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Imagining a constructionist game-based pedagogical model: using tabletop role-playing game creation to enhance literature education in high school English classes

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Pepperdine University

Graduate School of Education and Psychology

IMAGINING A CONSTRUCTIONIST GAME-BASED PEDAGOGICAL MODEL: USING

TABLETOP ROLE-PLAYING GAME CREATION TO ENHANCE LITERATURE

EDUCATION IN HIGH SCHOOL ENGLISH CLASSES

A dissertation submitted in partial satisfaction

of the requirements for the degree of

Doctor of Education in Learning Technologies

by

Kip Glazer

September, 2015

Linda Polin, Ph.D. – Dissertation Chairperson

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under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

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DEDICATION

I dedicate this dissertation to all literature teachers who work tirelessly to instill the love of literature in their students' hearts thereby enriching all humanity, and to all gamers who remind us how much fun life can be with play.

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ABSTRACT

In today's K-12 educational environment with the newly adopted Common Core State Standards (CCSS), improving student literacy as a foundational skill to obtain success in all other subject areas is one of the most important goals. Unfortunately, many literature curricula suffer from a lack of innovative pedagogy despite the introduction of various educational technologies meant to aid student learning. This study focuses on developing a new game-based constructionist pedagogical model for literature education using tabletop role-playing game creation. Using Shulman's (1987) Pedagogical Content Knowledge (PCK) that eventually evolved into Mishra and Kohler's (2006) Technological Pedagogical Content Knowledge (TPACK) as the main theoretical framework, this design-based research shows how tabletop role-playing game creation as a constructionist pedagogical strategy successfully helped high school students to receive the benefits of high-quality literature education.

Chapter One: Study Introduction

Crisis in Humanities Education

Imagine a high school Advanced Placement English Literature classroom where the students and their teacher discuss whether the readers should feel sympathy for the Monster in Mary Shelley's *Frankenstein, or the Modern Prometheus*. After all, the Monster murdered two innocent lives, both directly and indirectly, and was demanding that his creator create a female companion just for him because he was lonely. If the discussion progressed the way the teacher intended, students should have multiple opportunities to consider the nature and power of knowledge and gain deeper insights central to literature education (Applebee, Langer, Nystrand, & Gamoran, 2003).

Those remembering their experiences in their high school English classes might think that students having spirited discussions are common in English classes in the United States. However, English teachers know the truth. Instead of engaging in intelligent and pointed discussions, many students all across America frequently watch movies to supplement reading a lengthy text, complete publisher-generated worksheets to supplement writing essays, and struggle through computerized multiple-choice tests to demonstrate their knowledge. In California, many districts have adopted English curriculum devoid of lengthy fiction in an attempt to teach nonfiction pieces that are meant to develop student's basic reading and writing skills (Brynelson, 2005). Proponents of such nonfiction-focused programs in high school argue for the necessity as they point to the numerous standardized tests that students have to take and continue to take in the future. With added pressure to meet the federally mandated testing score targets set by the No Child Left Behind legislation, many schools have begun to eliminate lengthy novels to make room for shorter more testable pieces like short stories and newspaper

articles in their curricula (Koretz, 2009; McNeil, 2000). As a result, lengthy discussions on controversial topics rarely happen in today's high school English classrooms (Nelson, 2013), and the situation has worsened over the years. Simply put, complex literature pieces have been disappearing from high school English classes. A California English teacher even wrote an editorial for *The Washington Post* explaining why she no longer reads Shakespearean plays with her students (Dusbiber, 2015). It is as though many have accepted that the final fate of literature education without lengthy fictions or epic poems in favor of test-prep heavy nonfiction-focused curricula for high school English classes.

Still, there are many documented benefits of reading complex literature beyond just improving students' reading comprehension and writing proficiency. In a rebuttal to *The Washington Post* editorial in favor of eliminating Shakespeare from high school curriculum, another English teacher argued for the universal benefits that reading such complex works provide for all humanity. According to Trusedale (2015), Shakespearean plays provide many high school students opportunities to experience fundamental human conditions despite their antiquity or rather because of them. While reading *The Tragedy of Othello*, students learn that people 450 years ago suffer from jealousy and envy just as people do in today's society. Shakespearean plays and other classic literature pieces provide students to explore ideals foundational to democracy, such as equality and justice under the law, by portraying complex yet universal human conditions. He and others like also argued for additional benefits of enriching literature education as it helps students to develop different types of skills. In her op-ed article for *The Christian Science Monitor*, Fernald (2014) described how she learned to pay attention to details through quality literature education. She argued that all students deserve to read complex and lengthy literature pieces with an expert guide not only to understand the meaning of the text

but also to learn to pay attention to the details around the world. Because her literature teachers demanded that she pay attention to small details based on author's word choice and diction while focusing on the universal themes, Fernald learned to write succinctly without losing her voice.

Unfortunately, such training through reading complex literature pieces are rare in today's educational environment where the value of literature education has been steadily marginalized. Hardly a day goes by without a discussion on the importance of science, technology, engineering, and mathematics (STEM) education at the expense of humanities education, in particular, literature education. Levitz and Belkin (2013) described a serious decline in the number of students pursuing humanities majors including English even at universities like Harvard that have been traditionally a bastion of liberal education. Despite reports that humanities majors possess valuable 21st century skills such as communication and critical thinking and are in high demand by companies like Google (Reisz, 2011), students are under pressure to choose STEM-focused majors rather than humanities due to the current educational climate. In his 2011 State of the Union address, President Obama vowed to invest in STEM education and promised to add more than 100,000 new STEM teachers by 2020 ("The White House," 2011). President Obama also pledged $3.1 billion dollars to STEM education (Petty, 2013) while the National Endowment for the Arts reported a $250 million cut in funding for all humanities-focused programs ("Humanities Funding," 2014). Such an emphasis derives from the United States' persistent dismal ranking in the Program for International Assessment (PISA) of student achievement in science and mathematics as measured against other countries. As result, numerous educational experts and industry leaders have declared that STEM education will save the country's economy, keep the US competitive in a global market, and provide a better future for all Americans (Engler, 2012; Lane, 2012). With the political pressure and economic

incentives for more STEM education in schools, reading high-quality literature pieces in high school seems no longer necessary or even valuable. After all, what value does literature education have in today's fast-paced, highly technological society?

Value of Literature Education

Literature education provides too many benefits to become marginalized. In addition to improving students' basic reading comprehension and writing skills that are fundamental for learning in all other subjects (Common Core State Standards [CCSS] 2010; College Entrance Examination Board [CEEB], 2003; National Center for Education Statistics [NCES], 2012), quality literature education allows readers to be reflective of the past while imagining a different future. It gives the readers the freedom to reside in a space between what is possible as well as probable without binding them to the limitations of mundane reality. It acts as a catalyst for imagination and expansive thinking. Furthermore, it allows the readers to develop robust scientific thinking (Schwartz, 2015). Most importantly, literature and their writers provide the foundation for scientific ideas beyond simply telling entertaining stories.

Hemingway (1935) once said, "All modern American Literature comes from one book by Mark Twain called *Huckleberry Finn*... All American writing comes from that. There was nothing before. There was nothing good since" (p. 22). Whether one agrees with Hemingway's assessment or not, Twain certainly left an indelible mark on American literature for his stinging indictment against the institution of slavery by writing *The Adventures of Huckleberry Finn*. However, many readers might not know that he also predicted the Internet.

In his 1898 piece "From the 'London Times' of 1904," Twain described a network of phones that allowed people to rapidly share information, which an accused murderer used to exonerate himself (Twain, 1898). To deal with the stress of waiting for his execution, the

accused murderer requested access to the network. He promptly wasted all his time researching

frivolities using it. By chance, he found evidence to prove that he was not in the same city when

the murder took place. Not only did Twain predict the Internet, he also foretold the behaviors of

the humans using it in his not-so-famous little story. There are numerous such examples of the

predictive power of literature. For example, in his 1911 novel *Ralph 124C 41+*, Gernsback

described a mirror-like device on a wall called Telephot that Ralph, the main character, used to

communicate with his friend Edward. Ralph was able to see and hear what his friends were

doing at the other end of the Telephot similar to Skype or Google Hangout. These stories affirm

Gaiman's proud declaration in his 2012 lecture for Reading Agency when he paraphrased Albert

Camus by saying, "Fiction is the lie that tells the truth" (Gaiman, 2013, para 44). It is shocking if

not tragic to witness a trend that dismisses the expansive as well as predictive power[1] of

literature. How can educated people not understand that the physical manifestation of ideas must

be preceded by the illustration of imagination? How can scientists further their discovery without

being immersed in the world of possibilities that literature offers?

  Still, whether literature education can offer *practical* skills is an important question for

many people who look at education through a lens of cost-benefit analysis. They argue that

students should spend more time learning computer programming than lines from Shakespeare.

Damon Horowitz, Google's In-House Philosopher, certainly thought so before changing his

mind about literature education. In his article published by *The Chronicle of Higher Education*,

Horowitz (2011) discussed his struggle as a technologist before he found his cure through

humanities education. He described his success and failure as he attempted to develop a fully

functioning artificial intelligence that could process natural language. He eventually quit his job

---

[1] By *predictive*, I do not mean that literature predicts the future in a scientific sense. I mean that it provides an expansive mental space for different possibilities that have not yet been imagined by the scientist who must navigate the restrictions of the physical world.

and began pursuing his Ph. D. in Philosophy to compensate for his lack of skills. He pointed specifically to Shakespeare as an example when he described his lack of expansive cognitive experiences. He advocated for the importance of learning to think beyond what was technologically engineered to achieve true advancement in science. He, like many other scholars, realized that humanities education offered students the ultimate workplace competency in today's information-based economy by providing authentic opportunities to think critically.

Jay (2014) also argued that the competency to analyze, evaluate, and synthesize various arguments and assumptions has been the cornerstone of all humanities education, in particular literature education, which has become more important as well as economically valuable in recent years. Literary scholars are not the only ones who have come to such a conclusion. According to the survey results conducted by The Association of American Colleges and Universities, ninety-three percent of employers reported a demonstrated capacity to think critically, communicate clearly, and solve complex problems was much more valuable in any job applicant (Hart Research Associates, 2013). Literature education filled with complex and lengthy pieces, therefore, should be valued more not less in today's society where such skills are necessary for employees to be successful. Literature education offers both philosophical and practical benefits to learners and should not be marginalized.

A lack of reading lengthy, complex texts with an experienced guide diminishes the benefits that can be gained from reading literature, including understanding complex character development, which ultimately leads to strengthening one's own sense of self (Bloom, 2000). Such a benefit is particularly relevant and important for adolescents as they struggle to form their own identities during junior high and high school years. In discussing the importance of quality literature education in high school, Probst (2004) argued that adolescents' preoccupation with

and about themselves made them ideal readers because literature invites readers to enter into a fictional world as both participants and spectators. Because they saw themselves everywhere in literature without a fully developed sense of who they were, adolescents were able to imagine who they might become or wanted to become while reading stories. Reading others' books, therefore, afforded the safety and comfort of being someone else without the pressure of being that particular person (Probst, 2004). Furthermore, not interacting with complex pieces of literature that demand endurance and empathy of the readers deprive students of developing such abilities through reexamination of one's bias and prejudice. When speaking of Shakespeare's brilliance, Frye (1989) described the mandates of his plays on the readers to examine their own assumptions through clever use of language. He pointed how all Shakespeare's plays provided both the surface meaning and underlying meaning through the use of various literary devices. Therefore, literature education should provide enriching opportunities for students to engage in imaginative activities beyond choosing correct answers on standardized tests.

Issues with Current Literature Education

Although many in education know the importance of literature education, teaching literature well to students has not been easy. The domain of literature education is clearly suffering from what Pfeffer and Sutton (2000) called *The Knowing-Doing Gap*, which refers to the difficulty of implementing a good idea into practice. With the focus on standardized testing scores, teachers have struggled to provide high quality instruction to their students that include a sustained dialogue with documented benefits (Carbonaro & Gamoran, 2002; Gamboran & Carbonaro, 2002). Many high school English curricula are filled with short stories, poems, and nonfiction pieces that are for standardized test preparation (McNeil, 2000). As a result, students in literature classes often do not acquire the benefits from reading complex and lengthy pieces

such as critical thinking or sophisticated literacy skills. Teachers *know* that the students must read lengthy pieces to acquire specific skills yet they have not been able to *do* what they know that they must do. Bridging *The Knowing-Doing Gap* requires a systemic approach (Pfeffer & Sutton, 2000). In teaching, such a systemic approach is pedagogy, a way that information is being taught to students (Bransford, Brown, & Cocking, 2000).

   Need for a new kind of pedagogy in literature education. The field of literature education suffers from serious pedagogical stagnation. A brief investigation of available strategies revealed that teachers frequently resort to one of two pedagogical strategies when it comes to teaching great literature, especially full-length novels or epic poems (Cuban, 1984 as cited in Langer, 1995). The most common way for a teacher to teach a novel is to pose a variety of questions during a lecture after the students have read the assigned portion of the book on their own (Langer, 1995). Another popular pedagogical strategy involves a workshop model where students work independently in small groups to interact with a piece of literature prior to writing essays (Fletcher & Portalupi, 2001). Teachers use shorter works for such workshops due to the time constraints in the instructional setting (Beach, 1993; Blau, 2003; Probst, 2004).

   Unfortunately, the currently available pedagogies limit readers' interactions with great literature pieces. Furthermore, with the introduction of advanced educational technology in the classroom where students have more access to information, teachers need a new type of pedagogical strategy that is much more student centered without compromising the role of a teacher in the classroom.

Need for Research

   Gamoran and Carbonaro (2002) argued that the unequal quality of instruction in high school English classes has widened the student achievement gap among various populations for

many decades. They lamented that despite the establishment of Nystrand's (1997) and

Applebee's (1996) conceptual frameworks that advocated for quantity of writing, coherence of

the curriculum, valuing student voice, and high quality content as four cornerstones of high

quality English instruction, students all across the United States have not received this

consistently. Teachers in the United States are now under additional pressure due to the

implementation of the Common Core State Standards (Robbins & Bauerlin, 2013; Porter,

McMaken, Hwang, & Yang, 2011). In addition, technological advancement and the pressure

against humanities education in recent years have highlighted a need for a new pedagogical

advancement (Earle, 2002; Ertmer, 1999, 2005; Stenberg & Lee, 2002; Whitefield, 2012). Even

if society could forgo additional benefits from studying great literature, including the ability to

predict the imaginative future or as pure entertainment, improving literacy is indisputably one of

the most important educational endeavors of any society (UNESCO, 2008). With the amount of

investment the United States is making in the K-12 education system (NCES, 2014), developing

a new kind of pedagogical strategy that can engage learners in literature education and lead to the

improvement in literacy is absolutely necessary. This study aimed to accomplish such a goal

using game-based learning, specifically tabletop role-playing game creation.

Why Design-Based Research?

Despite the documented benefits for learning (Wouters, Nimwegen, Oostendorp & Spek,

2013; Young et al., 2012), teachers do not use games often in K-12 classrooms, and few teachers

and students enjoy the positive benefits from games (Lynch, 2013; Squire, 2006). Few studies on

the effective use of games in a typical K-12 environment have been conducted (Gredler, 1996).

In addition, many existing studies focus on commercial benefits of game-based learning

(Richards, Stebbins, & Moellering, 2013). Even when they are used in the classroom, games

typically replace or augment typical instructional practices known as *drill and kill* rather than engaging students fully in the learning process to improve their overall learning experiences (Bowman, 1982; Malone, 1981; Jonassen, 1988; Van Eck, 2006). The shortfall stems from both the lack and the stagnation of pedagogy using games and game creation and should be remedied.

Considering the impact that pedagogy has for improved student learning (Groff & Mouza, 2008; Lim & Chai, 2008; Shulman, 1987; Zhao, Pugh, Sheldon, & Byers, 2002), there is a huge need for research that focuses on developing a new pedagogical strategy to enhance game-based learning in K-12 classrooms. Of the various research methods, this study used design-based research (DBR) because it attempts to develop an educational method or theory that can be generalized beyond the classroom through iteration and design (Barab, 2006; Design-Based Research Collective [DBRC], 2003; Van den Akker, 2000), making it an ideal choice for this study. Chapter Two includes the steps and rationale for this choice.

