby, et al., 2008). They do not allow room to consider the multiple ways in which students create and interpret meaning through the multitude of activities and texts found within social and cultural practices and contexts (New London Group, 1996). For example, Champion (1998) found that children develop and use various narrative styles in their writing not only from formal education received in schools, but also from family learning and spaces. Additionally, findings in a case study by Clark (2020) suggest that children employ prior knowledge and social and cultural practices to literature classrooms to meaningfully participate in literature-based discussions and learning. Thus, social and cultural practices and contexts can impact one's literacy processes (Street, 2003; Pahl & Rowsell, 2006; Pacheco & Gutiérrez, 2009). It is through this approach where literacy is emphasized as a socially situated practice that reading and writing are rooted within identity and one's being with the world (Street 1995; Pahl & Rowsell, 2006; Jones & Hafner, 2021). Literacy practices vary in different contexts and our understandings of literacy have evolved due to the diversity of situated practice engaged in an interconnected world. As such, literacy definitions must be expanded to move beyond the notion of what is happening in classroom spaces.

Literacy learning can no longer be standardized, skill-based, teacher-directed, and focused on print only texts (Luke, 2000; Gee, 2010). It needs to be varied to include multiple methods of meaning making from "words, symbols, objects, places or persons" (Gee, 2005, p. 592) that are informed by a youth's way of knowing while acknowledging youth's everyday practices with technology (Gay, 2002; Street, 2003; Gee, 2010). Additionally, literacy learning must include understanding of how social structures impact people and their meaning making (Freire, 2000). Therefore, I argue that opportunities for critical engagement with multimodal

texts are imperative within the classroom space. For me, this includes incorporating video games into the classroom.

Video games offer different insights into learning due to the multiple practices that one engages with when they play video games. These may include decoding, design, and interpretation of multimodalities. These aspects of learning cannot be examined through the lens of a traditional definition of literacy. I contend that definitions evolve and therefore, must be explored. Within the next two sections, I provide scholarship that contributed to my views on literacy and outline how this scholarship impacted the research study.

Critical Literacy

Critical literacy informed my views on student literacy practices and learning within the classroom and my analysis of the data to assist in answering the research questions. Critical literacy (CL) is defined as the “use of the technologies of print and other media of communication to analyze, critique and transform the norms, rule systems and practices governing the social fields of everyday life” (Luke, 2012, p. 5). Within the classroom, CL focuses on using literacy and texts to challenge ideologies, social and institutional structures, and dominant discourse to promote social justice and change. Scholars suggest that digital media has the potential to reinforce stereotypes in society (Gay 2002; Morrell, 2012; Berman & White, 2013). Therefore, educators who engage critical literacy practices and learning into their classrooms, position students as participants in deconstructing dominant and producing counter narratives to shape discourse (Luke, 2000; Freire, 2000; Shor, 2009). As Luke (2019) states:

In this world - to not teach an approach to critical literacy, a learned, informed and curious skepticism of a multimediated, multimodal information and textual environment - would be to walk away from any possibility of democratic education: the responsibility to

teach each generation the tenets, values and stances that might enable us to live ethically, gainfully, and sustainably with diversity and difference and in shared purpose, fair and equitable exchange, and just community. (p. viii)

CL is often associated with Paulo Freire, Brazilian educator and scholar, who maintained that the banking method of education views students as empty and passive learners where teachers transmit knowledge onto students (Freire, 2000). The banking method is considered an oppressive tool that suppresses creativity, problem-solving, and transformation by rejecting inquiry within the learning process. It assumes that students know nothing and justifies the need for a teacher in the classroom. Within this context, a student memorizes and repeats what the teacher has deposited within them. Instead, Freire (2000) conceptualized a problem-posing approach to teaching and learning that positions students and their teacher(s) in a relationship centered around dialogue. Freire (2000) argued that through dialogue students and teachers learn from one another and the reality they live in. As students engage within these practices, they become challenged and see their connection with the world. CL promotes discussion around oppressive practices and advocates for the critique of how media, literature, and other texts portray the world (Shor & Freire, 1987). Thus, CL “is as much about acquiring a disposition toward texts, a learned and inquiring skepticism, as it is a formal element of curriculum” (Garcia et al., 2018, p. 77). Considering Freire’s views of dialogue as a mediating factor for literacy, we need to consider that such dialogue is not limited to singular subjects, but rather on a synthesis of multiple lines of inquiry. This leads us to consider multiliteracies.

Multiliteracies

My view of literacy learning has been impacted by scholars that met in New London, New Hampshire, in the mid 1990’s. The purpose of their meeting was to engage in conversations

surrounding the pedagogy of literacy and language with the focus being “the changing world and the new demands being placed on people as makers of meaning” (Kalantzis & Cope, 2001, p. 10), and therefore, positioning learners as creators of knowledge. These scholars formed the New London Group (NLG), which has been described as an “educational response to a persistent unequal distribution of capital, wealth, and power” (Garcia, et al., 2018, p. 84). The group of ten developed a pedagogical approach to literacy that they called multiliteracies. NLG argued that language use has changed due to technologies and global connectedness, and therefore, literacy learning must reflect these changes (NLG, 1996). They expanded literacy to recognize different modes of meaning-making that included “visual, audio, spatial, behavioral, and gestural” (p. 64) and stressed the importance of positioning youth as critical consumers that actively engage with varying modalities to inform civic action in a globally connected world. In his foundational book, *Literacy in the New Media Age*, Kress (2003) raised two questions: 1) How will the nature of literacy change with use of digital texts, and 2) what will the sociocultural effects of this next literacy be? Kress argued that communication modes (image, audio, video) are “governed by distinct logics [which] change not only the deeper meanings of textual forms but also the structures of ideas, of conceptual arrangements, and of the structures of our knowledge” (p. 16). The communication modes, or multimodalities, expand meaning making. Multimodalities offer wider affordances than traditional print text. For example, traditional print texts allow one to gain understanding of the subject matter by going through the pages of the book through linear representations. Electronic texts, in contrast, allow one to understand the content by exploring links, images, audio, and search functions and have the potential to yield different understandings due to the more fluid processing available. Thus, multimodalities provide thought

on the reconceptualization of meaning-making with a growing reliance on images and electronic media.

NLG argued that traditional pedagogical practices which support formal standardized learning were no longer sufficient in classroom spaces due to the differing meaning that occurs among students (Cope & Kalantzis, 2000). Thus, they promoted literacy as a social and cultural practice influenced by the space that it is in (Gee, 2015). The social and cultural approach to understanding literacy led to research and development of literacy studies. This approach is what Gee (1996) first called New Literacy Studies. Here, literacy is viewed socially and culturally (Gee, 2010). Therefore, literacies are multiple due to their full range of contexts which may be local or global due to technologies (Brandt & Clinton, 2002). Literacy is more than reading and writing due to the different meanings that are produced by readers' experiences and how the reading of texts is acquired (Gee, 2015). New literacies involve a socially recognized way of generating and communicating meaning within multimodal spaces and often include "interactivity, participation, collaboration, and the distribution and dispersal of expertise and intelligence" (Lankshear & Knobel, 2011, p. 76). These components are at the center of new literacies and are what Lankshear and Knobel (2011) call new ethos. New ethos are far removed from individualistic and author-centric practices that are more closely associated with traditional literacy. New literacies ask educators to not only examine youth's in-school literacy practices, but also acknowledge outside of school literacy practices which take place in multimodal spaces. These environments encourage the sharing of resources and feedback, and participants within new literacies seek relationships with those of similar interests (Knobel & Lankshear, 2007; Lankshear & Knobel, 2011). Thus, new literacies open the door to new possibilities in how

educators bring in different forms of texts into the classroom space for student learning. Video gaming as a text is one such possibility.

Video gaming is a new literacy where people are not only consuming information, but also producing meaning through their interaction with the game (Gee, 2017). Abrams et al. (2017) claim that video games include participatory practices such as social interaction, decision making, and preference. I adopt Abrams et al.'s (2017) definition of video games, "as a multimodal program manipulated by human reaction to on-screen and offscreen stimuli, decisions and actions mediated by the use of digital and nondigital tools" (p. 5). Gee (2017) argues that "A video game is just a set of well-designed problems to solve. The design...teaches and mentors players to solve the problem, using good principles of teaching and learning" (p. 118). Knobel and Lankshear (2014) concur:

Participation in new literacy practices like video games engages good learning principles such as creating and honoring preparation for future learning, building reading choices, creating motivation for extended engagement, providing opportunities to take control of one's own learning, teaching skill sets in relation to practices, and strategies for accomplishing goals and carrying out actions. (p. 99)

Additionally, video games are a popular form of media. The Bureau of Labor Statistics (2019) found that surveyed teens and young adults averaged an hour per day playing video games. In a report provided by Nielsen Games (2018), 66% of the U.S. population aged 13 and over identified themselves as gamers or someone who engages in video or role-playing games. Currently, there are over 3 billion gamers (Jovanovic, 2023) and over 80% of teens have access to gaming consoles (Vogels et al., 2022). As such, educators have the potential to draw upon the popularity of video games and extend students' real-world experiences when video games are

used for learning in the classroom (Gee, 2017). Gee (2017) states, “World experiences ... are the most foundational and important sources for learning and development” (p. 38). Furthermore, scholars such as Bacalja (2018), argue that when youth have an affiliation with what is taking place within the classroom space that their understandings of life are extended. Thus, literacy practices that involve engaging with video games as a text have the potential for students to develop connections among literacy, learning, interest, pleasure, and lived experiences.

Research Rationale & Significance

When considering literacy scholarship, one can conclude that the need to expand the understanding of youth’s literacy learning practices while using technology is needed in today’s classrooms “in order to enhance learner’s capacities for effective meaning making and communication in the foreseeable future” (Knobel & Lankshear, 2014, p. 97). Classrooms utilize different forms of technology and researchers have been studying technology use in the classroom. This research has ranged from mobile technology use (Li et al., 2018; Stacy & Aguilar, 2018) to blogging in the classroom (Sauro & Sundmark, 2019). However, research suggests that classrooms still tend to favor logocentric texts (Piotrowski & Witte, 2015) that are representative of dominant groups or mainstream cultures (Street, 1995; Gay, 2002). This practice doesn’t allow for all voices to be heard and/or experiences to be explored within the classroom. The lack of narratives does not acknowledge students’ lived experiences, and therefore, can cause students’ identities to be suppressed by not taking into account who students are (Gee, 2017). As such, educators must take into consideration how technology and the tools associated with technology can be leveraged in the classroom space to foster critical student learning and meaning making by bridging youth outside of school practices with inside of school learning (Hull & Schultz, 2002). One example is with video games. Research shows that video

games can support complex meaning making when they are incorporated into the classroom (Abrams & Hanghoj, 2022). Scholars, such as Gee (2013), have argued that video games lend themselves to learning opportunities that have the potential to bring together critical analysis with meaning making strategies to assist with the development of the skills needed to critically critique social and cultural influences.

In the past 15 years, research has gained momentum on examining video games and their effects on youth academic achievement (Hartanto et al., 2018; Drummond & Sauer, 2020), the characteristics of youth who play video games (Mikhailova, 2019), relationships that youth have with video games (Moreno et al., 2022), and the motivation of youth when engaging in video games (Petkov & Rogers, 2011; Lo et al., 2016; Cheah et al., 2022). Additionally, edutainment games or video games designed to combine educational concepts with entertainment (Almosawi & Khder, 2022), have received significant attention. These may include video games like GraphoGame that may, for example, teach spelling skills to a student. An ERIC search reveals just over 4,300 peer-reviewed scholarly articles focused on edutainment learning from 2010 - 2022. Additional research on video games and student learning has traditionally taken place in after school or summer programs rather than in the classroom space (King, 2015; Evans et al., 2017; Barreto et al., 2017).

One area that scholars argue needs more research attention is examining youths' critical engagement with video games in high school classrooms (Gerber & Price, 2013; Bacalja, 2018). For instance, Bacalja (2018) contends that analyzing students' learning and critical engagement with video games expands students' conceptions of literacy, application beyond classroom walls, and critical examination of everyday practices. One could argue that research in this area is needed as video games are often uncritically consumed by players (Brenick et al., 2007).

In this research study, I took careful consideration of the design of the unit where video games were incorporated. I wanted to explore the nature of student learning and literary analysis practices when video games and video game materials were brought into a secondary ELA classroom. Thus, the unit asked students to analyze visuals, language use, and power structures that surround and inform video game design and video game play. The focus was less on the tools of technology and more on technology as a type of literacy practice. The significance of this relationship is based upon the idea of understanding more about student literacy learning with video games as a text.

Theoretical Framework

In this section, I detail primary understandings that guided my interpretation of and framed the research on student literacy learning and practices. First, multiliteracies framework will be discussed to demonstrate how it informed my thinking on the research and unit design. Then, I elaborate on my thoughts surrounding the social construction of meaning-making. Additionally, I expand on how sociocultural theory allowed me to consider broader ecologies in which games are a part.

Multiliteracies Framework

As discussed in the previous section, the NLG (1996) proposed a new approach to language and literacy. It was the result of discussions that centered around worldwide historical trends and how those trends related to current pedagogical practices (Cope et al., 2018). The NLG considered the growing methods of communication in a world of increasing cultural and linguistic diversity. Their idea was to enrich literacy definitions that reflect current events taking place in the world. Therefore, instead of literacy being confined to traditional forms of

communication like print only texts, the NLG argued that language and literacy definitions be broadened as multiple methods of meaning making have increased due to multimodalities.

The NLG provided a “transformative pedagogy” (Cope & Kalantzis, 2003, p.18) for educators to utilize when designing and thinking about curriculum. Known as the Pedagogy of Multiliteracies (NLG, 1996), the framework provides teachers with a repertoire of practices to be incorporated into the classroom. The scholars proposed that teaching and learning would comprise four components including situated practice, overt instruction, critical framing, and transformed practice. Since its inception, these ideas have been refashioned to be the pedagogical acts of experiencing, conceptualizing, analyzing, and applying. (Kalantzis and Cope, 2005). Table 1 outlines the definitions of each of these acts as outlined by Kalantzis and Cope (2005).

Table 1

Definitions of Pedagogical Acts

<i>Experiencing</i>	Experiencing can be understood as learning that is contextualized in real world experiences that are familiar and new to the learner. Familiar experiences involve those that are based on interests, passions, and understandings of happenings. New experiences, on the other hand, are unfamiliar to the learner. These experiences may include engaging in unfamiliar situations or texts.
<i>Conceptualizing</i>	Conceptualizing involves processes where learners transfer knowledge between generalizable situations and their own theories of learning. It provides opportunities for learners to develop understandings of concepts and apply them to their own experiences.
<i>Analyzing</i>	Analyzing involves the “critical capacity” (p. 18) of learning. It includes the knowledge processes of both functionality and evaluation of power relationships. Thus, learners engaged with functional analysis draw conclusions based on the examination of cause and effect, deductive reasoning, and textual connections. Critical analysis is when one is evaluating perspectives, motivations, and interests on both personal and broader levels.

(Table Continues)

(Table Continued)

<i>Applying</i>	This pedagogical act involves two different kinds of applying. The first considers learners applying their meaning making in real world situations. This may be an application that could be considered predictable such as using learned digital literacy skills to create a webpage. The second is using one's understanding to perform action in the world that is new and transformative. An example may include creating a webpage for the purpose of promoting an upcoming fundraiser for an area of personal deep interest and/or concern.
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Some have argued that the Pedagogy of Multiliteracies does not work for some schools and teachers due to its linearity and limitations of exploration within experiences (Leander & Bolt, 2013). However, the Pedagogy of Multiliteracies and its pedagogical acts suggest engaging all students in learning that is meaningful because it allows for differences in student interests, acknowledges students' lived experiences, and promotes thinking and application beyond the classroom walls (Jacobs, 2013). As I seek to focus on student literacy learning and practices through youths' engagement of video games as a text, the framework of multiliteracies allowed me the opportunity to better understand approaches to teaching and learning within the unit of study. Additionally, the Pedagogy of Multiliteracies informed the video game unit design and engagements that students participated in.

Sociocultural Theory

Vygotsky's (1978) Sociocultural Theory suggested that learning is a social process and "awakens a variety of internal developmental processes that are able to operate only when the child is interacting with people in his environment and with his peers" (p. 90). Sociocultural theories have been utilized to explore culturally and historically grounded learning by researchers and theorists (Handsfield, 2016). From this perspective, learning is social and collaborative and is tied to cultural contexts of practice which foster "culturally and historically grounded literate activities" (Handsfield, 2016, p. 62). Examples can include writing an email,

creating a blog, and so on. These contexts generate meaning and invite others to reflect upon that meaning to generate meaning of their own (Knobel & Lankshear, 2007). As such, learning is embedded in Discourse communities where collective activity generates meaning (Lewis et al, 2007; Gee, 2015). Membership in Discourse communities can be reinforced or changed due to the feedback, support, or shared knowledge that is given within those spaces (Knobel & Lankshear, 2007; Lankshear & Knobel, 2011). Discourse communities will be discussed in detail in the next section and in Chapter 03.

Sociocultural theory informed my lens for this study while analyzing students' literacy practices and meaning making through their engagement with the unit, because I focused on social interactions within the discourse of the classroom space. This analysis may provide additional thought on youth culture that has the potential to impact student meaning and understanding (Garcia, 2018).

The Research Study

In this section, I discuss the purpose of the research study and outline the questions that guided the research. Additionally, key terms are operationalized for clarity and understanding of the study. Finally, study contributions are acknowledged and addressed.

The Study & Guiding Research Questions

The purpose of the study was to explore secondary students' literacy practices when they engaged with a unit that involves video games and video game materials. It set out to analyze possible connections between literacy learning and practices and different forms of text. The study adds to literature on video games in the secondary ELA classroom. To meet this purpose, the research explored youths' literacy practices while they participated in a unit utilizing video games as text in a secondary ELA classroom. It is important to remember that classrooms are

ever-changing. The changes are due to factors such as technological advancements, globalization, and major events, such as health pandemics and social justice movements. Thus, the research questions have been carefully worded to explore phenomena as it relates to students and their learning within these spaces.

Studying students' learning and literacy practices when video games are incorporated into a classroom allowed me to better understand student learning. I hope to further scholarship that may impact school curricular and educator pedagogical practices. Therefore, the following research questions guided the research study:

1. What can be learned about secondary students' learning and literacy practices when video games as a text are incorporated into the secondary ELA classroom?
2. What discourses do secondary ELA students engage when deconstructing and constructing video games as a text within a gaming literacy unit of study?
 - a. How do secondary ELA students disrupt and/or reinforce power laden (or discourse)?

Defining Key Terms

Literacy practices. Literacy practices simply mean what people do with language in their everyday lives. It involves the attitudes, feelings, and beliefs that people have (Street, 1993). Thus, it is personal yet influenced by meaningful social and cultural contexts. Barton et al., (2000) provide six assertions about literacy which support this thought. They state:

1. Literacy is best understood as a set of social practices; these can be inferred from events which are mediated by written texts;
2. There are different literacies associated with different domains of life;

3. Literacy practices are patterned by social institutions and power relationships, and some literacies are more dominant, visible and influential than others;
4. Literacy practices are purposeful and embedded in broader social goals and cultural practices;
5. Literacy is historically situated; and
6. Literacy practices change and new ones are frequently acquired through processes of informal learning and sense making. (pg. 8)

Therefore, in this research study, I define literacy practices as students' authentic engagements with text and multimodalities which utilize classroom discourse to support student learning and meaning making.

Discourse. Little 'd' discourse is seen as a way of being, doing, and thinking in language that is informed by an individual or group's belief and worldview systems (Gee, 1989; 2015). It is the language that is used to convey one's identity. Big 'D' Discourses are seen to reinforce or limit identities or "ways of being in the world" (p. 100) as they inform our actions and technologies within certain spaces. As such, Discourses are a way to fit into already established constructs. For instance, a person may be married and have a family, be employed as a teacher, and be a member of a local charity organization. This person is a member of, has a different role in, and interacts with aspects of Discourse in order to be recognized in each of these Discourse communities.

Discourses can be part of institutions (such as schools), often involve objectives or tools (like video games) and can change, blend, or disappear altogether (Gee, 2005; 2015). In addition, there are primary and secondary Discourses, and sub-Discourses can be found within Discourses. One's primary Discourse is the group that one is intimately involved with. In the example

previously provided regarding the person being married and having a family, the primary Discourse would be the family. The other groups (i.e. teacher and member of a local charity organization) would be considered secondary Discourses “where people share more narrowly defined knowledge and practices” (Gee, 2015, p. 96) and can include interests, specialties, or values as a basis for membership.

Gee (2013) has expanded on his thoughts surrounding identities to include how people from diverse backgrounds can “communicate across social and cultural differences when they form shared associations for words and concepts” (p. 209). As such, membership in Discourses communities forms a shared identity that is based upon the practices within the Discourse. Identities may shift due to differing contexts, but the life experiences within the Discourses foster meaning making through social construction that is centered around language.

Gee (1990; 2005; 2015) considers someone who is literate to have mastery of language in Discourses. The process of becoming literate allows one to develop metaknowledge which would allow one to examine Discourses and further explore how they shape meaning. Accordingly, I will draw upon Gee to define discourse in this research study. I define discourse as language in context and the big ‘D’ Discourse as part of larger structures, ideologies, worldviews, and influences that underlie participation. Fairclough (2001) takes up the idea of discourses from the standpoint of power and ideologies. Similarly, Fairclough does not see discourse as limiting in scope, but rather that one has the potential to influence the discourse of which they are a part. Thus, discourses are not neutral as one can bring in their inherent values and privileges within systems (Roger, 2011). This is further discussed in the Critical Discourse Analysis section in Chapter 03.

Contributions

The research study provides insight into secondary English Language Arts (ELA) students' learning and literacy practices when video games are incorporated into a unit of study. This knowledge contributes to the field's understanding of how different forms of text can be brought into the classroom to further students' learning. The study adds to an area of emerging research.

The findings from the study have implications for instruction that should be considered by educators. Analysis of student learning and literacy practices and classroom discourse provides further understanding of students' lives and their identities that have formed through Discourse communities. This knowledge plays a role in how educators plan for instruction and the organization of the learning environment. Additionally, some have argued that educators need to incorporate critical analysis of different forms of text into the classroom due to the messages and values that are found within mainstream media (Bogost, 2008; Love, 2017). An outcome within such a classroom may include students being more critical consumers of online information. This skill may be transferable to other forms of media and has the potential for students to be able to construct counter narratives to dominant discourse (Freire, 2000; Share & Mamikonyan, 2020). Thus, I devoted significant time in considering student learning with the unit and how it connected to outside of the classroom practices. The next chapter presents a review of literature which informed the research study.

CHAPTER II: REVIEW OF THE LITERATURE

To better understand how video games can be leveraged within the classroom space to foster students' critical thinking, an analysis of the history of game studies is needed. By looking back, one can see how this area has blossomed and continues to grow with advancements in technology and video game play popularity. In the next portion of this chapter, research that involves video games and the classroom context is explored. It includes teacher perceptions of video game use in the classroom, the motivational elements of video game play in the classroom, and secondary ELA students' critical analysis of video games in the classroom. Then, I will explore and elaborate on literacies. This will include discussion surrounding theory and review of relevant research as it pertains to the following categories: 1) new literacies, 2) visual literacies, 3) critical media literacies, and 4) gaming literacies. The chapter will end with a detail on how the examination of literacies has informed the design of the video gaming unit. One engagement from the unit will be included to demonstrate this understanding.

Game Studies

Scholars from disciplines such as engineering and computer science to other disciplines including psychology and education have been examining games (Coavoux et al., 2017). However, one may be surprised to know that some of the most in-depth research of gaming studies has come from humanities and sociology. In fact, two scholars from these fields, Johan Huizinga and Robert Caillos, have been credited by some to be the first to consider play and games. Their work provides a basis for thinking about games and how they are organized. In this section, I will discuss the history of game studies by outlining scholarship that has solidified this field as a research area.

Foundations

In 1938, Dutch historian Johan Huizinga published *Homo Ludens: A Study of the Play Element in Culture*, which some consider the origin of modern game studies. He did not study games in and of themselves but was more concerned with the creative quality of play and its influence on culture. Huizinga was interested in studying play and its role within law, war, science, poetry, philosophy, and art. Within the book, Huizinga (1938) suggests that play is a natural element of human culture and characterizes play as:

...a free activity standing quite consciously outside 'ordinary' life as being 'not serious,' but at the same time absorbing the player intensely and utterly. It is an activity connected with no material interest, and no profit can be gained by it. It proceeds within its own proper boundaries of time and space according to fixed rules and in an orderly manner. It promotes the formation of social groupings which tend to surround themselves with secrecy and to stress their difference from the common world by disguise or other means.

(p. 13)

Huizinga uses this definition to underscore his assertion that culture arises from play because people use play to interpret life and life's meaning. For Huizinga, play cannot be reduced to something meaningless. Instead, play is a special form of an activity that is social and significant and permeates all human activity from the start. For example, the development of speech and language allows one to communicate and express oneself on all levels. When one gives expression to life in the form of speech and language, they are creating a poetic world due to their play upon words (p. 4). As Huizinga contends, "Civilization is, in its earliest phases, played. It does not come from play like a baby detaching itself from the womb: it arises in and as play, and never leaves it" (p. 173). In his text, Huizinga offers forth the idea of the 'magic circle'

(p. 10). Magic circles are delimiting spaces and can include a screen, stage, courtroom, battlefield, or basketball court where the ordinary world is absent and play takes place. For Huizinga, this space of play is governed by special rules and order or ranking. People make the spaces for gameplay and the rules are followed for the purpose of order.

Thoughts on the term and concept of magic circle have influenced play scholars' considerations with how play may or may not be shaped. Scholars such as Salen and Zimmerman (2004) have used magic circles to describe a boundary around a game. For them, the emphasis on the magic circle is not so much the social aspects of the game, but more the psychological experiences that one may engage with or have when entering a game. Similar to Huizinga (1938), Salen and Zimmerman feel that the magic circle is player generated. This explanation serves to point out that players enter a space voluntarily where play occurs. However, scholars such as Antero Garcia contend that analysis of gaming systems within the magic circle is needed. Although magic circles are “culturally productive and built on the foundation of past production” (p. 235) games that are played within these spaces have their own sets of values due to differing factors such as the ethics of the creators of the gaming system or the locations in which the games are produced (Garcia, 2017). Additionally, some scholars have criticized the notion of the magic circle as it can depict a separate space that isn't connected to the outside world (Pargman & Jakobsson, 2008). These arguments expand thought on games, their systems, and play to further understand game affordances and possible limitations in different spaces.

Further considerations from Huizinga's thoughts on the magic circle have been from other present day scholars such as Adrienne Shaw. Shaw (2015) has discussed assumptions surrounding the magic circle and how it has the potential to narrow game play considerations by determining boundaries about play, defining what play happens to be, and fostering power

relations within play. Shaw promotes using discussions around the magic circle as a starting point for examining how game studies need to be considered through other lenses. For Shaw, queer theory needs a more prominent role in game studies to address considerations including the interactions of “sexuality, race, gender and class” (p. 65) among other areas of game study research.

In 1958, French sociologist and writer Roger Caillois published *Man, Play, and Games* where he extended upon and complicated Huizinga’s work on play. Caillos (2001) challenged Huizinga’s definition of play and described it as both “too broad and too narrow” (p. 4). Within this text, Caillos suggests that when an activity is disguised or secretive that play will expose the mystery behind the activity and essentially removes the activity’s secrets. Thus, when a disguised or secretive activity serves this function, institutionalism (and not play) is involved with and directing the activity. Moreover, Caillos felt that Huizinga neglected to include the material interest of play which Caillos feels is an important aspect that needs consideration.

Play is dependent upon the culture’s available resources and is found on a continuum that is bordered at one end with free play (paidia) and the other with highly structured play (ludus). Caillos (2001) identifies four attitudes about play that are found on the continuum. These include: 1) agon (rivalry that is based upon competition and demonstrates dominance in a quality such as speed or skill); 2) alea (outcomes are based upon chance where the player has no control); 3) mimicry (one engages in an imaginary universe where simulation of a character, place, or situation occurs); and 4) ilinx (where reality is destroyed by vertigo or instability through play) (p. 12). These four categories range from paidia (turbulence) to ludus (rules) and contain all games which are played. Categorizing games found on the continuum is dependent upon the attitudes that dominate a given game or moment of play.

Huizinga and Caillos began to organize how we think about play and how it shapes and is shaped by culture. Since that time, scholars continued to add thought surrounding play, its significance to culture, and thus formed groups or organizations that were centered around gaming. Composed of mainly educators that were interested in simulation games to enhance student learning, the North America Gaming and Simulation Organization formed in the late 1950s and into the 1960s. The group published literature on gaming and presented at conferences. Similar developments took place within different contexts internationally. But, due to the influence of observational learning theory during the time, a majority of the contributions to literature surrounding play could be found mainly in the area of child development and behavior research (Bandura & Walters, 1963). For example, Sutton-Smith, et al. (1963) studied children's preferences to 'masculine' and 'feminine' items during free play. Additionally, Charlesworth and Hartup (1967) examined social relationships during play in four preschool classes.

In the early 1980's, technological advancements gave rise to gaming in popular culture and more scholarship was devoted to examining the potential of game play. For example, Mitchell (1985) found in a study of twenty families that played games using Nintendo that playing video games was an important part of family play as it brought the families in the study closer together. Play became the focus of industry and scholars not only in the social sciences and humanities, but also from disciplines such as engineering and computer science (Zagal, 2008). The engineering and computer science approach to gaming research examined the technical features and design aspects of a game to determine marketability and (re)production. However, the social sciences and humanities began to conflict on how and why games should be studied. The social scientists felt that the examination of game's effects on peoples' actions

within these spaces was needed while humanities approached game research in terms of examining games as cultural objects and the necessity for examining how meaning is made within gaming spaces. These explorations in games were influenced by a host of other happenings in education that surrounded pedagogy, technology, and literacy theory.

By the late 1990's, scholars began to form two distinct camps based upon an academic debate that looked at the purposes of gaming research. The 'narratology versus ludology' debate began when Danish scholar Jesper Juul (1999) stated, "The computer game is simply not a narrative medium" (p.1) and argued in his thesis that games did not have stories and instead promoted player-controlled interactivity. The term ludology was provided by Uruguay born game researcher Gonzala Frasca. Ludology means a "discipline that studies game and play activities" (Frasca, 1999, p. 2) and promotes the examination of unique rhetorical possibilities within game studies. Ludology stems from child development theories (Piaget, 1957) and social anthropology (Caillos, 2001) and focuses on game structure more so than a narrative task (Eskelinen, 2004). This thought implies that games do not tell stories that are found in other texts such as movies or books.

Around this same time, Janet Murray's influential book *Hamlet on the Holodeck. The Future of Narrative in Cyberspace* (1997) was published. Within this book, Murray discusses the affordances and aesthetic qualities of narration within games that hold the potential for interactive drama. Murray attempts to promote the use of approaching game studies by means of literacy theory. The narratology versus ludology debate continued in publications and conferences for several years. Some still argue that the questions that it posed have never been resolved (Mukherjee, 2015) or "produce at best a partial account" (Buckingham & Burn, 2007, p.327) of games when the focus is either on the narrative or ludology of games. Nonetheless, the

debate fueled conversation about epistemological approaches to gaming studies and is still referenced as a pivotal point in gaming studies to this day (Koenitz, 2018).

During this same period, journals such as *Game Studies* and *Virtual World Research* were founded that assisted in solidifying game studies as a research area (Shaw, 2015). Meanwhile, broader influences continued to shape game studies and included thought by scholars who were attempting to define game studies as a field. In his book, *What Video Games Have to Teach Us About Learning and Literacy*, Gee (2003) provides 36 learning principles that he says are found in good computer and video games. Examples of the principles include how games are customizable for players. Additionally, games are in context to people's goals and provide immediate feedback. These 36 principles are grouped into three categories which are problem solving, understanding, and empowering learners and provide a framework for considering their use within the classroom space. Gee (2017) explains that games are "a way to learn about how to organize interest and passion" (p. 118); therefore, having the potential to provide educators opportunities to reflect upon pedagogical practices and student learning by not only considering youth's cultural practices, but also learning spaces that are currently available in the world and those that have not yet come to be. For instance, when someone has an interest in a video game, they may pursue more knowledge about the game in digital affinity spaces. This could include discussing aspects of a game with others online and exploring online multiplayer games to learn more about how to maneuver and conquer a game through a set of tasks.

Research with Video Games

Research focusing on the use of video games in classrooms is complicated for various reasons. Educators incorporating video games into the classroom can be faced with challenges such as lack of knowledge or comfort in bringing video games into the classroom to not having

the resources needed to guide their work (Nash & Brady, 2021). Consequently, video game use in U.S. classrooms tends to be part of conversations that surround obstacles or possibilities for using video games in classrooms or cases of unique teaching examples (Abrams & Hanghoj, 2022). Additionally, one must recognize that schools are historical constructs that are influenced by traditions and their local communities (Koutsogiannis & Adampa, 2022). Stakeholders may question the use of video games being brought into a classroom for learning, because it challenges long-held classroom practices such as reading traditional print texts.

However, research by Gilje and Silseth (2019), for example, followed a student “across a wide range of contexts,” and highlighted from their research “how young people’s engagement in gaming and the knowledge acquired can be transformed into a literacy practice in school, where game play in itself is often not valued” (p. 189). Thus, scholarship with video games in secondary ELA classrooms is emerging (Nash & Brady, 2021) and has been enriched by arguments that consider how youth can engage in rich literacy practices by joining together traditional and new literacies and bridging youth’s in and out of school practices (Apperley & Walsh, 2012; Hanghøj et al., 2020; Bacalja, 2020). Scholars call for more research to be conducted and provided to assist with these discussions (Gerber et al., 2014; Bacalja, 2018). As such, in this section, I review recent research to provide additional understanding of what has been studied with video games in the classroom space. The current study took place in a secondary ELA classroom. Therefore, I end the research on video games at the secondary level. Thus, the topics include: 1) practitioner perception of video game use in the classroom, 2) video game play and motivation in the classroom, and 3) how video games have been incorporated into the secondary ELA classroom.

Practitioner Perceptions of Video Game Use in the Classroom

Research seeking to understand teacher perceptions and attitudes of using video games in the classroom has had mixed results. Researchers report that educators question the pedagogical value of video game use in the classroom due to their lack of personal experiences with and negative views of video games (Greitemeyer & Mügge, 2014; Dickey, 2015; Beavis et al., 2017). This causes practitioners to express doubt with video game play and student learning in the classroom (Gaudelli & Taylor, 2011). Furthermore, Gerber and Price (2013) studied ten literacy educators' engagement with video games while the teachers examined literacy activities related to the games. It was reported that the teachers expressed value in having video games and incorporating game based pedagogical practices in the classroom; however, the teachers expressed concerns over how their colleagues and other school staff would perceive its use. Likewise, Stieler-Hunt and Jones (2017) found in a study with thirteen educators that they experienced alienation from their colleagues due to differences in their beliefs about using gaming within the classroom space. The participants in the study cited that they felt as though the alienation was due to colleagues having a predisposed feeling that gaming in the classroom is a waste of time. Additionally, students would openly express their interest in having gaming be in multiple classes, causing the potential for resentment towards the thirteen study participants.

Dickey (2015) conducted a qualitative study with four female educators. The study took place in a graduate course that was designed to introduce educators to research and classroom practice of game-based learning. The educators defined themselves as casual gamers, or those that play games that provide engagement for short periods of time and reported seeing the value of bringing gaming into the classroom. All four participants expressed concerns about how games may cause youth to become immersed within the digital world and impact developing

youths' minds and behaviors. However, it was noted that the game genre may have impacts on how educators value and view using games in the classroom for student learning. The educators in the study were heavily involved with adventure games. Dickey offered thoughts on how video game genres may impact educator perception and incorporation of games into the classroom space.

Gaming coursework in higher education was found to broaden educators' perspectives on the value of gaming as a learning tool. Kenny and McDaniel (2011) found that pre-service teachers' negative attitudes about incorporating video games into their future classrooms had significantly changed to positive attitudes after the pre-service teachers participated in and analyzed digital video game play within an undergraduate course. The results prompted the researchers to recommend that teacher preparation programs have inclusive video game engagements to challenge pre-service preconceived negative notions about video game use within classrooms. Similarly, An and Cao (2017) studied 50 educators' perceptions of game use in the classroom. The educators were enrolled in two graduate classes and the study revealed the educators' attitudes about digital game use in the classroom positively changed after they engaged in game design experiences during the course. Results included teachers reporting on the educational potential of digital games in the classroom and their increased interest in incorporating them into their instructional practices. However, it was not reported if the participants in the study actually incorporated video gaming into the classroom after their enrollment in the graduate class.

Another study that was conducted with 154 pre-services teachers examined perceptions of adopting video games in educational settings. Belda-Medina and Calvo-Ferrer (2022) found that pre-services teachers had positive attitudes about video game use in the classroom, but

barriers were identified that may prevent actual implementation. In the study, participants chose games that could be incorporated into pre-school and elementary classrooms that would assist students in learning the English language. The pre-services teachers then engaged with the game and finally evaluated the game for classroom use. The findings suggest that participants had positive attitudes about incorporating video games into their future classrooms, but the participants lacked the practical knowledge of incorporating games that assist with learning the English language into the classroom. This was seen as a barrier to the possibility of implementing video games into the classroom for learning purposes.

Rocha et al. (2018) conducted a research study where 714 elementary and secondary teachers were surveyed and asked about their perceptions of using educational video games in classrooms. The authors defined educational games as video games that are intentionally designed for use in education. They are meant to help students understand concepts and domain knowledge (Ge & Ifenthaler, 2017). The findings suggest that factors that influence whether a teacher will incorporate educational video games into the classroom include: 1) how the game relates to the curriculum, 2) lack of time and technological resources, and 3) poor design of the video games. Similarly, Sánchez-Mena et al. (2019) found with 312 higher education faculty that perceived usefulness of a video game directly influences whether one would incorporate video games into their course.

The research summarized demonstrates that educators who engage with video games within these studies acknowledge that there are educational possibilities that would positively affect students and their learning when video games are brought into the classroom space. On the flip side, the educators expressed concern about incorporating video games into their own classrooms. As seen in the studies, educators were reluctant due to factors such as how other

people would view their instructional choices and perceived negative impacts that gaming could have on their students.

Video Games and Motivation in the Classroom

Research that has taken place outside of the classroom has suggested that online gaming has the potential to increase feelings of closeness and friendship (Sundberg, 2018) and researchers have suggested the implementation of video games into classrooms due to their motivational elements (Malone & Lepper, 1987; Gee, 2007; Schrader et al., 2010; Molins-Ruano et al., 2014). The elements can include social (i.e., opportunities to meet and collaborate on games) and achievement (i.e., progress within the game) related motivation (Yee, 2006; Kahn et al., 2015). Video games have been found to have a positive impact on students who have been identified by educators as ‘at-risk’ or students who are inactive participants within a classroom due to reasons such as motivation, academic performance, and/or social difficulties. Labels such as ‘at-risk’ are problematic as it perpetuates deficit language and labeling of youth as inadequate (Muhammad, 2020). In a mixed methods study that involved 190 students ages 9 -12 years old, Hanghøj et al., (2018) found that the students within the group that were identified in the study as at-risk demonstrated an increase in their motivation towards being in the class that matched that of the students in the study that were not identified as at-risk after video games were incorporated into the classroom for learning. Video games were used to create a more inclusive classroom where there were opportunities for collaboration as students participated in teams. Thus, video games were used to reframe participation when students engaged with the curriculum.

Ebrahimzadeh and Alavi (2017) reported that when 241 students participated in digital video games within the classroom space to learn a foreign language, that the students had a

“significant change in motivation over time” (p. 103). The students engaged with *Warcraft III: The Frozen Throne* (Blizzard, 2003) were randomly assigned to either be a player, watcher, or reader. Throughout the unit, the students completed language learning activities surrounding the digital video game. This study added to previous findings that indicate that digital video games increase language learning motivation (Wehner et al., 2011).

Moreover, Rosengrant et al., (2019) found in a mixed methods study of secondary science students that the use of video games in the classroom became a platform for learning, because students' interests were increased in the curriculum. Survey and follow-up free response questions data demonstrated that the use of video games within the classroom addressed students' misconceptions and allowed for extensions of learning. The research provided demonstrates how classroom learning opportunities that acknowledge and reflect students' meaning making in contexts located outside of the classroom have the potential to foster interest in classroom learning.

Video Games in Secondary ELA Classrooms

Research of video games being incorporated into secondary ELA classrooms has gained momentum (Nash & Brady, 2021). The research has included students engaging in video game analysis to demonstrate their understanding of content found in traditional print texts and thematic elements found in video game storylines. Marlatt (2018) describes a study which involved senior level students in an English course. The class focused on communication and career skills and was offered for high school graduation credit. The instructor wanted to offer “alternative paths to success in literacy” (p. 57) and so after students read *The Outsiders* they used Minecraft to recreate scenes and the setting of the text. Students used their creations and game play to write a summary of their learning with the traditional print text. The findings

indicated that through video game analysis, scene creation, and video game play the students were more engaged with learning in the classroom, had increased levels of comprehension of the text and expanded notions of what literacy engagement includes.

Ostenson (2013) explored storytelling within video games in his high school ELA class. Students analyzed the narrative nature of video games by examining elements of the story such as the setting, characters, and themes. Findings indicated that students were able to recognize that their participation in the game impacted the narrative outcomes. Additionally, students commented on the nonlinear plots within the video games and how these features impact players and the storyline. Finally, students discussed video game characters and how they were depicted. Conversations surrounding stereotypes and comparisons to characters in traditional print literature took place. This led students to critically consider representations within storylines within different media forms.

Berger and McDougall (2013) studied four groups of teachers and their secondary level students in three separate locations in England. The research participants engaged in game play blogs, students taught their teachers how to play the video game *L. A. Noire*, and then they engaged in activities and resources about the game that analyzed the game as a literary text. Data revealed that the participants used the video game to identify themes surrounding gender roles. Specifically, participants identified men in positions of power. Participants reported that female characters were viewed through a man's lens, and the lead female character needed help from men to succeed. Kadakia (2005) explored secondary ELA students' engagement with a unit that incorporated the video game *Morrowind* to explore moral dilemmas. In the unit, students first engaged in the theme of choice and consequences in traditional print texts. Students then analyzed video game vignettes where they had to identify choices the character made and

consequences of their choices. Students explored the choices of stealing, joining a gang, and other choices that have permanent implications. Findings indicated that the students were highly engaged with the unit of study and were able to analyze themes within the game and make comparisons to the traditional texts that were read in the class and connect to life experiences outside of the classroom.

Beavis and O'Mara (2010) outline a case study where students' critical literacy and research skills were developed when they engaged with video games in the classroom. Secondary ELA students at a large Catholic boys school in Australia did a comparative analysis of *The Simpsons Hit and Run*, and *Grand Theft Auto IV*. Students also analyzed a game of interest to them and looked for key elements in the video games. The key elements included, but were not limited to, analysis of images, camera angles, and characterization. The unit concluded with students discussing audience appeal, ideological dimensions of the games, and representations and made comparisons to traditional print texts. Findings indicated that the students engaged in critical literacy practices when they engaged in video game analysis. The participants identified and discussed game changes according to age of the intended player, game creator motivations, and representations. These examples show how video games can be an avenue to deepen students' critical capacities when they are used within secondary ELA classrooms.

Literacies

In this section I will discuss 1) new literacies, 2) visual literacies, 3) gaming, and 4) critical media literacies. Each section includes discussion surrounding theory and review of relevant research as it pertains to each category. Additionally, at the end of this section, I

highlight one of the video game unit's classroom activities to demonstrate how multiliteracies, new, gaming, and critical media literacies informed the unit design.

New Literacies

In the 1980s, literacy had moved to the forefront of initiatives, policies, and research in the United States. Prior to this time, the term literacy was relatively absent, and instead, reading research and terminology associated with psycholinguistics dominated educational discourse. The development of literacy as a widely used concept of education was due to five factors that were identified by Lankshear and Knobel (2011). The first was the work of critical literacy scholar Paulo Freire. Freire developed adult literacy programs and worked with peasants in Brazil in the 1960's. Freire held at the core of the program that one needs to read the world and the word (Freire & Macedo, 1987). Freire (1987) argued that students "will be able to reconstruct their history and their culture" (p. 151) when their own lived experiences and words are used within literacy instruction and programs. He held the belief that illiteracy is the result of oppressive practices in relation to social structure and systems.

The second and third factors developed out of the 1970's. The literacy crisis claimed that the adult population in the United States was reading and writing at a minimal level for survival. It coincided with economic changes that were occurring in the U.S. and the release of the report *A Nation at Risk* in 1983. The next factor was the idea that economic stability is related to the attainment of levels of adult literacy. Thus, it was increasingly believed that the higher the population's literacy attainment, the better economic growth outcomes.

School, professional, and policy accountability that emerged during the 1980's and 90's is the fourth factor that was identified. During this time, movements towards standardization and student and school performance data reporting was pushed as a measure for things such as policy

to determine justifications for funding. Finally, the last factor identified was the development of sociocultural perspectives on texts. As discussed in chapter one, the sociocultural approaches to literacy and learning are viewed as social practices interaction within learning spaces (Vygotsky, 1978). Unlike the banking method of education which sees students as empty and passive learners where teachers transmit knowledge onto students within programs that do not reflect aspirations of the people (Freire, 2000), sociocultural theory embraces problem-solving education based on social and cultural experiences. In these types of classrooms, students and their teacher(s) are positioned in a relationship centered around dialogue. It is through dialogue that students and teachers learn from one another and the reality they live in. All members of the classroom become responsible for teaching and learning in these social spaces (Wenger, 1998; Freire, 2000; Rogoff, 2008; Kalantzis & Cope, 2012).

The sociocultural approach to understanding literacy led to research and development of literacy studies. As discussed in chapter 1, this approach is what Gee (1996) first called New Literacy Studies. New literacies are considered “ways in which meaning-making practices are evolving under contemporary conditions that include, but are in no way limited to, technological changes associated with the rise and proliferation of digital electronics” (Knobel & Lankshear, 2014, p. 97). New literacies involve a socially recognized way of generating and communicating meaning within multimodal spaces. These spaces consider multiple methods of communication (Jewitt & Kress, 2003; Kress 2010). Text in isolation is deemphasized and additional context is provided. This may include the inclusion of illustrations, narration, movement, and sound and lead to enhanced engagement with the text (Stufft & von Gillern, 2021). Additionally, multimodal environments encourage the sharing of resources and feedback, and participants within new literacies seek relationships with those of similar interests (Knobel & Lankshear,

2007; 2014; Lankshear & Knobel, 2011). New literacies point toward sociocultural theory in practice. Lankshear and Knobel (2018) contend:

Young people learn to participate in such practices independently of formal education, and in many cases importing versions of them into classroom learning may well kill students' interest in them and otherwise prove alienating. At the same time, however, the kind of facility with digital tools and familiarity with online networks, services, and affinity spaces involved in young people's everyday new literacies are likewise integral to the kinds of learning environments and opportunities formal education institutions should be making available to learners. The challenge is to mobilize or 'leverage' what young people know and understand from their everyday engagements and interests for the kind of educational work we believe schools should be moving toward. (p. 11)

Lankshear and Knobel (2018) challenge schools' traditional views on literacy and suggest that the best way to include new literacies in the curriculum is to have students participate in practices such as gaming and blog writing to gain contextual and situated learning. There are key components of new literacies implementation that should be considered. Skerrett (2016) discusses that teachers and students should value "one another's literate lives" (p. 119) and have literate activities in the curriculum that bridge outside of school practices with learning happening within the classroom learning space (Hull & Schultz, 2002; O'Brien, 2012). This can be accomplished by having students identify connections across contexts (Skerrett, 2016). Thus, incorporating new literacies into the classroom is not an add-on to make learning more appealing to students (Kist, 2005; Bailey, 2013; Hunter & Caraway, 2014; Miller & Bruce, 2017).

A new literacies classroom means shifting the everyday workings of the classroom to encompass multiple ways of learning. While print literacy is seen as a priority in many U.S.

schools (Sperry & Baker, 2016), students are engaging in numerous literacy practices outside of the classroom that many argue need to be brought in and acknowledged within the classroom space (Kress, 2005; Kress 2010). Current multiliteracies research examines use of modes across sociocultural contexts and technologies (Yeh, 2018). Shipka (2011), who has researched multimodality, play, and digital rhetorics, stressed the importance of promoting a holistic approach to meaning making where a full range of digital composition forms are considered for student learning in classrooms rooted in sound pedagogical practices. Lenters (2018) expands on Shipka's thought by stating that "bringing into the classroom multimodal texts that students enjoy out of school also provides an important space for educators to help students critically evaluate the texts they encounter both in and out of school" (p. 645). This idea is demonstrated in a recent study by Seglem & Garcia (2018) where student outcomes were examined in an inquiry driven classroom that incorporates multiliteracies (NLG, 1996). The instructor provided opportunities for students to be "exposed to different ways of making meaning" (p. 61). She provided students choices on how they approached their learning. Additionally, the instructor asked students to critically examine work and provided opportunities to reflect upon learning.

Additionally, Howard et al., (2017) found several assertions in a study where secondary ELA students were engaged in constructing multimodal arguments. The findings demonstrate that students were highly engaged in their learning when provided opportunities for choice in their learning process. Also, the students developed an understanding that argumentative compositions could be created multimodally and developed a belief that constructing multimodal arguments would help them with writing more traditional forms of composition. As such, new literacy practices move beyond verbal meaning and understanding to promote deep

understanding and practical application while putting students first and have fostered other forms of literacy as we will examine next (Lankshear & Knobel, 2008).

Low and Pandya (2022) analyzed 75 interviews with children aged 8-10 to gather their perspectives on multimodal composing. The students created videos in their social studies class and the researchers examined how students interpreted the purposes of the modes they used to design the videos. Findings showed that students chose the modes that were aesthetically pleasing to them, helped their audience understand and feel more connected to their products and modes that they had access to.

Higgs and Kim (2022) conducted a qualitative study to identify benefits from digital multimodal productions in traditional high school literature classrooms. Students created multimodal compositions that demonstrate learning with Anglo-Saxon poems. Data was collected through student digital products, semi-structured interviews, surveys, memos, field notes, and emails over a 6-week period. Students expressed that creating digital compositions assisted in understanding the literature. The results indicated that digital compositions provided an entry point into engaging with challenging print text and provided an example of how new technologies and traditional print text engage students in expanding communication modes for meaning making.

Howell and Dyches (2022) researched students' racial literacies through multimodalities in a predominantly white, suburban high school in the Midwest. Racial literacy is understood as a critical pedagogy used to end racism due to racism being a concept that is taught and learned (Laughter et al., 2021; Sealey-Ruiz, 2021). They explored the research question: How can students utilize multiple perspectives to sharpen racial literacies through multimodal design? The 6 week unit asked students to design a visual essay, tools of multimodal design, in response to

the district required reading of *The Adventures of Huckleberry Finn* (Twain, 1884). During the unit, students were taught the tenets of critical race theory and applied their learning to designing a visual essay. They collected images from their world (i.e. photographs from their own high school, images from shows they stream frequently) and analyzed them against passages from the canonical text. They wrote responses to posed questions and used the collected images to assist in communicating their understandings. Howell and Dyches (2022) found that students had success while crafting the visual essays by “externalizing new perspectives” (p. 108). However, students demonstrated difficulty in fully pushing back against racism. As a response, the authors argue that it is imperative for students to go back and reexamine elements of race that manifest in the curriculum and their own lives. The research presented demonstrates ways in which multiple ways of meaning can be enacted within the classroom. Providing multimodal opportunities for students allows them to engage with learning socially and through varying ways that aid with analysis and comprehension.

Visual Literacy

John Debes, the founder of the International Visual Literacy Association, has been credited with the first use of the term visual literacy in a letter that he wrote and sent to several U.S educators in the 1960s (Williams & Debes, 1970). The letter exchange started what some called a “visual literacy movement” (Moore & Dwyer, 1994, p. 14). This period of time saw visual literacy conferences held and the foundation of the *Journal of Visual Verbal Language*, now known as the *Journal of Visual Literacy* (Stuart, 2005). Visual literacy has been defined to include the contextual, critical, and communicative skills that enable one to use images and visual media to interpret and create meaning (Seels, 1994). However, visual literacy is not a fixed concept (Peña & Dobson, 2021). It has the potential to evolve due to factors that include

new technological discoveries and uses. Regardless, the connection of visual images and meaning making is one that can be found throughout history. Aristotle stated that, “without image, thinking is impossible” (as cited in Benson, 1997, p. 141). Thus, meaning is developed through the understanding of visual features by one thinking about and questioning the context of the images and the producer’s intent (Özsoy & Saribas, 2021). This concept is known as visual thinking. Visual thinking is internal and creates an emphasis on the reader’s action to create meaning and learn (Stokes, 2008). It is described as “the ability to turn information of all types into pictures, graphics, or forms that help communicate information” (Wileman, 1993, p. 114). It is one’s perception and ability to see images as shapes and symbols (Arnheim, 1969). Additionally, visual thinking includes the mental images one has due to the visual components of the image (Wileman, 1993). The visual components may include the color, texture, or lines used in the image.

Similar to a continuum, visual thinking leads to visual learning and then to visual communication (Wileman, 1993). Like visual thinking, visual learning is internal and includes, for example, learning from pictures (Seels, 1994). Thus, it may include someone viewing diagrams or photographs to learn concepts or to follow directions in putting an object together. Visual learning design principles have been used by companies for developing instructional materials, such as textbooks. Lastly, visual communication is the use of visuals to express ideas and convey meaning to others (Wileman, 1993). It is considered external where one is designing and producing a visual for others (Güney, 2019). Therefore, one must understand that images are not value-neutral (Brown & Savić, 2023). Image creators make conscious and unconscious decisions about what to include or not include in their images. The images can be biased in

representations and reinforce stereotypes that are found in society. This can lead readers to be positioned to view the world through a particular lens (Gee, 2010).

Scholars have fallen more or less into two groups regarding visual literacy. On one hand, it is argued that image use is ideal for developing active, meaningful, and permanent learning, and formally developing skills that question images should be a priority in classrooms (Güney, 2019). Two ways to develop visual literacy skills are suggested. The first is by helping students read images by applying analysis techniques. The second is by helping students write images as a communication tool (Buğday & Sarı, 2022). On the other hand, some feel that visual literacy is informed by personal practices and socialization and therefore, does not require explicit instruction (Messaris, 2012). Regardless, today's youth live in an image-saturated world (Kędra & Žakevičiūtė, 2019). Their everyday practices are mediated visually through activities such as making videos and posting them online, sharing photographs with friends on Instagram, and expressing themselves through graphical illustrations.

Visual literacy research has been conducted throughout the different levels of schooling. Therefore, I will highlight research conducted from PreK classrooms through pre-service teacher programs. Templeton and Doherty (2023) analyzed artifacts (photographs, transcripts, and fieldnotes) from PreK students in a New York City university childcare center through a photo-elicitation study. The children in a 3-year-old classroom were asked to take pictures with a digital camera and then discuss their favorite images with their classmates in a whole group setting. The children in the class were provided opportunities to ask questions during the group setting and then the images were posted on a bulletin board where students were encouraged to engage with them. The goal of the study was to see what insights youth provide the field of visual literacy when young people take their own pictures, interpret their own and other people's

pictures, and engage with the posted student pictures. Findings suggest that young people possess visual literacy skills at a very early age. The children interpreted images, questioned their classmates on the images that they chose to share, and used the images for self-expression.

In a study by Taylor and Buchman (2022), approximately 200 students in grades Kindergarten through 3rd grade worked with a partner to create visual narratives through the medium of a collage. Students were required to exchange ideas and support one another while employing technical artmaking practices (such as using shapes to represent ideas). The students were asked to consider what they may need to include to allow other people to “read” and understand their image. After the pairs created their collage, they then received a different image that was created by classmates. The students asked the pairs to interpret the original collage and add details to it to finish the image. The researchers noted that there was confusion by some students about what the given image was trying to portray due to lack of details. Other partners appeared to understand what the image was trying to portray and then added to the image that was already created. Afterwards, students received back their original collage and discussed as a class what had changed to their image, what it was like to see their collage interpreted and added to by other people, and what they would have added to their original collage. Findings indicated that the students felt that they needed to add more details to the original collage to communicate the meaning of the image so that others could interpret the collage better, more time was needed to complete the collages, and communication was key to working with partners.

Hanci (2022) investigated 299 high schoolers’ visual literacy skills to determine if there were any variables that impacted students' visual literacy skill proficiency. Variables that were tested included gender, grade level of student, and achievement. The Visual Literacy Scale that was developed by Kiper et al. (2012) was used to measure the visual literacy levels of high

school students. Additionally, questionnaires were utilized and reliability and validity studies were conducted. Results were statistically analyzed. Findings indicated that females scored significantly higher averages than male students in visual interpretation, distinguishing visual messages in daily life, and visual literacy total scores. Another finding indicated that the visual literacy of secondary students differs significantly according to the grade level. Thus, senior students scored statistically higher than those in lower grades. Lastly, the research also showed that achievement levels impacted visual literacy skill level.

Brown (2022) researched visual literacy practices of 83 students in three lower grade level high school Norwegian classrooms. Students engaged in critical practices that involved race and class, stereotypes, multiculturalism, and politics. Students were then provided an advertisement and asked to recreate the advertisement based upon their critical practices work. Findings indicated that the students were able to identify the intended message of the original advertisement, but also analyzed how the message was constructed and the advertisements implied message. However, when students recreated the advertisements, they were not always successful at challenging dominant discourse. For example, many students added women in their advertisements, but did not have the women as the employer. The women in the new advertisements were employees.