Game-Based Learning and Tabletop Role-Playing Game Creation

One area of education research that has shown a great promise in recent years involves game-based learning. Although the idea of play and games has been around for many decades, game studies and game-based learning have experienced unprecedented prominence in recent years (Gee, 2007; Kafai, 2006b; Malaby, 2007; Steinkuehler, 2006). Wanting to capitalize on the popularity of games to advance their causes, scholars and entrepreneurs began to study and implement games in their chosen fields. Many businesses now use the term *gamification* to describe using game mechanics for the purpose of yielding return on investment (Drell, 2014). However, many researchers have criticized such a move focused on profit yielding (Bogost, 2011; Jagoda, 2013) for appropriating only the extrinsic reward systems commonly found in games and not actual game-based activities. As a result, gamification has been simply defined as

"use of game design elements in non-game context" (Detering, Dixon, Khaled, & Nacke, 2011, p. 10).

This study uses the term game-based learning instead, which means using positive aspects of games and simulations such as infusing playfulness, working within while challenging established rules within a system, engaging in authentic assessments using gameplay, and game creation by students in the classroom to enhance all aspects of learning for students. It further examines the benefits of role-playing games such as their emphasis on imagination and the abilities to encourage the players to discover who they are through playing different roles, which are what classic literature pieces provide for their readers. It uses tabletop role-playing game creation as the core instructional strategy to develop a new pedagogical model. Chapter Two includes the definitions of game-based learning and explains why using tabletop role-playing game creation is an effective way to improve literature education.

Purpose of the Study

In today's learning environment where the general public as well as lawmakers demand accountability while the fast development of technology put enormous pressure on all levels of education, developing student-centered pedagogical strategy in literature education is imperative. Literature education is the cornerstone of all other education since it provides basic literacy skills to all students. Therefore, K-12 education includes literature at every grade to provide students with literacy skills considered foundational for all others subjects. Despite such a demand, many literature teachers often lack innovative pedagogical models that seamlessly infuse a broad spectrum of available educational technologies, which includes both analog and digital games, and content into their daily practices. To remedy such a problem, this study aims to develop a strategy to enhance literature education as the students created tabletop role-playing games. This

study focuses on developing a pedagogical model to foster students' imagination through exploration to combat the existing reductive literature pedagogy that concentrates on students' memorization of facts or words void of larger contexts. It used the design-based research method to develop, capture, and explore context-bound utilities of the pedagogy in a high school English classroom.

Research Objectives

Although intended to contribute to the scholarship of game-based learning and pedagogical theory building, this study focuses primarily on developing highly practical pedagogical strategy for K-12 literature education. Two research objectives for this study are:

- Develop a Common Core Standards-based constructionist pedagogical model for use in high school English classes using tabletop role-playing game creation that facilitates purposeful interactions between students and complex literature pieces.
- Develop useful criteria to improve future iterations of a new pedagogical model that uses tabletop role-playing game creation.

Theoretical Focus

This section provides the most basic definitions of various theories used for this study. Further examination and detailed explanation appear in Chapter Two. This study uses the Technological Pedagogical Content Knowledge (TPACK) Framework (Mishra & Koehler, 2006) as the foundational theoretical framework. With the challenges of today's classroom where new technology is forcing teachers to reconsider their instructional content and pedagogy, the TPACK Framework is one of the most useful models to use in developing a new pedagogical strategy (AACTE Committee on Innovation and Technology, 2008). In today's educational

environment, investigating the interplay of the components that are fundamental to K-12 is not only important but also necessary.

In addition, *cognitive apprenticeship* offered the rationale for the lesson sequence, including scaffolding, articulation, reflections, and exploration (Collins, 2006; Collins, Brown, & Newman, 1989). Cognitive apprenticeship advocates a sequence of instructions that transforms novices from passive recipients of knowledge from experts into self-reflecting and self-correcting learners through intentional and scaffolded interactions in a learning situation. Therefore, cognitive apprenticeship provided a useful theoretical framework for developing scaffolded lesson steps as the expert (i.e. a teacher) in the room reduces his or her influence and encourages the novices (i.e. students) to become more in charge of their learning.

Since this study's primary goal is to improve literature instruction by devising a practical pedagogical mode, developing students' metacognition through an intentional and iterative writing process became important (Negretti, 2012). Flavell (1979) defined metacognition as the knowledge and thinking about all thinking. He operationalized his idea of cognitive phenomena into four categories including "metacognitive knowledge, metacognitive experiences, goals, and strategies" (Flavell, 1979, p. 906). After Flavell posited the notion of metacognition, researchers and educators alike have embraced it as a theory as well as a classroom practice.

Finally, *constructionism* provided the rationale for continuous artifacts construction (Kafai, 2006a). As he distinguished his theory of constructionism from the established theory of *constructivism* posited by Piaget, Papert and Harel (1991) defined learning as "building knowledge structure through progressive internalization of actions" (p. 1). Although she acknowledged that both Piaget and Papert viewed knowledge as something that a child actively

constructed, Ackermann (2001) described Papert's constructionism to be much more context-driven, media-focused, and preference-centered than Piaget's constructivism.

Based on the above theoretical foundations, this study argues why student construction of the tabletop role-playing game was at the center of developing a new constructionist pedagogical strategy.

Significance of the Study

This study attempts to answer the issue of literacy development, which has become one of the most critical and contentious issues that America's K-12 education has faced in recent years. For the past several decades, there have been numerous calls to improve the literacy rates of all American students. Many Americans can still recall the famous *Newsweek* cover story, "Why Johnny Can't Write," where many leading experts and intellectuals lamented the decline of the writing skills among all Americans (Sheils, 1975). Since the publication of that sensational cover story in the 70s, literacy skills of young Americans haven't improved much. According to the latest National Assessment of Educational Progress's report, only one quarter of the nation's high school students is proficient in writing (NCES, 2012). Considering the dismal statistics, many are calling for drastic improvements of the quality of literature instruction in the middle school and high school classrooms. One potential solution to improving writing instruction is an increase in the number of hours spent in writing (Applebee & Langer, 2011); another is more frequent teacher feedback to students (Gundlach, 1981).

However, with an average of forty students per class, one English teacher must grade over two hundred essays each time he or she assigns an essay, making it nearly impossible to increase the hours spent on writing that require frequent feedback (Dillon, 2011). As a result, students are not writing as much as they should to develop sophisticated writing skills.

According to large-scale writing research conducted by the Albany State University, a typical student wrote about 1.6 pages per week in their high school English classes, which translated to approximately 400-500 words per week (Applebee & Lager, 2011). The results of the study also showed that only seventeen percent of such words written by high school students were considered extended writing beyond copying notes from their teachers, which meant a student wrote approximately 90 words per week in their English classes (Applebee & Lager, 2011; NCES, 2012).

Recognizing such constraints, researchers are now examining a variety of technological solutions that can address the issues associated with writing instructions (Graham, 2013). Researchers have argued that a web-based writing environment could facilitate intentional interactivity among writers to improve writing skills (Yang, Ko, & Chung, 2005). Unfortunately, such instructional strategies have neither inspired nor motivated students to become interested in longer works of literature in both reading and writing. Since great writing must begin with careful reading (Newkirk, 2012), developing a pedagogical strategy that targets both reading and writing skills is imperative to improving literature education. This study includes how and why tabletop role-playing game creation achieves such a goal.

Furthermore, students of today often suffer from boredom and apathy in class (Clark & De Zoysa, 2011). The pedagogical strategy created as a result of this study focuses on changing the apathetic attitudes toward longer works of literature among students by leveraging the benefits of game-based learning. It uses game-based learning due to its popularity among the new generations of students and teacher who grew up playing digital and analog games. According to the latest New Media Consortium's Horizon Report, the average age of gamers are 30, with 68% of them over the age of 18 (Johnson, Becker, Estrada, & Freeman, 2014, p. 42).

The report showed that game-based learning has become one of the main instructional methods used at many colleges and universities. The report argued that game-based learning is no longer a temporary educational fad but a mainstream instructional practice. Building on such assertions, this study aims to produce a pedagogical model that allows full integrations of many positive attributes of game-based learning into literature education. Rather than focusing on the innovative nature of game-based learning, it concentrates on creating an innovative pedagogical model within a larger context of game-based learning. While creating tabletop role-playing games, students had the opportunities to transform themselves from passive readers and consumers of information to active writers and producers. Students gained a broad set of literacy skills including reading and writing as they created artifacts such as game boards and rulebooks. The game-based instructional model provided students with authentic opportunities to become game creators and fiction writers that resulted in a widely deployable pedagogical model.

This study is significant because it focuses on developing a theoretically sound yet practical pedagogical strategy for a K-12 classroom to improve literature education. It acknowledges the importance of improving literature pedagogy as part of English education. It uses tabletop role-playing game creation as the core pedagogical strategy, which affirms gaming as a mainstream topic in popular culture, no longer just the domain of *geeks* or *nerds*. It resulted in a new pedagogical model with critical features that teachers could use in their literature classes with their students to achieve their goal of improving student literacy.

Assumptions

This study assumes that a group of high school students in two Honors junior English classes and an Advanced Placement senior English class at a comprehensive high school in California were representative of a larger population of high school students in the United States.

It relies heavily on the teacher's overall pedagogical proficiency to respond and adjust to many unplanned and unexpected occurrences throughout the implementation. It also assumes that the conventional ways of teaching literature, such as using lectures or hosting workshops in the classroom, were not as effective as using tabletop role-playing games creation. It posits that high school students were likely to prefer game-based learning to a typical literature instruction. Finally, it speculates that high school students were much more likely to participate in the reading and writing activities while creating games. Additional pedagogical assumptions that became more apparent as the study developed are detailed and discussed in Chapter Five.

Limitations

Since the author of this study was both the researcher and the teacher in the classroom, there was a bigger danger of experimenter or researcher bias (Creswell, 2013; Gray, 2014; Roberts, 2010). Furthermore, students participating in the study received grades after participating in the activities, which created a conflict of interest in some cases. Despite generating a plethora of data, the study focuses on identifying a set of preset criteria. Chapter Three includes a discussion on the ways to limit such biases and develop an effective pedagogical strategy.

Chapter Summary

This chapter began with identifying the hostile climate against literature education that demands reading of complex literature pieces in favor of standardized-test preparation and STEM education. It described the value of literature education while identifying issues with current literature education, primarily the lack of innovative pedagogy. It established a need for this research and rationale for using game-based learning, in particular, tabletop role-playing game creation as a pedagogical strategy. It mentioned the reason for design-based research and

established the purpose of the study. It listed the research objectives and the primary theoretical

focus. It concluded with the significance of the study followed by the assumptions and

limitations.

Chapter Two: Related Literature

Overview

This study focuses on developing a new pedagogical model for literature education using tabletop role-playing game creation as its core instructional practice. The pedagogical model was built on the Technological Pedagogical Content Knowledge (TPCK) Famework (Mishra & Koehler, 2006) and constructionism (Kafai, 2006a; Paper & Harel, 1991). The unit attempted to develop students' metacognition (Flavell, 1979) as they engaged in a practice of cognitive apprenticeship (Collins, 2006; Collins et al., 1989) through participating in the unit.

This chapter begins with the critical features of the study followed by the definitions of key terms prior to describing foundational learning theories used in developing the first pilot. It explains the rationale for choosing the TPACK framework and establishes an explicit connection between the TPACK framework and game-based learning in high school literature classes. It discusses why game-based learning, specifically tabletop role-playing game creation, is a superior strategy for teaching complex literature pieces as opposed to existing instructional strategies. It describes a brief history of game-based learning and its development to provide a context of using tabletop role-playing games creation as a pedagogical strategy. It features Hergenrader's original research (2013) of using tabletop role-playing games creation for college-level creative writing courses, and its influence on the pilot unit development for high school literature classes. The chapter concludes with the rationale for selecting design-based research as the method.

Critical Elements of This Study

The study design identified several critical features for the data collection and analysis in developing a new game-based constructionist pedagogical model. This study used such features

to measure both successes and failures throughout the implementation to inform future revisions and refinement of the model (Collins, Joseph, & Bielaczyc, 2004). This study aimed to develop a new pedagogical model using the TPACK framework for a high school classroom. All activities in the model occupied the space where technology, pedagogy, and content optimally intersect and interact per the main framework. Each activity achieved a seamless integration of all three components to encourage students to create artifacts to demonstrate their learning.

Additionally, the evidence of success heavily relied on improvement of student learning since this study aims to develop a pedagogical model for the K-12 educational environment. The study contained the contents mandated by the Common Core State Standards (CCSS) and other state standards for K-12 education. Although different instructional activities addressed varying standards, this study focuses on the standards listed below as they encourage students' critical skills development. According to the California English Language Content Standards (California Department of Education [CDE], 1997), students in grades eleven and twelve are required to:

- evaluate the philosophical, political, religious, ethical, and social influences of the historical period that shaped the characters, plots, and settings (RC 2.5; LRA 3.2; LRA 3.5 c; LRA 3.9).
- identify and understand certain literary terms including irony, tone, mood, and archetypes in recognition of the author's writing style (LRA 3.3; LRA 3.4; LRA 3.6).
- establish reflective connections between literature and self (LRA 3.2).
- use vivid, fresh, and natural language (WS 1.5; WS 1.9; WA 2.2).

According to the newly adopted CCSS (2010), students must gain sophisticated literacy skills while reading complex literary texts. The CCSS for English Language Arts further identify the

following seven major traits as essential. To demonstrate that they are college and career ready, students must acquire:

- independent thinking skills.

- strong content knowledge.

- adaptability of working with various texts, performing various tasks, and handling a variety of evidence.

- competency in comprehension as well as criticism of others' work.

- ability to provide strong textual evidence.

- proficiency in the use of technology and digital media.

- capacity to understand varying perspectives and cultures. (CCSS, 2010, p.7)

To address both the California Content Standards and the CCSS, all instructional activities, including reading, writing, and speaking, required the students to reference evidence from all types of texts. All instructional activities centered on developing students' overall literacy including basic, digital, visual, and cultural literacies (Cambridge Assessment, 2013; UNESCO 2008). The data collection and analysis plan used the above standards as the criteria to measure the success of such activities.

This study attempts to develop a constructionist pedagogical model. Therefore, all instructional activities were constructionist in nature, which meant that the students continuously created artifacts both to learn and to demonstrate what they learned. This study asserts that effective pedagogy should facilitate meaningful, intentional, and content-based interactions during all instructional activities; therefore, all activities contained plans to increase such interactions among the students, between the teacher and the students, and between the students and the content. In addition, the pedagogical model sharply focused on creating an overall

learning environment to extract the best outcome from all students via intentional interactions at every turn. It provided what Kirschner and Merriënboer (2013) called *second-order scaffolding*, which allowed an unobtrusive transition from teacher-led instruction to student-led instruction by providing iterative opportunities for learning.

For example, while creating the tabletop role-playing game, students read and wrote about the chosen literature text multiple times with guidance from the teacher. Students interacted with one another as they read each other's writing products and provided feedback under the supervision of the classroom teacher. Students used different analog and digital media to consume information about the text as well as produced artifacts including visuals based on detailed instructions provided by the teacher. Students had multiple opportunities to make creative yet critical and systemic decisions within the parameters that the teacher provided. Students took on different roles such as spectators, consumers, creators, critics, game players, and leaders throughout the process with careful guidance from the teacher. Therefore, the frequency and quality of interactions among all participants became important indicators for the successful development of a constructionist pedagogical model.

Another aim of this study is to create a new pedagogical model that allows literature teachers to meet their specific standard-based instructional goals using tabletop role-playing game creation without compromising the core goal of encouraging creativity through literature. The model included innovative tools and strategies for teachers to use without reducing their importance in the classroom. The model acknowledged the expertise of a literature teacher in the classroom while providing adequate structural support for improved student learning in the K-12 education environment. Therefore, the model provided the necessary instructional frame and

activities for high school students to develop skills such as critical thinking mandated by the state standards (CCSS, 2010; Paul & Elder, 2007) while engaged in imaginative creation.

Definition of Literacy

One of the main goals of this study is to develop a pedagogical model that could develop students' sophisticated literacy skills. Although literature teachers work hard to develop their students' practical literacy skills, literacy is typically defined with various characteristics rather than a single definition (Kell & Kell, 2014). Campbell (1990) defined literacy as an integration of communication skills including reading, writing, listening, speaking, and critical thinking. Gee (1998) defined literacy as the individual's ability to use effective discourse to communicate relevant ideas beyond the boundaries of his or her primary cultural or social group. Keefe and Copeland (2011) expanded the definition of literacy to include five core principles for literacy: everyone's innate capacity to acquire literacy, literacy as fundamental human right and experience, literacy as the byproduct of human relationships and interactions, literacy as a tool for empowerment, and literacy as a collective responsibility of all humans. According to the Organization for Economic Co-operation and Development (OECD), developing literacy is a critical human right because of its direct connection to economic power and self-sufficiency (UNESCO, 2008). The Program for International Student Assessment (PISA), which measures the worldwide academic achievement of students, described three different types of literacy: literacy, mathematical literacy, and scientific literacy (OECD as cited in Kell & Kell, 2014). All three of PISA's definitions included an individual's capacity to understand and use specific types of information to become productive. Finally, according to United Nations Educational, Scientific, and Cultural Organizations (UNESCO), literacy is a fundamental human right (OECD as cited in Kell & Kell, 2014; UNESCO, 2008).

Based on the above definitions, this study defines literacy as the students' abilities to access quality information using both analog and digital tools, communicate their ideas in writing and speech, and create visuals that demonstrate their understanding of the materials according to the CCSS. It further defines literacy as the students' ability to productively participate in a community of learners that values learning through intentional peer interactions as all participants focus on capitalizing each other's skills and talent (Gee, 1998). This study also argues that developing such skills is critical for all students' future success, including their economic success. Chapter Four contains additional examples of how students developed sophisticated literacy skills based on the CCSS as a result of participating in the unit.

Definition of Educational Technology

Another important goal of this study is to develop a pedagogical model that utilized available educational technologies including tabletop role-playing games. The definition of educational technology has changed over the past several decades (Reiser, 2001; Whelan, 2005). When defining educational technology, many begin with Galbraith's (1967) definition of technology as "the systemic application of scientific and other organized knowledge to practical task" (p.12). Despite the constant changes in the field, Galbraith's definition rings true to many educational scholars due to its focus on devising solutions to real problems. Still, when it comes to defining what educational technology is, scholars have argued for a broader definition that includes the technological tools in addition to the idea of systematic application of such tools. Reiser (2013) summarized that scholars have defined educational technology as either a set of available instructional media or various systemic instructional process. The Association for Educational Communications and Technology (AECT) has also provided several different definitions of instructional or educational technology since 1963. Their latest definition stated

that educational technology, which has been accepted as one of the most comprehensive definitions by many researchers, was "the study and ethical practice of facilitating learning and improving performance by creating, using, and managing appropriate technological processes and resources" (AECT, 2007, p. 1).

In consideration of various definitions of educational technology, this study defines educational technology as all the tools that the students used in class, including the Internet and all forms of writing tools from a pencil to the online forum, as well as the system that allowed the orchestration of such use, in particular, the tabletop role-playing game mechanics. Because a classroom is similar to a complex ecosystem where multiple actors and elements interact with one another constantly, a robust definition of educational technology is necessary for developing an effective pedagogical model. Furthermore, an integrated theoretical framework is required to address such complexities in a real classroom setting.

Therefore, this study uses tabletop role-playing game creation as its core instructional activity rather than commercial videogames or other published educational games typically used in many game-based learning research (Annetta & Bronack, 2011; Chen, 2008; Gee, 2007; Shaffer, 2006). Such a move was consistent with the objectives of this study aimed at developing an innovative constructionist pedagogical model.

The Technological Pedagogical and Content Knowledge (TPACK) Framework

In today's learning environment with increased access to educational technology, teachers must possess the knowledge in technology to enhance student learning (Valdez et al., 2000 as cited in Earle, 2002). Yet an effective integration of educational technology into the K-12 curriculum has been extremely challenging (Ertmer, 1999, 2005; Groff & Mouza, 2008; Levin & Wadmany, 2008). Because there are many barriers and issues for integrating

educational technology into the K-12 education, researchers have called for an integrated

approach to addressing the challenge of technology integration into K-12 education (Earle, 2002;

Ertmer, 1999; Inan & Lowther, 2010; Russell, O'Dwyer, Bebel, & Tiao, 2007; Painter, 2001).

The Technological Pedagogical and Content Knowledge (TPACK) framework addresses the

needs for seamless integration of three major elements - technology, pedagogy, and content - in

today's educational environment (Koehler & Mishra, 2009). The TPACK model illustrates the

importance of balancing all three such elements in forming a dynamic learning environment to

improve student learning (Harris, Mishra, & Koehler, 2009; Mishra & Koehler, 2006).

The TPACK model (also known as the TPCK) traces its origin to Shulman's (1987)

Pedagogical Content Knowledge (PCK). In his speech to the American Education Research

Association, Shulman (1986) first advocated for the need to develop a new and much more

sophisticated paradigm for researching teacher effectiveness. He argued that the researchers and

teachers needed to gain a better understanding of the profession of teaching in order to improve

the craft of teaching. Shulman warned against the historical trend that over-emphasized and over-

simplified teaching as either the content or the pedagogy. According to Shulman, simplifying

content as the subject matter knowledge to be taught and the pedagogy as teacher behaviors

created a "missing paradigm" (p. 6), which was detrimental to the development of the teaching

as a serious profession. For Shulman, the content knowledge (CK) represented a more complex

knowledge beyond the simple subject matter or domain knowledge. His definition of the CK

included *subject matter content knowledge, pedagogical content knowledge,* and *curricular

content knowledge*.

The *subject matter content knowledge* was the amount and the particular organization of

the knowledge that a teacher possessed. A teacher, therefore, did not completely possess the

subject matter content knowledge unless he or she was able to explain to their students why something was worth knowing and how it related to all other important facts both in theory and in practice.

The *pedagogical content knowledge* was the subject knowledge that a teacher possessed about teaching. A teacher possessed such knowledge when he or she was able to choose from a plethora of classroom activities that could be the most effective for the group that he or she was teaching. It pertained to the teacher's flexible abilities to augment or eliminate a section of the subject according to the background knowledge and preconception of the learners. It allowed the teachers to accept and to combat the learners' inaccurate prior knowledge, which led the teachers to assist their students to elevate their newly acquired knowledge into the academic domain.

Shulman's third type, the *curricular knowledge*, was the remedy for the lack of knowledge among the students. For a teacher to be effective, he or she should have access to high-quality curriculum and associated supplemental materials just as a doctor would to the surgical tools and medicines. It required a teacher's knowledge beyond the subject matter. Shulman argued that a teacher's ability to evaluate and supplement the existing instructional materials created was essential. All three types of knowledge came from a deep understanding of the subject, methods, and available tools. Shulman summarized his points when he declared, "Those who can, do; those who understand, teach" (Shulman, 1986, p. 14).

Shulman (1987) continued to develop his ideas for the professionalization of teaching. According to Shulman, teaching has always been a highly complex endeavor that should never be reduced into a checklist of observable behaviors of the teacher in the classroom. Shulman argued that a teacher:

> *knows* something not understood by others, presumably the students. The teacher can transform understanding, performance skills, or desired attitudes or values into

pedagogical representation and actions. These are ways of talking, showing, enacting, or otherwise representing the ideas so that the unknowing can come to know, those without understanding can comprehend and discern, and the unskilled can become adept. (p. 7)

He further claimed that PCK was the perfect blend of content and pedagogy that allowed teachers to perform all their necessary teaching tasks, distinguishing them as pedagogues rather than simple content specialists. His idea of acknowledging the complexity inherent in teaching and the need for an integrated approach pushed the conventional definition of a competent teacher, allowing the new era of research using much more sophisticated and nuanced approaches. His arguments also served as the foundation for the development of the TPACK framework.

Mishra and Koehler (2006) expanded Shulman's ideas to include technological knowledge in their new, expanded framework known as the Technological Pedagogical and Content Knowledge framework (TPACK) (See Figure 1). Mishra and Koehler (2006) agreed with Shulman's definitions of content knowledge, pedagogical knowledge, and pedagogical content knowledge. However, their primary focus was to develop a robust framework that addressed the additional complexities in the teaching profession caused by the introduction of educational technology. In developing their framework, Mishra and Koehler used Shulman's (1986) definitions of content knowledge (CK), pedagogical knowledge (PK), and pedagogical content knowledge (PCK), while adding *technological knowledge* (TK), *technological content knowledge* (TCK), *technological pedagogical knowledge* (TPK), and *technological pedagogical content knowledge* (TPCK).
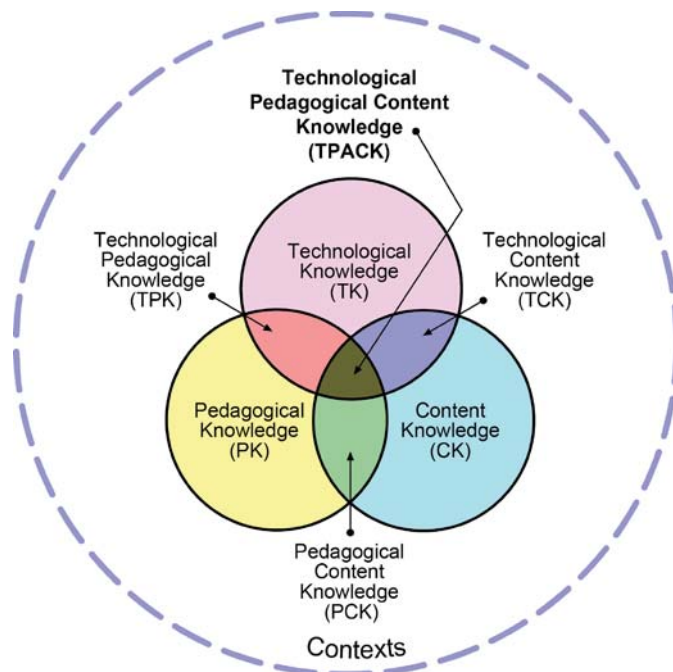
Figure 1. The TPACK image. Adapted from "The TPACK Image," by M. Koehler & P. Mishra, 2012.

Harris, Mishra, and Koehler (2009) acknowledged the challenge in defining TK due to the constant changes in the domain. They defined TK as the learner's technological competency gained from continuous interactions with all available technologies. TPK was defined as the teachers' abilities to alter their teaching methods based on their deep understanding of the use of different technological tools in different instructional contexts. Teachers demonstrated TPK through modifying and adapting the primary use of available educational technology and its functions to fill the particular needs of their students. TPK relied on the teachers' abilities to exercise their *creative flexibility* by using technologies for the purposes beyond the original design. TCK was the teachers' integrated understanding of how a specific technology and content influenced and constrained each other. It addressed the new type of knowledge that teachers gained as they considered the influence of technology as it changed the existing content, impacted human cognition, and offered new analogies for learning. TPACK, therefore, was

where all the components intersected to illustrate a teacher's total professional competency in dealing with technology, pedagogy, and content knowledge.

Mishra and Koehler (2006) built a flexible framework that could both inform and evaluate the effective teaching practices as more and more teachers began to incorporate technology into their daily teaching practices. With the addition of technological knowledge into the framework, TPACK provided a useful framework that represented the complexity of teaching in today's classroom (Chai, Koh, & Tsai, 2013).

Lack of Pedagogical Content Knowledge (PCK) in Literature Education

Despite being rooted in Shulman's construct of PCK, the TPACK discussions have primarily centered on the technological content knowledge and technological pedagogical knowledge rather than enhancing pedagogical content knowledge. Topics in the articles in *Handbook of Technological Pedagogical Content Knowledge (TPCK) for Educators* included incorporating digital tools into a K-6 literacy education (Schmidt & Gurbo, 2008), helping pre-service teachers acquire technical skills (Hughes & Scharber, 2008), providing technical knowledge on web-based tools to world language teachers (Olphen, 2008), leveraging technology to enhance social studies education (Lee, 2008), and using computers in mathematics education (Grandgenett, 2006). Numerous researchers have identified teachers' beliefs about pedagogy as one of many challenges on the instructional technology integration (Baylor & Ritchie, 2002; Chen, 2008; Hew & Brush, 2007; Lim & Chai, 2008; Russell, O'Dwyer, Bebell, & Tao, 2007; Zhao, Pugh, Sheldon, & Byers, 2002). It is clear that teachers need to incorporate more technology into the classroom in today's educational environment. As the TPACK model suggests, without possessing sound PCK, teachers are unable to be effective in incorporating technological tools.

According to James and Pollard (2011), effective pedagogy required a fundamental understanding of learning and teaching since it could not be separated from either concept. Pedagogy resided in the in-between space of teaching and learning. Pedagogy was contingent upon both teaching and learning and was one of the most important concepts in education. Yet a serious discussion on pedagogies had been rare (James & Pollard, 2011), which originated from the assumption that the professional teachers were already familiar with various effective pedagogies (Hughes & Scharber, 2006).

However, Stenberg and Lee (2002) disputed the idea of teacher familiarity with effective available pedagogies in their studies of Ph. D. candidates, training to become professors. They argued that the training model ubiquitous in current teacher education inadequately prepared graduate students to assume the responsibilities of teaching or professing. The study was particularly compelling since the study participants were highly competent in their content knowledge, yet their abilities to teach what they knew to others were not natural to them. Stenberg and Lee warned against treating solid scholarly preparation the same as pedagogical training since the interplay of both the theories and practices were essential to understanding pedagogy. They proposed a critical and pointed evaluation of existing pedagogy as well as the development of a new kind of pedagogy in English education that was much more student-centered.

A survey of literature supported Stenberg and Lee's argument for a lack of sophisticated pedagogy for literature education. According to various literature education scholars, one of the most common ways for a teacher to teach has been to lead the students through guided reading activities using questioning (Langer, 1995). In the K-6 level, teachers used additional techniques such as literature circle, book clubs, and readers' theater (Schmidt & Gurbo, 2006). But in high

school English classes, the most prevalent activity has been a teacher-led group discussion that culminates with teachers interpreting or summarizing the plots for their students, followed by questions centered on the facts from the reading (Burke, 2013; Elkins, 1976; McMahon, 2002; Newkirk, 2012; Raphael & McMahon, 1994). After several days of questioning and answering, teachers administer reading comprehension quizzes that require recalling facts from the book to ensure that the students have completed the reading assignments, all designed to help students perform well on standardized tests rather than gain the full benefits from literature education. Once students finish reading, teachers assign an essay. Variants of this approach contained different types of questions along with graphic organizers that addressed characters and themes with no student essays (Applebee & Langer, 2011; Koretz, 2009; McNeil, 2000).

Another popular pedagogical strategy for teaching literature involved a workshop model (Beach, 1993; Blau, 2003; Probst, 2004). When using the workshop model, teachers model how to read a piece prior to allowing the students to lead discussions in small groups. Because they work in small groups in this model, students often engage in peer-led discussions and peer feedback (Blau, 2003; Langer, 1995; Lewis, 2001). At the conclusion of a workshop, students produce either an essay or a writing portfolio. Unfortunately, the workshop models are often built on shorter pieces such as short stories or short poems due to the time demand for students to interact with one another, making this ineffective in teaching longer and more complex pieces such as novels and epic poems.

While developing their framework, Mishra and Koehler (2006) acknowledged that technology has advanced rapidly in recent years. Such a phenomenon has posed a series of challenges. Scholars have argued against adhering to a list of competencies for the available technological tools that have consistently become obsolete every couple of years (Koehler &

Mishra, 2005; Mishra & Koehler, 2003; Mishra, Koehler, & Zhao, 2007; Zhao, 2003). Until recently, the field of education has also suffered from the lack of available education specific tools (Zhao, 2003). Although this situation has improved with the introduction of Google Apps for Education (GAFE) and other educational specific smartphone applications (Cummiskey 2011; Etherington, 2014), teachers have struggled with the constraints created by having to use commercially designed software for classroom instruction (The New Media Consortium & the Consortium for School Networking, 2009). To compound the issue, teachers have suffered from professional development that focused on generic solutions rather than individual teacher needs (Glazer & Ng, in press; Mishra & Koehler, 2006), despite the context-driven nature of learning and teaching.

Using Games and Game-Creation for Student Learning

Using the TPACK framework, this study asserts that game-creation is an ideal solution to addressing the pedagogical challenges created by both the lack of robust literature pedagogy and the introduction of educational technology. Of all the available types of games, the study used tabletop role-playing games as the primary game genre due to its commonality with complex stories, foundational to literature education. Tabletop role-playing game creation addresses one of the central tenets of the TPACK framework where it strongly favors the teacher expertise in selecting particular pedagogical strategies specific to a particular instructional content. In addition, game-based learning with a game-creation focus represents a new pedagogical approach that embodies a particular set of pedagogical moves espoused by constructionism (Kafai, 2006a; Paper & Harel, 1991), where students become authentic creators as a result of participating in well-orchestrated instructional activities. The design of the pedagogical model represents continuous and fluid interactions among educational technology (various tools being

used including the game mechanics), content (literature), and pedagogy (game-creation) located in the center of the TPACK framework (See Figure 1). To better understand why tabletop role-playing game creation is a great pedagogical strategy, it is important to acquire basic knowledge regarding role-playing games and why they are good for literature education.