Eutsler (2021) conducted a qualitative case study with 28 pre-service teachers within a higher education classroom at a university located in the U.S. southwest that has approximately 38,000 enrolled undergraduate and graduate students. The pre-service teachers were asked to design their own digital book using CoSpaces Edu Software. The purpose of the research was to explore how pre-service teachers attend to visual literacy skills and how multiple modes of communication were incorporated into their design after basic coding skills were learned by the

participants. The students created visually engaging books with colorful graphics and utilized multiple modes of communication which included captions and narration. After the digital books were created, the students shared their digital stories with classmates and answered an open-ended reflection to identify challenges and consider future classroom possibilities and implementation. The reflections revealed that the students felt the digital books were a creative outlet and they acknowledged possibilities in incorporating the creation of digital books into their future classes. Reflection comments included how creating a digital book could be considered a “fun extension” or end of the unit project that could be incorporated into learning. However, students mentioned there would be numerous challenges to including such an activity in the classroom and that there may not be enough time in the instructional day. Thus, leaning towards not incorporating this type of activity into their own classrooms. The research presented in this section highlights work that has been done surrounding visual literacy. As shown in the findings, visual literacy is seen in children and further developed and explored into adulthood. There are positive reports of the use of visual literacy for learning in classrooms, and educators can use it as a way to have students demonstrate understanding and provide opportunities for expression.

Game Literacy

The term game literacy assumes that games are a medium that separates itself from other forms of literacy and the skills and knowledge that are gained from this form of literacy is applicable to different situations and contexts (Buckingham & Burn, 2007). Additionally, Buckingham and Burn argue “that any account of game literacy needs to address both the elements that games have in common with other media and the elements that are specific to games” (p. 328). They feel that the multimodality (Kress, 2005) and social practices (Street,

1995) that are involved with gaming can provide answers on one's meaning making when they participate within this literacy. Thus, Buckingham and Burn suggest that the definition and scholarship of an overarching game literacy must encompass the functional and critical aspects of game play. Functional aspects include, for example, a mastery of being able to maneuver through a game by the use of controls. Examining semiotics would be considered a critical aspect and includes, but is not limited to, character gestures, images in the game, and sounds.

Zimmerman (2009) contends that gaming literacy “asks, in other words, not What does gaming look like? but instead: What does the world look like from the point of view of gaming?” (p. 24). Zimmerman outlines three major concepts of gaming literacy: systems, play, and design and argues that the three concepts develop skills (i.e., cognitive, creative, and so on) that are needed to be considered literate in the future. Salen and Zimmerman (2004) further this thought by promoting metagame. Metagame is understood as games and components involved with the game — such as the social context where games are played — are examined. Scholarship suggests that metagame is what a player brings to the game, how they prepare for the game, what they do during the game, and what they take away from the game (Kahila et al., 2021). Thus, a game player will use information outside of the game and bring that information into the game to gain advantage during game play (Boluk & LeMieux, 2017). Garcia (2018) explains that metagame is understood as layers of gaming which include:

- Broader, sociocultural context in which games are produced, discussed, and played;
- Smaller affinity spaces and player communities focused around specific genres, franchises, and platforms for gaming;
- An individual's own interpretation and participation with a game;
- The platform and its specific designs for interpreting and interacting with the game; and

- A game's specific world, goals, and narrative structures. (p. 201-202)

Here, game literacy does not only involve how to play a video game or read the multimodal texts during game play. Players must contextualize a plethora of information to solve a problem with the end goal of winning the game. As such, game literacy is multidirectional and fluid (Abrams, 2015). For instance, Kiouriti (2022) examined the importance of connecting metagaming in literacy practices through an ethnographic study of four participants aged 16 - 17. The participants played the first person shooter video game *Counter Strike: Global Offensive*. Data analysis of 196 hours of play and interviews revealed that the game participants engaged with multiple complex problems during play. This caused the players to take part in different literacy practices to prepare for the next time they would play the online game. These practices included the participants engaging in online and offline forms of communication. For instance, the participants would watch online tutorials, gaming tournaments, and speak with local gamers to gain insight on tactics to use during game play. Thus, they engaged in metagaming to gain and develop strategies for game play. Garcia (2018) examined layers of gaming in a study that focused on literacy practices and how systems shape play within and around the analog game, *Dungeons and Dragons*. The findings suggest that researchers may benefit from examining what happens within and around games and their systems because doing so can expand understanding of literacy practices within games and demonstrate how learning is shaped through the game materials, spaces, and game play.

Additional research that has been conducted within gaming literacy to support metagame has been conducted by Zagal and Bruckman (2007) who they found in a study of higher education students enrolled in a gaming studies class that students equate proficiency in games with being successful at playing them. They found that students in the class initially focused on

the features of a game and not necessarily analyzing the meanings surrounding a game. Thus, these scholars argue the goal of game literacy is to engage students in developing a deep understanding of games. Through metagame, critical analysis of the medium can take place as one is considering and questioning all aspects of the game. Like critical literacy, these skills promote the deconstruction of what is being consumed while fostering skills and thinking that produces counter narratives.

One medium where metagame can take place is with video games. Video games are multimodal texts and require practical and interpretive knowledge of visuals, sounds, writing, and other forms of expression that are integral to the gaming experience (Kress & Van Leeuwen, 2001; Buckingham & Burn, 2007). Research supports the use of video games within the classroom space due to the positive effects it has on learning tasks, such as decision-making and other cognitive and perceptual skills (Eichenbaum et al., 2014). For instance, Bacalja (2018) found in a study of middle level English students who engaged in a video game unit that the students demonstrated understanding of how video games can be mediated through decisions that are made by players to counter the game designer's reality. Stufft and von Gillern (2021) examined how 31 sixth and seventh grade middle school students analyzed multimodal symbols during video game play and made decisions based upon the interpreted information. The qualitative study found that students utilized the multimodal features to understand the game. Also, students used selective attention to some multimodal features in the video game to make decisions on what they wanted to do during the game. These decisions included what they wanted to build during the game and where they wanted to go in the game to complete certain tasks. Additionally, McNeice et al. (2012) demonstrated that students' critical capacities were enhanced when the students examined how video games positioned players during game play.

Therefore, the critical approach to analyzing video games lends itself to be connected with critical media literacy. This is due to how critical media literacy positions learners to critically question consumption of all forms of media and produce counter narratives to the discourse within such mediums.

Critical Media Literacy

The International Literacy Association released a paper in 2009 titled *New Literacies and 21st Century Technologies*. It stressed that literacy educators have the responsibility to incorporate new literacies into classroom practices to prepare students for activism within the global setting. Although this cannot be solely left to teachers to address, the report stated that educators need to consider methodologies that include various forms of texts combined with technology to assist in the fostering of informed and critically minded students. Around the same time, Alvermann and Hagood (2010) published an article in the *Journal of Educational Research* that highlighted critical media literacy, challenges associated with bringing critical media literacy into the classroom, and practical applications and connections to multiliteracies. In particular, Alvermann and Hagood note how school discourse influences the inclusion and exclusion of certain learning practices. For instance, the school's architectural design reflects the assumed ways that one should act while in certain areas of the building. Also, school discourse reflects the pedagogy and curriculum valued (Gee, 1996) which often privileges dominant discourse (Luke, 1994). Scholars have argued that school discourse does not acknowledge lived experiences causing students to view their everyday practices and interests as irrelevant to academic learning (Street, 1995). Additionally, scholars note that educational systems that promote standardization and memorization promote false notions of success at the cost of society's needs (Keller & Share, 2019).

Critical media literacy is one way to address these concerns. It includes a multi-perspective inquiry of popular culture practices that address power and foster transformation (Mirra et al., 2018; Kellner & Share, 2019). Pedagogical practices are deepened to levels that promote students analyzing the relationship between information and power (Kellner & Share, 2019). It involves students questioning assumptions about the world and to challenge status quo practices. They consider whose story is and is not being told and become interpreters of media messages that are encountered (Kelly & Brower, 2016). Also, one disrupts discourse that perpetuates power and oppression (Luke, 2000; Kellner & Share, 2019). Hobbs (1997) provides components of media literacy that need to be considered when conducting analysis of media texts. The components include examination of messages as constructions and representations of social reality, interacting with media messages to negotiate meaning, and analyzing media texts that have economic, political, social, and aesthetic purposes (p. 9). Students engaging in classroom discussions about power within these components have opportunities to counter social reproduction of stereotypes (Freire, 1970). Kellner (1995) has argued that young people are being educated by the media industry through their engagement with commercials, social media, and/or the video games that they play. This education does not ask youth to critically consider what they are engaging with. Instead, it positions adolescents in passive, non-collaborative roles where dominant narratives are provided and controlled. While never being considered a necessity in schools (boyd, 2014), critical media literacy opens space for youth to analyze, for example, perceived normal narratives and ideological representations within various forms of media to foster social change (Luke, 2000; Kellner & Share, 2007; Funk et al., 2016; Kellner & Share, 2019).

Saunders et al., (2017) provides a school-wide example that demonstrates how educators can assist students in critical analysis of media to “engage and participate as active citizens in an increasingly complex world” (p. 518). The authors chronicle a series of events that were part of an aftermath when a motivational video was shown during an all-school assembly. After the assembly, a group of students began to question the speaker’s message, and after a lengthy investigation, more students joined the critique, engaged with the speaker and his company about motives in his message and video, and reported their findings to other media outlets.

Another example of incorporating critical media literacy into the classroom is provided by Heppeler and Mandarino (2018) who describe a yearlong progression of learning that occurred within one high school social studies classroom. The students engaged with critical media literacy to engage in the construction of a historical argument surrounding the documentary film, *13th*. This film traces mass incarceration in the United States and uses embedded primary multimedia sources. The instructor used a film as an anchor text and offered alternative perspectives through, for example, images found on social media platforms that were taken during the time periods covered in the film. Through analysis of all texts within the unit, students initiated and created counter narratives of topics that were not explicitly covered in the film. These included the incarceration of immigrants and women. This engagement allowed students to interrogate happenings through a variety of mediums to create meaning and action.

Similarly, McArthur (2016) highlights work done by researchers and classroom teachers with Black, female students. This work involves fostering youth’s critical analysis skills to counter negative narratives about Black girls and women and “encouraging them to tap into their agency” (p. 370) to bring about social change. These counter-narratives were produced through podcasts after the analysis of music videos and on-line advertisements found on social media

where the images of Black girls and women within these texts were sexist and stereotypical. This space allowed these young women to deconstruct inequalities and produce counter narratives for change.

Finally, Camilli-Trijillo and Romer-Pieretti (2017) conducted a meta-synthesis of research surrounding critical and digital literacy. Meta-synthesis is a systematic review that can be used for explaining theories of interest and to provide results of studies (Walsh & Downe, 2005). 117 studies were reviewed that dated from 1996 to 2016. The goal of examining the research was to look for evidence in how these literacies empower people from historically marginalized populations. Although the research was not focused solely on the secondary school setting, some findings from the analysis suggest a need to support secondary teacher planning and preparation to incorporate critical media literacy into the classroom. By doing so, educators have the necessary tools to be able to have their students critically engage in these discourses. The scholars also report from their review that engaging students in critical media literacy allows for empowerment of youth and participation in cultural issues based upon the questioning of digital media. The summaries of the research above provide examples of how literacies and video games can be incorporated within the classroom. They assist in considering how the two intersect to develop critically minded youth.

Conclusion

In this chapter, I provided the development of game studies and reviewed relevant literature on using video games for student learning. Drawing upon research, I developed a study which sought to examine student literacy and learning practices with video games as text in the classroom. By developing a theory guided conceptual model of a video game unit that positions students to be critical consumers and producers, I was able to highlight ways in which critical

pedagogies can be utilized within the classroom space. In the next chapter, I will provide an overview of the study on examining student learning with video games in a secondary ELA classroom.

CHAPTER III: METHODOLOGY

In this qualitative study, I examined how secondary youth in one upper-level ELA classroom engaged with learning and literacy practices while participating in a month-long unit where they used video games as text. At the end of the unit students created their own video game using the Scratch (MIT) platform. Students collaboratively analyzed video game multimodalities, examined and remixed video game posters and images, and reflected on their own personal connections with video games as text during the unit of study. In this study, I explored what can be learned about secondary students' learning and literacy practices when video gaming is incorporated into the curriculum and examined how students disrupt and/or reinforce power laden discourse as they deconstruct and construct video games and video game materials.

I gathered data by drawing upon ethnographic methods in the classroom setting where the unit took place. I blended sociocultural, multimodal, and critical perspectives to analyze student interactions, products, and interviews in the classroom within the structures of the school, unit goals, and discourses that emerged. I combined multiple means and perspectives to collect data from students in the classroom. Student collaboration and products were at times influenced by the school policies that were in place due to the coronavirus pandemic. These policies included, for example, students only being able to sit at their desk and face forward with masks on during the duration of the class period.

In this chapter, I describe the research design and framework, including the research questions, data sources, and data analysis. Additionally, I describe the characteristics of the research setting, teachers, students, and my researcher role. The following research questions guided this study:

1. What can be learned about secondary students' learning and literacy practices when video games as a text are incorporated into the secondary ELA classroom?
2. What discourses do secondary ELA students engage when deconstructing and constructing video games as a text within a literacy unit of study?
 - a. How do secondary ELA students disrupt and/or reinforce power laden discourse?

Research Design and Framework

I employed an inductive qualitative research design for this study. I needed to gather in-depth data surrounding the human experience within the classroom space and use the data to guide my identification of themes and findings (Creswell, 2015). I approached this study by being an active participant in the class where the data was collected. I was involved in all activities in the class during the research study. My involvement included co-teaching the lessons, working with small groups, and helping individuals with their projects. The qualitative methodologies included components of grounded theory (specifically inductive coding) and critical discourse analysis. This provided a rich record of the observed reality of the students in the classroom while considering my influences and biases that impact the research process (Corbin & Strauss, 2008) and helped to answer my research questions.

Interpretivist Paradigm

The interpretivist paradigm holds the belief that reality and knowledge are socially constructed through things such as language and cultural artifacts (Alharahsheh & Pius, 2020). People are complex and, therefore, experience and understand reality in different ways. Interpretivism is a critique of the positivist paradigm structure that believes there is a single reality. The purposes of research within a positivist paradigm are said to be prediction and control where the data is presented in reports that specify relationships among variables (Lincoln

& Guba, 1986). “A positivist believes that there are facts with objective reality that can be expressed numerically” (McMillan, 1992, p. 9). From a quantitative perspective, observation and measurement are needed to draw conclusions about our world (Gay et al., 2009). Consequently, the research is based on collecting numerical data and analyzing it mathematically through statistical analysis.

In contrast, interpretivism involves exploration to answer research questions that are centered around a phenomenon of interest to the researcher(s). Denzin and Lincoln (2003) expand on this by offering a definition of qualitative research that includes “a situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that make the world visible. These practices transform the world” (p. 4). Thus, the research within this paradigm utilizes methods of conducting the research and includes collecting various forms of data (i.e., interviews, field notes, images) to gain a better understanding of the world through a researcher’s interpretation of “the stories that are constructed by research participants who are trying to explain and make sense out of their experiences and/or lives” (Corbin & Strauss, 2008, p. 10). This understanding can only occur if the research takes place where the phenomenon is happening, and the researcher is fully engaged within the space while considering influences and biases that they may bring to the research process (Corbin & Strauss, 2008).

As such, this research study intended to generate an understanding of students’ interpretations of what they were engaging within the unit and use their realities to contribute to knowledge in a new way. Thus, interpretivism supported the design of the study and exploration of student learning and literacy practices when video games were incorporated into the classroom. I rejected principles of other paradigms, such as positivism, as I wanted to conduct

research that would provide opportunities to explore topics more in depth while considering the students' own experiences and to answer the research questions:

1. What can be learned about secondary students' learning and literacy practices when video games as a text are incorporated into the secondary ELA classroom?
2. What discourses do secondary ELA students engage when deconstructing and constructing video games as a text within a literacy unit of study?
 - a. How do secondary ELA students disrupt and/or reinforce power laden discourse?

Construction of and Influences on Learning

I aimed to understand the way that people make meaning through cultural contexts and social construction. Therefore, the research study was designed in the interpretivist paradigm and rooted in the understanding that learning is socially constructed. Herein, meaning making involves both personal and social processes that include spoken and written language and other modes (i.e. signs and symbols) of making meaning (Chiari & Nuzzo, 2003). The processes draw upon cultural understandings and social interactions where language shares meaning with others (Vygotsky, 1978). Drawing on the New London Group (1996), I believe that learning includes multimodalities and is reflective of a globally connected world. In this sense, meaning is not something that is done in isolation (Gee, 2015). Rather, it involves using people's lived experiences and dialogue to co-construct understandings of the world.

My research is also rooted in critical heuristics informed by critical literacy. As explained in Chapter 2, the term 'critical' is understood as the ability to judge or argue and question what is truth and whose interests are being served? (Luke, 2012). Critical literacy acknowledges that there are cultural forces that are found in media and popular culture (Morrell, 2012). Cultural forces have the potential to reinforce existing dominant discourse. All people are influenced by

what is consumed within not only traditional texts, but also in media and popular culture and how stereotypes and White, middle-class, male ideologies are reinforced within these spaces (Gay, 2002; 2010). As Gay contends, “Television programs, newspapers, magazines, and movies are much more than mere factual information of idle entertainment. They engage in ideological management and construct knowledge on how the content is convey(ed)...” (2002, p. 109). Thus, it was imperative to examine engagements surrounding the critical analysis of power that is extant in mainstream gaming. These practices have the potential to provide more understanding of how students may disrupt power and oppressive practices and how students can critically consume information (Luke, 2000).

My understanding about the social construction of meaning and societal influences impacted my methodology for this study. First, I view meaning making to be socially and culturally constructed, and I believe students need to be active in their learning. Therefore, it was important as a researcher to be in the context of the study and observe the participants in their day-to-day interactions in the classroom to further my understanding of the learning that was taking place. Also, being critically oriented within the research informed my reading of students' discourse related to power when they participated in the unit activities. As students worked through the unit of study, I had opportunities to analyze discourse and see if and how students disrupted and/or maintained power.

Setting and Participants

This research took place at Granite High (pseudonym). I chose Granite High for the research study as it was one of only a few schools that was having in-person learning during the coronavirus pandemic and granted me permission to conduct my research in the school. I had reached out to seven different districts asking about the possibility of conducting research in their

school, but many were apprehensive about having an outsider come into the school during the pandemic. Granite High is situated in a rural community that is located approximately fifteen miles from a large city located in the Midwest of the United States. The high school is in a district that serves approximately 4,500 students and has 274 full time teachers (Illinois State Board of Education, 2021). The district has five elementary schools that feed into two middle school campuses. There is only one high school in the district. Granite High School (9th - 12th grade) has enrolled over 1,300 students with 67% of the population identifying as White (Illinois State Board of Education, 2021). The next largest racial group are identified as Asian (17%). The school has a 90% graduation rate with 13% of the student population eligible to receive free or reduced lunch. The high school was built in 1976 and has had six additions to the building since that time with the most recent being in 2014 where a second story was added to the existing building. These additions were completed to update the original building and provide increased student capacity.

Granite High's principal reported that its students are challenged with "a wide array of courses, high expectations, and rigorous curricula" (J. Brown, personal communication, September 9, 2020) that are influenced by the school's cultural beliefs. The beliefs include that at the core, education, individual development, and service to others are at the foundation of the school and align with the district's strategic goal to continually improve student growth and achievement. In addition, extracurricular activities and clubs are provided for students to become active within the school. In an interview, Mr. Brown (pseudonym), the school principal, stated, "We literally have something for all students. It is always my hope that students take the opportunities to become involved" (September 9, 2020).

Study Context

I selected Sarah Jones (pseudonym) and the students in her class as the study context. Sarah identifies as an Asian-American cis gender female. She has been teaching for a total of twenty-three years with twenty being in the district. I am familiar with the school and district as I had extensive experiences in the school building where the research was conducted. I developed a collaborative, professional relationship with Sarah during my time at the high school. Sarah enthusiastically and graciously agreed to have students engage in a unit where video games were incorporated for learning when I first approached her about it.

Planning the Project

Sarah and I discussed the possibility of the research taking place in her classroom during Spring of 2019. We decided to co-design a unit that would incorporate video games into the classroom as this was something that she was interested in learning more about. She expressed that she would like, "...students to get to the next step in their learning and connect their out of school practices with what they are learning in the classroom" (S. Jones, personal communication, August 4, 2019). Our first meeting took place in Sarah's classroom. I prepared for the meeting by drafting goals for the unit and possible lessons that may be included. Sarah and I discussed the goals that I drafted and attempted to determine with which class the unit would best align. We examined the curriculum from courses that she teaches and discussed texts that the students read throughout the semester. Sarah and I narrowed down the options to two courses and used the drafted goals and activities to finalize the decision.

Additionally, Sarah and I reviewed different resources to gather ideas for unit lessons as we were both not familiar with how to develop a video game unit of study. These resources included literature by Consalvo and Dutton (2006), for example, where holistic approaches to

game analysis are provided. We used these ideas from the resources to develop the unit. For example, one activity that we generated and was introductory in the unit included asking students to ‘read a video game’ by examining the modes (i.e., sound, color, images, characters, music) within a video game. Students were asked to consider how the multimodalities informed the story being told in the video game. Students then compared this information to a traditional text that they read during the course and considered what the author from that piece of literature used to build and tell the story.

Sarah had her students in one class from spring of 2020 engage with some of the activities we had developed for the video gaming unit. Although I did not analyze the responses from the activities for research purposes, I did use the student products and feedback to modify and develop additional activities for the unit. This provided us with the opportunity to see how the students responded to the activities and led us to consider additional applications or revisions that were needed based upon feedback that we received from students.

During that same time, Sarah and I decided upon the course where the research would be conducted. The course selected for the research study was 1st hour Composition. We chose this class, because it was being held in-person during the coronavirus pandemic. I wanted to conduct the research in an in-person course for reasons such as to be provided opportunities to ask clarifying questions in-person and get to know the students on a more personal basis. The class was held for an hour and thirty-six minutes every other day due to new practices that were enacted by the district due to the coronavirus pandemic. These practices included the district adopting a block schedule at the secondary level and offering families the option to have their students attend the school in person or virtually. The Composition curriculum aligns with the Illinois Learning Standards for English Language Arts, 11-12. Students read and write selections

which include fictional and nonfictional stories, poems, and essays. Sarah utilized print texts that are representative of world cultures that she has selected and acquired. Students also wrote numerous fiction and nonfiction pieces that included, for example, a college entrance essay. The course is not required for graduation but is offered as an option for students to count towards the district's ELA graduation requirements. Assignments for the course are part of the normal classroom activities and students are mostly assessed via traditional contexts which include written essays, participation, and preparation for classroom lessons.

Additionally, Sarah included New Literacy (Gee, 2010) activities such as a classroom blog where students provided feedback and had conversations regarding course content. All classroom materials were provided to students through Google apps. During this study, she taught another composition course that was held during the 2nd hour. She taught the video gaming unit to the 2nd hour students as well. However, I was not present and did not collect data from the 2nd hour.

A Collaborative Partnership

Our partnership during the research study was collaborative and supportive of one another. I was a participant observer that worked alongside the students and Sarah. Although Sarah was the primary instructor, I had opportunities during each class to facilitate discussions related to the unit. Due to my role as an active participant observer, I was allowed to examine my questions at a deeper level with the research population. Students were encouraged to share their perspectives and demonstrate them in their student products and reflections. I intentionally integrated critical perspectives into discussions centered on power during the video gaming unit and looked for opportunities to explore topics surrounding messages, ideological representations and/or stereotypes represented in video games. For example, on September 16, the class held a

discussion about implicit and explicit messages that are found in texts. Students were asked if they thought that texts can contain beliefs or value messages. Layla, (pseudonym) a student in the class, explained that creators' use of different images and colors made it easier to direct a viewer's attention to a certain point by emphasizing one mode.

I encouraged these conversations and aimed to integrate these perspectives into the unit to encourage dialogue surrounding these topics. As the unit progressed, I began to do more co-facilitation of the lessons. At times it was difficult to have the students in the class engage and discuss openly during the whole class discussion. Therefore, I worked with small groups and asked students to answer short and long answer questions through Google Forms. This provided opportunities for individual students to respond to the learning and for me to gather more research data. I used the students' Google Forms as part of the study to triangulate data.

Additionally, I felt that I needed to further develop relationships with the students to build rapport, so students felt more comfortable with me. Therefore, I brought in ice breaker activities that I completed at the beginning of each class. These activities included, for example, using emojis to solve a riddle. At the end of my time in the classroom, students commented during our final interviews how much they enjoyed the activities and were hopeful that Sarah would continue those for the remainder of the semester. Also, I arrived early before school began to greet and welcome students into the classroom and accompanied the class outside during mask break time that was built into the day. I often talked with students about their weekends, an upcoming school event, or a book that I had seen them carrying. While students worked on their final classroom product, I made myself available to assist with questions surrounding technology and coding for the game. As the unit progressed, I noticed that students sought my assistance and openly engaged in conversations with me. For example, on September 18, a student raised his

hand while he worked on deconstructing a video game cover. He asked me to assist with the image on the cover to determine the most prominent part of the cover. While I worked with him, he asked me if I had ever played the game and how I came to have all of the video games that I brought into the classroom for that lesson. Although I had never played the game that he was analyzing, I told him that the games I had brought were from my husband's collection. I joked with him that although I probably wouldn't be able to compete with younger online players anymore due to my need for reader glasses, that I have enjoyed playing multiplayer shooter and gameplay video games, such as Halo's *Capture the Flag*. I thoroughly enjoyed my time with the teacher and students. Truly, on my last day, I was saddened that I wouldn't be returning, but was surprised when students brought in treats for a class farewell celebration.

Covid-19 Pandemic Interruptions

Student day-to-day classroom activities and engagements were set within a larger unit of study focused on using video games as texts in the classroom. The unit of study took place from September 9, 2020, to October 16, 2020. In this particular study, school and classroom procedures - remaining seated for socially distance learning, mandatory mask wearing, and no in-person coursework collaboration - were put in place due to the coronavirus pandemic. Students completed work on devices that were provided by the school district. These devices and apps used in the classroom - Google, Chromebooks, Scratch - provided opportunities for synchronous and asynchronous collaboration, but students were not able to sit side by side or in small groups during the research study. The procedures created some constraints relative to the larger activities that the students participated in. These constraints included not being able to physically work in small groups as the students needed to remain in their seats during the class period. Therefore, when the teacher and I developed the unit, we embedded multiple

opportunities for students to respond to learning during the daily engagements. For instance, when the unit explored ideological representations in video games, students had opportunities to engage in whole classroom discussion, talk with someone sitting across from them, respond to questions that were posed to them through Google forms, and create a product that would demonstrate their understanding. Student products were completed using technology, and at other times, with individual worksheet papers or large construction sheets of paper.

Whole class and paired discussions and social interactions were framed by the classroom environment context. The classroom environment context in the research study was what one may consider traditional in nature where students would remain seated, student desks were arranged in rows facing the front board, and students would raise their hands to ask the teacher questions. Of course, the classroom environment context may be influenced by the procedures in place due to the coronavirus pandemic, but from my observations of other classrooms during the study and my previous employment with the district, these established structures were in place in many classrooms within the school prior to the coronavirus pandemic.

Additionally, I want to note the students' interpretations and engagements with video games as a text was a new concept for all the students in the class. Every student in the classroom noted on a survey completed on October 8, 2020, that they had never participated in a unit where video games were used for learning beyond rote activities such as using an online math game to learn multiplication. Additionally, students were asked their thoughts surrounding video games and learning prior to exploring the concepts in this unit. Based on an online survey that the class completed on August 27, 2020, most students reported skepticism about the value of video games brought into a classroom for learning. They felt video games do not lend themselves to learning opportunities for students. These aspects of the learning context have the

potential to set a precondition for social interactions as students have limited background knowledge or experience with this form of learning (Duranti & Goodwin, 1992). The study context was best suited for the data collection due to the research questions that I aimed to answer as I wanted to explore secondary students' learning when video games were incorporated into an ELA classroom. Although we are not able to generalize findings, the information provided from the study can allow us to consider how findings can be transferred to similar settings, inform teacher practices, and impact curricular implementation.

Participants

The twenty-seven students enrolled in the Composition course were juniors and seniors. Seventeen of the students identified as White, six as Asian, and four as two or more ethnicities. There were seventeen students who identified as female and ten students who identified as male in the course. No students enrolled in Composition had an Individual Education Plan (IEP). An IEP is a plan that outlines special education services for students with identified disabilities. I collected data from all students in the class; however, I analyzed the data from twenty students. Seven students did not complete and return the assent and/or consent forms. Four of the seven stated that their parents or guardians did not want them to participate in the study. Of the seven students, two were male and five were female. During the unit, it was observed that the seven students were engaged; however, it is possible that the research findings may have been different if the seven students' data were included in the analysis. Regardless, the research study consisted of twenty student participants (see Table 2). The students had varying academic abilities and provided the research with differing perspectives and experiences. I wanted to stratify based on academic ability level to understand how students of all abilities learn when video games are incorporated into the classroom. Student abilities were determined by teacher records that

included classroom grades and standardized testing scores. Additionally, I utilized informal observations and student responses to posed questions that were asked via Google docs and forms.