What Is a Role-Playing Game and why Tabletop Role-Playing Game for Literature?

In June of 2013, I attended the Games, Learning, and Society Conference as part of my doctoral studies at Pepperdine University. In one of the sessions, I encountered Hergenrader's research (2013) on role-playing game creation to teach creative writing at a college level. Having taught English at a high school for twelve years at the time and in search of innovative pedagogies to improve my own teaching practice, I realized the potential of his method despite our differences in student population and instructional settings.

According to Hergenrader (2011, 2013), teaching fiction writing using a traditional workshop model has been highly ineffective for aspiring fiction writers since it tended to limit students to simply imitate overt and often mundane literary techniques in other works at a macro level. Instead, Hergenrader (2013) argued for role-playing game creation as an unorthodox yet viable option to help creative writing students to focus on both the micro and macro level of creative writing practices. He focused on leveraging what he called *cataloging* that occurred during role-playing gameplay. Hergenrader (2013) defined *cataloging* as "[an act of] skimming and selecting of desired items each with its own unique properties and descriptions" (2013, p.6). The power of role-playing games as a tool for creative writing resides in the way that players assemble a coherent narrative while controlling their characters while simultaneously yielding to the structure of the game. To learn how to build a complex unit such as a well-developed story, a writer must learn to compose the subunit of tightly controlled stories that develop *incrementally*

(Hergenrader, 2013).

Therefore, his instructional strategy included incremental writing practices that led to complex world building analogous to a typical gameplay session for a role-playing game. This encouraged his college students to gain the necessary skills to become proficient creative writers. His research focused on not only the craft of writing but also the ethical dilemma critical to high quality literature such as Shakespearean plays or novels read and taught in literature programs (Hergenrader 2011, 2013). He chose role-playing game creation as an expansive means to encourage his students to create stories from multiple perspectives without losing sight of smaller units that comprised the whole (Hergenrader, 2013).

His research propelled me to consider the possibilities of game-based learning and using role-playing game creation for my own instructional practice, which eventually led to creating the first pilot lesson using *Beowulf*. Although there were slight differences as to how the pilot unit unfolded (i.e. visual creation) and instructional goals (i.e. content acquisition and evidence-based writing practices), the basic structure of the model (i.e. a two-part instructional framework, continuous and incremental writing practices, and the extensive use of digital tools) from Hergenrader's research provided the main framework for my research. Prior to explaining the details of the pilot unit, however, it is critical to understand the rationale for using game-based learning, in particular tabletop role-playing game creation, for K-12 literature education since Hergenrader's research focused primarily on creative writing instruction in higher education.

Educational games and game-based learning. Just as literature education contains various genres, there are several different types of games that can be used for literature education. Rogers (2010) listed eleven different genres comprising twenty different types of

games.[2] Interest in games for learning has waxed and waned over many decades. Initially in the early 1980s, computer-based games offered simulation of history and science such as Minnesota Education Computer Consortium's (2003) *Oregon Trail* (1974) and *Where in the World is Carmen Sandiego?* (1985) or playful drill and practice of reading and math concepts in *Reader Rabbit* (1986) or *Math Blaster* (1991) (Edwards, 2012). The revival of interest in educational games seems to have arisen around 2004 with a growing recognition among researchers that massively multiplayer games and game communities embodied powerful learning activities. Since then, there have been many urgent calls for use of gameplay in formal school settings. However, there are a number of different perspectives on game-based learning.

Using digital games for education. Over the years, scholars have consistently argued the benefits of using videogames for learning. In reviewing the history of videogame use in education, Aguilera and Méndiz (2003) described that many early videogame studies focused on either their impact on spatial abilities in relation to the games' spatial representation of the real world or the development of the learners' intellectual skills such as reading and mathematics. Eventually, more sophisticated studies focused on the emotional impact on the players. Such psychological focus led to studies on the affective and emotional factors of the videogames and their impact on the development of more sophisticated cognitive skills such as problem-solving, decision making, and collaboration (Aguilera & Méndiz, 2003; Squire, 2003).

Other scholars identified the literacy development, technological competency development, and identity development as additional benefits of videogames (Gee, 2004, 2007; Selfe, Hawisher, & Ittersum, 2007). Squire (2003) identified two ways that videogames have been used in education. First, games have been used to train a specific set of skills or information

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[2] Roger (2010) listed action, shooter, adventure, construction and management, life simulation, music and rhythm, party, puzzle, sports, strategy, and vehicle simulation. He placed role-playing game and massively multiplayer online role-playing game under adventure games.

(Jonassen as cited in Squire, 2003; Sitzmann, 2011). Second, games have simulated highly

dangerous and often costly real life situations for consistent training of the users including pilots

or other military personnel. Low-fidelity simulations and strategy games have also been used to

develop skills such as manipulation of variables, development of varying perspectives, abilities

to simulate hypothetical events, visualization of dimensions, and comparison of simulations

(Squire, 2003).

One of the central arguments for benefits of videogames has been their connection to the

new learning environment. In today's media-saturated society where most students are

accustomed to actively participating in the information creation utilizing various social media

platforms, a conventional pedagogy that focuses on a linear progression has become grossly

inadequate in preparing students for the future (Gee, 2004, 2007; Selfe et al., 2007). To prepare

for a more globally networked society of today where access and the ability to gain such access

to information have become imperative for success, students must be given learning

opportunities to become producers of new knowledge (Benkler, 2006; Black, 2008; Jenkins,

2006). Concerned scholars and educators have worked to correct such issues by arguing for the

use of digital games and computer simulations in the classroom to improve student motivation

and engagement.

Advocating for game-based learning, Gee (2007) established thirty-six learning principles

to demonstrate the benefits that anyone could gain from playing videogames. He claimed that

well-designed video or digital games required players to actively participate in an interest-driven

learning process through tackling carefully sequenced challenges, making them to be effective

learning tools for the modern society. Gee (2013) further argued that the use of videogames and

computer simulations in the classroom allowed students opportunities to think deeper about the

materials they are learning since humans think and understand best when they can fully engage their imagination through play.

Because gameplay allows students to experience sophisticated modeling, students can create mental models beyond simple knowledge acquisition (Squire, 2011). In his study on the player behaviors of *World of Warcraft*, a massively multiplayer online role-playing game, Chen (2012) argued that while playing well-designed video or digital games, learners gain opportunities to produce, consume, remix, and critique all sorts of media. Video gameplay provides game players with multiple opportunities to communicate, collaborate, problem solve, and even metacognate, making it an ideal tool for learning. Scholars have also proposed using digital simulations to enhance learning in the classroom. Landriscina (2013) argues that computer simulations can teach factual, conceptual, procedural, and metacognitive knowledge. Due to their immersive characteristics that allow the cognitively enriching interplay between the academic content with complex knowledge systems and the students' mental models that allow systems thinking, digital simulations can enhance classroom learning (Landriscina, 2013).

Of all the benefits that video gameplay or gameplay in general provide, the benefits of literacy development is one of the main focuses of this study. Many scholars claimed the benefits of literacy development through rich narratives (Selfe & Hawisher, 2007). When discussing the benefits of playing videogames, Bogost (2007) discussed the idea of "procedural rhetoric" (p.1) inherent to many videogames. He explained that the power of videogames comes from their complex *rhetoric* that allows players to connect specific experiences with specific content. He argued that playing videogames offers players much more than tangential benefits of having unspecified experiences. By forcing players to become engaged in specific experiences dictated

by a constructed system, well-designed videogames encourage players to examine their biases, which is one of the central goals of literature education.

Role-Playing Games for Literature Education

Although other types of video games can provide complex narrative structures, role-playing games closely resemble classic literature in many ways. A role-playing game allows the players to embody attributes, such as strength, dexterity or intelligence, in playing characters that are predefined in a game system governed by a set of predetermined rules (Yee, 2006), just as literature education encourages its readers to envision themselves to become part of a story's plot using their imagination. Tychsen (2006) identified five distinctive characteristics of role-playing games: "storytelling with rules" (p.76), players' embodiment of fictional characters within the fictional world, players' shared understanding of the various elements of the game, presence of the game master who leads the game, and a minimum of two characters. Literature education aims to teach students to interact with complex and lengthy literature pieces that contain multiple types of tensions and conflicts designed to reveal universal patterns like role-playing games do with a complex set of rules for their players. Literature education demands that students learn to identify details like various literary devices while understanding universal patterns just as role-playing games demand their players to understand the details of the game and the rules. Similar to role-playing games that demand the players to imagine themselves to be someone different during the gameplay, literature education requires the readers of complex literature pieces to imagine themselves as different characters in an imagined world. Literature education highlights how the writer of a fictional story controls every element of the story similar to a game master or game creator who controls various aspects of a role-playing game. Just as role-playing games require at least two characters, typically the game master and a player, literature education shows

that there must be at least two characters, be it inanimate or animate, to provide necessary tension in a story and how their interactions can perpetuate the conflicts in developing the storyline. Similar to complex literature pieces that need readers to become truly relevant and meaningful, a role-playing game comes alive when the players play. At its core, the biggest benefits of literature education is showing how a great piece of literature allows the readers to exercise their creativity by occupying a creative space while reading just as role-playing games allow a player to imagine himself or herself to become a character in a complex imaginary world (Heliö, 2004; Tresca, 2011).

Heliö (2004) categorized three types of role-playing games: analog role-playing games commonly referred to as tabletop role-playing games or paper-and-pencil role-playing games, live-action role-playing games, and computer or digital role-playing games. Bowman (2010) acknowledged that the term role-playing game has been used to describe different practices ranging from board games to card games to videogames. However, she argued that a true role-playing game should be firmly rooted in storytelling communities that were systemically organized to encourage the players to develop alternate identities. This study focuses on the power of storytelling and identity development inherent in role-playing games, in particular tabletop role-playing games, in developing a pedagogical model for K-12 literature education.

Benefits of playing tabletop role-playing games for literature education. There are several characteristics of tabletop role-playing games that make it a perfect tool for literature education. Table 1 illustrates the main features of a typical tabletop role-playing game and its connection to high school literature course according to the CCSS. This study used a dice-based game system due to the popularity of tabletop games like *Dungeons & Dragons* and other typical

tabletop role-playing games that use dice to incorporate unpredictability into the storytelling
process.

Table 1

Comparison between Features of Tabletop Role-Playing Games and Literature Education

Features of tabletop role-playing games	Elements crucial for literature education based on the CCSS
Complex game setting or fantasy world	Understanding the varying demands of audience, task, purpose, and discipline; basic understanding of the setting of a story and its impact on the development of the plot of a story
Complex character attributes and backstories	Understanding of the characters' motives, values, and rationale for particular decisions; valuing evidence; building strong content knowledge
Choices for various roles including game master and different players	Examining of the author's intent; developing and demonstrating independence while reading
Development and overcoming challenges during gameplay	Understanding cause and effect of inciting incidents that propels and dénouement that concludes a story
Multiple players providing multiple perspectives during gameplay	Gaining multiple cultural perspectives through reading, writing, and speaking
Moral and ethical dilemmas inherent in the game and game rules	Evaluating morality and values and their influence on the development of the story
Collective storytelling development during gameplay	Responding to varying demands of audience, task, purpose, and discipline; developing literary competency
Documentation and recollection of complex gameplay	Recalling facts from reading; incorporating textual evidence while writing
Game pieces including the game board	Developing literacy while interacting with digital and other types of visual media as alternative representations of the text

Tabletop role-playing games allow the players to experience the complex character development process foundational to all great literature. According to Cover (2010), tabletop role-playing games are typically played in person using a game board and dice as players take on various characters while following a set of game rules. During the gameplay, a person known as the game master, who manages the overall development of the story using dice-rolls as well as rules and references in the guidebook, leads the story (Pulver, Punch, Jackson, & Hackard, 2008); however, the point of the game is for the players to co-create the epic story while negotiating complex rules set by the game system. Although the game master can guide the players by developing a basic storyline and even provide additional characters not played by the participants, character development becomes the players' responsibility during gameplay. By having to respond to other characters through persistent dialogues and interaction, players develop their play characters that mirror themselves as much as in response to others.

Due to the requirement for the players to co-create complex stories that can last for an extended period of time, Mackay (2001) defines a role-playing game as "an episodic and participatory story-creation system that includes a set of quantified rules that assist a group of players and a game master in determining how their fictional characters' spontaneous interactions are resolved" (p. 4-5). Though he did not specify, he clearly meant to describe a tabletop role-playing game since he recounts his experience as five of his friends sitting around a table with "half-open books, crumpled papers, and chewed pens" (p.5). Deeply rooted in the storytelling culture, tabletop role-playing games allow players to experience storytelling in an intensely situated fashion while interacting with other players in real time (Bowman, 2010; Cover, 2010; Mackay, 2001). This is unlike other types of games that center on creating interactions between the game and the player. Tabletop role-playing games require all players to

tell *storie*s such as overcoming the monster, rags to riches, the quest, voyage and return, comedy, tragedy, and rebirth, which are known as the seven basic plots for all stories (Booker, 2009). In providing numerous opportunities to become creative storytellers, these games fulfill one of the main goals of literature education.

Allowance for full player participation is one of the most important aspects of a tabletop role-playing game since it directly addresses the central tenets of Dewey's (1938) idea of a learner-centered education. As one of the pioneers for social learning theory, Dewey argued for the creation of educational environments that provide the learners numerous opportunities to construct knowledge through interactions with others and their environments. He firmly believed in providing the learners multiple opportunities to experience solving problems. While taking on particular roles during the gameplay, players become active problem solvers who must negotiate rules and limitations similar to various conflicts in literature while developing a sense of self by engaging in a complex storytelling process (Cover, 2010; Mackay, 2001).

Tabletop role-playing games' celebration of open-endedness supports literature education. One of the central arguments of this study is that reading as an act of constructing personal meaning extends beyond simply decoding words written by the writer. Although understanding the plot of a story is an important goal of reading literature, the ultimate purpose for readers is to acquire the ability to apply the lessons learned from engaging in a constructive and continuous dialogue with the characters. Even when the story ends, lessons learned from such interactions often reverberate throughout our lives. Readers often see memorable characters and their moral dilemmas in their lives as well as in themselves. Even when characters perish, they never disappear completely. In that sense, great literature and its influences never cease, and the stories never truly end. Analogously, reaching a clear ending with a final winner is not the

primary focus of a tabletop role-playing game. Although the players can experience numerous epic wins while playing, there is no definite winner since the game can theoretically continue indefinitely (Cover, 2010). Unlike many other games that either pit players against each other or pit players against the game itself, the focus of the table role-playing game is for the players to surmount the challenges together as they elaborate on the storylines rather than winning the game by mindlessly gathering game points (Cover, 2010; Fine, 1983; Mackay, 2001). The structural affordance and emphasis for continuous learning through problem solving makes a tabletop role-playing game an extremely attractive solution to teaching complex and open-ended subjects such as literature where a balance for the content knowledge and skills-education is absolutely necessary.

Tabletop role-playing games also support the psychological and moral development of the players just as great literature pieces do. They allow players to experience a cathartic liberation from their constricting social roles, participate in the creative endeavor of being a part of epic stories, gain additional practical and interpersonal skills, develop a strong sense of self, and try on alternate identities in a safe environment for personal enjoyment (Bowman, 2010). By controlling the fates of all players, game masters are tasked with making fair and ethical choices (Mackay, 2001). Game masters are aware of all the choices made by the players and maintain their power via continuous negotiations with the players. They must exercise scruples in advancing the game. Taking on such a role is a great training for possessing controlled power. Players also make moral and ethical choices as they commit to the historical accuracy and social structure (Fine, 1983). From choosing a role-playing system to deciding the individual actions while playing a character, players continue to develop their sense of fairness. Players must make decisions based on future moral and ethical implications. Rather than simply accepting the

structure of a story or the author's moral universe, players actively experience making decisions that reflect their morality and ethics while playing the game.

In addition, tabletop role-playing games also offer players opportunities to hone practical skills. With the use of dice and the practice of complex points calculation to advance the game, players develop additional mathematical skills and strategies (Pulver et al., 2008). Like in digital role-playing games (Chen, 2012), tabletop role-playing game players build trust through intentional interactions while performing a task, recover from numerous failures, strategize for the good of the group, and learn to deal with serious social issues. Most importantly, tabletop role-playing games permit the players to become engaged in enriching narrative traditions that allow the players seamless transition among the story world, the game world, and the real world while gaining such skills (Cover, 2010).

Game Creation[3] Beyond Gameplay

Yet playing the game only allows the players to temporarily reside in the game creator's imaginary world. Despite the structural encouragement for the players to become co-creators of the story, a tabletop role-playing game confines the content of the story to stay in the purview of the game creator. Furthermore, gameplay rarely requires the players to engage in complex writing activities necessary for literature classes although many players voluntarily engage in them. In order for teachers to harness the benefits from tabletop role-playing gameplay while

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[3] Some might take issue with the term *creation* since the term typically means making something that did not exist prior to the act of creating. It is true that my students did not necessarily create something brand new since they mostly modified existing elements of various role-playing games. However, I used the term creation in an *instructional* sense that students were making something new that they have never been asked to do so in a classroom setting in order to demonstrate their analytical and thesis skills. It also meant that they caused a unique physical manifestation of their varying ideas in a unique fashion. No two classes will have the same exact game even if a teacher follows all the steps exactly. Such an accomplishment warrants a designation of creation.

encouraging students to read and write, a strategy that pushes the classroom beyond simply playing a tabletop role-playing game is needed.

Although built on Hergenrader's (2013) original research conducted with college students, this study focuses on developing a K-12 pedagogical strategy that encouraged high school students to engage in specific instructional activities. First and foremost, the students had to engage in intentional writing practices that referenced the text that they were reading. Unlike Hergenrader's study that focused on creative writing skills development for college students, this study requires high school students who were often reluctant writers to produce vast amounts of writing grounded in canonic texts that they were reading to achieve the instructional objectives set by the Common Core Standards. Second, the study encourages the students to engage in focused dialogues centered on the text, which is one of the major goals of high school literature education. Finally, it aims to develop metacognition skills through intentional collaboration to achieve a common goal of creating a playable game. Table 2 illustrates the features of tabletop role-playing games and their connection to the design of literature classroom activities that matched specific elements drawn from the standards for high school literature education (CCSS, 2010).

Table 2

Comparison Among Features of Tabletop role-Playing Games, Literature Education, and Classroom Instructional Activities

Features of tabletop role-playing games	Elements crucial for literature education based on the CCSS	Classroom instructional activities
Complex game setting or fantasy world	Understanding the varying demands of audience, task, purpose, and discipline; basic understanding of the setting of a story and its impact on the development of the plot of a story	Setting description; game board creation
Complex character attributes and backstories	Understanding of the characters' motives, values, and rationale for particular decisions; valuing evidence; building strong content knowledge	Character description; gameplay
Choices for various roles including game master and different players	Examining the author's intent; developing and demonstrating independence while reading	Game master selection discussion; rules creation; gameplay
Development and overcoming challenges during gameplay	Understanding cause and effect of inciting incidents that propels and dénouement that concludes a story	Adventure description; gameplay
Multiple players providing multiple perspectives during gameplay	Gaining multiple cultural perspectives through reading, writing, and speaking	Gameplay; background research; recursive writing practices; writing feedback process
Moral and ethical dilemmas inherent in the game and game rules	Evaluating morality and values and their influence on the development of the story	Defense of characters' choices during gameplay; rules creation
Collective storytelling development during gameplay	Responding to varying demands of audience, task, purpose, and discipline; developing literary competency	Setting description; character description; adventure description; gameplay

(continued)

Features of tabletop role-playing games	Elements crucial for literature education based on the CCSS	Classroom instructional activities
Documentation and recollection of complex gameplay	Recalling facts from reading; incorporating textual evidence while writing	Gameplay and reflective writing practices
Game pieces including the game board	Developing literacy while interacting with digital and other types of visual media as alternative representations of the text	Game board pieces and other visuals creation

A constructionist pedagogical strategy. Based on the understanding that students learn better by creating in a situated environment through collaboration (Brown, Collins, & Duguid, 1989; Collin, Brown, & Newman, 1989; Greeno, 2006; Martinez & Stager, 2013), this study argues that tabletop role-playing game creation is a superior solution to simply playing a game due to its ability to effectively facilitate the transformation of the learners into knowledge producers for today's knowledge-driven economy (Benkler, 2006; Black, 2008; Gee, 2013; Jenkins, 2006). Because the students must actively participate in the creation process, tabletop role-playing game creation naturally allows students to become true co-creators of the knowledge fundamental to an effective pedagogical practice in literature education that includes both reading and writing (Blau, 2003).

Tabletop role-playing game creation as a pedagogical strategy contains many characteristics of Papert's constructionist model. Although he expanded Piaget's constructivism into pedagogical principles known as constructionism, Papert distinguished his framework from Piaget's ideas. The most significant difference was Papert's focus on the importance of learning context and individual preferences (Ackermann, 2001). In their own words, Papert and Harel (1991) distinguished themselves from Piaget when they said:

> Constructionism - the N word as opposed to the V word – shared constructivism's
> connotation to learning as building knowledge structures irrespective of the
> circumstances of learning. It then adds the idea that this happens especially felicitously in

a context where the learner is consciously engaged in constructing a public entity where it is a sand castle on the beaches of a theory of the universe. (p. 1)

Papert argued for the distributed nature of instruction that moved beyond learning as students created artifacts (Papert & Harel, 1991). Learning activities centered on concrete knowledge were just as important and advanced as developing abstract thoughts (Ackermann, 2001; Kafai, 2006a). Learning, according to Papert, was both situated and pragmatic; therefore, artifact construction was not only useful but also imperative (Papert & Harel, 1991).

Tabletop role-playing game creation helped students understand literature as they created their own narratives. As they created the game, students learned the details of the story that they later used to create the game. Their narratives that contributed to the game creation demonstrated their understanding of the function of protagonist and antagonist, role of conflicts, narrative devices that perpetuate storytelling, and universal themes. While playing the game, students continue to reveal their abilities to become effective storytellers by composing stories, affirming the process as a constructionist pedagogical strategy.

A practical pedagogical strategy for a real classroom: TPACK reimagined. Tabletop role-playing game creation embodies TPACK by seamlessly combining technology, pedagogy, and content knowledge. It addresses the issues of the digital divide and the full inclusion of all the benefits of game-based learning since creating a tabletop role-playing game does not necessarily require access to sophisticated digital tools. Although students can still use many online tools such as Google Docs or forums, teachers can easily implement this model without technological hardware such as computers or even Internet access. Even when they have limited access to digital technology, students are exposed to highly sophisticated educational technology that is inherently game-based learning, making this strategy extremely powerful. Since the process naturally facilitates deeper reading, teachers can incorporate the content while retaining

the benefits that come from the tabletop role-playing gameplay, making it ideal for a high school classroom where content learning is just as important as skill development. In addition, it allows a successful inclusion of the required content, i.e. a literature piece, into the learning process.

Learner motivation. It is no surprise that games are interesting to the players and highly motivational for learning (Chen 2008; Gee, 2007, 2013; Kafai, 2006b; Squire, 2006, 2011). Tabletop role-playing game creation extends the notion of motivation for learning as the player participates in the construction of their knowledge (Gee, 2007; Kafai, 2006a; Papert & Harel, 1991). Because it allows them more control over their play than simply playing designated roles as game players, learners can gain the motivational benefits based on the dimensions of self-identification (Klimmt, Hefner, & Vorderer, 2009). While playing videogames, players are highly motivated (Malone & Lepper, 1987). However, what's enjoyable for players may not match designers' intent (Wang, Shen, & Ritterfeld, 2009). Tabletop role-playing game creation effectively closes an enjoyment gap that often impedes learner motivation. Because the students create the game they want to play over time, the game creation process fully addresses the learner motivation issues.

Gaming Beowulf: Constructionist Pedagogy in High School Literature Classroom

In August of 2013, I launched the first pilot using *Beowulf* that consisted of two parts: game creation and gameplay. Modifying Hergenrader's (2013) overall framework to fit the K-12 educational environment, I designed a 6-week unit on tabletop role-playing game creation to teach an epic poem. The following describes initial instructional decisions, additional theoretical rationale for such decisions, and a brief description of the pilot that led to the eventual design of this study.

Text selection for the first pilot. The pilot began with the survey of the literature canon to choose the most appropriate text to initiate the process. Fine (1983) examined four different popular role-playing games, *Dungeons & Dragons*, *Chivalry & Sorcery*, *Traveller*, and *Empire of the Petal Throne* (p. 16) to describe common characteristics that make them popular. He noticed that these games had highly archetypal characters that possess interesting attributes, strong social structures that provide adventures and conflicts, and a story arc that easily facilitated a hero's journey (Fine, 1983; Pulver et al., 2008). Furthermore, based on many conversations with Hergenrader and other local tabletop role-playing game players, I chose *Beowulf* as the text for the first pilot due to its similarities to one of the most popular and iconic tabletop role-playing games, *Dungeons & Dragons*, which includes battles and heroic deeds of the players as they storm a dungeon and fight the dragon.

According to The British Library Board (2009), *Beowulf* is the longest epic poem in old English that represents the Anglo-Saxon society. It portrays an epic hero, Beowulf, the Geatish prince who lived in current day Sweden, battling and eventually defeating the monster Grendel that had been terrorizing Hrothgar's kingdom in current day Denmark. With four distinctive geographical areas - the Ocean between Sweden and Denmark, Hrothgar's Kingdom in Denmark, Grendel's Cave, and the Dragon's Lair where Beowulf eventually met his death - and various archetypal characters, *Beowulf* was a natural fit for creating a role-playing game that included a hero's journey. In addition, students typically did not enjoy reading *Beowulf* since they considered it to be too ancient to have any relevance to their own lives, making this an appropriate text for a pilot test.

Using Cognitive Apprenticeship in designing the structure. The lesson steps are intentionally sequenced to facilitate the development of problem-solving skills proposed by the

cognitive apprenticeship model (Brown et al., 1989), which evolved from Lave's (1988) research on traditional apprenticeship. Lave observed that the traditional apprenticeship centered on domain-specific tasks and methods for accomplishing such tasks. Traditional apprentices worked to complete situation-bound tasks rather than learning tasks that were distant from the real tasks. In order to help their apprentices reach mastery, masters coached them through careful scaffolding. The cognitive apprenticeship model focused on two important aspects of learning (Collins et al., 1989). First, knowledge should be acquired and utilized to solve real problems in a real-life context rather than an isolated instructional environment. Context mattered in learning. Second, it focused on developing learners' cognitive skills and processes through constant adjustment of the learning environment. Providing and gradually removing scaffolds was crucial. Because the focus was gradually allowing learners to gain skills through continuous practice much like artisans in craft apprenticeship, the activity steps were carefully orchestrated to move learners from simple tasks to complex and divergent tasks.

Because lesson steps centered on building a complex game that moved students from global sets of skills to local skills, students gradually developed complex cognitive and mental tasks through several repetitive and recursive tasks (Brown et al., 1989; Collins, 2006; Collins et al., 1989). For example, students produced copious amounts of writing throughout the pilot via a highly scaffolded writing process. They wrote multiple drafts for the same assignment. For each writing activity, students typically began online postings with one-on-one conversations with the teacher. Once the students became familiar with the tool and gained knowledge about the writing tasks, they collaborated in small groups. Eventually students participated in whole-class conversations that were designed to maximize student learning through productive interactions in an online learning community (Azevedo & Jacobson, 2008; Collins et al., 1989).

The pilot also addressed the problem of lack of writing and digital tools in high schools using game creation. Dennen (2004) pointed to larger class sizes and diversity among students as serious challenges for teachers to implement the cognitive apprenticeship model in K-12 classrooms. She advocated devising useful solutions such as *methods, templates,* and *tools* through ongoing research and argued that more research was needed to help us better understand the use of these solutions. To address such concerns, Brown (2006) offered digital gameplay and digital game creation as possible solutions. He argued for leveraging learners' desire to build games to improve learning rather than solely focusing on researching gameplay experiences. He pointed to rich gaming experience like *World of Warcaft* and *Civilization* as examples, acknowledging the potential of role-playing and game creation. Extending Brown's argument, this study demonstrated that tabletop role-playing game creation with or without the use of digital tools or digital games could enhance student learning in K-12 classrooms.

Developing metacognition through recursive and interactive writing practices. Tabletop role-playing game creation with extensive writing practices was intended to help students develop metacognition. All lesson steps blended critical reading with recursive writing, intentionally engaging all students, to address the lack of writing in traditional literature classes (Applebee, 2000; Applebee & Langer, 2011). In establishing a new pedagogical strategy for creative writing instruction, Hergenrader (2011, 2013) argued for incremental writing practices to develop students' creative writing skills. Based on his initial design, my first pilot also included continuous and incremental writing practices.

However, the pilot focused on developing students' factual and academic writing skills in accordance with the content standards in a K-12 classroom (CDE 1997; CCSS, 2010). Although students wrote constantly throughout the first pilot, they were required to focus on incorporating

the information from their readings, making this an ideal pedagogical strategy for a high school

English class. For instance, students used an online forum to complete daily reflections that

allowed them to develop self-regulation through writing, further developing their metacognition

skills in a technology-aided writing environment (Mair, 2012).

Metacognition and Writing

Flavell (1979) defined metacognition as the knowledge and thinking about all thinking.

He operationalized his idea of cognitive phenomena into four categories including

"metacognitive knowledge, metacognitive experiences, goals, and strategies" (Flavell, 1979, p.

906). According to Flavell, metacognitive knowledge was a person's understanding of others as

cognitive creatures with their own thoughts, ideas, and beliefs. Metacognitive experiences were

any mental occurrences relating to all forms of intellectual activities. Goals, also known as tasks,

were defined as the objectives of a thinking process. Strategies or actions were both the thoughts

and the actions formed when reacting to all forms of cognition. An effective pedagogical strategy

must demonstrate its usefulness with tangible evidence, such as student writing products (Flavell,

1979).

Developing self-regulation. Subsequent researchers included self-regulation and self-

regulated learning as essential components of metacognition in various educational settings

(Dinsmore, Alexander, & Loughlin, 2008; Sperling, Howard, Staley, & Dubois, 2004).

According to Bandura's 1986 research (as cited in Dinsmore et al., 2008), self-regulation meant

that learners could monitor and control their emotions as well as behavior by thinking about their

thinking process. Self-regulation later became closely connected to self-regulated learning,

which meant that the learners could regulate their own thinking, motivation, and learning in a

variety of contexts without the assistance from others (Dinsmore et al., 2008). Applying the

concept to writing skills development, Negretti (2012) argued that a transfer of knowledge from one context to another often originates from self-regulated learning. In other words, self-regulation was necessary for students to develop a coherent manuscript including paragraphs in an essay or essays themselves. Since being able to independently monitor and control one's own knowledge and learning sufficiently enough to apply them to other contexts was an ultimate goal of any educational endeavor, it was no surprise that metacognition had often been declared as a vital component of successful writing skills development (Azevedo, 2009; Azevedo & Jacobson, 2008). Metacognitive skills have been considered foundational to student achievements in the areas of reading, writing, and memory (Flavell, 1979).

   Metacognition and academic writing. One such study dedicated to metacognition focused on academic writing. Negretti (2012) attempted to show how a student's "rhetorical awareness" (p. 144) was connected to his metacognitive skills. Her concept of rhetorical awareness was connected to self-regulation. She investigated how this brand of metacognition helped novice writers acquire necessary skills to select and employ appropriate rhetorical strategies in academic writing because they could monitor and regulate their own thinking. By looking at the way that students answered reflective questions as well as non-prompted reflections that students wrote, Negretti found that students' perception of the writing task played a key role in their ability to learn more efficient writing in an academic setting. To discern the nature of the students' perceptions specific to the writing task, she utilized journaling rather than the think-aloud protocols or interviews typical in metacognition research for her data collection (Schellings, Van Hout-Wolters, Veenman, & Meijer, 2012). Negretti (2012) argued that journaling best exposed the students' self-awareness level because the students retained the evidence of their own thinking processes for further reflection. The study's results showed that

the interplay between the students' metacognitive awareness and their task perception helped the students to further mediate their understanding of the academic writing task. Such increased awareness of specific writing strategies best suited for discrete tasks also improved their self-regulation skills. Negretti concluded that the development of the students' metacognitive awareness allowed the students to better select the most effective academic writing strategies in an academic environment.