Table 2

Student Demographic Data

No.	Student Name	Gender	Ethnicity
1	Molly	Female	White
2	Taylor	Male	White
3	Michael	Male	Two or More Races
4	Carol	Female	Asian
5	Kayla	Female	Asian
6	Alex	Male	White
7	Michelle	Female	White
8	Max	Male	Asian
9	Maggie	Female	White
10	Beth	Female	White
11	Ali	Female	White
12	Todd	Male	Asian
13	Lauryn	Female	Two or More Races
14	Christy	Female	White
15	Lily	Female	White
16	Clayton	Male	Asian
17	Amelia	Female	White
18	Samantha	Female	White
19	Wyatt	Male	White
20	Matthew	Male	Asian

Unit of Study

Sarah and I planned and wrote the video games unit (Appendix A). As previously mentioned, we utilized resources to assist with the development of the unit since incorporating video games into a classroom was new to both of us. The students explored video games as text

through various engagements that included examining video games' modalities, genre, design, goals, narrative structure, and contexts where games are played and discussed. The unit was designed to take approximately four to six weeks to complete. There was time provided during the lessons for all activities to ensure access to technology and dialogue opportunities.

Sarah and I formed the essential questions: How can video games be incorporated into an ELA classroom? What are modalities, who influences their use, and how do they contribute to video games as a text? How do video games influence players? This unit included three phases: 1) The analysis and discussion of modes in video games; 2) the analysis and discussion of ideological representations in video games; and 3) the creation of a video game.

Phase 1

We conducted pre-unit lessons on definitions of literacy in the first week of September. We asked students to provide their own experiences with video games and gaming and to consider if and how video games can be used in a classroom for learning. During phase one, we focused on students examining video games by analyzing modes to develop understandings about the construction of video games and how those compare to traditional texts. We introduced visuals, voices, style, animation, color, scenery, music, character, appearance, attitude, characters, body language, and pictures in introductory sequences of video games. For example, students deconstructed the sequences in provided video game introductions by focusing on certain modes (see Figure 1). Then, they shared their observations and used their learning to answer the following questions:

1. How does combining modes (image, words, movement, coloring, framing) inform the story that is being told in a (multimodal) text?

2. How do the modes that you explored in the introductory sequence construct meaning for viewers or players of the video game(s)?

3. How is genre created similarly and/or differently in video games compared to novels?

Provide textual evidence and/or examples in your responses?

Figure 1

Deconstructed Introductory Sequences of Video Games

Multimodality	Video Game - Fall Out 76	Video Game – Minecraft	Video Game – Titan Fall	Video Game - Madden
Student Choice of Modality:				
Student Choice of Modality:				
Student Choice of Modality:				
Student Choice of Modality:				

We focused on ideological representations found within video games to develop student critical analysis skills surrounding ideological representations found within texts in late September. During the unit, students deconstructed video game covers, researched characters found in video games, and remixed video game characters and video game advertisements to target different audiences or demographics. Sarah and I brought in these activities to position students to critically analyze a different form of media with the goal of shaping discourse to challenge dominant narratives. As such, we asked students to consider the game characters through different identities such as gender. Additionally, class discussions surrounding how video game players are positioned, what representations are or are not found within video games,

and why game developers chose to incorporate these different things into video games were explored.

Lastly, in late September into early October, students had time to play and create their own video games during the class. Students spent one and a half weeks or four classroom days composing their own video games through Scratch (MIT). I selected Scratch (MIT) due to the free and easy access of the platform. Students were given the choice to create their game with a partner or on their own. Once students were done with their video games that they created, they played and provided feedback on their classmates' games. Students also made their games public to encourage feedback from those outside of the classroom. It was hopeful that this would broaden the context of gaming and promote dialogue around game construction. If students obtained feedback, Sarah and I encouraged the students to reflect on the comments and determine if they should make changes to what they had created. Additionally, students were invited to play video games from three gaming systems that I brought into the classroom. Signups were utilized so that all students would have an opportunity to play the games I brought into the classroom. Although playing video games was not a requirement, twelve students enrolled in 1st hour signed up to play during the class. I had not anticipated this number of students expressing interest by signing up to play. I talked with the students about playing video games when I first came into the classroom. Students did not seem as though this was something that they were interested in doing at that time and some had expressed that they didn't want other people to watch them playing games.

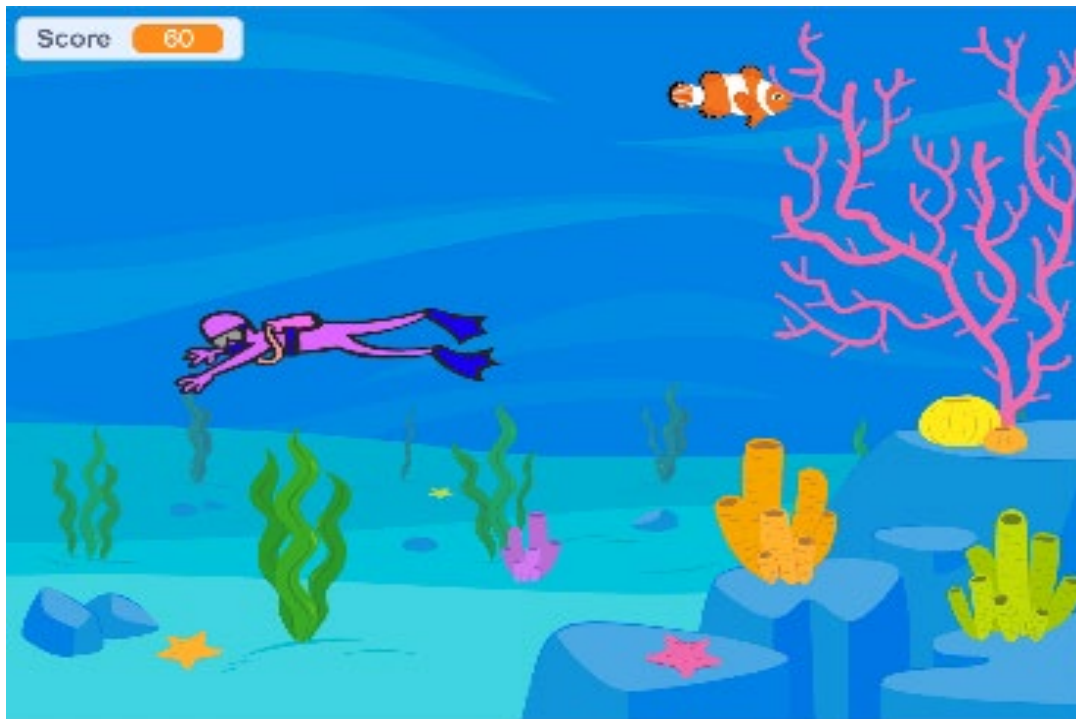
Phase 3

Figure 2 presents an overview of what happened during Days 3 – 4 of Phase 3. On the first day of Phase 3, Sarah and I introduced the platform, Scratch (MIT), to students. We shared

links, watched video tutorials, and a game that we co-created to serve as a student example. Following the introduction, Sarah provided students with an opportunity to explore the Scratch platform on their district provided Chromebooks. During the second class day, Sarah demonstrated how to code within Scratch. Some students were comfortable with coding and so began to plan their game. Other students needed more time and assistance but began to plan their game. During the third and fourth days of Phase 3, students created games. On the fifth day, students played each other's games, provided and gathered feedback, and ended with completing a Google Form about their video game (Appendix B).

Figure 2

Phase 3: Day 3 & 4: Creating



Technology

Google products that included Drive, Docs, Forms, and Slides were utilized throughout the unit. Students were familiar with the apps as the course was organized through Google apps. Additionally, students accessed the resources for the unit through the Internet. For instance, Scratch is an online platform that was used to create student video games and students utilized Google to create a video game character collage.

Due to the coronavirus pandemic, students were not allowed to work in close proximity to one another during the school day. Thus, Google allowed the students to work synchronously and collaboratively while being on separate devices. These tools provided students opportunities to co-construct. All students used Chromebooks that were provided by the district. However, the work within the unit was completed only during the actual class time to account for students that may not have access to the Internet at home.

Data Sources

I collected data across seven weeks of the unit of study. The data sources are provided below and are organized for each research question. I kept the data sources consistent for all research questions (see Table 3).

Table 3

Research Questions and Data Sources

Research Question 1: What can be learned about secondary students learning and literacy practices when video gaming is incorporated into the secondary ELA classroom?	
Participants	All Students
Data Sources	Student interviews
	Classroom audio recordings
	Field Notes
	Google Form Questionnaires
	Artifacts: student work

(Table Continues)

(Table Continued)

Research Question 2: What discourses do secondary ELA students engage when deconstructing and constructing games as a text within a gaming literacy unit of study?	
Participants	All Students
	Student interviews
	Classroom audio recordings
Data Sources	Field Notes
	Google Form Questionnaires
	Artifacts: student work

Research Question 2a: How do secondary ELA students disrupt and/or reinforce power laden discourse?	
Participants	All Students
	Student interviews
	Classroom audio recordings
Data Sources	Field Notes
	Google Form Questionnaires
	Artifacts: student work

Classroom Observations and Audio Recordings

I used classroom observations as a data source. Observations are important in qualitative research. They assist researchers in collecting firsthand information in the actual setting that the research is taking place (Creswell, 2015). Observations helped me answer my research questions by allowing me to gather open-ended data. I would write field notes from every classroom visit and use these to triangulate the data. Additionally, I recorded each class period using two portable audio recording devices as a way to capture the data. These were placed at opposite ends of the classroom on desks where students were not seated. I placed the recording devices at these locations to capture classroom discussion and student interactions during the unit of study. The class was audio recorded on September 9, September 14, September 16, September 18, September 24, and September 28. Student interviews were also audio recorded. The interviews were conducted on October 6 and October 8 and were audio recorded using one

portable audio recording device and QuickTime Player on my personal laptop. Thus, I used the classroom discussions as a source for data and the audio recordings assisted in saving the data. For example, on September 14, students deconstructed modalities in video game trailers. I used the class audio recording to capture discussion on how students discussed how the multimodalities contributed to the trailer storyline. This discussion helped to answer my research questions as students discussed how modalities contribute to understanding the purpose of the game. Transcriptions of the observations were then used to analyze the discussions.

Field Notes

Field notes are written text collected by a researcher during an observation in a qualitative study (Creswell, 2015). I took notes during each class period when I was able or at the end of the classroom lesson. I would listen to the tape recordings for each day and cross reference what I had in my notes with what was recorded. I then time-stamped the notes with where they occurred in the tape recordings so that I could easily go back to the recordings as needed to listen to the conversations again. For example, on September 18, I noted the discussion that the class had about Princess Peach from the Nintendo Mario franchise. I utilized audio recordings coupled with fieldnotes to truly capture the events happening in the classroom. Also, I used field notes to record my thoughts or any broad idea that I was having from the data that I had collected. For instance, on September 9, 2020, I noted a thought that I had in the field notes that stated “Using video games as a medium/text for learning seems to be a new concept for the majority of the students in this class”. As such, the field notes provided me with additional data that included not only descriptions of the classroom activities, but also my personal insights that emerged from the observations.

Google Form Questionnaires

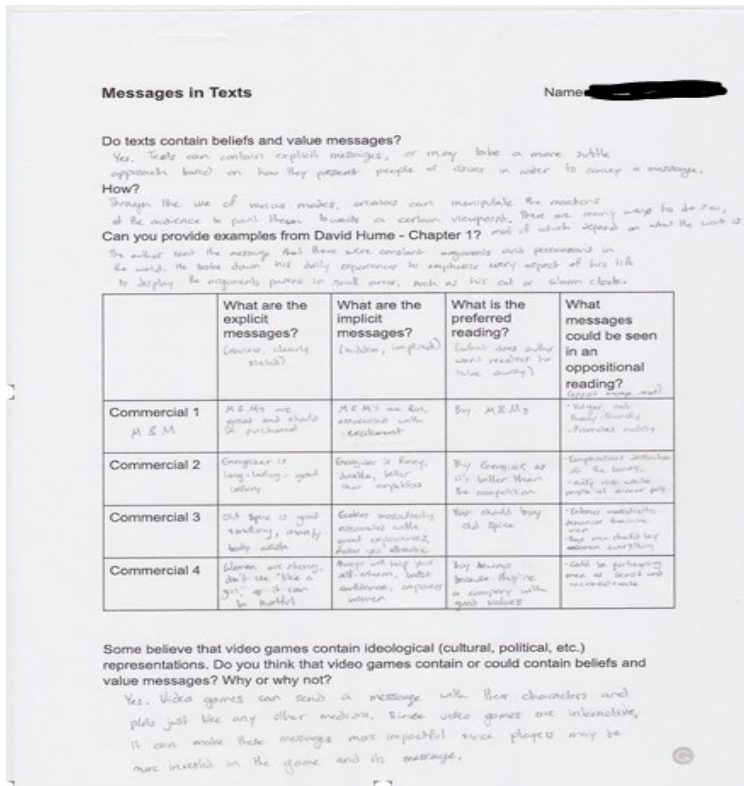
(Appendix C, Appendix D, Appendix E, Appendix F) Questionnaires are unstructured text data that can be closed ended or open-ended (Creswell, 2015). Closed-ended questions have predefined responses. Open-ended questions are not answered with a simple yes or no. They require respondents to elaborate on their thinking. Therefore, questionnaires are tools used in qualitative research to measure preferences, opinions, and attitudes about subject matter. Thus, reflecting the research paradigm. I wanted to gather information about students prior to the unit beginning and during my time in the classroom. I observed students not always participating during the whole class discussions. Therefore, I created questionnaires by using the Google Forms app. The questionnaires were electronically sent to students, and they used their Chromebooks to answer. Students completed Google Form Questionnaires on August 27, September 9, September 18, and October 2. The questionnaires solicited information from students about their learning during the unit, thoughts surrounding video games as a text, and reflections on their Scratch Game project. For instance, on October 2, the Google Form Questionnaire asked questions to answer questions about the Scratch game the students created. The data that I collected from the student responses included the game's target audience, how students decided on the game's target audience, and if they developed the game with the target audience in mind. As such, I was able to learn about the participants within this learning experience and how it relates to answering the research questions. Students were given time at the end of the class to answer the questionnaires. Thus, I had nearly 100% participation from the students. Only students who were absent did not answer the questions.

Artifacts

Student work samples (as artifacts) were collected throughout the unit to analyze student learning in response to the unit lessons. The artifacts provided a piece of data that captured how students learning and engagement occurred during the unit (Silverman, 2001). Artifacts included worksheets (collected on September 14, September 16, September 18, and September 22), large and small posters (collected on September 14 and September 24), digital images that were shared with me and Sarah Jones (collected September 16 and September 24), and the final video game project (collected October 6 and October 8). For example, Figure 3 shows a worksheet that was collected on September 10. Students were asked to answer the questions on the worksheet in response to the classroom engagement on messages in texts. This example was completed individually by a classroom participant and was used to understand students' thoughts on explicit and implicit messages utilizing a classroom reading, media, and video games. I used the raw data from the artifacts for analysis. For example, students completed the worksheet below during class. The worksheet asked for student thought on messages that may be found in texts. I used the responses from the worksheets as part of data analysis. The responses assisted in answering the research questions as the data showed that students recognized author motivation, beliefs, and value messages.

Figure 3

Messages in Texts



I stored student artifacts in a locked cabinet in my home office or on my password-protected personal laptop computer. Students completed class work individually or in small groups of two to four due to the teacher providing student choice. Although students were expected to complete work individually, if creating a poster with a partner, they would first plan and then take turns with completion. All participants in the class allowed me to acquire their work and keep them.

Student Interviews

(Appendix G) All students were invited to be interviewed; however, nine students agreed to be interviewed. I chose semi-structured interviews, because I wanted to explore students'

thoughts and reflections to interpret meaning. The semi-structured format provided flexibility in exploring topics during the interview and provided me with a guide that I could reference and follow (Brinkmann & Kvale, 2015). It is different from structured interviews where predetermined questions are systemically asked to all interview participants. In this study, the interviews were done individually in a small teacher work room that was located down the hall from the main classroom. The questions for the interview were developed prior to the interviews taking place. The questions were open-ended to gain further insight into the students' experiences with the unit and to help answer the research questions. For example, one question asked students: "How do you define literacy?" I asked this question to determine if their definition of literacy had expanded as compared to the definition that they provided at the beginning of the unit on a Google Questionnaire. The interviews were recorded on a audio recorder and on my personal laptop computer using QuickTime Player. I sought to understand students' perspectives and reasoning behind their thoughts. Therefore, those that were interviewed were asked to reflect on the unit and what they learned by engaging with it, provide their thoughts on using video games as a text in a classroom, and explain the project they created. Similar to the field notes, I transcribed the interviews and time stamped the interview for easy reference.

I brought all data sources together as I moved towards analysis; however, there were issues with the audio recordings during classroom discussions. The issues included inaudible student responses. I anticipated that this may be an issue due to mask wearing requirements and tried to counter this issue by having two recording instruments at different ends of the classroom. Unfortunately, it did not correct the issue. Thus, the audio recordings were not given equal weight compared to the other data collection instruments.

Data Analysis

Inductive qualitative research design was utilized for the study as I gathered and analyzed data to derive themes (Creswell, 2015). Additionally, elements of grounded theory and critical discourse analysis were incorporated in the data analysis. This resulted in approaching analysis in waves while also bringing in theory. Multiliteracies and sociocultural theory aided in pulling together the findings to interpret the results and understand the phenomenon. For instance, data analysis began immediately after the first set of data was collected. I began with preliminary readings of obtained data and wrote notes and memos of what I initially saw from what had been collected. I came back to the field notes to determine if what I was observing was impacted by my theoretical framework. The field notes were created on my personal computer and were linked to the classroom day in which I was present in the classroom. My field notes were reflective in nature and contained observations from the lessons, questions that I had from the data that was collected that day, and quotes from students that I found to be interesting or to assist with case study participant identification. I would write observations from student discussions and use the transcribed tape recordings, field notes, and student products from that class period during analysis. Here is an example taken from a memo on September 14, 2020, where students talked about why modes are used in social media and how that may relate to mode use in video games. Student discussion from audio recording:

1. Modes are used to grab people's attention by emphasizing features of whatever is on social media and target certain audiences. (at 18 minutes in audio recording)
2. Those that post on social media want to do so for a reason. (at 20 minutes in audio recording)

3. Modes assist with understanding content and people wanting to know more about what is going on. (at 25 minutes in audio recording)

I then used field notes from that day, transcribed recordings, and student products to triangulate the data from that part of the unit. Table 4 outlines the order data was collected.

Table 4

Order of Data Collection

Date	Data Collected
August 27, 2020	Pre-Engagement Activity (Google Form)
September 9, 2020	Audio Recording Multimodality Reflection (Google Form) Student Worksheet
September 14, 2020	Audio Recording Multimodality Posters
September 16, 2020	Audio Recording Student Worksheet/Video Deconstructing Video Game (Google Form)
September 18, 2020	Audio Recording Character Google Search
September 22, 2020	Repurposing Video Game Character Poster
September 24, 2020	Audio Recording New Audience Advertisement Worksheet New Audience Advertisement Poster
September 28, 2020	Audio Recording
October 2, 2020, through October 16, 2020	Student Game Projects
October 6, 2020	Student Interviews
October 8, 2020	Student Interviews Post-Engagement Activity (Google Form)

Coding was completed next. I used my personal computer to code the data that had been uploaded and by hand on printed paper that had student responses or work. During this stage, I

began with open coding to begin my conception analysis of the data (Creswell, 2015).

Researchers use open coding to code the data into major categories of information. Open coding is used to capture a range of ideas and thoughts, which eventually leads into major categories of information. I started with coding the Google Forms from September 10, 2020, due to the responses being written. Figure 4 shows how I conducted open coding of the Google Form from September 10, 2020. I interpreted data from the sources previously provided and labeled it based on the properties of the data. For instance, for the response: creates a more cohesive story, I labeled this construct ‘meaning’. Thus, I used symbolic labels to capture the general essence of what I believe was being said in the participant response. I then reread the data and the open codes to ensure that any two pieces of the data that relate to the same subject were labeled with the same codes. The word labels were revisited and refined as needed. Thus, the codes were not fixed and at times I would change the codes as I completed this stage. For example, the word ‘meaning’ was used by multiple students on a Google Form that they completed on September 10, 2020. Therefore, meaning became an initial open code. To further elaborate, during the class period that day students examined multimodalities and were asked to provide their thoughts on why different modes are included in video games. Additionally, words that were indicators of a code were bolded and put into italics to determine their alignment with the initial code that was labeled, such as major categories began to emerge from the data collected. The open coding stage was not related to the theoretical framework.

Figure 4

Coding of Data from September 10, 2020

	A	B
1	Timestamp	Name
2	9/10/2020 9:55:20	[REDACTED]
3	9/10/2020 14:55:15	[REDACTED]
4		
5		
6	Question 1	
7	[REDACTED]	The various modes, including lighting, audio, scenery, cinematography, and narration all help construct meaning for viewers. The lighting and audio help distinguish if the game is more upbeat and calm or more
8	[REDACTED]	The modes construct an atmosphere that promotes the meaning the game makers are trying to get across. They show whether the game is intense, laid back, who its audience is, and most importantly what play
9		
10	Question 2	
11	[REDACTED]	Combining the modes overall helps create a three-dimensional story for viewers to take in when watching a game/trailer. This enables them to get a feel for what it is about , even if they do not have to physically
12	[REDACTED]	Combining modes creates a more cohesive story and often makes the appeal to viewers much stronger. Using modes that complement each other heighten the message of the game and provide a better sto
13		
14	Question 3	
15	[REDACTED]	In video games, not much of the genre is reliant on words , which is what is standard for a novel or other literary piece. For example, in the games, Fallout 76 and Minecraft, the trailers did not use any words ,
16	[REDACTED]	Genre is created differently in video games than novels in the sense that video games can utilize background audio/music while novels cannot. Video games, such as Madden, use sounds to make you feel as
17		
18	Question 4	
19	N/A	
20		September 09 Data
21		Open Codes
22		Construct meaning, Meaning
23		Want to Play, Game more appealing, Want to Play, Appeal
24		Learning, Creates Story, Better Story Line
25		No words, no words,
26		Act as text, used modes to tell story
27		
28		
29		

As another example, on September 18, 2020, students deconstructed video game covers as part of the unit and answered the question, “How do we make sense of the game from the covers that are produced?” on a Google Form. One student responded, “We can look at the cover to infer the general *purpose of the game* and the purpose gives clues as to what the game is all about”. Another student responded, “Based on the elements the cover includes, the audience can see the *purpose of the game*, or the message the game is trying to convey”. Although the responses are not identical, they both identify a common concept about why video game covers are created and designed. These were then later developed into a code.

I looked for relationships or connections within the open codes to develop broader categories to complete axial coding. Axial coding emerges when one or more open coding categories (called phenomenon) are identified by the researcher (Creswell, 2015). I used axial coding to identify the main themes by grouping the labels from the open coding step. For example, on August 28, 2020, I asked students to respond to a Google Form to gather their

preconceptions surrounding using video games for learning. During analysis, I highlighted student recordings in transcript form that were similar in thought and wrote one to two words that provided an overall concept of the idea. I then used the words to develop themes that were coming from the transcribed data. As such, when open codes were organized through axial coding and grouped based on their relationships, I reviewed all the words and messages within those axial codes to move toward themes. The figure below demonstrates this work. One concept from this set of data included that students did not relate video games to learning. Another concept was that video games were used for entertainment purposes only. One code that did not develop into a theme, in this data set, was motivation. Motivation was a concept in two responses but was not found in other responses. It wasn't related to the criticality that I was looking for and didn't assist in answering the research questions. Therefore, I did not include it as a concept that was developing from the given data.

Figure 5

Open Coding of Data from August 27, 2020

The image shows a document with handwritten annotations in blue and red ink. The text is a transcript of student responses about video games and learning. Annotations include phrases like "Not related", "motivation", "for fun", "memory skills", "impact", "for fun", "Not related", "learning", "colleges", "Not related", and "motivation". The text is partially obscured by blue scribbles.

Thus, I used the axial codes to bring the data into one overarching theme that demonstrated a recurring trend. I utilized diagramming to assist with developing these categories to see how the categories are related. If the categories did not fit under the primary classification or were not fully developed, I returned to the data to fill gaps in the data (Corbin & Strauss, 1990). If the categories were not supported by revisiting data, it was not reported. Thus, utilizing grounded theory where constant comparison leads to conclusions from the data. For example, one theme that developed from that data was that students connected learning to outside of the classroom. This theme developed as data showed that students questioned social media posts and advertisements that they engaged with outside of the classroom after learning with video games and the activities that were included in the unit.

Critical Discourse Analysis

Critical discourse analysis (CDA) examines language in context with an inherent focus on power and justice (Fairclough, 2004). CDA pushes to reveal how ideologies and power constructs influence and perpetuate dominant discourse and narrative. As a tool, CDA can be used to make “transparent to readers and listeners the devices with which texts position and manipulate them” (Luke, 1995, p. 20). I employed CDA as a layer of data analysis to examine how secondary students disrupt or reinforce dominant discourse when video games are incorporated into an ELA classroom. I wanted to explore how students interpreted conditions of inequality in and around video games as a text, and therefore, I drew upon CDA by focusing on if and/or how the students in the classroom critically deconstructed video games and video game materials. Although different researchers pull from different theoretical roots, I drew upon Fairclough. Fairclough (1995, 2001, 2003, 2004) is aligned to social theory with groundwork by Marx (Fairclough et al., 1997). Drawing upon Fairclough’s framework for studying discourse, I

analyzed secondary students' spoken and written language and their discourse practices of text production and consumption. Additionally, I drew upon Fairclough (1989) definition of power. As Fairclough explains, power is found in multiple ways. Of course, one form of power is physical where it is exercised through denying people jobs, for example. Another form of power is "through coercion" (p. 3) where consent is manufactured through ideologies or assumptions that are embedded in ways of knowing or behaving. Power can be explicit or concrete. It can also be hidden. Hidden power is understood as the implicit practices that are found in media, for example, where sources, perspectives, ideology, and balance is in favor of those that are creating the message.

During analysis of transcripts and student products, I detailed how students identified and deconstructed how power was expressed, normalized, and contested. Thus, critical discourse analysis began as I was doing general open coding. I related the student responses to power. I developed questions that drew upon Fairclough during analysis and conducted this form of analysis in tandem with open to axial coding (1995; 2001; 2003). The questions developed included:

1. How do students identify hidden power in video games?
2. How do students reinforce or disrupt identified power in video games?
3. How do students use their learning about power in video games outside of the classroom space?

Additionally, I utilized Fairclough's (1989) three elements of discourse analysis: 1) description of text, 2) interpretation of the relationship between text and interaction, and 3) explanation of the relationship between interaction and text. For example, on September 18, 2020, students engaged in activities where they analyzed video game covers. The class engaged

in conversations about video game producers, the producer's authority over what is included on the covers, and how audiences are positioned in relation to this messaging. Students were asked on a Google form to include their thoughts on what was included on the video game cover and possible impacts that these images have on consumers. One student replied:

I believe that representations in games shape how people treat the real-world groups represented. If you have spent significant time playing a game in which a certain race, gender, or sexuality is consistently depicted with one characteristic, you are more likely to believe that this is an accurate depiction of the real world. Games can therefore play a large role in the expectations people have of the real world, especially if the game depicts a group or culture that people do not have real-world experience with.

For this response, I first engaged with it during open coding and examined the text itself and noted that declarative sentences were used and the response included cause and effect, repetition, and the use of nouns and the pronoun 'you'. Also, the response demonstrated an expressive modality where the student is speaking their truth by providing explanation for their thoughts (Fairclough, 1989). Next, I interpreted the text to determine the discourse. This included considering the topic, activity, purpose, connections, and subjects or people involved to "determine the experiential, expressive and relational meanings which it makes possible" (p. 149). Here, the student related representations in video games with reinforcing stereotypes in society. Finally, I transitioned to the explanation stage. As such, I explored the text to determine the effects that the discourse can have on structures. I used the questions I generated to explore power. The student's response pushed back against power by challenging how video game characters are represented by video game producers. Additionally, the student provides examples of the negative effects that representations can have on consumers. Thus, the research study and

CDA as a tool for analysis was an avenue to explore power in a literacy classroom to determine implications for future classroom practice and curriculum considerations.