Another study examined how technology enhanced metacognition by developing a writer's self-regulation. Mair (2012) focused on reflective practice because it allowed the students to become aware of their own thinking, learn about how to learn, and monitor their own learning process by regulating their own thinking, emotions, and motivation. She further argued that technology could provide resources, opportunities, and familiarity to the new generation of learners who were familiar with available new media. Created based on Dewey's notion of meta-reflection, online platforms such as Haikulearning and Google Docs, where students were allowed to read and comment on each other's writing afforded the users the ability to monitor their previous reflections while composing new ones. Mair found that participants could simultaneously observe their own reflective writings, build new reflections, and reflect on both when using a computer platform that allowed the participants to monitor each other's writing. Mair concluded that the continuous process of self-reflection, which was easily facilitated by technology, increased the participant's metacognitive skills.

In his discussion of metacognition and cultural instruction, Ivers (2007) argued that foreign language teachers needed to incorporate metacognitive techniques into their instructional repertoire. After examining various first- and second-year foreign language courses, Ivers acknowledged that many such courses have neglected metacognition due to a focus on efficiently

delivering basic content. He argued that neglecting the proper inculcation of culture was hindering the learning processes of many foreign language learners (Ivers, 2007). His solution was what he called *emancipation inquiry*, where learners were asked to critically evaluate both their own cultural constructs and the constructs of the new language they were attempting to acquire. His strategies certainly encouraged learners in developing self-regulation. Rather than being asked to memorize and recall information pertaining to superficial topics such as sports, celebrities, and holidays, learners would be asked to evaluate the underlying prejudices or culturally mediated rituals. By engaging in the process of explicit evaluation of cultural implication, learners would develop their language skills as well as metacognition. Each step of this pedagogical model was designed to develop students' metacognition through writing due to their intertwining nature.

Description of the First Pilot

Based on the above theories along with the template provided by Hergenrader's (2011) original research, I developed the first pilot with game creation and gameplay in September of 2013. Game creation had five major tasks: description of *Beowulf*'s world, visual creation, character description, adventure description, and game rules creation. Gameplay had four tasks: fishbowl play, game master selection, gameplay, and assessment (See Appendix A for an outline of the first pilot). The pilot serves as a proof of concept for developing a constructionist pedagogical model based on the TPACK framework. Each step combines the educational technology of tabletop role-playing mechanics with the literature content.

Establishing the lesson objectives. Because it was a pedagogical strategy intended for an actual high school classroom, meeting the standard lesson objectives was important for the first pilot. Therefore, the pilot began with setting clear lesson objectives to address both the

California State Content Standards and the Common Core State Standards for 12th grades (CDE, 1997; CCSS, 2010). Setting the clear and measurable lesson objectives is an indication that a teacher possesses PCK since it drives the assessment plan as well as the course of the activities involved. For this pilot, the lesson objectives contained both the content section and the skills section (See Appendix A) due to the complex nature of literature education. The separation also allowed the creation of a summative assessment based on the students' discrete knowledge acquisition and the formative assessments focused on students' literacy skills acquisition, which are essential to an effective literature curriculum (Blau, 2003; Harlen & James, 2006).

Historical background research and setting description. Prior to interacting with the text, students began with an historical and geographical exploration *Beowulf*'s setting to learn the role of literature as a reflection of society and culture (Booker, 2009). This step was designed to provide students with foundational global skills essential to building a conceptual framework for understanding a literature piece (Collins et al., 1989). It was also designed to improve students' reading comprehension by activating background knowledge (Elbro & Buch-Iversen, 2013). A checklist was provided to evaluate authority, accuracy, objectivity, and comprehensiveness of various online resources to help students gain research skills (Metzger, 2007). Based on the cognitive apprenticeship model (Brown et al., 1989; Collins et al., 1989), students created a draft to receive feedback from peers as they moved from simple to more complex concepts.

Bolter (1998) argued that literacy in today's learning environment has more to do with "production and consumption of images than reading and writing of either hypertextual or linear prose" (p. 7). He continued to argue for an expansive definition of literacy beyond print texts in favor of other types of literacy known as digital literacy (Bolter, 2001). To gain complex digital literacy skills fundamental to literature education (Eshet-Alkalai, 2004; Keefe & Copeland,

2011), students used various digital tools such as Wikipedia, Google Scholar, and National Geographic to acquire specific information while discussing credibility and validity of the sources. After completing the research, students wrote about what they learned. The descriptions served as a summative assessment since students shared the discrete knowledge acquired that were crucial to measuring student learning (Taras, 2010).

Once they completed the written descriptions, students also created visuals (See Figure 2) to demonstrate their visual literacy, which are deemed necessary for students' academic success (Association of College and Research Library [ACRL], 1996; Bristor & Drake, 1994). To develop their visual and other literacy skills, students needed to synthesize the information acquired through their reading in different ways using different media. By drawing and writing about the characters based on the classic text they have read, students were able to ground their new creation and engage in an active process of designing or *constructing* artifacts for learning (Kafai, 2006a). Students created several visuals after each writing segment to reinforce their visual literacy skills, defined as "a set of abilities that enables an individual to effectively find, interpret, evaluate, use, and create images and visual media" (ACRL, 1996). In addition, students wrote reflections of their activity to improve their metacognitive skills (Mair, 2012). After the initial description of the world, students participated in guided discussions both online and in class to help them make connections between the historical information and the poem. For instance, students discovered that the longhouses or mead halls described in *Beowulf* were built high on cliff tops to provide protection against invaders. They realized that the Danes built the hall around a large fireplace to provide relief from harsh winter conditions. Students often referred back to geography or history while describing their imaginary characters and creating the additional adventures, indicating the importance of this activity.

Figure 2. World description and student-created visuals photographed by the author

Game board creation. The game board was an essential part of the gameplay since it was the central physical environment where all gameplay happened (See Figure 3). In addition, a game board as an artifact illustrated students' visual literacy skills and content knowledge as it contained details from the content. Therefore, the game board could be an ideal assessment tool. Unfortunately, all students did not participate in creating the game board during the first pilot since it was not considered essential at the time. Instead, a single volunteer created one board to be used by everyone during the gameplay. Therefore, an opportunity for assessment was lost, establishing a need for change in future iterations.

Figure 3. The front (left) and back (right) panel for a game board from *Beowulf* photographed by the author

Character description. Once they gained the sense of the world where the story took place, the students described the characters. Character description transitioned students from focusing on the factual into imaginative, considered one of the most important functions of literature education (Frye, 1964). To gain the ability to imagine beyond the text, students wrote two descriptions: one character from the book and an imaginary one who has a relationship with one of the characters. While describing characters, students expanded their mental boundaries to create their own communities, to solve problems of character creation, and to explore a variety of identities in a safe and highly contextualized environment (Bowman, 2010). In addition, students drew a picture to accompany their final drafts of the character creation, as a way to continue developing their visual literacy skills (See Figure 4).
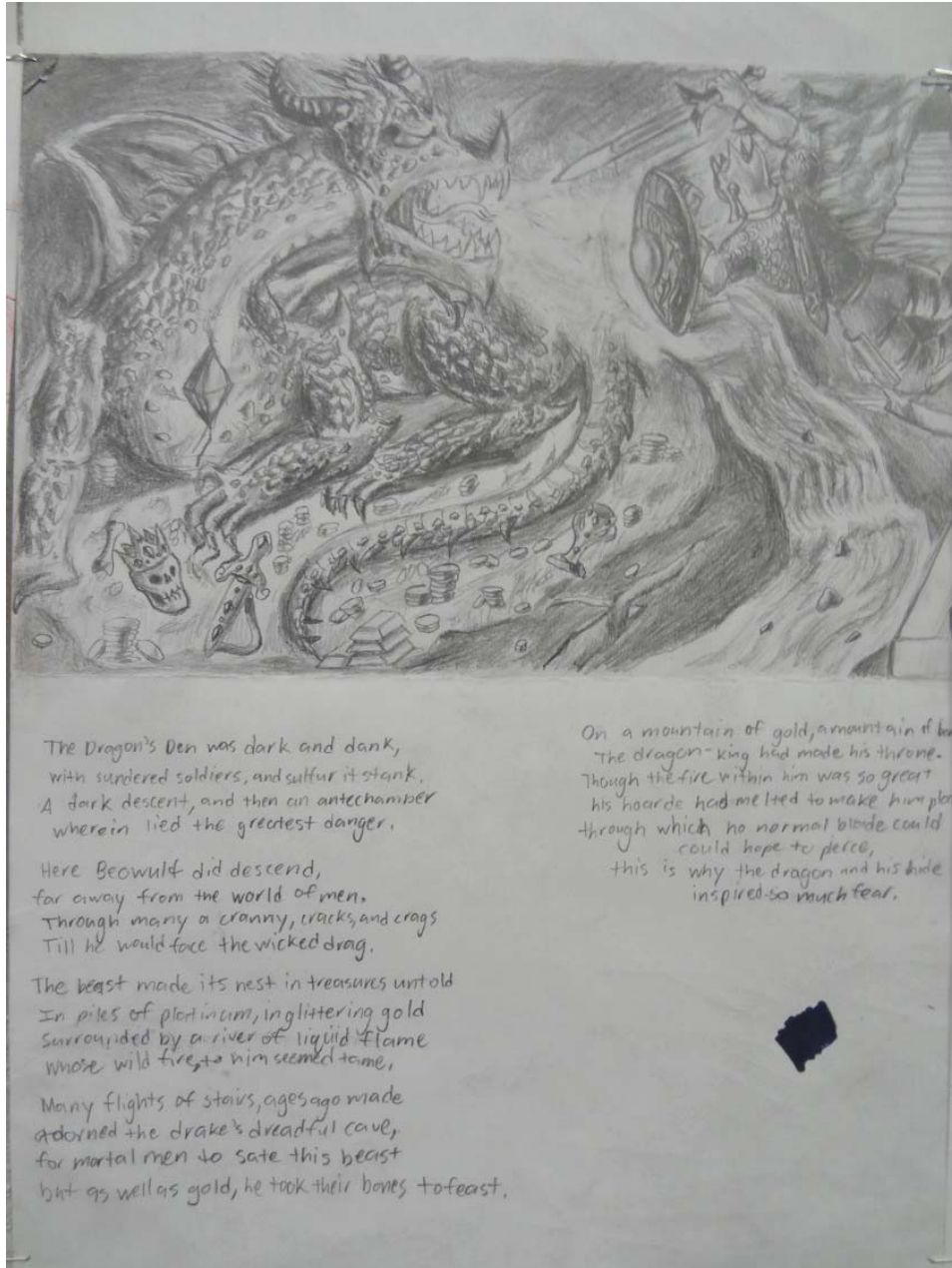
Figure 4. A character visual from *Beowulf* photographed by the author

Adventure description. After describing one character from the text and creating

another imaginary character, the students created adventures using the characters that they

described and created thus far (See Figure 5). Because students chose the story that they wanted

to tell rather than the story that the teacher assigned them to tell, they became true co-creators of

the instructional practice rather than passive learners, gaining agency over their own learning

(Bandura, 2002, 2006). Learner agency is extremely important for adolescents who felt alienated

by the schooling process (Gee, 2013). Therefore, this step became central to all future iterations.

Figure 5. A screen capture of an adventure description from *Beowulf* created by the author

   For the purpose of building a more complex game representative of the complexity of the

text they read, students created adventures for different characters in areas of their choice as long

as they contained factual information from the text. For example, one student created an

adventure in the dragon's lair for one of his imaginary characters while another student created

an adventure that happens in Beowulf's dream while he was traveling from his kingdom to

Hrothgar's kingdom. Such examples showed how students capitalized on the power of storytelling as the conduit for incorporating different textual sources while expressing varying emotions to meet the demands of a high-quality literature education (Brown, Denning, Groh, & Prusak, 2005).

Students posted their adventures in a protected space online and received feedback from one another to improve their descriptions. They were required to read at least three other adventures, and provide feedback on them. Once they received feedback, they were able to edit and improve their adventure stories. Because students who struggled to create innovative stories were able to benefit from reading others' stories to improve their own, the online interactions functioned as an effective scaffold (Collins et al., 1989). After the feedback process, students voted for the most exciting and elaborate adventures. Rather than simply vote for the entry, however, students had to provide the reasons for their choice along with their votes to demonstrate their critical thinking skills, which later were used for assessment.

Additional game pieces and game rules creation. Although the creation of additional game pieces was not planned prior to the pilot, some students expressed their desire to incorporate their prior knowledge of board games into their new games. When asked, students mentioned wanting to use game rules or game pieces from popular board games such as *Monopoly* or *Risk*. By adding additional game pieces such as chance cards uncommon to role-playing games, students demonstrated their abilities to make connections between what they were learning and what they knew. It became clear that game creation naturally empowered students by validating their prior knowledge and allowing them to gain learner agency (Bandura, 2002, 2006).

Once the descriptions of the world, characters, and adventures were complete, students brainstormed the game rules. Rules from existing popular games such as *Dungeons & Dragons* and *The World of Darkness* were used to provide the basic structure; however, it was imperative for students to have the freedom to modify the rules. Such a departure demonstrates students' ability to create a conceptual framework that allowed them to control their narrative process, transforming the steps into a strong pedagogical strategy rather than a simple instructional activity (Bowman, 2010; Collins et al., 1989).

Discussions surrounding the game rules were significant for enhancing literature education because it gave students a tangible opportunity to exercise their decision-making skills. While reading the classics, I often teach my students to search for universal patterns in a complex imaginary world that afforded them the ultimate freedom to rebel against the limitations of the real world, which is central to a high-quality literature education (Booker, 2009). Although primary purpose of the pilot unit was to develop students' imagination, it also provided readers an opportunity to be morally centered and to make tough decisions in a chaotic world due to its power to strengthen one's sense of self by empathizing with others, which represents another important benefit from reading high-quality texts (Bloom, 2000). By witnessing characters' struggle against seemingly insurmountable challenges while reading great classics, learners can learn what it means to overcome obstacles with their moral center intact (Frye, 1964). Therefore, fair and just game rules created through rigorous negotiations served as evidence of student learning of morality as well as imagination from the literature, which became evident as the gameplay unfolded. Even when a player acted to break the rules, the players and the game master quickly subdued or deterred their behaviors from destroying the group's movement forward. In later iterations, balancing the rules to encourage the playability of the student-created games

served as an important assessment opportunity for them to meet the CCSS. Chapter Four contains more information on the applicability of this step.

Although they initially struggled to establish rules quickly since many of them were unfamiliar with complex role-playing game rules, discussions surrounding the game rules revealed what the students valued. For example, one class decided that the players should be allowed to share points if one of the players was to lose all his or her points. The other class, however, decided that such a player would simply spectate. The difference indicated how invested one group of students had become in winning the game as opposed to simply enjoying the interactions while playing the game.

After creating the game rules, students reflected on their rationale, which allowed them to examine their attitudes towards competition. After the initial rules discussion, I asked the students to consider the Anglo-Saxon culture in establishing the game rules. Both groups came to a conclusion that the players were more likely to gift points if another player was to be in danger of losing all of his or her points. Students cited the culture and political climate of *Beowulf* as the rationale for such a decision. According to the students, no one person could survive without relying on others in *Beowulf*'s hostile world; therefore, maintaining fairness through the rules seemed appropriate for the game. By considering the cultural background, the students were able to determine what constituted fairness and the utility of morality. Although its full potential has yet to be explored, rules creation became one of the most important steps for the development of the final pedagogical strategy.

Still, the rules discussion was not extensive during the first pilot, due to both classes having two or three experienced *Dungeons & Dragons* players who were able to modify the basic rules quickly as the gameplay developed. Not wanting to delay the unit, I also allowed the

game masters to edit the rules as they saw fit in favor of moving the gameplay forward, which was altered in later iterations. Chapter Four contains more information on how the rules creation evolved, and its significance to the development of the final pedagogical model.

Pedagogical moves of gameplay. Once the students completed creating the game pieces and rules, students were ready to play. First, they had to choose the game masters. In tabletop role-playing games, game masters are responsible for narrative flow of the game, enforcement of the game rules, affordance of new challenges that propel gameplay, and continuous maintenance of gaming environment through creation of additional characters (Tychsen, Hitchens, Brolund, & Kavakli, 2005). Since the gameplay heavily relied on the flexibility of the game rules set forth by the game master during the first pilot, game masters strongly influenced the choices of all players and are responsible for moving the story forward just as a fiction writer would. Therefore, choosing a game master with little imagination has the potential to stagnate the progression of the game.

During the first pilot, the students engaged in a whole-class discussion regarding the characteristics of a good game master. To choose a good game master, the students had to consider narrative talent, negotiation skills, patience, and quick thinking skills in choosing their game masters who could provide the players with enriching literary experiences (Mackay, 2001). Although both gameplay and game-creation have traditionally been male-dominant (Ivory, 2006; Williams, Martins, Consalvo, & Ivory, 2009), the narrative-focused nature of tabletop role-playing games seemed to encourage both male and female students to volunteer as game masters during the first pilot testing. The importance of having proficient game masters for the success of the unit and how the final model addresses this issue are included in Chapter Four. A typical tabletop role-playing game can accommodate a fairly large group, but a group was limited to six

to eight members including the game master to encourage the participation of every member throughout the gameplay. Each class had four to five groups when the gameplay began. After each day, students documented what they did and reflected on their decisions.

Post game debrief. The post game debrief revealed that the students were generally satisfied with the entire process but disliked the amount of writing they were required to produce. Ironically, such complaints showed that the process was effective in improving writing instruction since students continuously practiced writing and produced more than they would have otherwise (Applebee, 2000; Applebee & Langer, 2011), indicating the potential power of this pedagogical strategy.

Study Lesson Steps

Based on the experience from the first pilot, I created the following instructional plan for this study. As with the first pilot, the overall plan contained two main parts. Part one addressed the physical game creation; part two addressed the gameplay. Table 3 lists the overall instructional schedule along with a brief description for each activity. An activity signifies the duration of the particular instructional activity lasted longer than a normal class period of fifty-eight minutes. Two of the first set of lesson plans for the first iteration (Appendix B) and two CCSS-aligned sample rubrics for assessment (Appendix C) appear in the Appendix Section of this document. The initial plan contained twelve activities.

Table 3

Initial Instructional Plan

Activity Number	In-class activity	Student task	Student created artifacts	Learning goal	Evidence of learning
Activity 1	Background research	Complete the background research; create a description and post it online	First forum post on the background	To teach the role of literature as the reflection of its society and culture; use of online resources	Inclusion of the explicit connection between the piece and the society and culture it represents in writing; citation from the resources used
Activity 2	Setting description	Complete the first draft of the setting description and peer edit version 2; create 3 drafts of the descriptions	Setting description version 1 in the notebook; version 2 and 3 online	Synthesize information from the reading and produce a coherent description; produce legible and coherent manuscripts; recognize errors in writing and provide feedback	Inclusion of the information from the text; abilities to improve writing based on peer-feedback; grammatically correct feedback; content-based correction in feedback; complex syntax development
Activity 3	Character description	Create 2-3 character descriptions based on the text; peer edit version 2; create 3 drafts of the book character descriptions	Book chapter character description version 1 in the notebook; version 2 and 3 online	Same as above	Same as above

Activity Number	In-class activity	Student task	Student created artifacts	Learning goal	Evidence of learning
Activity 4	Imaginary character description	Describe one imaginary character; peer edit version 2; create 3 drafts of the imaginary character	Imaginary character description version 1 in the notebook; version 2 and 3 online	Synthesize information from the reading and produce a creative description of a character based on the information in the book; produce legible and coherent manuscripts; recognize errors in writing and provide feedback	Same as above
Activity 5	Visual creation	Create a drawing and description of a setting, a book character, or an imaginary character	A drawing and attached written description	Create a visual representation as well as written description of the setting and the characters; make decisions based on the information and prior experience; visual literacy	Same as above; a visual that represents the content
Activity 6	Adventure creation	Describe three possible adventures and post all of them online; provide and receive feedback	Adventure description version 1 in the notebook; version 2 and 3 online	Create a list of adventures based on the information gathered over time; negotiate to the rules of the text in describing possible adventures; be creative and logical in the description of the possible adventures	Inclusion of the information from the text in creating the adventures; ability to stay connected to the fictional universe while being creative

Activity Number	In-class activity	Student task	Student created artifacts	Learning goal	Evidence of learning
Activity 7	Game board creation	Create a section of a game board	Game board pieces	Create a visual representation of the game universe	Inclusion of the information from the text
Activity 8	Rules discussion	Discuss and decide on game rules; write the rule books; write reflections	Written rules in the notebook and a set of rules to be used to by all groups	Apply the existing game rules to create personalized rules; ability to articulate personal opinions verbally	Elements of the existing game system along with new rules; complex verbal and written expressions of morality or ethics of certain rules
Activity 9	Game master selection	Create a list of characteristics of a great game master; reflect and choose a book character who would be the best game master	Self-reflection journal on the qualities of good game master	Develop self-reflective skills; learn and articulate the qualities of a good leader/game master; negotiate and come to decisions for the good of the group	A written list of characteristics for a good leader/game master; reflections on the leader selection process and choices

(continued)

Activity Number	In-class activity	Student task	Student created artifacts	Learning goal	Evidence of learning
Activity 10	Gameplay and debrief	Play and describe the gameplay; reflect on the gameplay	Descriptions of the gameplay and daily reflections	Develop reflection skills; justify the morally ambiguous decisions in writing; negotiate the rules of the game; learn to effectively communicate verbally in addition to writing; good record keeping skills; connecting the literary devices used in developing good stories	Moral justification of the gameplay decision; detailed and logical written record of the gameplay; articulation of the literary elements used during the gameplay
Activity 11	Wrap up	A classroom discussion	Debrief data	Demonstrate the additional knowledge gained from reading	Student reflections

Critical nature of the model: leveraging game-based learning. Although this plan included several activities that are common in a typical English curriculum such as character description or visual creation, additional activities included in this plan clearly differentiated the model from other types of pedagogical practices typical for high school English classes. The plan included activities such as imaginary characters description and adventure description that were specifically designed to encourage students to write creatively while grounding their knowledge in the text. Rather than allowing the instructional activities to be episodic and disconnected from one another, the plan aimed to integrate all activities into the creation of a playable tabletop role-playing game through careful sequencing and continuous scaffolding. The overall goal of the tabletop role-playing game creation was to provide a necessary yet positive pedagogical tension to enhance student learning as they engaged in each instructional activity. The initial model, therefore, encouraged the students to demonstrate the literary fluency necessary to create something beyond simple description or analysis of a single event that are standard in high school curricula.

Part one: Physical game creation. Each student was responsible for creating a single panel of a larger game board, several visuals representing story setting and characters, and additional game pieces for the physical game creation portion. The initial plan required the students make suggestions for game rules for the final gameplay. The plan also asked the students to conduct background research, write character descriptions, and generate possible adventure descriptions during the game creation process. The following section contains the general information regarding my original plans prior to first iteration. The details of all specific changes made during two iterations appear in Chapter Four with the analysis of the data and appropriate justifications.

Activity 1: Background research. Game creation included historical and geographical background research designed to teach the students the role of literature as the reflection of society and culture (Booker, 2009). This activity was to provide students with foundational global skills essential to building a conceptual framework for understanding a literature piece (Collins et al., 1989; Eshet-Alkalai, 2004) and digital literacy skills (Cambridge Assessment, 2013; UNESCO, 2008). Throughout the research process, students were to evaluate authority, accuracy, objectivity, and comprehensiveness of various online resources (Cuban, Kirkpatrick, & Peck, 2001; Metzger, 2007). Initially, the plan called for students writing three drafts: first draft with only the factual information, second draft with the information from the literature piece, and third draft after receiving feedback from others (Brown et al., 1989; Collins et al., 1989), which changed drastically. Chapter Four includes the changes and rationales.

Activity 2: Visual creation. After completing their initial background research, students were to create multiple visuals including the sections for the game board, drawings that show the story's settings, portraits of three to four different characters both in the story and purely imagined, and the scenes from the events and adventures both in the book and purely imagined. Each visual had to contain information from the text per instruction. However, students created one game board piece and a character visual during both iterations. Chapter Four includes the rationale for such changes.

Activity 3: Writing. During both the game creation and gameplay, students had to continuously write using their notebooks and online forums. Game creation required students to create detailed descriptions of the setting, several characters, and possible adventures. For each category, each student was supposed to write the first draft by hand, edit it in a small group in class, post the edited versions online to receive feedback from three other writers, revise it again,

and then post the final version online. However, the plan changed during both iterations. During the gameplay, students were to write daily reflections, which contained the type of adventures, rationale for personal decisions during the gameplay, and lessons learned.

This activity was intended for students to take on multiple identities as both readers and writers, which is one of the most fundamental goals of a high school English class mandated by the content standards (CCSS, 2010). It was meant to encourage the students to interact with the primary text and students-created texts. The plan required students to reference the text and cite the sources. The main purpose was to gradually move the students from the concrete to abstract so that the students could sustain a meaningful interaction with a lengthy and complex text.

Activity 4: Rules creation. For rules creation, the plan called for students to form small groups. After creating a rulebook in a small group, students were to provide rationales for their decisions during a whole class discussion. This activity endured the most significant changes during both iterations. Instead of modifying elaborate rules for existing tabletop role-playing games, students were asked to devise simple and manageable rules for gameplay. Originally, there were five simple steps to creating the rulebooks. However, this activity became more challenging than originally anticipated. The details regarding the challenges and subsequent changes appear in Chapter Four.

This activity was designed to help students learn how certain decisions and their reasons for such decisions reveal the decision makers' worldview and ideology to meet the mandates from the CCSS. By sharing their opinions and negotiating the rules that impacted all the players, students were encouraged to examine and express their core values, typical in literature education (Bloom, 2000; Booker, 2009; Carnes, 2005; CCSS 2010; Frye, 1964). Shelden and Biddle (1998) listed the narrowness of the curriculum that has dampened student interest and

inhibiting critical thinking as the most dangerous perils of today's K-12 educational system. By engaging in instructional activities that encouraged critical thinking and moral decision making, the plan intended for students to develop additional skills that were fundamental to their overall intellectual development.

Activity 5: Game master selection. A game master manages a tabletop role-playing game by maintaining the narrative structure of the game, supplying additional challenges to the players, and enforcing the game rules (Makay 2001; Pulver et al., 2008). Initially, the plan called for four to five game masters per class. Due to the size of the class and the scheduling limitations, however, there was only one game master during the first iteration with six players. During the second iteration, there were four game masters as was planned originally.

Students were to generate a list of necessary characteristics for a good game master and the reasons prior to selecting the game masters. After compiling the list, students were to discuss who would make good game masters in groups. Although choosing a game master was another way that the students could learn their decision-making skills, this task was designed to help the students become self-reflective of their own strengths and weaknesses through self-reflective journaling (Gleaves, Walker, & Grey, 2008).

Part two: Gameplay. Tabletop role-playing game creation as a pedagogical model provides opportunities for students to acquire complex literacy skills beyond acquiring discrete information that are often favored in K-12 educational environments (Hagstrom, 2006; Taras, 2009, 2010). Therefore, this became one of the most critical elements of this pedagogical model. By requiring the gameplay, the model intended to help the students gain critical literary skills as they embodied different identities through the characters that they chose to take on, made decisions as the narrative developed, and participated in the story creation process. The

gameplay was intended to provide students opportunities to make narrative decisions that impacted not only themselves but also the other players because they each had to act and react to others' decisions.

This activity was deigned to harness the power of gameplay core to this pedagogical model. The plan called for students to react to not only the author's words but also the interpretations of other readers during the gameplay. Because the gameplay was to require them to provide evidence, it was meant to encourage and even force students to defend their decisions in a public manner, exposing the depth of their understanding of the text. It was intended for students to gain valuable opportunities to become active participants of the narrative process rather than remain passive spectators and readers that are common in K-12 literature education.

Activity 1: Narrative creation. The plan required the students to create narratives throughout the gameplay as players while the game masters monitored the plausibility of the stories generated from the players. After two to three days of playing, each group was to share the progress of the gameplay. The plan called for the students to consider how the fiction writers use of standard literary devices such as foil, point of view, and inciting incidents to develop their stories as they played the game. During the first iteration as they created the character visual, the students were to be required to include a minimum of three types of literary devices. Chapter Four included the examples and data analysis results.

Although it was tough to find enough time since typical tabletop role-playing game of a specific story (often referred to as a module within a larger campaign) can last several days if not several months, the plan included this activity since it was critical for students to experience the power of narrative creation embedded in tabletop role-playing games (Mackay, 2001). The gameplay was central to addressing one of the challenges of today's literature education where

students reported feeling bored while reading complex literature pieces (Clark & De Zoysa, 2011) and disconnected from the stories of others despite their desires to experience the exciting stories of many archetypical heroes and heroines while reading fictional works (Appleyard as cited in Sainsbury & Schagen, 2004). By allowing students to embody their collective stories, this pedagogical strategy intended students to become active participants of the larger literary community.

  Activity 2: Reflections on the decision-making process. Gameplay was supposed to help students experience how to make good decisions that could determine the fate of all the characters involved in the role-playing narrative. This activity was designed to meet the additional goal of helping students experience morally challenging situations and teach them to become empathetic (Booker, 2009; Frye, 1964; Jay 2014), which is one of the many benefits of a quality literature education. Although reading great classics can provide diverse and complex experiences for readers to grapple with ambiguous moral and ethical dilemmas, it is still linear and controlled by the narrative structure of the author. By making spontaneous yet morally laden decisions about the characters during the gameplay, students were allowed to move beyond being simple readers and became storytellers however temporary. Such a contextualized experience was deemed crucial to improving students' critical thinking skills. In other words, it was meant somewhat to *force* the students to make moral and ethical choices according to the rules that provided additional tension, so that they had no choice but to exercise their critical thinking skills. Such experiences were to teach students to consider moral and ethical implications of various life choices inherent in great classics.

  Gameplay was to provide opportunities for students to reflect on their decisions, evaluate them, and alter or persist. Such experiences, typically lacking in a traditional literature education,

were meant to allow the students to experience what it means for them to fully integrate into the

society they live in as confident and competent participants (Bowman, 2010). Therefore, the plan

required the students to write daily reflections during the gameplay. Analysis of the reflections

appears in Chapter Four.

Rationale for Conducting Design-based Research

At the conclusion of the first pilot, a need to formalize this pedagogical model emerged.

Among all available research methods, design-based research fit the best for creating a

generalizable pedagogical due to its definition and efficacy.

Definition of the design-based research. Barab and Squire (2004) defined design-based

research as "a series of approaches, with the intent of producing new theories, artifacts, and

practices that account for and potentially impact learning and teaching in naturalistic settings" (p.

2). Wang and Hannafin (2005) further elaborated design-based research as:

> a systematic but flexible methodology aimed to improve educational practices through
> iterative analysis, design, development, and implementation, based on collaboration
> among researchers and practitioners in real-world settings, and leading to contextually-
> sensitive design principles and theories. (p. 6)

There are five major characteristics of the design-based research method (Van den Akker,

Gravemeijer, McKenney, & Nieveen, 2006). Design-based research is used to create intervention

strategies that could be used in real world settings including classrooms. Its process is highly

iterative and included several cycles of design, evaluation, and revision of the specific

intervention strategies. It focuses on understanding and improvising the process rather than

simply discerning a single cause or context-free effect from an experimental treatment with

highly controlled variables and experimental conditions. It measures practical utilities and impact

of the process in real-life contexts. Finally, it aims to contribute to a broader process of theory

building; this distinguishes design-based research from action research, which focuses on the individual and his or her immediate work context (Anderson & Shattuck, 2012).

One way to understand design-based research is to compare design-based research to other types of research methodology. Collins (1999) contrasted design experiments, a progenitor of design-based research, and laboratory studies of learning. Such distinctions allowed researchers to differentiate design-based research from other types of educational research methodologies, especially traditional psychological experimentation that had dominated educational research for centuries. He argued that educational research should be conducted to develop practical strategies for real classrooms since the purpose of research was to enhance student learning in real life. He found his solutions in the product development community as he and other researchers worked to establish design-based research as a viable research method for education that addressed various shortcomings of psychological experimentation. Design experiments were set in messy, real life situations as opposed to laboratories since learning in laboratories rarely looked like learning in a typical classroom. It dealt with three different types of variables that he labeled as climate variables, outcome variables, and system variables rather than a single dependent variable. Unlike in psychological research where researchers often attempt to control variables, researchers conducting design experiments made no attempt to hold any variable constant. Instead, they endeavored to identify the nature of all variables as well as the extent of their effects. Researchers were allowed to alter the research plan throughout the implementation phase rather than having to follow the initial plan without any alteration. Also unlike in most psychological experiments where social interactions were either ignored or highly discouraged, social interactions were encouraged and even valued. As a result, researchers expected to deal with noisy and messy data from all the interactions. The researcher worked on

developing a profile or a set of critical characteristics rather than testing hypotheses. Collaboration among all participants regardless of their roles was highly valued, unlike in psychological experiments where the roles were clearly defined and unbreachable.