Trustworthiness

As the sole researcher in this study, it was vital to strengthen the reliability and trustworthiness of the research findings (Lincoln & Guba, 1985; Yin, 2009). Thus, I incorporated strategies to increase trustworthiness. One specific strategy that I included was triangulation methods. Creswell (2015) defines triangulation as, “the process of corroborating evidence from different individuals, types of data, or methods of data collection in descriptions and themes in qualitative research” (p. 259). Triangulation within this research study was accomplished through the collection of various forms of data from students in the Composition class. As previously stated, I collected student products, conducted student interviews, recorded and transcribed classroom discourse, and utilized written field notes and observations to enhance accuracy of findings. Additionally, I created reflective memos. The memos provided me with a self-awareness and critical reflection to address biases that had the potential to impact the study. Finally, I engaged in prolonged engagement where I was in the classroom during each day of the unit for the whole class period. The prolonged engagement provided me with rich data to answer the research questions. I would have not been able to gather the needed data with limited or only one observation. This process is described next.

Positionality

As a novice researcher, it is important to explore my positionality. This exploration assists in bias awareness and strengthening trustworthiness of results. Thus, I identify as a White, able bodied, middle class, cisgender female. I hold this existence with the constant realization that my reality impacts my understanding of the world and that my identities have privileged my

existence. Rose (1985) stated, “There is no neutrality. There is only greater or less awareness of one’s biases. And if you do not appreciate the force of what you’re leaving out, you are not fully in command of what you’re doing” (p. 77). Thus, I made a position statement (Mullet, 2018), journaled, created memos, and talked with other education professionals, such as members of my dissertation committee, during data collection and analysis, which assisted with my reflections upon my interactions and interpretations of the data. As I collected data, I would ask myself how I was impacting the research due to my own identities and interactions with those in the study. It forced me to think about positionality and consider who I was as an individual and member of the classroom (Bourke, 2014). As I previously stated, I believe that learning is a social and personal process that is impacted by various modes of learning. Thus, when analyzing data, I looked for moments when students engaged in discourse and brought their own backgrounds and beliefs into the classroom space. I also consulted with graduate student colleagues to minimize the potential for omissions. This assisted with helping me think through the data collection and what I was finding within the research study. Next, I will present the study findings.

CHAPTER IV: FINDINGS

Oh yes. Learning with video games. It's big because it's kind of like advertising. You are a buyer of something, and I can say well now I can see why they put this in there and why they did it. It makes you question things a little bit (Amelia, October 06, 2020).

I have found myself looking at ads differently and stuff. Even when I go to buy things, I will look at the covers more and try to decide who they are portraying and stuff. Is it someone who resembles me? Or not (Carol, October 06, 2020).

Introduction

I begin this chapter with interview excerpts from two students as they reflect the study's major findings: 1) Students transfer learning from traditional print texts to video games to other forms of media that they engage with outside of the classroom, and 2) Students challenge dominant discourse when centered as thinkers in classroom discourse. This was identified by themes that I outline in the chapter. The themes are: 1) shifting perceptions, 2) making sense of texts, and 3) applying learning to design processes. As such, in this chapter, I share findings from an analysis of student data from whole class and small group discussions, student products, and individual student interviews to answer the research questions:

1. What can be learned about secondary students' learning and literacy practices when video games as a text are incorporated into the secondary ELA classroom?
2. What discourses do secondary ELA students engage when deconstructing and constructing video games as a text within a literacy unit of study?
 - a. How do secondary ELA students disrupt and/or reinforce power laden discourse?

I approached this study knowing that my own definition of learning and literacy practices informed how I thought about the study and research findings. My definition includes that learning and literacy practices are social, are a means of connecting people with one another, and are found in people's everyday lives (Street, 1993; 2003; Gee, 2010). Thus, youth use multiple methods of meaning making that are informed by their ways of knowing through everyday practices, such as those with technology (Gay, 2002; Street, 2003; Gee, 2010). In this unit, students were centered as thinkers in classroom discourse. They worked collaboratively to construct meaning and read video games and video game materials to understand textual elements of video games and video game materials. The elements included but were not limited to tone, character development, symbolism, and theme. Students examined and explored author's purposes, targeted audiences, implicit and explicit messages, and ideological representations found in video games and video game materials. Also, students applied learning to their own design processes when they created their own games. Overall, the data provided a rich context for analysis. The themes are explicated next in the chapter.

Theme One: Shifting Perceptions

Participants reflected on how and if video games should be incorporated into the classroom for learning. The students' perceptions surrounding the use of video games for learning influenced their initial thoughts towards the unit. Before the unit began, only seven students indicated on a pre-engagement Google Form that video games could be used in classrooms for learning while thirteen of the class were skeptical and expressed doubt about using video games for learning in a classroom. At the end of the unit, all (20) students reflected on their engagement with video games and reported that they felt video games can be used for learning in a secondary ELA classroom. Thus, students' perceptions surrounding the use of video

games in the classroom for learning seemed to shift from the beginning to the end of the unit. In this next section, data of initial to shifted perceptions is provided for context. These accounts importantly show students' preconceptions about texts used for learning and reflect how institutional and dominant school discourse influenced their perceptions about legitimate learning practices (Scott, 1989). In other words, the classroom discourse supported dominant views of what should and should not be included in classrooms for learning. Data showed that most students' preconceptions served as an initial barrier to viewing video games as a legitimate medium for learning. However, by the end of the unit, classroom discourse surrounding the use of video games for learning changed to a new, non-dominant discourse where all students expressed that video games can be used in the classroom for learning. Thus, students' definition of learning expanded to include multiple methods of meaning making (Gee, 2005; 2010). Examining the shifting of perceptions has the potential to foster broader scale conversations about dichotomies that are perpetuated when texts are classified as traditional or multimodal. This idea is discussed further in Chapter Five. I label the first section Discourses of Initial Perceptions and the second section Discourses of Shifting Perceptions. Evidence to support the development of the theme is outlined to show how the shifting of perceptions occurred.

Discourses of initial perceptions

Seven students described the potential value of using video game materials and video games in the classroom for learning. Their comments indicated initial buy-in as they considered their own experiences with video games and expanded on what video games can do for players outside of classroom spaces. Data examples are provided below. The common thread was how participants expressed that video games provided learning opportunities. The students who had more experiences with playing video games tended to report that they felt that video games

offered learning when used in a classroom. For example, Lauryn (all student names are pseudonyms) was one of the seven students that indicated a belief that video games can be used for learning. She replied in a written response,

I think video games can enhance the tools that allow you to learn. Video gamers tend to have good hand-eye coordination, and they excel at multitasking. There is also a lot of mathematics and physics within certain building games and games including trajectory. Gaming can help you become better at strategizing.

Personally, certain phone games help me in maintaining my focus. For example, Subway Surfers is a game I frequently play. It helps me calm down, and whenever I play it, I am entirely focused on it (Lauryn, August 28, 2020).

Here, Lauryn considered how video games can be used as a tool to amplify skills that are connected to other curriculum areas. She provided personal experience with video games and how video games have had a positive emotional impact on her, specifically when she engaged with the video game, Subway Surfers. Lauryn's response demonstrated that she was open to using video games in the classroom for learning. Darius, another one of the seven students who believed that video games can be used for learning, stated that video games have multiple positive effects on learning. Darius identified as an avid gamer, or one who plays video games, and frequently mentioned how he enjoyed playing on-line role-playing games with friends. He stated:

I believe that there are many things to be learned across all video game genres. In my personal experience with video games, I have seen first-hand how you can coordinate with teammates in multiplayer games and learn how to better work with other people. Single player story-based games also allow players to

experience multiple types of amazing storytelling and learn about character motivations and reasoning that can be applied to real life in order to better understand the actions and lives of others. (Darius, August 28, 2020)

Like Lauryn, Darius' statement provided evidence of his initial perception of using video games for learning in the classroom. He indicated his belief that video games provide opportunities for learning and working with people daily. Darius recognized storylines that are found in some video games and how the plots from video games lend themselves to learning experiences. Additionally, he considered how learning from video games lends itself to having a deeper understanding of everyday life experiences. Another student, Matthew responded, "I love video games because it connects me to a group of people. I play COD Warzone, and it connects me with my friends. I could see them being used in a class" (August 28, 2020). Matthew expressed how he has engaged with friends where they can learn about and explore video games. This is important as he is open to the idea of bringing video games and video game materials into the classroom for learning due to the possibility of connecting with other people to learn. These responses illustrate that students are thinking about how learning with video games is multifaceted (Gee, 1996). It is not just one thing, but instead is across many contexts and ways of learning. They recognize that meaning is generated when there is active participation and collaboration among people.

The rest of the students in the class were either 1) skeptical of video games being brought into a classroom for learning, but were open to it, or 2) did not feel that video games lend themselves to learning in school. These were the two threads that were used in data analysis. As an example, Carol responded on the Pre-Engagement Google Form (Appendix H) that she never had an interest in playing video games yet was open to seeing what may happen when video

games are used in a classroom. Another student, Layla, expressed doubt with learning when using video games in a classroom as compared to traditional print forms of text but thought that using video games may increase motivation for students that may otherwise not be engaged in the classroom. As she explained:

I have not previously used video games in a school setting, so I do not have much experience with them. I rarely play video games, and I do not own any gaming units such as a PlayStation or Xbox. I have several friends who enjoy gaming, and the majority of what they play does not seem like material that has a lot of educational value, although I'm sure there are a wide variety of games. Personally, I am slightly skeptical of using video games in learning. While I know that many have thorough story lines, I feel that the actual action in the video games, while fun, would not be extremely helpful, and that traditional literature has more helpful components. However, I think that students who might not be engaged with traditional literature might be more likely to learn if video games were used. The use probably depends on the context of the teacher's lessons, so I am fairly neutral on the possibility. (Layla, August 28, 2020)

In this example, Layla supported traditional views on literacy learning by expressing that the games that her friends play do not have educational value, yet considered how using video games as a literate activity may motivate students by bridging outside of school practices with learning happening within the classroom. Her thoughts illustrated that she is open to exploring different approaches to learning that mirror students outside of the classroom practices.

Whole class discussions, written reflections, and interviews captured rigid and traditional views of learning that almost one third of the students held. Students were not

open to considering the use of video games in the classroom and engaged in institutional and dominant discourse in which they expressed feelings about schools for learning with video games. Wyatt pointed out:

I don't think video games are a great source of learning. Personally, for me when I play I don't necessarily feel like I learn like I would in class. Maybe it's because of the certain games I play. Whenever I play video games it always ends up in me losing track of time. I don't think I have ever played a video game that has taught me something valuable out of it. (August 27, 2020)

Wyatt's personal experiences and feelings about video games guided his decisions about using video games for learning in the classroom. The first indication of this was seen when he replied "Personally, for me, when I play [video games] I don't necessarily feel like I learn like I would in class." Here, Wyatt is not considering multiple methods of learning that include "visual, audio, spatial, behavioral, and gestural" (NLG, 1996, p. 64). He separated one's way of knowing outside of the classroom and learning that is found in classrooms. He did not see that the two could be combined.

The narrow view of learning with video games was also captured on the first day of the unit when Sarah and I decided to ask students to think about literacy and what it means to be literate. I wanted to explore students' thoughts of the NLG's (1996) idea of enriching literacy definitions to reflect multiple methods of meaning making due to increased multimodalities. We started by asking students to think about literacy, to develop a definition of literacy, and to consider what literacy does and does not include. Sarah, the classroom teacher, started by reading the National Institution's (n.d.) definition of literacy and asked students their thoughts on the definition. National Institution defined literacy as "an individual's ability to read, write, speak

in English, compute, and solve problems at levels of proficiency necessary to function on the job, in the family, and in society” (para. 1). A transition occurred during the conversation when Sarah and I brought up video games and the student responses on the Pre-Engagement Form.

The following two discussion excerpts revealed how literacy definitions can be complex, but that learning with video games and thinking about combining literacy and learning with video games in the classroom was a new concept.

Kayla (student): It [National Institution’s definition of literacy] may be privileging English and one culture.

Sarah (teacher): What do you mean?

Matthew (student): It’s [literacy is] in all languages and in all cultures; not just in English.

Kayla (student): Literacy isn’t just about solving problems. It is more.

Amy (researcher): More in what ways?

Todd (student): If someone can get the point across when they are talking to someone then they are literate. You know, someone can talk fluently. They are literate in that language.

This classroom conversation indicated that students’ view literacy as more than competency in reading and writing. The students acknowledged that literacy is found in all countries and cultures as explicitly stated by Matthew when he expressed, “It’s in all languages and in all cultures - not just in English” (Matthew, September 09, 2020).

As the conversation continued, Sarah prompted students to think about literacy and how it could include gaming literacy. Students did not initially respond. One student replied that they weren't sure as they had never thought about gaming literacy. In this instance, other students also indicated that they hadn't thought about if and how literacy could include games and gaming. The teacher then turned the classroom discussion to learning with video games. Dominant narratives and traditional classroom practices were supported as outlined below.

Sarah (teacher): What about learning with video games? There are quite a few in this class that don't feel that one can learn with video games in a classroom.

Wyatt (student): I just don't see how that works.

Clayton (student): I don't really think video games and learning are very practical at a high school level. I think if it was possible, it would be really fun and enjoyable. But, what can you learn from a video game? I told my parents that in my Composition class that someone was coming in with video games for research, and they were like, what?

Lily (student): Yeah. I never put the two and two together. To me, video games and learning are two different things and are used for two different things. Video games to me are a pastime used when you are done with homework at night or when you're bored during the day. Of course, I am curious though to use video games to learn, though.

Molly (student): I think using video games to learn is very innovative. Students can do something they enjoy while still being able to learn. I feel like playing video games in the classroom can also cause kids to be more imaginative and creative in certain aspects. I mean I played video games in school all the time growing up. It

helped me learning about something in a much deeper extent. I felt more motivated to participate and had a lot of fun doing it.

Amy (researcher): Do you remember what it was? Do you have an example?

Molly (student): In 4th grade, my teacher had us play video games for math. You could level up, earn points, and play mini games. I really did not like math and still don't, but playing games involving math made me much more engaged because I was playing really fun and entertaining video games while still learning the concepts for math. Some may think playing video games to learn may be a distraction, but I feel nowadays kids can really benefit from it.

Amy (researcher): It sounds like it was what is called an edutainment game where it's a game that helps you learn a skill.

Molly (student): Yeah, I don't know. I guess.

Amelia (student): I really do not have much experience with video games because I never grew up playing them. Honestly, no offense, I do not really think that video games and learning have anything to do with each other with, you know, that video games are known to ruin your brain. I am not really sure how they could help you learn real life things or things that will help you in school but I am excited to see how this goes to see how they interact with each other.

The discussion is significant as students were encouraged to think more broadly about learning with video games and video game materials. However, as seen in the discussion, some students did not demonstrate that they felt video games could be a source of learning in the classroom and engaged in school and institutional discourse. For instance, Clayton did not value

the use of video games for learning in the classroom. This was first indicated when he stated that video games and learning were not practical at the secondary level. Additionally, Lily indicated that she saw no connection with video games and learning when she said, “I never put the two and two together.” However, her use of the adverb “Of course” (last sentence) demonstrated her potential departure of her initial perceptions of using video games for learning in the classroom. Interestingly, Amelia asserted that video games “ruin your brain”. Her language indicated an initial perception that video games could cause harm, but her use of the action verb “excited” in the last sentence showed that she may be open to using video games in the classroom to personally experience how video games and learning could go together. Molly, on the other hand, expressed that using video games in the classroom was innovative. Her word choice indicated that using video games for learning isn’t something that is commonly experienced and outlined an example from elementary school to demonstrate how one can learn with video games. The example she provided from 4th grade isn’t surprising. As explained in Chapter 02, research has been completed on youth’s increased motivation when engaged with video games in the classroom and the popularity of edutainment games used by schools (Petkov & Rogers, 2011; Lo et al., 2016). Her prior experiences with video games for learning shaped initial perceptions of bringing video games into the high school Composition class.

Discourses of shifting perceptions

Students shifted perceptions of using video games for learning in the classroom as they progressed through the unit of study. The shifting was demonstrated in several classroom discourses. The first revealed itself early within the unit. It occurred after the class watched 1) a video that highlighted James Gee and his thoughts on how games can be used for curriculum development and learning purposes in the classroom and 2) a video game trailer where students

made observations about modes. In this example, dominant discourse was initially evident as students discussed their view of how schools shape learning (Scott, 1989; Piotrowski & Witte, 2015; Sperry & Baker, 2016; Koutsogiannis & Adampa, 2022). At the end, classroom discourse highlighted a change in students considering how learning with video games could be a possibility in the classroom.

Alex (student): He [James Gee] talks about how kids trust the learning techniques of learning in games more than in the schools. Kids trust the learning techniques of Halo more than [learning] in the schools.

Amy (researcher): What do you mean? How does that affect how students learn in school?

Alex (student): I'm not sure that it does at all. It's just the way things are and how things are done in school.

Lauryn (student): Yeah. Learning in the U.S. is learning and test, learning and test. Memorization and take a test. For [video] gaming, you are forced to fail to learn the game, but it's ok, because there aren't grades associated with anything. If students aren't afraid to fail, it will be more effective.

Amy (researcher): What do you mean by it will be more effective?

Lauryn (student): Learning in school.

Amy (researcher): Because?

Pause as students do not respond.

Sarah (teacher): Do you think that more students going remote might promote more of this kind of learning? You know. With video games? And other tech.

Wyatt (student): I doubt it. It's just not how things are done.

Amy (researcher): So - How many of you ever thought that you would be using video games in the classroom for learning? Raise of hands?

No hands went up.

Amy (researcher): What about when Sarah introduced this to you? How many of you thought - Video games in the classroom? No way.

9 hands went up.

Amy (researcher): James Gee makes a claim that video games and how they are designed can be used to think about how curriculum or what content in the classroom is designed and how learning can happen in schools. Some say that - yeah, it could make that learning more effective, but it's just not how things are done.

Wyatt (student): School is to prepare you for your next steps. Video games don't do that.

Sarah (teacher): Could it though? Think about genres that you read. What do authors do to construct the genre of the text? What is an author utilizing to construct meaning for readers?

Amelia (student): They will use a lot of description about the characters and the setting and stuff.

Amy (researcher): Ok. What else?

Darius (student): A story you follow.

Sarah (teacher): Do video games have these as well?

Carol (student): Yeah, but...I guess I never thought about it.

Sarah (teacher): So, could we look at characters, setting, the story of a video game and talk about it? Think about it during the mask break and let's come back and look at a video game trailer.

This excerpt is significant. The classroom discourse revealed students' experiences with learning in school. Lauryn noted that learning by memorizing content to take a test and then moving on to the next unit to take another test was common practice within classrooms. This discussion indicated traditional classroom practices are supported and practiced within the school (Scott, 1989; Piotrowski & Witte, 2015; Sperry & Baker, 2016; Koutsogiannis & Adampa, 2022). As such, the school has the potential to shape the views held by some students of what constitutes learning and what does not (Piotrowski & Witte, 2015). This was seen in Wyatt's response when he stated, "School is to prepare you for your next steps. Video games don't do that." Additionally, during the conversation, the students seemingly implied that if students are provided learning opportunities that involve trial and error that learning and engagement could be enhanced. As Lauryn explained that there are no risks involved with this form of learning [with video games] as compared to only memorizing content to earn a grade on an assessment. Subsequently, a practice such as learning with video games would disrupt common learning practices that students experience in classrooms. Sarah alluded to this during the end of the whole class discussion when she facilitated thought on how one can learn with video games in a classroom by analyzing character(s), setting, and plot in video games.

When students returned from the mask break, the students watched a Fallout 76 video game trailer that was available on Youtube. Afterwards, the teacher held a discussion with the class where they shared their observations regarding the setting, characters, and mood for example, and compared it to how meaning is created in other forms of texts. An excerpt of the

discussion is outlined below to show the first instance in data that supports the theme of shift in perceptions among students that were initially skeptical and expressed doubt about using video games in the classroom for learning.

Sarah (teacher): What were some of the things that the creators of the trailer did to have us understand more about the story and what is taking place?

Carol (student): The setting and all of the images of destruction. It looked like a nuclear bomb went off.

Amy (researcher): How many of you noticed the coloring change from the beginning to the end?

Michael (student): It was black and white when they were talking about the past and then color was added when it was present.

Sarah (teacher): What were some of the audio that you noticed?

Layla (student): A President or someone in authority who was talking.

Amelia (student): The narrator was slow and clear and to try to get people rallied up.

Sarah (teacher): What else?

Amelia (student): They talked about the past and the current future and honoring people to appeal to people.

Todd (student): The purpose is to get people to want to do something. I'm just not sure what that is.

Sarah (teacher): So, we have characters, looking at the author's purpose, setting, all of this with a video game trailer. We look at these things in books, too. So, what's the difference?

Maggie (student): It's just a different form. I guess. But not one that you think about much.

Todd (student): Yeah, I just don't look at a video game and think about all of that stuff.

Sarah (teacher): Have any of you ever done this before? Use a video game trailer in class?

No one raises their hand.

Sarah (teacher): Why do you maybe think that is?

Wyatt (student): It's just not what is done in school, but I guess it could be. I don't know.

In this example, the teacher facilitated students' meaning making by posing questions about the video game trailer and connecting it with learning experiences that students have had with print text. Here, students made connections across contexts to gain situated learning (Skerrett, 2016; Lankshear & Knobel, 2018). There was a shift in perceptions about video games for some students as demonstrated by Wyatt's response where he initially supported dominant discourse regarding learning in school; however, he teetered and considered that learning with video games may be a possibility in class. In previous classroom discourses, Wyatt was adamant that video games and learning in schools do not mix. His shift in perception is a signifier of doubt about learning practices commonly found in school.

Like Wyatt, other students including Amelia, Lily, Beth, and Layla also engaged in classroom discourse that demonstrated shifts in perception and again, institutional and school discourse that influences the inclusion and exclusion of practices. For example, Amelia was the student on September 09, 2020, that asserted video games "ruin your brain". After describing

and demonstrating a game she created to the class, Amelia reflected on learning with video games,

I just think this is unique. I have never done anything like this before. The more that I think about it and I think it was interesting that video games were brought into the class for learning, because I have never ever thought about it. (Amelia, October 06, 2020)

Her repeated use of the declarative “I think” statements demonstrated a very clear shift in thought involving video games being incorporated into classrooms for learning. Her reflection indicated she had not experienced video games being incorporated into the classroom for learning as shown with the use of the word “unique” and the statement “I have never done anything like this before”. By engaging in classroom activities that center students as thinkers and promote participation and collaboration, Amelia had a shift in perception regarding the utilization of different forms of text for learning. However, her response also revealed that it was not a common classroom practice that she had experienced. Similarly, Beth stated at the end of the unit,

I never imagined myself learning with video games in school, but I learned about things that I was unaware of before. Like when we talked about the different modes that are used and the purpose behind everything that the creators include. And, like, when we took away a mode - how the message was affected when you change things in the visuals or the sound behind the game - but that’s what the author wants. It’s what they want us to see. (Beth, October 10, 2020)

In the first sentence, Beth's use of the adverb ‘never’ almost seemingly implied a disbelief that learning with video games in school would never take place; however, Beth

countered her initial thoughts about learning with video games by stating specific examples that took place during the unit. Thus, her engagement with the unit where she was centered as a thinker and provided opportunities to engage in a text that she had not engaged with in this capacity in a classroom seemingly encouraged her to shift her perceptions. Additionally, she alluded to pushing back against power and narratives she encountered in games when she stated, for example, “but that’s what the author wants. It’s what they want us to see”. Here, Beth thought about texts critically and considered creator motivation. Her reflection demonstrated thinking about how people are positioned through a particular lens when consuming texts (Gee, 2010).

Summary

The students in the class initially expressed a range of thoughts surrounding the use of video games and video game materials for learning. Students relied on their own experiences with video games and learning in school to form opinions on whether other forms of text can be brought into the classroom for learning. Some students were open to the idea, while the majority of students engaged in institutional and dominant school discourses. This was seen by the students’ narrow views of what counts as a learning practice. At the end of the unit, students demonstrated shifting perceptions of learning with video games. Their initial thoughts on what should and should not be included in a classroom for learning were challenged. All twenty students recognized and acknowledged that learning happens when video games as a text are incorporated into a classroom. This finding helped to answer research question 1: What can be learned about secondary students’ learning and literacy practices when video games as a text are incorporated into the secondary ELA classroom. Additionally, the finding supported scholarship that considers how learning practices evolve, are multiple, and need to acknowledge students’

everyday practices (Gee, 1996; Luke, 2000; Gay, 2002; Street, 2003; Gee 2010; Knobel & Lankshear, 2014).

Theme Two: Making Sense of Texts

Before the unit began, data indicated that learning with video games was new for the students in the class. As such, students needed to make sense of video games as a text. Therefore, the teacher and I facilitated the unit by centering students as thinkers in the classroom through pedagogical practices that prioritized dialogue and facilitation of learning with new literacies (Wenger, 1998; Freire 2000; Luke, 2000; Rogoff, 2008; Kress, 2010; Kalantzis & Cope, 2012; Knobel & Lankshear, 2014; Kellner & Share, 2019). Students collaboratively examined and analyzed video games as a text to determine literary devices including, but not limited to, author's purpose and targeted audience. Students engaged in visual literacy practices when exploring video game graphics and critical media literacy practices when interpreting what they encountered in video games and video game materials (Seels, 1994; Alvermann & Hagood, 2010; Kellner & Share, 2019). Thus, the theme developed during the students' engagement with the unit. As such, I provide examples of classroom activities to demonstrate how the students engaged in literacy practices with video games. This allows context for the data collected. Through analysis, data revealed that once students made sense of video games as a text, they transferred learning with traditional print texts to video games to other forms of media they engage with outside of the classroom. Additionally, as students worked through the unit and engaged in visual literacy and critical media literacy practices, they engaged in critical discourses; however, data showed that students reinforced stereotypes found in society during the unit. This will be explicated in this section of the chapter. I label the first section Engaged in

Literacy Practices and the second section Engaged in Discourses. Evidence to support the development of the theme is outlined below.

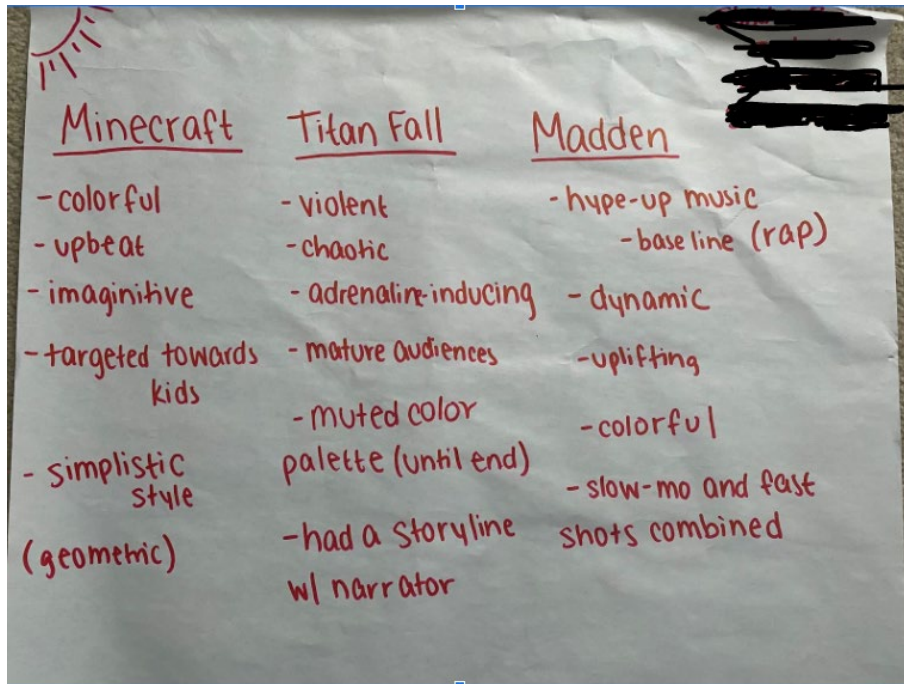
Engaged in literacy practices

Towards the beginning of the unit, Sarah facilitated a conversation with students that asked them to think about processes they go through to analyze print text. She stated, “When you read something you analyze all of the information that you are presented with to draw conclusions. What might that include?” (Sarah, September 09, 2020). Students replied, for example, that they will look at what the author includes in the texts to determine if the argument is well supported. Students also offered that when reading fiction print texts that they will use techniques such as identifying foreshadowing to predict what may happen next to a character in the plot. Sarah shared with the class, “Yes, you are analyzing all of these things in print text. Now, by looking at video games and their covers, too, you are looking at what is being presented to you to draw your own conclusions. Right? Analyzing an argument from a creator of a video game, similar to what you do when you read something.”

From here, students analyzed modes (i.e., text, image, audio, music) used in video games to learn about multimodality. Multimodality can be understood as an approach to meaning that includes modes and their interactions to create meaning (Kress, 2009). For example, students deconstructed video game introductory sequences by looking at the modes that contribute to multimodality. Students then made comparisons of the recorded observations with neighboring classmates and made a collective chart that was later displayed and shared with the whole class. One group’s observation list included words like upbeat, chaotic, uplifting, violent, dynamic, and adrenaline inducing. The group’s list is provided in Figure 6.

Figure 6

Students Outline Observations from the Introductory Video Game Sequences



Classroom discourse demonstrated how students were engaging in literacy practices when thinking about genre, plot, and character development in print texts and comparing that with video games. For example, in the excerpt below, Sarah asked the class to make comparisons between print texts and video games. Students engaged in new literacies discourse when they discussed ways of learning and meaning making with print text and transferring the learning and meaning making with video games (Gee, 2003; Lankshear & Knobel, 2011).

Sarah (teacher): So how are genres created similarly or differently in novels compared to video games?

Todd (student): Novels and video games can use both words and other things to explain the genre. Video games are able to use things like sound and visuals to further explain the genre because of the platform that electronics have.

Taylor (student): True. Video games use sight and hearing. Books use "sight" but it is imagination only and not visible pictures.

Amy (researcher): Meaning you have to visualize what is happening in the story yourself?

Taylor (student): Yep.

Darius (student): Novels and video games build up their genre by creating a very detailed and in-depth background and history. It sets the mood of the book or game through what happened in the past and what needs to be accomplished to reach a goal...either as a player or the character in the book. (September 14, 2020)

What several students, including Todd, Taylor, and Darius (in the excerpt above) pointed to was that authors of print texts create meaning for readers through the use of imagery, description, and development of the story similarly to how creators of video games create meaning for players. The difference is how that is accomplished. Students stated that meaning is created in video games through modes that are used and how they intersect. Thus, students made comparisons between meaning making with print text and that with video games. Through the contextualized experience that may be familiar or new to students, they conceptualized the practice of reading and meaning making with print texts to make sense of video games as a text (Kalantzis & Cope, 2005; Lankshear & Knobel, 2014). This was also demonstrated in individual reflections that students were asked to complete on a Google Form (September 10, 2020). The responses were originally labeled as a basic idea through an open coding process and then grouped under uses of modes during axial coding. The two groups were: 1) provided an understanding of what the game is going to be about and 2) were used to appeal to potential

players of the game. Clayton, Lily, and Carol were three of fifteen students that cited how modes provided the viewer an understanding of what the game is going to be about. I included their examples specifically as the students used terms in their responses typically associated with print text. The terms were theme, readers, and story. Interestingly, as noted in the Theme One: Shifting Perceptions section, Clayton and Lily were also two students that held initial perceptions that video games could not be used for learning in the classroom. In Clayton's response he provided:

They [modes] play a part in making the trailer or game. They give the people a sense of what the games are gonna be like so if you have exciting music and intense visuals people will assume that the game will be very action oriented. They all play a role in forming a central idea or theme of what the game will be its like building a snowman each piece is needed for it to be complete. (September 10, 2020)

Here, Clayton implied that meaning will not be accomplished if a mode was left out or missing. Clayton supported his thought by stating that the underlying message or theme of the game would not be communicated to people, and therefore, limit understanding. Similarly, Lily stated "The modes used to introduce the game help set the scene or a better understanding for what the game is about. It helps grab the reader's attention if they are interested in this type of game." For Clayton, he used 'central idea or theme' in his response demonstrating how video games tell stories similarly to print text. Lily used the word 'readers' in her response almost seemingly noting that one can read games similarly to the process of reading print text. Carol responded similarly to Clayton and Lily in discussing how modes promote meaning for viewers. She stated that even though written words were not used in the introductions that she viewed, the

trailers still told a story due to the modes that were included. “Combining the modes overall helps create a three-dimensional story for viewers to take in when watching a game trailer. All these modes act as the text, and its purpose is to get the viewer to want to play the game. They help create meaning for the game.” Here, students connected print text to learning with video games showing that literacies are multiple (Gee, 2010; 2015). Students engaged in literacy practices to gain contextual and situated learning and made connections among texts (Knobel & Lankshear, 2007; 2014; Skerrett, 2016; Lankshear & Knobel, 2018).

What several students, including Clayton, Lily, and Carol, pointed out on Google Form responses was how modes used in the video game trailers can prompt people to want to play the game. For instance, Michelle noted “The modes indirectly speak to and affect the viewer in various ways. They often appeal to the viewer, sometimes even emotionally. Ultimately, they influence the viewer to think that their game is worth buying.” In the first sentence, Michelle stated that modes “indirectly speak to” viewers influencing them to buy the game. This suggested that modes used collectively through multiliteracies impact people if they are not critically consumed (Luke, 2012; Morrell, 2012). These thoughts were also displayed in a subsequent activity where Layla watched the video game trailer, Rocket Arena (<https://www.youtube.com/watch?v=Pi1glpgx0EU>). She wrote in a response, “Multimodality makes it easier to direct a viewer’s attention to a certain point by emphasizing one mode. Like sounds which accompany actions or shots can deliver the game creator’s opinion about these to viewers, creating a statement.” Layla shared an interesting thought on video game creator’s use of modes to position players to consume their narrative. Across the two responses, the students alluded to the effects that texts, such as video games, may have if not critically questioned (Luke, 2000; Freire, 2000; Shor, 2009).

Kayla referenced a trailer to Luigi's Mansion 3 game and described how the sounds that were added drew her into wanting to play the game. "It all came together to not only hook me into the game but also to develop the story of the game." Here, Kayla articulated how modes in video games tell the story of the text while making the game appealing to players. She continued this thought on her Multimodality Reflection sheet where she expanded on how modes create a more cohesive story for viewers to follow. Kayla stated,

Genre is created differently in video games than novels in the sense that video games can utilize background audio/music while novels cannot. Video games, such as Madden, use sounds to make you feel as if you are on the field during an NFL game, and they create the energy that you would experience if you were actually playing through their use of music/audio. Reading about a football game in novels would not be the same as the text only appeals to certain senses. In a video game, you can hear the roar of a crowd while in a novel you just read "...and the crowd went wild." (September 16, 2020)

Kayla's repeated use of 'you' followed by action verbs in her explanation made her viewpoint clear that she felt video game creators' use of modes have large impacts on player's engagement and meaning making with the game (Kress, 2003). However, as seen in her last sentence, her response seemed to suggest that there is a lack of meaning when one must rely on imagination over the external production of sound. Thus, Kayla's response indicated that, in this instance, she was not connecting meaning making in print texts with video games and viewed each as separate. Additionally, she did not engage in discourse questioning what informs a creator's use of the modes (Luke, 2012). She only reported how modes impacted audiences as consumers of information.

Classroom discourse on modes used in media that students engaged with outside of class occurred after students watched Instagram posts that they viewed during the unit. Students connected how modes used in video games and modes used in social media posts created meaning for viewers. The first Instagram post was of singer and songwriter, Miley Cyrus. The sound was initially left off due to technical difficulties. The excerpt below outlines students' perspectives on modes used in social media and the impact on viewers. It is the first set of data that indicated the transfer of learning from video games to other forms of media.

Amy (researcher): How does this [no sound] impact your understanding of the post?

Ali (student): It makes you want to hear the sound. I want to know what she is saying and singing.

Taylor (student): Without the sound, I would scroll past it on Instagram. I don't want to engage. I can't hear it.

Maggie (student): It makes you want to know more.

Sarah (teacher): How is this like leaving a mode out of a video game?

Michelle (student): Well, I just don't understand what is going on. Like here. I think I know, but really I don't know what is going on.

Sarah (teacher): So, it's impacting your understanding?

Michelle (student): Yeah. The mode is left out, so I don't understand exactly what the post is all about. Like in video games, if something is left out, then someone won't understand the meaning. (September 14, 2020)

Here, classroom discourse demonstrated students' application of learning with video games to other forms of media that they engage with outside of the classroom. Taylor shared that he would not even be interested in the post without the sound while Ali wanted to make sense of

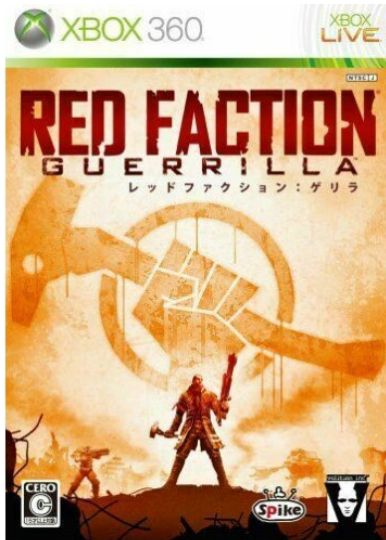
the post and be able to hear it. Michelle shared that she was not able to understand what happened in the Instagram post as a mode was left out. She used the word ‘exactly’ which indicated that she utilized all other information from the post to try to yield understanding (Kress, 2003). Thus, she attempted more fluid processing available with the electronic text (Cope & Kalantzis, 2000; Gee, 2015). However, with the sound not available, she reported not understanding exactly what the post was all about.

Engaged in discourses

Students engaged in critical discourses of video games and video game materials to form conclusions surrounding implicit and explicit messages, bias, and ideological representations when the teacher and I facilitated classroom conversations. Student discourses included but were not limited to stereotypes being normalized in video game content; however, data indicated dominant discourses informed students interpretations of the video games and video game materials when students worked individually or in small groups. Additionally, dominant discourses were reinforced in student generated products. For example, the class completed a Deconstructing Video Game Cover Google Form (Appendix C) and Worksheet (Appendix D) that drew from a critical media analysis unit (Beucher, Lowe, & Smith, 2020). Carol, Kayla, Layla, and Lauryn chose to deconstruct the XBox 360 Red Faction Guerrilla game cover as shown in Figure 7.

Figure 7

Red Faction Guerilla Game Cover



The group noted the prominent hatchet in the image and the man that was in the center who was holding various weapons. The students felt that the tone of the image was aggressive and violent. They noted that the tone was due to the weaponry shown in the image, fighting that was happening in the background, dark hues of the red color in the image and writing at the top, and destruction of buildings in the background. “It shows only a couple of male characters in scenes of intense violence,” Layla said in response during the activity. She continued, “The cover is displaying men as strong and aggressive.” Carol added, “Basically, that is the intended audience for this game. Males.” “But why only males?” Layla asked. “Would you want to play this game based on the cover?” Carol replied. “Well, no.” Layla responded, referring to the cover. Lauryn then added that the cover reflects why the characters are fighting and that the cover is trying to motivate a certain audience to play the game (September 18, 2020).

The small group’s discussion revealed that dominant discourse informed how they interpreted the video game image. The students concluded that the game was intended for a male

audience due to the image on the video game cover. Thus, the students were buying into gender norms and stereotypes that boys like aggressive and rough things while girls do not. For instance, Layla questioned why the audience of the video game would only be males, but quickly stated that she wouldn't play the game based on the image as well. Here, the students unintentionally contributed to the systems of power in society. They made assumptions about the game and the intended audience based on the image (Fairclough, 1989).

Another example of reinforcing dominant discourse was when students were asked to consider and critique the designer's intent to serve a targeted audience. A group of four students (Lauryn, Michelle, Ali, and Amelia) decided to create a new audience advertisement for *Wallace and Gromit: The Curse of the Were Rabbit*. This video game is based on the films with the same name and rated for play by children and adults alike. The students discussed audience discourse by analyzing the image. They engaged in visual literacy practices to determine that younger populations would be the target audience. The group decided that they wanted to "increase representation and target a wider audience" (September 24, 2020) by incorporating cultural objects and the Spanish language into the advertisement. Figure 8 displays the original advertisement with the student created advertisement.

Figure 8

The Original and Student Created Video Game Advertisements



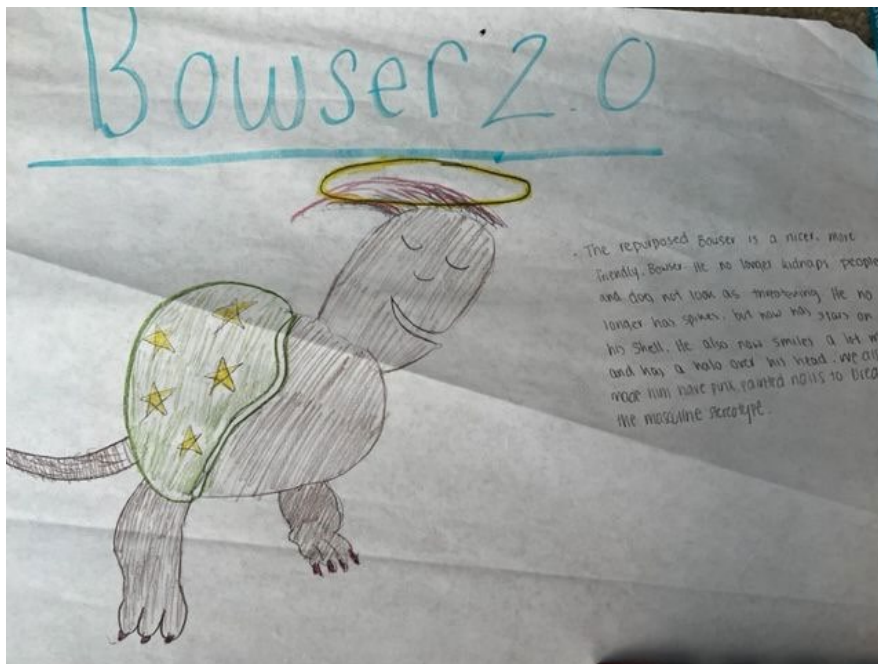
When asked who would most likely be interested in playing the game, the group responded that it would be the Spanish speaking countries and people due to their “culture represented” (September 24, 2020) by the calavera or sugar skull that replaced the pumpkin, the Spanish guitar that is being held by a Latinx Wallace, and the Spanish language on the poster. Their awareness of culture and the need for cultural representation in different forms of media shaped their approach to their repurposed advertisement. The group articulated this by having the prominent calavera, the Spanish language, and the main character wearing a sombrero and holding a guitar. The students positioned and enabled a new audience to engage with the advertisement. However, the students reinforced dominant discourse in their created product. They incorporated objects into their repurposed advertisement that supported stereotypes of the Latinx culture. The group did not consider how the included objects support hidden power and favor those creating the advertisement (Fairclough, 1989).

Dominant discourse was also reinforced when students engaged in unit activities that explored representation in video games. Students chose a video game character and were asked

to recreate the original video game character based on the activities that had been done in class. They could either draw the new character or utilize their Chromebooks to create the character. In one example, Molly and Michelle chose to recreate Bowser, the primary antagonist in Nintendo's SuperMario franchise. They drew Bowser and included a description on their student product that stated Bowser "does not look as threatening" and has a friendly demeanor (September 24, 2020). Molly and Michelle drew a halo and stars on the new Bowser and colored his hair pink. Additionally, they painted his nails pink to "break the masculine stereotype" as seen in the figure below. Here, the students were implicitly reinforcing stereotypes by including pink painted fingernails even though they wanted to push back against masculinity found in the game.

Figure 9

Student Product of Bowser



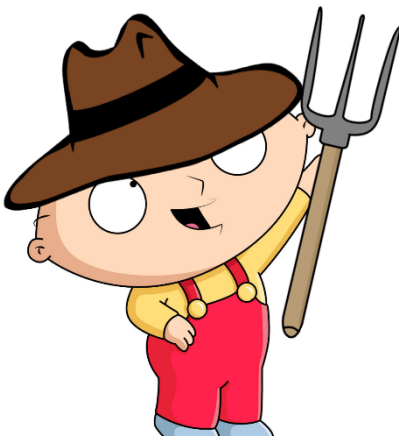
In another example, Taylor recreated Stewie from the Family Guy video game franchise. The video game is based on the Fox network animation series, Family Guy, where Stewie is a

one year old fictional character who possessed an advanced vocabulary and engaged in eccentric behaviors. Taylor's version of Stewie included a hat and pitchfork. Taylor's character is provided as a figure below. Taylor stated to the class:

I made him a farmer because he's [Stewie] an English boy with an English accent. I added a hat, but the overalls are the original character. He still has a little farmer feel. That's how I picture farmers with a hat like that and a pitchfork. (September 24, 2020)

Figure 10

Taylor's Recreated Character



When asked why he pictured farmers with a hat like the one he included and a pitch fork, Taylor responded "I've never met a farmer before, that I know of. So, that's how I picture them" (September 24, 2020). Here, Taylor relied on his perceptions of farmers to recreate his character. He included stereotypes that can be found in society where farmers have pitchforks and wear hats. Thus, he reinforced stereotypes found in media in his recreated video game character (Fairclough, 1989).

Interestingly, students engaged in critical discourse and pushed back against dominant narratives during teacher facilitated classroom discussions. As an example, a class discussion on

character portrayal and representations in video games and video game materials revealed students' thoughts on how video games could reinforce stereotypes in society. An excerpt of the discussion is provided to show students' thoughts on how video games and other images shape meaning that people accept as truth (Alvermann & Hagood, 2010). Here, students are answering questions about video game images that they answered on a worksheet (Appendix D).

Michael (student): For the first one I said to look at color, text, placement, people in the cover, and overall message that the cover is trying to convey.

Alex (student): Yah. Evaluate the colors, the titles and subtitles, and the characters in order to create generalizations about the text.

Michael (student): Based on the elements the cover includes, the audience can see the purpose of the game or the message the game is trying to convey.

Amy (researcher): What do you mean the message the game is trying to convey.

Maggie (student): Well, we can look at the cover to figure out the general purpose of the game and the purpose gives clues as to what the game is all about.

Sarah (teacher): What about number 6?

Darius (student): For number 6, I had the game developers' personal opinions may impact the tone and their attitude towards these issues. They also may want to make a political statement in their depictions of characters and certain portrayals.

Lauryn (student): But, their reasons would be to convey a certain message as to who the game is geared towards and who their target audience is. Everything the game makers do is to get more people to buy and play the game.

Darius (student): True. The game developers could portray representations of different categories in certain ways to make the game more appealing to play. They could also simply be playing into stereotypes while representing certain groups. If they are creating a game about war and fighting, they may have more male characters than female, because they assume that the audience will be men and they [game developers] correlate men with fighting.

Clayton (student): Yeah, but how things are represented can make the players relate to the games more, because the player will feel drawn to the game if they are represented in it.

Sarah (teacher): So, what I am hearing is that game creators may do things on purpose to get people to play the game. Is that right?

Beth (student): I put an example that they [game creators] want to appeal to people, so they often create characters that have the ideal body type, such as very muscular men, and skinny but curvy women. Sometimes, they try and make their characters more diverse, which can help them draw in a larger and more diverse audience to buy the game.

Sarah (teacher): Molly?

Molly (student): It can influence how players view themselves. In our game, it was very stereotypical with a very muscular man and a barely dressed thin girl on the cover. For young viewers especially, it can have a big impact on them.

Amy (researcher): How so?

Molly (student): They will think that is what is normal and should be found everywhere. (September 18, 2020)

Here, students were centered as thinkers in the classroom and engaged in critical discourse. The discussion demonstrated students' thoughts on how power is legitimized and normalized in media, such as video game and video game materials (Fairclough, 1989; Luke, 1994; 2000; Kellner & Share, 2019). Students supported their responses with examples from the analyzed video game materials and proposed that the power found in the video game images can be problematic for those that consume the text without critical analysis (Luke, 2000; Freire, 2000). For instance, Darius stated that creators of video games could "be playing into stereotypes while representing certain groups" (September 18, 2020). Darius' response pointed towards social reproduction of stereotypes found in media (Hobbs, 1997; Funk et al., 2016; Kellner & Share, 2019; Luke, 2000). Additionally, Molly commented on how images can have "big impacts" on youth (September 18, 2020). Here, Molly alludes to negative effects that video game creators can have on players through image oversexualization.

Student engagement in critical discourse captured in the previous excerpt was also reflected in classroom discourse surrounding Princess Peach Toadstool from the Nintendo's Mario franchise. Figure 10 provides an image of Princess Peach Toadstool. First, students made general observations about the popular video game character and pulled in their own experiences with playing the video game into the discussion. Then, student discourse shifted to discuss stereotypes that may be reinforced with Princess Peach and how to counter social reproduction of stereotypes through changes with the character. An excerpt from the discussion is provided for context.

Figure 11

Princess Peach Toadstool



Sarah (teacher): So, tell me about Princess Peach.

Wyatt (student): She looks very innocent with the way that she has her hands.

Kayla (student): She is clean and isn't dirty. Dressed in pink with white gloves.

Ali (student): She is a typical princess with blue eyes, blonde hair... That is what I think a princess looks like.

Layla (student): In the video game she is a typical damsel in distress. She is a girl that needs saving. She's a princess and that is the story that you typically hear about. She is saved by Mario. A man.

Amy (researcher): When you say typically hear about, what do you mean?

Layla (student): I read a lot of stories where there is a female character that needs help and it takes a man to help. Like all of the Disney stories basically when I was young.

Sarah (teacher): Why is that the case?

Layla (student): I don't know.

Sarah (teacher): How could we change the story of Princess Peach?

Amelia (student): Change the story so that she is the one saving Mario.

Todd (student): What she looks like could even change. She could be a different race or something.

Amy (researcher): What would the end purpose of these changes be?

Lily (student): So - want to be able to get both sides of the story.

Amy (researcher): What do you mean?

Lily (student): View her as an equal or the same. (September 24, 2020)

The students engaged in critical discourse as they identified how power was expressed and normalized with the video game character, Princess Peach (Fairclough, 1989). Although dominant discourse informed Ali's response on her view of what a princess looks like, students discussed how Princess Peach's character enforced societal beliefs on gender roles. Layla described Princess Peach as a "typical damsel in distress" that needs saving by a man (September 24, 2020). She drew upon print text that she read as a child to draw this conclusion yet expressed uncertainty about the implicit practices found in those stories where female characters were portrayed in such manners (Fairclough, 1989). Further, Amelia suggested that the story be changed to one where Princess Peach is saving Mario, and Todd recommended that the physical appearance of Princess Peach be altered. Thus, Amelia and Todd suggested counter narratives to the dominant discourse and disrupted power found in the video game (Fairclough, 1989). Interestingly, Lily added that the changes suggested by Amelia and Todd would provide "both sides of the story" for Princess Peach to be viewed as equal or the same (September 24, 2020). Here, Lily's response indicated how counter narratives shift the balance of power and challenge stereotypes found in society (Luke, 1994; 2000; 2012; 2019; Freire, 2000; Shor, 2009; Gee, 2010; Mirra et al., 2018; Kellner & Share, 2019).

During individual student interviews that were held on October 06 and October 08, 2020, students noted that learning when video games are incorporated into the classroom provided them with opportunities to bridge learning that occurred in the classroom with outside of classroom practices. All interviewed students explained that their learning with this unit impacted them as far as having an increased awareness of media they engaged with daily. Their reflections indicated that when they participated in a unit where video games were brought into the classroom for learning and they engaged in activities that asked them to analyze texts consciously and critically, they developed an awareness of gender and cultural representation in mainstream media causing reflection on if and how identities are represented or reinforced in society. Carol stated,

I certainly have started questioning what I am seeing now. I have found myself looking at ads differently and stuff. Even when I go to buy things, I will look at the covers more and trying to decide who they are portraying and stuff. Is it someone who resembles me? Or not. (October 06, 2020)

Carol's intonation during the interview was positive and her repeated use of "I" followed by verbs in the past tense indicated that she had already applied learning with video games to media she engaged with outside of class. Here, Carol also engaged in critical discourse. She noted that she critically analyzed ads to determine the narrative on the covers and used the information to question and draw conclusions about the text (Fairclough, 1989; Luke, 1994; 2000; 2012; 2019; Freire, 2000; Shor, 2009; Gee, 2010; Mirra et al., 2018; Kellner & Share, 2019).

Similarly to Carol, Molly related learning with video games to commercials. She admittedly stated that she never used to critically question what she was viewing on

commercials, but now considered the purpose behind what she was consuming. As Molly explained:

Definitely I look at things differently now. Like the colors, the music behind it, and the people that are in the commercial. And the way that they speak. It definitely has had an impact on my thinking. I've never done that before. I just kind of used to look at it, but this has made me take a step back and think like this is what they are trying to do or there is a message they are trying to get across. (October 08, 2000)

Here, Molly's response demonstrated that she had increased awareness of hidden power that is found in media (Fairclough, 1989; Luke, 2000). She considered the implicit practices that were used by the commercial creators and indicated that she engaged in critical consumption of media when she stated, "this has made me take a step back and think this is what they are trying to do." Molly demonstrated her learning of how text positions people to potentially "manipulate them" (Luke, 1995, p. 20).

Summary.

Students engaged in critical discourses during teacher facilitated lessons. They challenged dominant narratives and considered how counter narratives challenge power. During student interviews, students expressed how they questioned what they were viewing when engaging with social media and advertisements by considering what was included or wasn't included in the post. However, when students created their own products during the course of the unit, data indicated that they reinforced stereotypes and dominant discourse. The findings helped to answer research question 2: What discourses do secondary ELA students engage when deconstructing and constructing video games as a text within a gaming literacy unit of study? And the subquestion a) How do secondary

ELA students disrupt and/or reinforce power laden discourse? Additionally, the finding supported scholarship that considers learning across contexts with new literacies (Jewitt and Kress, 2003; Kress 2010; Knobel & Lankshear, 2014; Skerrett, 2016). It also supported scholarship on incorporating critical media literacies into classrooms to acknowledge students' lived experiences and to promote the analysis of information and power (Fairclough, 1989; Luke, 2000; Freire, 2000; Kellner & Share, 2019).

Theme Three: Applying Learning to Design Processes

Students created their own video games using the free MIT online program, Scratch. First, students learned basic coding that was required to create a video game. Then, students explored the program and determined the setting, characters, purpose, and audience of the game they were creating. After the game was created, the students were asked to make the games public for the opportunity to have other people comment and provide feedback on the game. Thus, students took their learning with video games and video game materials and applied it to a game that they created that would be made public. After students created their games, they were asked to reflect on the games that they created and consider how they would or wouldn't have changed their game. Many students designed the game to target a certain audience; however, four student interviews revealed that students recognized restrictions within the platform that they noted as being problematic. I highlight these specific findings below.

Carol and Lauryn partnered to create the video game, Astronaut Explorer. The objective of Astronaut Explorer is to try to catch the astronaut. The astronaut moves quickly throughout the page and a player has to click on the astronaut to earn points. The girls stated that the target audience of the game would be 5 to 6 year olds, and they utilized "bright colors and upbeat music" to appeal to this age group (October 02, 2020). In the planning and creation phase, Carol

and Lauryn expressed that they discussed ideological representations and gender roles in the selection of the character. Carol stated, “We considered ideological representations in our character, but there weren't any options for female astronauts, which is a problem in and of itself.” Lauryn added, “We thought about doing this, but there was no available sprite [character] that would allow us to do this. For example, by adding a female sprite, we could have shown female representation in the space industry. However, we could not do this.” In follow-up interviews, I asked Carol and Lauryn to expand on why they considered ideological representations and gender roles in their video game.

Carol: I think it is important to consider ideological representations in video games, because it will encourage and support diversity or do the opposite. Children need to see their identities and identities different from theirs in the media in order to grow up more tolerant and feel confident in themselves.

Lauryn: It is important because it shows progression in society. It can also do things like break gender roles and change people's view of different stereotypes. Really, I've never considered how each video game character is or could be portraying a certain stereotype or general idea to the public. I never thought about that before.

The students wanted to integrate a female astronaut character into the game to disrupt discourse that reinforces power (Luke, 1995). Although a female astronaut wasn't an option within the software, both Carol and Lauryn expressed the importance of addressing this in texts. Their responses indicated their thought on how having multiple narratives acknowledges and promotes lived experiences and pushes back against stereotypes found in society (Kress, 2003; Luke, 2000; Gee, 2017). This was demonstrated when Carol stated the need for youth to see

“their identities and identities” of others in texts. In this case, Carole was referring to having options within the game where the main character was a female astronaut. Similarly, Lauryn noted that more representation has the potential to challenge people’s views of gender roles.

Layla created the game, Fish Catch, on her own. The object of the game is for the diver to catch the fish to accumulate points. Layla was comfortable with coding and was able to add levels to her game that increased in difficulty. Also, she decided on the theme of her game due to the options that were available within the software. “I looked through the backgrounds and characters to see what my options were, and I decided that since there were a lot of ocean-related options I would make a game which utilized them.” In addition, Layla constructed the game for younger players due to what she called the “simplistic nature” and selected which modes she would add to make the game more appealing to the audience. As Layla explained:

I tried to add multiple different aspects of backgrounds and characters as well as a vivid color palette to keep viewers interested in the game. I did not add sound to the game because I never turn on the sound on my Chromebook, so I didn't think that it would be very appealing to me, although I realize it might be to other players. (October 06, 2020)

In a follow-up discussion, Layla stated that if she had an opportunity to change anything in her game it would be to add sound to make the game more engaging for the players. Similar to Carol and Lauryn, Layla expressed the importance of considering characters in the game, but added that there weren’t many sprites [characters] to choose when creating the game. Layla stated, “The way that characters are represented in the games is important as it can have an effect on the real-world beliefs of their audiences. But there was only one option of a scuba diver. You can really only tell that they are human.” (October 06, 2020). Here, Layla considered

representation and how it has the potential to reinforce stereotypes. Although there weren't many options for characters, she indicated that characters in games can impact the audience's beliefs (Luke, 1995).

Kayla created *Catch the Crab*. This game involved catching crabs to save the boardwalk from a crab infestation. Kayla designed the game based on the "lack of sprites available to bring on more characters other than boys that are found in Scratch" (October 06, 2020). Therefore, she drew from personal preferences and the targeted audience of the game. "I picked the boardwalk, which I like, and thought that a crab infestation could possibly happen there. Many people like the city boardwalk because it reminds them of summer." (October 06, 2020) Kayla stated that she wanted to appeal to the players, and therefore, utilized modes such as bright colors, made the game difficult to complete to entice players to keep playing, and added language to the instructions that would draw people to play the game. Kayla carefully considered her audience when creating the game and wanted to appeal to players to make them want to play. However, Kayla also indicated that there was a lack of representation within the gaming platform when she stated the need for more characters "other than boys." Here, Kayla demonstrated that she wanted to include females as main characters within a game. Unfortunately, she created a completely different game due to the limitations within the platform.

Scratch was utilized for the class, because it was free to the public, tutorials were provided to assist with coding, created games can be easily shared online, and Sarah, the classroom teacher, had coding skills to assist students with program difficulties. However, the students highlighted in this section identified limitations with the platform when they created their games. As previously mentioned, some students had to select a different character than they wanted even though their goal was to address representation. Additionally, students reported that

the features available to include in their games were basic, and thus, led them to create games that were simple which forced their game to be created for a certain audience. Students identified the limitations within the platform that could be considered problematic as the identified limitations could inadvertently reinforce dominant discourses. If they had opportunities to change anything regarding the games they created, students stated that they would have included enhancements like different audio and graphics to appeal to older audiences and include more opportunities to choose different characters in their games to bring in different gender and cultural representations.

Conclusion

During the unit, students analyzed modes found in video game trailers and critically analyzed video game covers, video game characters, and video game advertisements to identify messages, representations, and targeted audiences. Data analysis revealed students transferred learning with print texts to video games to other forms of media, students engaged in literacy and learning practices when video games were incorporated into a classroom, and finally, students engaged in critical discourses during teacher facilitated learning engagements. Findings also indicated that students reinforced dominant discourse when creating student products. These themes support research indicating that when various texts are brought into the classroom, students are centered as thinkers in classrooms that prioritizes dialogue, and learning is facilitated for critical engagement, that students can in turn be critical consumers of texts that they engage with both inside and outside of the classroom. Next, I will provide interpretations of the research and recommendations for next steps.

CHAPTER V: DISCUSSION

The research study was completed during an unprecedented time where many schools were fully remote due to the Coronavirus Pandemic. This school, however, held classes in person and therefore, provided an opportunity to conduct research with the goal of understanding students' learning when video games and video game materials are incorporated into a secondary ELA classroom. Through data collected by whole class and small group discussions, student products, and interviews, findings were identified that answered the research questions:

1. What can be learned about secondary students' learning and literacy practices when video games as a text are incorporated into the secondary ELA classroom?
2. What discourses do secondary ELA students engage when deconstructing and constructing video games as a text within a literacy unit of study?
 - a. How do secondary ELA students disrupt and/or reinforce power laden discourse?

In this chapter, I offer a discussion of findings in response to the research questions. I provide a summary of the study, synthesize the findings and connect the findings to the research questions, connect the study to theory and prior research, discuss implications for practice and research, and provide limitations and reflections on my own learning during the study. I end the chapter with suggestions on how the findings from this study can inform classroom practice.

Summary of Study

This dissertation research sought to understand how secondary students in an ELA course learn from video games as a text. As outlined in Chapter One, school approaches to technology have been more for traditional purposes that include academic assignments and assessments (Gee, 2007; Hutchison & Reinking, 2011; Peterson & McClay, 2012; Piotrowski & Witte, 2015;

Appova et al., 2022). However, research has shown that youth use technology as a method of communication and learning, to foster relationships, and for entertainment purposes outside of the classroom (Sum et al., 2008; Agosto et al., 2016; Schaeffer, 2019; Anderson et al., 2022). As such, classroom practices do not align with youth's engagement with technology (Gee, 2007). Consequently, some argue that new instructional practices are needed that acknowledge youths' everyday practices with technology (Street, 2003; Pahl & Rowsell, 2006; Pacheco & Gutiérrez, 2009; Serafini, 2012). Additionally, technology has been shown to reinforce stereotypes that are found in society (Gay 2002; Morrell, 2012; Berman & White, 2013). Therefore, technology in schools needs to be utilized for deeper understanding and critical engagement (Luke, 2000; Buckingham, 2008; Luke, 2012; Dwyer, 2016; Kellner & Share, 2019). Critical engagement with technology has the potential to disrupt dominant discourse and produce counter narratives that promote social justice (Luke, 2000; Freire, 2000; Shor, 2009; Luke, 2019; Share, 2020). This dissertation sought to understand how secondary students learn when video games and video game materials are incorporated into the classroom. It explored students' perceptions of using video games for learning, classroom discourse, and application of learning to answer the research questions. To provide support, Chapter Two included literature on current research, highlighting new literacies, visual literacies, critical media literacies, and gaming literacies. The chapter also discussed the history of games studies and focused on current research with video games. Chapter Two called attention to the fact that research with video games is emerging; however, the literature reviewed in the chapter demonstrated that research with video games has faced barriers (Nash & Brady, 2021; Abrams & Hanghoj, 2022). Research findings indicated that practitioners question the value of video games in the classroom (Greitemeyer & Mügge, 2014; Dickey, 2015; Beavis et al., 2017) and lack the knowledge on how to incorporate video games in

the classroom for learning (Belda-Medina & Calvo-Ferrer, 2022). Within Chapter Two, research on student motivation when video games are used in the classroom and research on the incorporation of video in secondary classrooms were also provided.

In Chapter Four, I shared findings generated from the qualitative study. As detailed in Chapter Three, I drew upon ethnographic methods in the classroom where the study took place and used sociocultural, multimodal, and critical perspectives during data analysis. Themes were derived from inductive qualitative research design. Additionally, I followed Fairclough's (1995) method of Critical Discourse Analysis as I worked through the data. Chapter Four addressed the research questions. I examined classroom discourse and student products when video games were incorporated into the classroom. The findings from the research questions were: 1) Students transfer learning from traditional print texts to video games to other forms of media that they engage with outside of the classroom, and 2) Students challenge dominant discourse when centered as thinkers in classroom discourse. Themes that were outlined in the chapter included 1) shifting perceptions, 2) making sense of texts, and 3) applying learning to design processes. Thus, the research study aimed to contribute to literature surrounding educational possibilities of bringing new literacies into the classroom space, specifically through video games and video game materials.

Synthesis of Findings

As shown in the review of the literature, schools are influenced by their communities and long held traditions (Koutsogiannis & Adampa, 2022). They tend to favor logocentric texts, and therefore, students may engage with text in isolation (Piotrowski & Witte, 2015; Sperry & Baker, 2016). As such, the classroom practices include an over-emphasis on constrained skills rather than engaging students in learning surrounding conceptual development, analysis,

comprehension, and connections to personal meaning-making across contexts (Hull & Schultz, 2002; Kress, 2010; O'Brien, 2012; Skerrett, 2016; Lankshear & Knobel, 2018; Koutsogiannis & Adampa, 2022). In effect, the classroom practices don't promote multiple ways of learning (Luke, 2000; 2018; 2019; Kress, 2005; Knobel & Lankshear, 2007; Kress, 2010; Knobel & Lankshear, 2014).

Additionally, Black et al. (2015) contend there is a gap between youth engagements with technology outside of the classroom compared to the ways that technology is used inside of the classroom. They state that how students create meaning outside of school plays a significant role in 21st century education. "Youths in our digital age are self-taught, forming communities of culture as they immerse themselves in social media outside of our classrooms." (p. 2). Similarly, Sefton-Green (2004) completed a review of learning practices youth engage with outside of school which are typically not valued in educational settings. Sefton-Green argued that traditional learning theories do not apply to how children learn outside of the classroom. "This is a new area and the 'road map' of where we need to travel to understand this is laid out through these different theoretical perspectives, from constructivism to discovery/experiential, situated learning, and new literacies studies" (p.12).

Sarah, the classroom teacher, recognized that what student learning and engagement looks like in her classroom could change. She wanted to bring technology into her classroom but didn't want it to be used by the students solely as a tool. Instead, she wanted to use technology to extend students' learning and literacy practices. However, as Sarah stated to me when I first approached her about conducting research in her classroom using video games as a text, she always wanted to bring in different technologies into the classroom, but just didn't know how and was concerned that administration and parents may begin to question her teaching practices

(August 09, 2019). Like Sarah, other educators may hesitate to include other forms of text in the classroom as they are fearful of backlash and are unsure about how to develop learning opportunities that include different forms of texts (Albreti, 2008; Koutsogiannis & Adampa, 2022). Additionally, school leaders have been shown to react negatively to video gaming culture, prohibiting video games in schools due to perceptions that they have the potential to diminish the integrity of classroom learning (Halverson, 2005). Thus, this is reminiscent of research findings supporting how schools influence the inclusion and exclusion of certain learning practices, including video games (Luke, 1994; 2000; 2018; 2019; Freire, 2000; Alvermann & Hagood, 2010; Koutsogiannis & Adampa, 2022). I experienced skepticism on part by the administration when proposing my research study. I believe the skepticism was reinforced by institutional practices that don't acknowledge and celebrate teacher autonomy and the multiple ways in which students learn. However, as the findings in the study demonstrated, students engaged in learning when video games and video game materials were brought into the classroom. Students created meaning and drew conclusions based upon analysis of the video games and video game materials. Ultimately, I was granted access once I explained the purpose and goals of the research and fully outlined the unit of study.

Students' initial perceptions on what counts as a learning practice were challenged and by the end of the unit all students recognized and acknowledged that learning happens when different texts, such as video games, are incorporated into a classroom. The findings test the traditional pedagogical model of learning that is standardized and dictated by mandated curricula and supports scholarship demonstrating that learning practices are multiple and emerge for different purposes (Street, 1995; Gee, 2005). Here, classrooms expand and push what learning and pedagogy can look like today (Mirra & Garcia, 2021). It considers how learning practices

evolve, are multiple, and need to acknowledge students' everyday practices (Gee, 1996; NLG, 1996; Luke, 2000; Gay, 2000; Street, 2003; Gee 2010; Knobel & Lankshear, 2014; Luke 2018; 2018; 2019).

Initial classroom discourse illustrated students' engagement within a school that favors logocentric texts (Piotrowski & Witte, 2015; Sperry & Baker, 2016). School and institutional discourse aligned with research findings showing schools favor print texts and have been shown to marginalize gaming in the classroom (Halverson, 2005; Sperry & Baker, 2016; Koutsogiannis & Adampa, 2022). Many students voiced skepticism and questioned bringing video games into the classroom for learning as seen when Wyatt stated, "School is to prepare you for your next steps. Video games don't do that." Students had not experienced learning with video games in school, did not feel video games lend themselves to learning, and expressed that the classroom and video games simply don't go together. Just as research by Greitemeyer and Mügge (2014), Dickey (2015), and Beavis et al., (2017) has shown, students did not feel that learning with video games was a legitimate classroom practice. This suggests that they held negative views about video games. As previously mentioned, students likely held these views because schools have historically operated within these definitions and enacted very traditional ways of engaging students in learning that align with social expectations (Scott, 1989; McKenney & Bradley, 2016; Sperry & Baker, 2016). Given these circumstances, it is only logical to assume that students' initial views on using video games for learning in the classroom were impacted by the educational system.

As the data collection continued to take place, students expressed changes in perception about learning with video games. By the end of the unit, all students expressed that video games can be included and used in a classroom for learning. As Beth stated, "I never imagined myself

learning with video games in school, but I learned about things that I was unaware of before.” Thus, her meaning making expanded with multimodalities (Kress, 2003) and supported scholarship promoting the need for classroom learning practices to evolve due to technological advances (Gee, 1996; Luke, 2000; Gay, 2002; Street, 2003; Gee 2010; Knobel & Lankshear, 2014; Luke 2000; 2018; 2018; 2019).

Therefore, schools that separate or group texts into categories, such as traditional and multimodal, have the potential to perpetuate dichotomies in what counts as a text used for learning and what does not. Consequently, students may exclude learning practices with certain texts in the classroom even though they may engage with the same texts outside of the classroom on a daily basis. Therefore, pedagogical approaches must reflect learning that acknowledges students outside of classroom practices (Gee, 1996; Freire, 2000; Luke, 2000; Kalantzis & Cope, 2001; Kress, 2003; Gee, 2017).

Additionally, literature has reflected that learning is diverse (Knobel & Lankshear, 2014; Luke 2018; 2018; 2019; Kellner & Share, 2019; Share, 2020; Share & Mamikonyan, 2020). Learning cannot be confined to only traditional print texts or the idea that reading and writing are isolated activities that only occur in a specific context. Rather, literacy and learning include an array of practices that are ongoing and evolving (Gee, 2003). Simply put, Gee (2003) reminds us that there are “many different ways of reading and writing” that are embedded in “a lived and historically changing set of discursive practices” (p. 14, 21). However, what often happens in classrooms is that students are expected to read and write print texts but aren’t asked to consider the discursive practices in which different forms of texts are a part (Gee, 2005).

Scholars have discussed how video games can provide numerous learning opportunities in classrooms (Gee, 2003; Lankshear & Knobel, 2011; Knobel & Lankshear, 2014). In this study,

students made connections among print texts and video games by engaging in practices that included analyzing modes such as sound, images, and colors to determine elements that included but were not limited to intended audience, tone, and setting. (Knobel & Lankshear, 2007; Gee, 2010; Knobel & Lankshear, 2014; Gee, 2015; Skerrett, 2016; Lankshear & Knobel, 2018; Kellner & Share, 2019; Share, 2020). Students conceptualized the practice of reading and meaning making with print texts to make sense of video games as a text (Kalantzis & Cope, 2005; Lankshear & Knobel, 2014). For example, Clayton discussed how modes contributed to meaning making by providing audiences more context and an understanding of what is happening in the [video game] trailers (September 16, 2020). Other students reflected upon why modes help with understanding aspects of the text, such as tone or theme, and then applied the learning to other forms of media that they engaged with outside of the classroom. For instance, students engaged in classroom discourse surrounding modes when they analyzed Instagram videos. As detailed in Chapter Four, Michelle expressed that she wanted to understand more of what was happening in one Instagram video but was unable to have full meaning when the sound was left off. She compared this to when modes were left out of video games and how that impacted meaning. Thus, students expressed a lack of meaning when modes used in social media were absent from the post (Cope & Kalantzis, 2000; Kress, 2003; Gee, 2015). Similarly to Ostenson's (2013) study where students analyzed video game literary elements to identify the setting, characters, and themes, the students in this study engaged in literacy practices which included analyzing literacy devices to form conclusions and apply that learning to media. Here, the data assisted in answering research question 1.

Shor and Freire (1987) contend that learning opportunities that involve students' critiquing how text portrays the world is important. Critical engagements with technology guides

students “in developing a critical consciousness” (Morrison et al., 2008, p. 434) towards what they consume. Scholarship suggests video games can shape and reinforce stereotypes for those that engage with them (Foucault & Nazzaro, 1972; Turkle, 1995; Fairclough, 1996; Luke, 2000; Gay, 2002; Kellner & Share, 2019; Share, 2020; Share & Mamikonyan, 2020). Thus, some argue educators must find ways to raise critical questions within the classroom to disrupt stereotypes that are found in society (Luke, 2000; 2018; 2018, 2019; Kellner & Share, 2019; 2020; Share & Mamikonyan, 2020). Therefore, educators who design and bring critical experiences into their classrooms position students as active participants in deconstructing dominant narratives (Luke, 2000; 2018, 2019; Freire, 2000; Shor, 2009; Share, 2020; Share & Mamikonyan, 2020) that they can then apply to new situations (Cazden et al., 1996). The critical experiences include a dialogic process where knowledge is co-constructed. To this end, a teacher’s role may change to one of facilitator and include learning from all within the classroom (Freire, 2000; Luke 2000; 2018, 2018; 2019). Similarly to research conducted by Beavis and O’Mara (2010) and Berger and McDougall (2013), students in this research study engaged in critical discourse when the teacher facilitated classroom discussions. Excerpts from Chapter Four illustrated how students engaged in discourse about how power is legitimized and normalized in media, such as video game and video game materials (Fairclough, 1989; Luke, 1994; 2000; 2018, 2018, 2019; Kellner & Share, 2019; Share 2020; Share & Mamikonyan, 2020). They questioned what they were viewing when engaged with video games and media from outside of the classroom. Students suggested how video game and other media creators reinforced stereotypes and proposed counter narratives. For example, students proposed changes to how characters were represented in video games. They challenged dominant narratives and considered how counter narratives challenge power (Fairclough, 1996; Freire, 2000; Luke 2000; 2018; 2018; 2019).

However, students were found to reinforce stereotypes and engaged in dominant discourse when they created student generated products and took part in small group activities. For instance, Taylor repurposed Stewie from The Family Guy video game to be a farmer. Taylor included a pitchfork and hat in his image as he stated that although he had never met a farmer, he envisioned farmers in that manner. Here, Taylor demonstrated that he has been positioned to view farmers in a certain manner. This supports scholarship that states that texts control “ideological management and construct knowledge on how the content is convey(ed)” (Gay, 2002, p. 109). Interestingly, students were positioned to critique how texts portray the world during teacher facilitated discussions (Freire, 2000; Luke, 2000; 2018; 2018; Shor, 2009), but perpetuated stereotypes in their classroom assignments. Upon reflection, I would have had students extend learning by analyzing their own products and engage in teacher facilitated conversation surrounding, for example, if and how stereotypes may be found in what they produced (Share, 2020).

When students applied their learning to creating their own game using Scratch, students recognized that the platform had restrictions that they felt were problematic. The restrictions included limitations on characters that the students could use when designing their own games. For instance, Carol and Lauryn wanted to have the main character of their game be a female astronaut to increase representation and counter gender roles. Unfortunately, they were unable to find a female astronaut to use in their game. Similarly to Carol and Lauryn, Kayla changed her original game due to the lack of available characters. She stated that there were only boy characters available, and she felt that girls needed to be represented in her game. Here, students found a barrier to increasing representation within Scratch. This supported scholarship that games can inadvertently reinforce power and dominant narratives that are found in society

(Foucault & Nazzaro, 1972; Turkle, 1995; Luke, 2000; Gay, 2002; Kellner & Share, 2019; Share, 2020; Share & Mamikonyan, 2020). However, the students in this case identified and questioned the limitations as they recognized the need to counter social reproductions of stereotypes (Freire, 2000; Luke, 2000; 2018; 2018; 2019; Kellner & Share, 2019; Share, 2020).

Answering the Research Questions

I utilized inductive qualitative research design as I gathered and analyzed data to derive themes (Creswell, 2015). As explained in chapter three, elements of grounded theory and critical discourse analysis were incorporated into data analysis. First, I began with preliminary readings of the data after the first set was obtained and transcribed and compared the readings to the field notes that I had written either during the class or immediately after the class had ended. Open coding was completed next to develop broader categories of the data (Corbin & Strauss, 1990; Creswell, 2015). The broader categories were utilized to look for relationships among the collected data to complete axial coding. I diagrammed to determine relationships and finished with axial coding. Axial codes were used to develop themes that demonstrated recurring trends.

Additionally, I utilized critical discourse analysis during open coding to explore how students identified and deconstructed how power was expressed, normalized, and contested. CDA began as I completed general open coding by first describing the text, interpreting the relationship between the text and interaction, and then explaining the relationship between the interaction and the text. As described in chapter three, I developed questions that drew upon Fairclough (1989; 1995; 2001; 2003) and Luke (2000; 2018) to utilize during the last stage of CDA.

Data analysis was conducted twice to answer the research questions. It was first conducted during the fall of 2020 and into the spring of 2021. Shortly thereafter, the dissertation

committee encouraged a data revisit to further solidify the trustworthiness of the research findings. Therefore, I conducted a full data analysis a second time. Prior to doing this, I revisited literature on qualitative research (Corbin & Strauss, 1990; Creswell, 2015) and CDA (Fairclough, 1995) to confirm processes for data analysis. I compared the findings after the two analyses were completed. Although CDA from the first analysis supported the finding that students engaged in critical discourses during teacher facilitated lessons, the second analysis revealed more data examples that strengthened the findings as I worked through the three steps of CDA with the research data.

Connections to Theory

As mentioned in previous chapters, sociocultural theory informed the research. Sociocultural theory contends that learning is socially constructed and tied to one's cultural context (Vygotsky, 1978). The theory supports the notion of including new literacies, such as engaging in learning with video games and video game materials, into classrooms, because it acknowledges youth's everyday ways of knowing and meaning making. Thus, students' learning naturally extends from inside to outside of the classroom.

What complicates matters is when teachers, administrators, and community members do not fully understand youth's everyday literacy practices and do not seemingly find value in bringing the practices into the classroom for learning (Halverson, 2005). Learning with new literacies, and in this case, video games and video game materials, can be disregarded in schools (Knobel & Lankshear, 2007). Thus, it can be challenging when an educator does bring texts that do not conform to the traditional views of learning as they may be questioned about the necessity and value (Britzman, 2003). This was seen in the research study where students initially questioned or disregarded the ideas of bringing video games into the classroom for learning.

Additionally, school administration was first hesitant about bringing video games and video game materials into the classroom for learning. However, this study demonstrated how sociocultural theory and multiliteracies come together to support student learning and recognized how meaning making is ever changing. Firstly, students engaged in teacher facilitated discussions and activities to think about learning with video games, critically analyze problematic messages and representations embedded in video games and video game materials, and produce their own online game using the platform, Scratch. Importantly, students considered how their learning with the unit impacted their out of classroom practices and challenged power found in social media and television advertisements. Additionally, students engaged in literacy practices that did not involve traditional print texts. Rather, students engaged in literacy practices that involved video games. Thus, they engaged in the multiliteracies framework by experiencing, conceptualizing, analyzing, and applying their learning with video games (Kalantzis and Cope, 2005). By utilizing a multiliteracies framework in the classroom for learning and engaging in teacher facilitated discussions and learning, students' perceptions of texts expanded to include video games. Also, it broadened how youth engage with literacy practices. As shown in the findings, students transferred learning from traditional print texts to video games to other forms of media (i.e., commercials, social media posts) that they engage with outside of the classroom, and they challenged dominant discourse when centered as thinkers in classroom discourse.

Implications for Research

This study explored how high school students in one English Language Arts classroom engaged in a unit involving video games. The study contributes to the emerging research involving video games and gaming in educational spaces and how students can engage in critical ways with video games (King, 2015; Evans et al., 2017; Barreto et al., 2017). However, there are

still numerous ways to explore this pedagogical practice that were not answered in the current study. These ways include: 1) following the students from the study into the next school year, 2) conducting the research in other classrooms and levels, and 3) considering educator perspectives.

Following Students into the Next School Year

After the study concluded and I was analyzing and revisiting data, I began to wonder several things about the students. For instance, did the students from the study still think that video games can be used for learning? Are students connecting their learning in the classroom to interests outside of the classroom? If the unit had continued, would students continue to reinforce stereotypes or would students counter stereotypes in their products? In this study, students engaged in critical discourse during teacher facilitated discussion; however, students reinforced dominant discourse and stereotypes when they produced their products in small groups. Thus, expanding learning with texts, such as video games, throughout the year and following students into the next school year would assist in answering these questions. Therefore, one could conduct a longitudinal case study (Hays & Singh, 2012) where students would engage in the unit and then the researcher would track the students to the following school year to gather student reflections on learning with video games and video game materials. This would be important as it could provide insight into changes in student thought or learning with video games that may or may not have occurred and explore reasons why this may be the case. Results from a longitudinal study, such as the one described above, could provide educators with ideas on scaffolding learning with texts and how learning can continue from one year to the next. Therefore, practitioners would obtain necessary resources to incorporate texts, such as video games and video game materials, into their classroom practice.

Conducting the Research in other Classrooms and Levels

While the research was conducted in an English Language Arts high school classroom, conducting the study in a different content area (i.e. social studies) and at a different developmental level (i.e. elementary or middle) would help advance the understanding of student learning and literacy practices when texts, such as video games, are incorporated into the classroom. For instance, exploring how younger children engage in critical conversations surrounding texts, such as video games and video game materials, in the classroom could contribute to understanding about meaning making with multiple texts. Additionally, it may assist in countering school and institution discourse surrounding what constitutes a learning practice in the classroom as students would be engaging with these practices at earlier ages. Finally, since video games in the classroom is an area that is understudied yet emerging (King, 2015; Evans et al., 2017; Barreto et al., 2017), it is important to consider what the data may reveal in different classrooms as it would contribute to literature on new literacies and critical engagement in school settings.

Educator Perspectives

Educators are reluctant to bring video games into their classrooms for student learning (Gaudelli & Taylor, 2011). This reluctance is due to multiple factors which include lack of knowledge surrounding video games and negative perceptions of video games as educational tools (Greitemeyer & Mügge, 2014; Dickey, 2015). Gathering data from educators that incorporate a unit where video games and video game materials are used for learning is important. It would provide insight surrounding educator perspectives on bringing different forms of text into classroom lessons. Additionally, research would be a means of seeing if and why a teacher would decide to include the unit in future classes or discontinue it and could

inform curricular and professional development for educators. For instance, Dickey (2015) found in a study that the educators in the study understood the value of bringing gaming into the classroom but thought that students that were involved with the games would become consumed by them causing negative impacts on their learning. This study could be expanded to have the educators employ the unit of study and explore if there were any changes in their thinking after the unit concluded.

Implications for Instruction

Students learned from video games and connected their learning in the classroom with outside of school practices. They engaged in critical discourse and applied learning. The findings from the study have implications for instruction which include considerations for teacher preparation, providing educators continuous professional learning and support, and advocating for administrators and policy makers to prioritize efforts where teachers have the autonomy to develop and incorporate critical learning opportunities that reflect students meaning making with new literacies. For instance, in science students can learn to critically analyze policies that impact the natural world, and in social sciences, students can critically analyze content that is provided in a textbook and consider what perspectives are missing.

Educator and Pre-Service Educator Support

It cannot be assumed that educators automatically know and understand how to adopt critical practices in their classrooms. Additionally, some argue that teacher knowledge and practice contribute to reproductions of social inequities (Apple, 2011). Therefore, supporting educators with developing critical stances towards their teaching practices and student learning needs attention. Thus, practitioners need professional learning that centers on identity and implicit bias reflection and learning. Additionally, culturally relevant and responsive pedagogical

practices need to be understood and explored by educators to foster culturally grounded literate practices in classrooms (Gay, 2002). This, of course, requires a commitment on the part of pre-service teacher programs and district and building level administration. Teacher education programs and administration should consider, for example, approaches to engaging pre-service and practicing educators with embedded and ongoing professional learning centered on collaboration with other teachers, preservice teacher educators, students, and community members to construct and reconstruct teaching knowledge (Hargreaves & Fullan, 2012). This could be completed through a mentoring program where educators would first learn about theory and frameworks, such as multiliteracies. Then, preservice and practicing teachers could connect their learning to curricular models and instructional strategies that would be developed and implemented into a classroom setting. For example, at the preservice level, coursework and projects could ask students to design a gaming unit. Here, the preservice teachers would receive feedback and support to create a unit that is pedagogically sound and transformative with scaffolding they may need from instructors. However, this also means that teacher educators need to know and understand how this can be done. As such, there needs to be curricular support in higher education to prepare future teachers for this type of instruction and mindset. These efforts have the potential to positively impact student learning and communities that educators serve. An outcome within such a space may include educators considering and implementing critical approaches to teaching that may not reflect their current practices or own experiences in the classroom. As such, these efforts have the potential to positively impact student learning and communities that educators serve.

Policy Makers

Based on study findings, students felt that learning can happen with video games and video game materials; however, students reported that they had only engaged with traditional print texts in classrooms. This has important implications for policy makers in understanding the need for schools to reflect the realm of student practices and lived experiences that occur outside of the classroom. Policy makers should actively support and fund educational approaches that are student centered, acknowledge students' various ways of meaning making, and promote learning that critically analyzes various forms of text. These are sound practices for policy makers to support; however, unless there are shifts in policy and practices, there is likely to be limited change with current school practices that primarily focus on the transfer of content to students (Freire, 2000). One way that policy makers may become familiar with and support these changes would be to invite them into classrooms where this learning is taking place. Here, they would have an opportunity to see first-hand students' critical engagement with texts, such as video games. Additionally, work surrounding multiliteracies could be presented at state and national conferences to disseminate ideas and network. Finally, students should be involved in advocating for change. There are annual advocacy events that are held at state capitols. Thus, students would share examples and stories of uses of technology and digital learning at such events, inviting policy makers to view learning through student's perspectives.

Personal Reflections

I have learned from this study that conducting research is complex and not for the faint of heart. Firstly, I had difficulty in being granted access to a classroom to conduct the research study. One part of this was due to the coronavirus pandemic, but another included school administrators' hesitation to bring in research where video games and video game materials were

used for student learning. I was not anticipating the plethora of questions from school administrators surrounding the research and how video games were going to be incorporated into the classroom. Regardless, I feel this study lends itself to understanding more about students and their learning and the importance of bringing in new literacies that are enacted through a critical lens. I am not promoting that schools abandon learning surrounding reading and writing print texts. However, one finding indicated that during the unit, students reported questioning what they were consuming on social media platforms. This is significant as there has been a plethora of recent studies that point to the negative effects that social media have on teen mental health (Twenge & Farley, 2021).

Additionally, there are many moving parts that must be examined and considered for the findings to be reliable and trustworthy. Upon reflection, I would have conducted a pilot study. This would address issues that arose during the study. For instance, I would have been able to foresee and better able to address and assist challenges the students had with creating their own video game using the online platform, Scratch. On a broader scale, it was challenging to conduct research in the school setting during a pandemic. Understandably, obtaining access to a classroom that was in-person was difficult due to concerns with additional people coming into a building. As such, there were limitations on group work that were set in place during class in efforts to limit movement and protect students from illness. I attempted to consider all aspects of data collection during this time; but admittedly, I am sure that there were blind spots that I didn't even know and areas that I didn't even consider due to conducting research in a classroom while navigating expectations put in place during a global pandemic.

Limitations

As previously mentioned, this study was conducted during the coronavirus pandemic. Classroom and school procedures were in place to decrease student interaction. The procedures inevitably influenced the study and how unit learning activities were scaffolded. An additional set of limitations is found in participation and research location. Although all 27 students in the class participated in the unit, the data from 20 students was analyzed. This inevitably impacted the findings and had implications on data that could have been gathered. Also, research was conducted in one classroom that is located in a Midwest high school. Therefore, transferability of findings is limited, and it cannot be assumed that the findings are generalizable to larger populations (Gasson, 2004). However, I attempted to increase validity by triangulating data (Creswell, 2015), exploring my positionality, and talking with other education professionals, such as members of my dissertation committee, during data collection and analysis. I argue that the study provides opportunities within the field of education. The study allows classroom educators and scholars alike opportunities to explore and consider how a classroom unit of study, such as the one that the students in this research study participated in, can shed light on students' critical engagement with various forms of text during a pandemic. Additionally, it can provide thought on how students at different levels (i.e., elementary, secondary) or content areas (i.e., history) could participate in a unit such as the one outlined with slight curricular adaptations.

Finally, like most qualitative research, the process and analysis of the data collected is researcher dependent (Gaille, 2017). A researcher's competence with the skills and knowledge needed to conduct a qualitative study can impact the validity of the findings. Due to this, I made every attempt to be as transparent to the description of the study and data analysis that led to the

development of the findings. Also, as I analyzed data and wrote these chapters, I revisited my strategies for trustworthiness and questioned my processes to clarify the study conclusions.

Conclusion

This study contributes to emerging literature on student learning and literacy practices when video games and video game materials were incorporated into a classroom. It revealed that students' transferred learning from print texts to video games to other media they engaged with outside of the classroom. Additionally, students engaged in critical discourse when centered as thinkers in the classroom. This study demonstrates the importance of incorporating various texts into the classroom for critical engagement. It enhances efforts in supporting pedagogy that engages students in learning that allows for differences in interests and promotes thinking and applying learning to lived experiences. This skill may be transferable to other forms of media and has the potential for students to be able to construct counter narratives to dominant discourse (Freire, 2000; Luke, 2000; Share & Mamikonyan, 2020).

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APPENDIX A. VIDEO GAME UNIT

Unit Description:

Video games will be used as the primary text for learning. Participants will critically explore video games through various engagements that include, but are not limited to, examining video games' modalities, genre, design, goals, narrative structure, and contexts where games are played and discussed. Additionally, the video game unit will explore game developers' motivations, ideological representations, and video games as a cultural object. This unit is designed to take approximately 4 – 6 weeks to complete as there is time provided during class for all activities to ensure access to technology and dialogue opportunities.

Standards Addressed:

CCSS.ELA-LITERACY.RL.11-12.1

Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.

CCSS.ELA-LITERACY.RL.11-12.2

Determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text.

CCSS.ELA-LITERACY.RL.11-12.3

Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, how the characters are introduced and developed).

CCSS.ELA-LITERACY.RL.11-12.5

Analyze how an author's choices concerning how to structure specific parts of a text (e.g., the choice of where to begin or end a story, the choice to provide a comedic or tragic resolution) contribute to its overall structure and meaning as well as its aesthetic impact.

CCSS.ELA-LITERACY.RL.11-12.4

Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful. (Include Shakespeare as well as other authors.)

CCSS.ELA-LITERACY.RL.11-12.5

Analyze how an author's choices concerning how to structure specific parts of a text (e.g., the choice of where to begin or end a story, the choice to provide a comedic or tragic resolution) contribute to its overall structure and impact.

CCSS.ELA-LITERACY.RL.11-12.6

Analyze a case in which grasping a point of view requires distinguishing what is directly stated in a text from what is really meant (e.g., satire, sarcasm, irony, or understatement).

CCSS.ELA-LITERACY.SL.11-12.1

Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 11-12 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.

CCSS.ELA-LITERACY.SL.11-12.2

Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.

CCSS.ELA-LITERACY.SL.11-12.3

Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used.

CCSS.ELA-LITERACY.SL.11-12.4

Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.

CCSS.ELA-LITERACY.SL.11-12.5

Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.

CCSS. ELA-WRITING.11-12.W.1.b

Text Types and Purposes: Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience’s knowledge level, concerns, values, and possible biases.

CCSS.ELA-WRITING11-12.W.2

Text Types and Purposes: Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.

CC.11-12.SpeakingListening.1

Comprehension and Collaboration: Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 11–12 topics, texts, and issues, building on others’ ideas and expressing their own clearly and persuasively.

CC.11-12.SL.1.a

Comprehension and Collaboration: Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas.

CC.11-12.SL.1.c

Comprehension and Collaboration: Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives.

CC.11-12.SL.2

Comprehension and Collaboration: Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.

CC.11-12.SL.3

Comprehension and Collaboration: Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used.

CC.11-12.SL.5

Presentation of Knowledge and Ideas: Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.

1. Pre-Engagement (for students to complete prior to the unit of study):

Students respond to the following:

Prior to exploring the concepts in this unit, what are your thoughts surrounding video games and learning? Reflect on your own experiences with video games and articulate your beliefs about using video games for learning. Write a personal reflection that describes your thoughts. You can include personal examples in your reflection.

Students submit Pre-Engagement writing onto the classroom online platform for collecting assignments.

2. Let's Think About Literacy

- Designed to take one, 45 minute class period

Purpose: To understand and clarify thoughts on video games for learning.

Groups of 2 -3 students discuss the following three questions:

1. What is literacy?

National Institute for Literacy (n.d.) where literacy is defined as “an individual's ability to read, write, speak in English, compute, and solve problems at levels of proficiency necessary to function on the job, in the family, and in society.” (para. 1).

2. What does it mean to be literate?
3. In what ways is someone literate?

Once groups are finished and have an opportunity to share with the whole class, consider:

1. How could these understandings or definitions include game literacy?

Use the following article as reference for discussion:

Article on gaming literacy (includes a short video with James Gee that can be shown)
[https://www.digilanguages.ie/gaming-literacy-what-is-it/#/roles? k=in5399](https://www.digilanguages.ie/gaming-literacy-what-is-it/#/roles?k=in5399)

Quick read as a class; discuss initial thoughts.

What are the possibilities and limitations of the notion of game literacy? Is it just an elaborate way of talking about how people learn to play games, or is it something broader than that?

How can games be used for learning in the classroom? Specifically consider video games.

During this discussion, encourage students to share their own experiences with video games or games in general. Ask students to share their Pre-Engagement Writing or use that as reference in their discussion.

Record students' thoughts on the classroom board.

3) **Multimodality and Understanding Texts**

- Designed to take 3 - 4, 45 minute class periods

Purpose: develop understandings about the constructed nature of video games.

Part 1:

Begin with a focus on genre. Read the blurbs of three print-based texts, each of which related to a different genre of story (adventure, biography, etc.) to students.

After each reading, ask the students to discuss the mode(s) used to construct the genre.

Next, show the introductory sequence of the video game Fall Out

76: <https://youtu.be/r0MnePcXxkI>

to the students and ask students to brainstorm the ways the video game creates genre.

Deconstruct the introductory sequence of the game and focus on: visuals, voices, style, animation, color, scenery, music, character, appearance, attitude, body language, pictures and angles as a whole class.

Record student responses on a whiteboard with a table - the top row being the names of the games and the side the students can decide what multimodality they would like to focus on (see example below). Examples include: text, visual, dialogue and music.

FALL OUT 76

Text

Visual

Dialogue

Student Choice

Ask students to focus on aspects of the multimodality of three video game introductions. These could include:

1. <https://youtu.be/MmB9b5njVbA> (Minecraft trailer)
2. <https://youtu.be/VqeMjHmL9eg> (TitanFall)
3. <https://youtu.be/vXrO6AU65-8> (Madden)

*Consideration: ask the students to complete a table similar to the one above used for Fall Out 76.

Discuss as a class the student responses to the questions. **How does combining modes (image, words, movement, coloring, framing) inform the story that is being told in a (multimodal) text?

How do the modes that you explored in the introductory sequence construct meaning for viewers or players of the game(s)?

How is genre created similarly and/or differently in video games compared to novels? Provide textual evidence and/or examples in your responses.

Part 3:

Hold a class discussion about why and how multimodality contributes to a medium (video games) beyond contributing to the story being told.

Some students may say something surrounding thoughts, feelings, and ideas being conjured. Ask students to elaborate on their meaning making when multimodality is involved (i.e. How do modes contribute to meaning making?)

https://www.instagram.com/p/CE-7_ynARIO/?igshid=9ahs7a3ccqvq

No Sound

https://www.instagram.com/p/CE9QJe9HE_J/?igshid=3cgua8xptong

Image only

<https://www.instagram.com/reel/CE7RkL9jpoC/?igshid=1w0k4b6hzumzr>

Only let students listen to the music/then watch the whole video

Using household items (bring in your own from home or there are resources online (<https://www.zapsplat.com/sound-effect-category/household/>, <https://youtu.be/rb4oTIYNNHs>)) listen to the sounds that these items create and discuss as a class what images or feelings they invoke.

Watch a video game introduction without sound (many introductions are available online - probably should choose a video game introduction that has not been used above).

Then, watch the video game introduction with sound and hold a discussion about the role of sound in video games.

https://youtu.be/92GBo7o_4kA

Choice:

1. In small groups, ask students to choose a video game introduction to retell a small portion of the introduction inputting their own choice of sounds. Students can utilize programs such as Screencast O'Matic to record their screen and add in new sound effects that have the potential to change the meaning, ideas, thoughts, and feelings that the audience may experience or conjure.
2. Compare multimodalities of two texts.
3. Other ideas??

Provide groups of students time in class to complete and share the newly created introduction as a class once done. Hold a discussion at the end about the new introductions. Questions can include:

Who determines the multimodalities that are included in video games? Why are the multimodalities chosen included?

4: Ideological Representations in Games

- Designed to take 5, 45 minute class periods

Purpose: develop student critical analysis skills surrounding ideological representations found within texts.

Part 1:

Discussion: When you look at an image, or when you read a text, what is your approach? What questions are you asking? What are you looking for? What do you tend to notice first? Do you pay attention to how you feel when you look at the image? What personal experiences, or knowledge do you find yourself making connections to? What do you think about perspective (whose viewpoint the image or perspective is taken from?)

Hold discussion - Do texts contain beliefs and value messages? How? Can you provide examples from texts? Draw on a novel that the class has read or another text from something happening in the news at the present time that is found on social media.

David Hume - Chapter 1

What are the explicit messages each medium gives? What are the implicit messages? What message does the author want to give to the consumer? (preferred reading) What messages could be seen in an oppositional reading? (an oppositional reading is also known as “reading against the grain”). Watch these and other ads and make notes on their preferred and oppositional readings.

<https://youtu.be/q33drZUXSzY>

<https://youtu.be/2zfqw8nhUwA>

Scantily clad woman fighting a brainwashing machine, inspired by George Orwell’s classic dystopian novel “1984.” The futuristic society depicted was condemning a bunch of drones to a life based on the “Unification of Thoughts.”

<https://youtu.be/QRgCZk2oGs4>

<https://youtu.be/owGykVbfgUE>

<https://youtu.be/yIxA3o84syY>

Some believe that video games contain ideological (cultural, political, etc.) representations. Do you think that video games contain beliefs and value messages? Why or why not?

Explain to the students that they will be working in teams to deconstruct video game covers.

Students pair or go into triads and get a video game cover. *I have fifty Xbox 360 game containers that contain the game covers and discs. I am using the Xbox 360 game covers due to access and the fact that the newer consoles, such as Xbox OneX, allow players to digitally download games. With that option, a game cover and disc are no longer required to play the video game. This is similar to digitally downloading movies to view at one's home.

Ask the pairs/triads to go through the questions using the game cover looking at the image, wording, coloring, etc. Students may even look at the pages included in the cover.

Questions may include (consider providing questions via a sheet of paper):

1. What do you see in the image? What stands out to you?
2. How are the objects/people/animals placed in relation to one another?
3. What colors do you see?
4. What is most prominent (large, repeated, visible) in the text?
5. What is least prominent (small, hidden, backdrop) in the text?
6. What is the tone of the text?
7. Who is the audience for this text?
8. What is the story in this text?
9. Can you identify stereotypes in this text? What are they?
10. What does the author of the cover want us to feel when we look at this cover?
11. Why was the cover created this way?

*Please note that it may be possible that not all questions will be answered - it depends on the game cover the group selects.

As a whole class, the students share their thoughts on the video game cover that they have. Collect the student text analysis papers and the games.

Whole class discussion or could be used as an assignment: How do we interpret text (in this case the design of a game cover)? How do we make sense of the game from the covers that are produced?

Discuss: What would be game developers' reasons for the portrayals of or representations (gender, sexuality, race) on the game cover? What impact - if any - do representations have on the players or viewers?

Part 2:

Ask students to go online and search popular characters that are found in video games. The searches can easily be completed by entering 'best video game characters of all time' in a search engine like Google, for example.

The outcome of this exploration will most likely result in underrepresentation of female and minority characters. Additionally, stereotypical representations such as sexualized portrayals of women will be found.

Students will create a digital collage of their findings by easily copying and pasting images onto one document. Students share the digital collage with classmates.

Hold a class discussion about similarities and differences in representations that have been found. Student responses will be recorded on the classroom board. A classroom discussion follows where questions are posed to students. These questions will include, but are not limited to:

- 1) What values are represented in or omitted from the character images?
- 2) What messages are being sent to players of the game through the character images?
- 3) Are game developers responsible for ideological representations that are put into games? Why or why not?

Students will then work with partners to repurpose a character that they found online that challenges representations. Students will have flexibility and choice on how they would like to complete this assignment, but an example may include repurposing Princess Peach from Nintendo's Mario franchise. Princess Peach has blonde hair, blue eyes, wears a crown on her head, and wears a pink dress. The repurposed Princess Peach could be of Asian descent, have brunette hair, brown eyes, a baseball cap on his head, and be dressed in a tie dye t-shirt and bluejeans. Student products will be shared as a class.

Part 3:

After discussing representations within video games with characters, let students know that they will be critically analyzing advertisements of popular video games. Hold a discussion about the for profit business of video game and advertisement and marketing strategies.

Ask students to group into teams of 2 - 3 and provide them with multiple video game print advertisements that can easily be found and accessed online. Some include:

THE GALAXY IS FAR, FAR AWAY.
THE FIGHTING IS UP CLOSE AND PERSONAL.



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www.starwars.com
www.lucasarts.com



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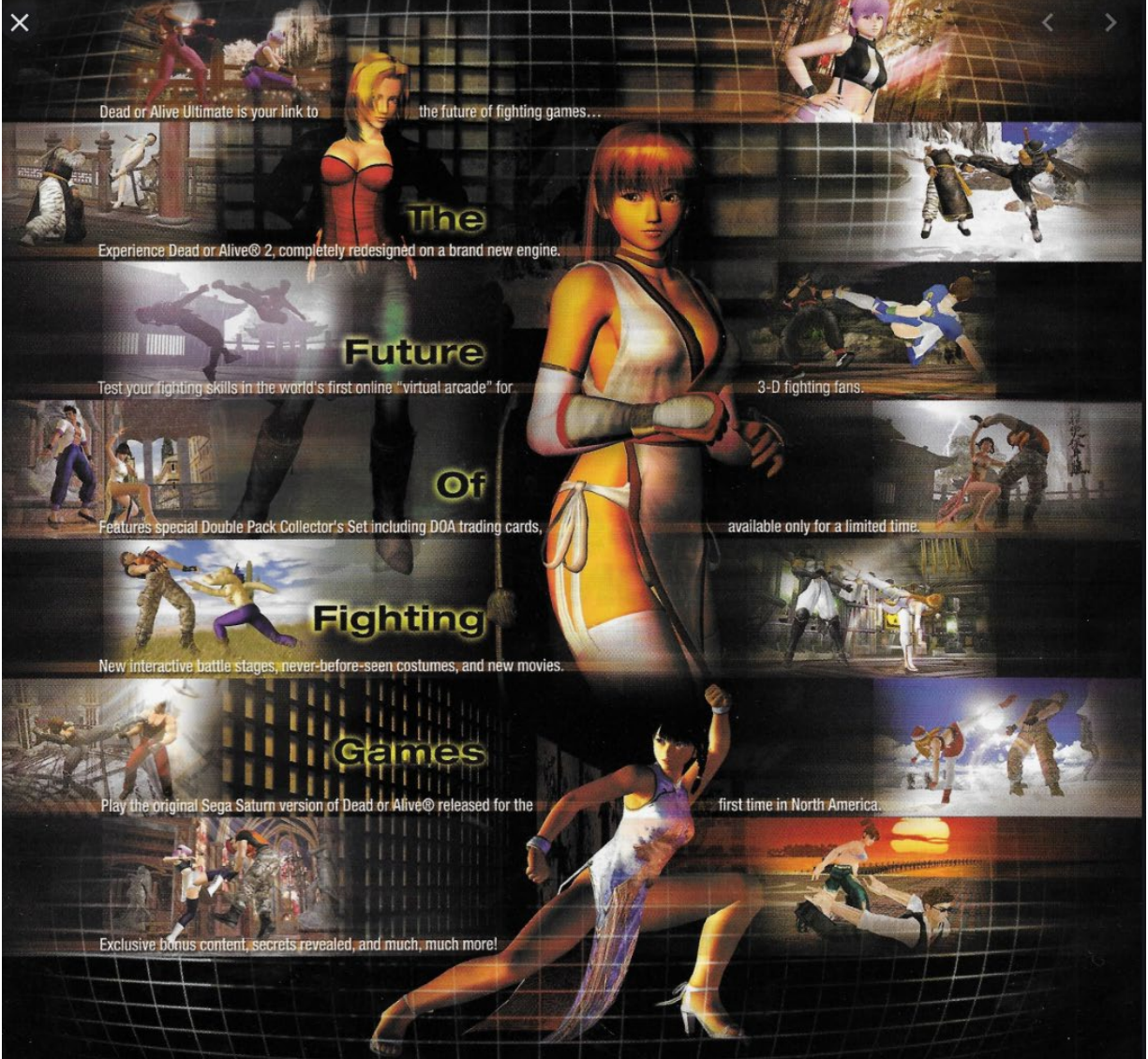


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www.doultimate.com

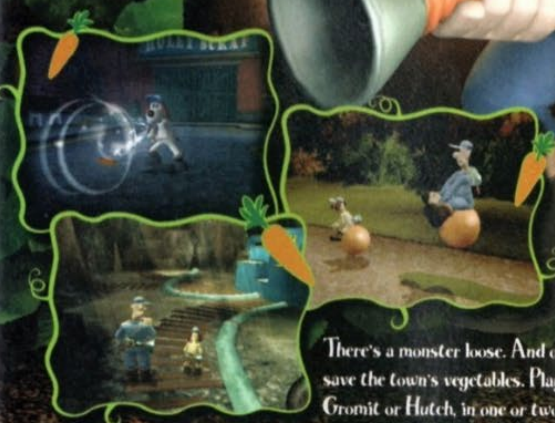
TECMO 100% GAMES



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Be Wallace. Be Gromit. Beware.

It's a new game based on a cracking good movie.



There's a monster loose. And only you can save the town's vegetables. Play as Wallace, Gromit or Hutch, in one or two player mode, as you explore every inch of their hometown, with your trusty bow gun in hand. So get ready, the garden needs guardin'.

Wallace & Gromit in **THE CURSE OF THE WERE-RABBIT**



PlayStation 2

Aardman
WandG.com

FRONTIER

KONAMI
www.konami.com/gs

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THERE'S NO KILL LIKE OVERKILL.

ARMED AND DANGEROUS

Meet the Lionhearts. A smack-talking rag-tag band of rebels bound on an impossible quest. With an arsenal of outrageous weapons, they're destined for victory in 12,000 bullets or less. If they can make it through an army of psychotic robots and wall-smashing Goliaths, they just might save the world...if they don't burn it down first.

Visit www.esrb.org or call 1-800-771-3772 for more ratings information.

armed.lucasarts.com

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Similar to deconstructing the video game covers, ask the students to deconstruct the print advertisements focusing on the semiotics (i.e. coloring, images, texts) and to identify possible ideological representations and/or stereotypes that are reinforced.

Hold a class discussion surrounding who the people are that decide what should be included in the advertisement, why are these decisions made, who is the target audience, etc.

Students work within their groups to recreate the advertisement to target a new audience and/or demographic. This can be created on a large sheet of paper or poster board. It can even be recreated digitally if students choose to do so.

By looking at what works online, then students can discuss the importance of audience in writing and determine how they can reach particular audiences when they write papers as well as how the purpose of their paper relates to the audience and delivery of their message.

The following are questions that may help the student address and determine audience:

Who is the general audience you want to reach?

Who is the most likely to be interested in what I am doing?

What affect could your project have on the audience or a population?

If your audience isn't interested or engaged, how would you change what you have made to engage the audience?

What counter arguments should you prepare to answer?

Conduct a gallery walk of finished products.

Hold a discussion regarding how people are positioned based upon identities (i.e. age, race, gender, class).

Invite students to write to gaming companies with their thoughts and findings.

5: Time to Play

- Designed to take 4, 45 minute class periods.

Purpose: develop critical understandings of video game play on individual and broader levels

Students will be playing video games with consoles, etc., that the teacher and I will be providing and bringing into the classroom.

Group students into game teams (3 - 4).

Students play (or will be provided the option to watch their group members play) video games for three to four class periods.

After each class period game play, students are asked to participate in a blog that is created specifically for this class. On the blog, students will be asked to discuss and respond to experiences surrounding game play. There is liberty surrounding the topics, but they could include: challenges their team is experiencing, what they are noticing about the game (i.e. representations, cultural artifacts, and so on). The teacher will contribute to the blog as a facilitator.

On the final day, students are asked to participate in student interviews about their experiences. The questions can be generated by students, but may include:

What do you think the creators of the game wanted you to learn?

If you could change the game what would do?

Do you feel that there are any messages that the creators of the game want you to learn by playing the game?

Was there anything that stood out to you while you played or that you noticed that made you stop and question?

How much of the game is fictionalized?

Did you notice stereotypes in the game? What were they?

Hold a class discussion surrounding the responses of the interviews.

6: Post - Engagement

Students respond to:

What are your thoughts surrounding video games and learning? Reflect on your own experiences with video games and articulate your beliefs about using video games for learning. Write a personal reflection that describes your thoughts. You can include personal examples in your reflection.

APPENDIX B. SCRATCH GAME GOOGLE FORM

Scratch Game Project

Form description

Email *

Valid email

This form is collecting emails. [Change settings](#)

First and Last Name *

Short answer text

What is the title of your game? *

Short answer text

Why did you choose this title? *

Long answer text

Tell me about your game (i.e. what is the object of the game?) *

Long answer text

How did you go about deciding what you wanted to include in the game? *

Long answer text

Did you make any changes to the game during the development of it? Why or why not? *

Long answer text

What would be the target audience for this game? Why? *

Long answer text

How did you develop your game with your target audience in mind? *

Long answer text

What background (setting) did you chose for the game? Why did you choose this background? *

Long answer text

What other modes did you add to your game? *

Long answer text

Why did you add the modes that you listed in the previous answer? or Why did you not add other modes to the game? *

Long answer text

How do the modes that you included in your game have the potential to add meaning or understanding of the game for your audience members? *

Long answer text

What character or characters (sprites) did you add in your game? *

Long answer text

Why did you choose the characters that you did? *

Long answer text

Did you consider ideological representations in your decision for your character(s)? Why or why not? *

Long answer text

Do you think that it is important for game designers to consider ideological representations when developing games? Why or why not? *

Long answer text

What do you like the best about your game? Why? *

Long answer text

What would be something that you would change about the game you developed? Why? *

Long answer text

Did you receive any feedback or comments from sharing your project online? What was the feedback and what did you do in reaction to the feedback/comments? *

Long answer text

Is there anything else that you feel I should know about the game that you designed and created? *

Long answer text

APPENDIX C. DECONSTRUCTING VIDEO GAME COVERS GOOGLE FORM

Deconstructing Video Game Covers

Form description

First and Last Name *

Short answer text

How do we interpret text (in this case the design of a game cover)? *

Long answer text

How do we make sense of the game from the covers that are produced? *

Long answer text

What would be game developers' reasons for the portrayals of or representations (gender, sexuality, race) on the game cover? *

Long answer text

What impact - if any - do representations have on the players or viewers? Why do you believe this to be true? *

Long answer text

Please feel free to include any other thoughts that you have about the classroom engagements from today.

Long answer text

APPENDIX D. WORKSHEET

Deconstructing Game Covers

Name: _____

1. What do you see in the image? What stands out to you?
2. How are the objects/people/animals placed in relation to one another?
3. What colors do you see?
4. What is most prominent (large, repeated, visible) in the text?
5. What is least prominent (small, hidden, backdrop) in the text?
6. What is the tone of the text?
7. Who is the audience for this text?
8. What is the story in this text?
9. Can you identify stereotypes in this text? What are they?
10. What does the author of the cover want us to feel when we look at this cover?
11. Why was the cover created this way?

*Please note that it may be possible that not all questions will be answered - it depends on the game cover selected.

APPENDIX E. MODES GOOGLE FORM

Composition 1st HR

Form description

Name *

Short answer text

How do the modes that you explored in the introductory sequences construct meaning for viewers or players of the game(s)? *

Long answer text

How does combining modes (image, words, movement, coloring, framing) inform the story that is being told in a (multimodal) text? *

Long answer text

How is genre created similarly and/or differently in video games compared to novels? Provide textual evidence and/or examples in your responses. *

Long answer text

Any other observations or thoughts that you would like to include?

Long answer text

APPENDIX F. VIDEO GAMES AND LEARNING GOOGLE FORM

Post-Engagement Activity

Form description

What are your thoughts surrounding video games and learning? Reflect on your own experiences with this unit and articulate your beliefs about using video games for learning. *

Long answer text

First and Last Name *

Short answer text

APPENDIX G. STUDENT INTERVIEW

Student Interview Questions

1. Which type of game would you be more likely to play? Online or board games?
2. If you play video games, who do you mostly play video games with?
3. How do you define literacy?
4. Have you ever participated in a unit with video games before? Why do you believe that you have or have not?
5. What did you learn about by participating in this unit?
6. What did you learn about video games by engaging with this unit?
7. Tell me about your gaming literacy project.
 - a. How did you go about deciding what to do?
 - b. What were your goals?
 - c. Did you ever change your goals or the project? Why or why not?
 - d. Did anyone reply or respond to your creation? If they did, did you do anything with their feedback?
8. What would you have done differently if you were to create an online game again?
9. Is there anything else that you feel I should know about your project?
10. Has this unit expanded your ideas about and/or definition of literacy? If so, how?
11. If I were to do this unit with a different class, would you have anything that you would change or add?
12. Is there anything else that you would like to share that we have not already discussed?

APPENDIX H. PRE-ENGAGEMENT GOOGLE FORM

Video Game Unit Engagement - 08/27/2020

Form description

First and Last Name *

Short answer text

School Email Address *

Short answer text

Prior to exploring the concepts in this unit, what are your thoughts surrounding video games and learning? Reflect on your own experiences with video games and articulate your beliefs about using video games for learning. Write a personal reflection that describes your thoughts. You can include personal examples in your reflection. *

Long answer text