Reeves (2006) further distinguished design-based research from predictive research. He argued that design-based research was particularly useful and appropriate for educational technology research since a simple installation of new technology in the classroom did not always guarantee success and required constant adjustments and refinement during implementation. Wang and Hannafin (2005) argued that the researchers must establish strong theoretical foundations and must set practical goals at the onset. The researcher must collect data and analyze them immediately to inform the iterative design process, and the design must be generalizable.

Rationale for using the design-based research method for this study. The design-based research method, with its context-bound and practice-focused nature, is an ideal choice for the complex endeavor of developing a new pedagogical model (Barab & Squire, 2004; Brown, 1992; Mishra & Koehler, 2006). Design-based research bridges the gap between a new item being designed and its implementation in a real educational setting (Collins, Joseph, & Bielaczyc, 2004). It is grounded in the notion that learning and contexts are co-constituted and should not be treated as isolated entities from one another (Barab & Squire, 2004), which is crucial in literature education where important skills such as reading and writing cannot be easily separated from the content such as the literature piece being read or the context that it was produced including history and culture.

Design-based research traces its roots to educational research conducted in real life situations that aimed to develop useful and practical solutions to educational problems (Brown,

1992; Van den Akker et al., 2006). For example, Brown and Campione (1996) used design-based research to develop a model known as *a community of learners* for grades one through eight. Through iteration and curriculum creation, they established design-based research as an appropriate research method for educational research that led to the creation of effective intervention strategies for student learning. Design-based research was also used for Joseph's Passion School Project where she developed an interest-based curriculum in three phases (Joseph, 2000, as cited in Collins et al., 2004). Based on data generated after each phase, a new theoretical framework known as *Interest-Driven Learning (IDL) Design Framework* emerged (Edelson & Joseph, 2001).

Another example was the BGuILE project where researchers developed software and activities as discipline-specific scaffolds for science education (Reiser et al., 2001, as cited in DBRC, 2003). Using Wang and Hannafin's process (2005), researchers identified the influence of students' psychological perceptions, which were not considered at the onset of the project, on their understanding of scientific information (Sandoval, 2003). By analyzing daily conversations, student-created artifacts, and instructional steps, researchers also gained additional insights into the role that teachers played in helping their students capitalize on the affordances of learning materials (DBRC, 2003). Discoveries of concomitant yet extremely useful insights demonstrated the usefulness of design-based research for educational research.

Chapter Summary

This chapter began with the critical features for this study, followed by the definitions of terms. It provided rationale for using the TPACK framework and its efficacy for literature education. It described what game-based learning is and listed features that make role-playing games appropriate for literature education. It argued for why specific features of tabletop role-

playing games were beneficial to literature education. It added various theoretical justifications for creating a pedagogical model centered on tabletop role-playing game creation and provided a detailed description of the first pilot on *Beowulf*. It listed the original study lesson steps followed by the rationale for using design-based research.

Chapter Three: Methodology

This study aims to create a new type of pedagogical model for literature education using the design-based research method. The goals of this study are to:

- develop a Common Core Standards-based constructionist pedagogical model for use in high school English classes using tabletop role-playing game creation that facilitates purposeful interactions between students and complex literature pieces.

- develop useful criteria to improve future iterations of a new pedagogical model that uses tabletop role-playing game creation.

This chapter begins with the study design overview. It provides the plans for data collection and analysis. It includes information regarding the researcher, research setting, the participant selection process, and human subjects considerations. It concludes with the means to ensure study validity and reliability and the data security plan.

Study Design Overview

To design a robust pedagogical model, this study had two phases using two different groups of students and two different types of text. The research aimed to answer one of the questions that emerged after the first pilot based on *Beowulf*, which was whether tabletop role-playing game creation could be used for other types of text other than epic poems. Such a choice was to address the issue of generalizability of the design (Barab & Squire 2004; Collins et al., 2004; DBRC, 2003; Glazer & Hergenrader, 2014; Van den Akker et al., 2006; Wang & Hannafin, 2005). Since the final pedagogical model was intended for K-12 education, a primary focus of this study was to develop a model based on the CCSS. Table 3 in Chapter Two showed the original plan.

Text Selection

During the first phase, referred to as Iteration One: Novel, a group of high school juniors in two Honors sections used Ray Bradbury's novel *Fahrenheit 451* to create a tabletop role-playing game. During the second phase, referred to Iteration Two: Play, a group of seniors in an Advanced Placement English literature class used Oscar Wilde's play *The Importance of Being Ernest* to create another tabletop role-playing game. The texts represented major literature genres typical in high school literature curricula in addition to an epic poem, which was already used during the pilot.

Plans for Data Collection and Analysis

Due to the cyclical nature of design-based research, there were two phases of data collection and analysis as well as an additional phase for finalizing the model. Both iterations included data collection and analysis. The finalized model appears at the conclusion of this chapter.

Table 4 operationalized the data collection and analysis plan. Since the model was intended for the K-12 educational environment, the CCSS became the foundation for measurement of success of this strategy for all data sources and analysis. In accordance with the design-based research method, I conducted all data analysis to inform and improve the pedagogical model by looking for certain markers that demonstrated the effectiveness of the model (Brown, 1992; Brown & Campione, 1996; Edelson & Diana, 2001).

Table 4

Data Collection and Analysis Plan

Element /criterion	Definition	Data source	Collection method	Analysis
Synthesis of background knowledge	Ability to philosophical, political, religious, ethical, and social influences of the historical period that shaped the characters, plots, and settings	Student forum posts	Random selection of journal entries from 25% of the participants after the setting description activity	References to specific terms that represent philosophical, political, religious, ethical, and social influences such as communism, totalitarianism, democracy, justice, liberty, etc.
Critical thinking	Ability to solve problems and create new ideas or items based on the knowledge gained	Students' imaginative character descriptions, reflections, and gameplay journals	Random selection of journal entries from 25% of the participants four times	Code for key phrases indicative of critical thinking including, if /then statements; appearance of new information following because or since; new content
Literary terms	Domain specific terms such as irony, tone, mood, and archetypes	Students' discussions of the terms; Objectives posttest	Record small group feedback sessions	Code for terms such as irony, tone, mood, and archetypes
Writing skills	The use of vivid, fresh, and natural language; development of complex sentences and writing styles	Student posts and written reflections	Random selection of the forum posts from 25% of the participants	Code for the use of multisyllabic terms; presence of varying and complex sentences; word count of each posts; type of feedback provided by the students (grammar, syntax, and content)

(continued)

Element /criterion	Definition	Data source	Collection method	Analysis
Literacy development	Ability to use a variety of medium to express ideas	Student artifacts and accompanying descriptions	Game board pieces and visuals from 25% of the participants	Holistic scores from the rubric for visuals
Volume of writing	The number of words in a post; number of posts; total length of writing	Forum posts; journal entries	Forums posts and journal entries from all participants	Count the number of words in the forum posts and other writing assignments
Student attitude	Students' attitude towards literature	Classroom discussions	Video recordings	Key words that indicate the students' attitude towards the instruction

Since one of the major instructional goals was to improve literature education via robust writing instruction, student writing became the basis of data and analysis. The data analysis focused on understanding students' attitude as well as confirming their writing skills acquisition (Applebee & Langer, 2011; Black & William, 1998; Taras, 2010). Therefore, the number of words, length, and linguistic complexity in each assignment became important. The decision to count the number of words was based on the 2011 Nation's Report Card on Writing. According to the report card, high school students wrote approximately ninety content-based words per week in their English classes (Applebee & Lager, 2011; NCES, 2012); therefore, Chapter Four included the number of words written by the students per each assignment. I conducted additional analysis of audio recordings and video recordings from the student interactions, which revealed the presence of foundational literacy skills listed under the elements and criterion section of the table above.

Analysis on three randomly chosen student artifacts from three students per class, for nine in total, indicated whether students acquired basic writing skills as well as visual literacy. I

collected and analyzed video and audio recordings of game rules creation discussions and audios

of small group discussions during game board creation and assembly to demonstrate whether the

activities resulted in increased meaningful interactions among students that led to student

learning. I analyzed students' daily reflections to measure student agency (Bandura, 2002, 2006).

In addition to student-created products, I kept a daily research journal to document the

occurrences of any unexpected events to inform the future design process (Collins et al., 2004;

Creswell, 2013; Grey, 2014). My personal reflections that were not critical to model creation

appear in Chapter Five.

At the conclusion of each iteration, I conducted two cycles of coding for the class

discussions and randomly selected writing products (Saldana, 2013). During the first cycle of the

first iteration, I used holistic and descriptive coding due to the fluid and spontaneous nature of

the collected data (Saldana, 2013). I used six different codes from the table above, *synthesis of*

background knowledge, critical thinking, literary terms, writing skills, literacy development, and

student attitude. I also added two new codes, *details from the text* and *CCSS*, as the study

developed.

One weakness of design-based research is the impossibility of collecting and analyzing

all possible forms of data due to the dynamic nature of the research setting and the frequent

occurrences of unexpected events (Hoadley, 2004; Wang & Hannafin, 2005). Acknowledging

the weakness of the design-based research method, I focused on collecting and analyzing only

the data that exposed the central characteristics of the pedagogical model that led to informing

the improvement of the pedagogical model (Brown, 1992; Collins et al., 2004; Grey, 2014). The

decision was based on this being the *initial* research to develop a deployable pedagogical model

that could be used in other classrooms with other teachers. Therefore, Chapter Four contains only

what was essential to the development of the pedagogical model, and Chapter Five includes further discussions on additional items.

Role of the Researcher

Because design-based research uses multiple methods for data collection that includes qualitative data, it is important to understand the role of the researcher (Creswell, 2013; Van Den Akker et al., 2006). I am a high school English teacher with thirteen years of teaching experience. I have taught in two different districts and at five different comprehensive high schools. I have taught all four grade levels of high school English classes as well as all skill levels ranging from English Language Development Level I, who are commonly referred to as newcomers who have little or no English language skills, to senior Advanced Placement English Literature, who are typically considered ready for college-level courses prior to high school graduation. Currently, I teach at a high school in the State of California. In addition, I won multiple teaching awards including the County Teacher of the Year award. I have also served as a mentor teacher for other teachers and a master teacher for pre-service teachers for many years. I have provided a number of professional development workshops at national conferences for English teachers. Based on my years of experience, I consider myself to be a competent, professional educator who is able to make appropriate instructional decisions for my students. I also acknowledge that a level of fluidity to the execution of my plans could have been due to my experiences not due to the effectiveness of the model. Chapter Four contains the ways that I responded to the development of the unit and suggestions to minimize the overreliance on specific teacher expertise. Some of my personal insights and reflections that were not essential to the development of the model but could be useful to other teachers were included in Chapter Five.

Description of the Research Setting

According to the California Department of Education (2013), the high school I taught at

opened its door in August of 2008. As of 2013, it had 1881 students, and offered eight different

types of English classes: Special Education English for all grade levels for students identified as

needing Special Education services; English Language Development for students identified as

English leaners; Literacy for freshmen identified as needing additional support; California High

School Exit Examination preparation for juniors and seniors who have not passed the exam;

Gifted and Talented English classes for freshmen and sophomores; College Preparatory for all

grade levels; Honors for juniors and seniors; and Advancement Placement for juniors and

seniors. A vast majority of students took college preparatory English classes, and there were few

special requirements or prerequisites for students wanting to take Gifted and Talented, Honors,

or Advancement Placement classes for the 2014-2015 school year.

Participant Selection

Due to the characteristics of the design-based research method that require more than one

data collection cycle, I chose two groups of students that I had access to at the time of this study.

Therefore, I worked with two Honors English sections (25 and 31 students respectively, a total of

56 students) for the first cycle and an Advanced Placement section (21 students) for the second

cycle. My choice reflected my desire to implement the strategy for classes with different skills

and grade levels to gain further insights (Barab & Squire, 2004; Collins et al., 2004; DBRC,

2003; Wang & Hannafin, 2005; Van den Akker et al., 2006).

Juniors self-selected into the Honors classes, and seniors self-selected into the Advanced

Placement class. Once the students selected the course, the school's computer program grouped

them in two different class sections. Even though they were in two separate classes, my juniors

interacted in a single group for the online forum posts and peer-editing tasks while generating visuals and rulebooks as two separate groups.

Because I worked with the students I already taught for over six months, I had many benefits that I did not initially anticipate. For example, my students have been a part of a Google Chromebook pilot and had been using an online Learning Management System (LMS) for many months. As a result, I was able to rely on their technical proficiency, which dictated the development of the unit in an interesting way. Chapter Four includes the impact of students' technical proficiency and means to respond to the lack of such skills in implementing the unit.

Human Subjects Considerations

This research was educational research that was conducted in the context of a typical instructional practice. As a result, the risk to the human subject is minimal, and the study required only an exempt institutional review board (IRB) application under 45 CFR 46.110 and 21 CFR 56.110. Furthermore, I already obtained written permission from the site principal to conduct design-based research (See Appendix D). I also obtained written permission from the parents and assent from the students to use class data generated for this dissertation per Pepperdine's IRB requirements (See Appendix E). I provided the option for a student or parent to opt out from this study. I planned to provide the student with an alternative instructional activity for the duration of the study as was common in such cases. However, no one opted out of the study.

Prior to reporting, I removed all identifying personal information from all participant-produced products used for analysis. All likeness of the participants was obscured in the photos or videos prior to reporting to protect their privacy. No individual grades or test scores that could be traced back to an individual participant were reported.

Means to Ensure Study Validity and Reliability

Due to the purpose of DBR and the goals of this study, I acknowledge that a wider implementation of the pedagogical model was necessary for generalizability or even plausibility of the model (Grey, 2014). To ensure the validity and reliability of the study, I collected a variety of data through all iterations and attempted to achieve a sufficient level for multiple triangulations of data (Denzin, 1989, as cited in Grey, 2014; Flick, 2006, as cited in Grey, 2014). Following Creswell's (2013) recommendations for ensuring the validity of the study, I provided detailed descriptions of the process, clarified the bias, and reported any failures in the final report. To ensure the internal validity, all measurements and questionnaires focused on revealing the critical features of the pedagogical model to achieve the research objectives. The study had two iterations of the lesson steps. For reliability, I included a significant portion of audio transcripts of the classroom discussion sessions and students' writing samples. Since the class activities were developed based on the CCSS, I used them for analysis to ensure the reliability of the findings.

Data Security Plan

Numeric codes indicated individual students' participation whenever reported. Since this research focused on the overall characteristics of the pedagogical model, there was no need to identify individual students in the analysis. However, a commercially available online LMS known as Haikulearning, which required a login and a password from each participant for all instructional activities was used to ensure student privacy. A log file to catalog student information was created and stored in a password-protected external storage unit. Once the forum posts were downloaded into a data file, all identifying information was removed prior to the storage in an online storage unit that required a login and a password for access. All files

including the copies of student works, interview recordings, and any additional datasets were kept in a password-protected online storage unit. All identifying information other than the numerical codes was removed from any student-created products prior to being stored. All information will be destroyed after five years.

The publication of the study findings used and will use pseudonyms for all participants that were associated with the overall data results only when necessary. All personal details not critical for the research that might be used to identify individual students prior to reporting the data results were removed. Every precaution was taken to ensure the privacy of the participants.

Chapter Summary

This chapter began with the study objectives and study design overview. It detailed the plans for data collection and analysis in Table 4. It contained the information regarding the researcher, research setting, the participant selection process, and human subject consideration. It concluded with the means to ensure study validity and reliability and data security plan.

Chapter Four: Findings

This is a design-based research with two cycles of implementation with data collection and analysis that led to changes in the model being developed. This chapter contains data and analysis from Iteration One: Novel and Iteration Two: Play. It concludes with the summary findings and the finalized model.

Iteration One: Novel – A Unit on *Fahrenheit 451*

For Iteration One: Novel, all fifty-six students in two Honors English classes participated. The unit lasted a total of sixteen days: fourteen instructional days, one additional day for gameplay, and one day for post assessment during this iteration. Each class period was fifty-eight minutes long except for two days that were forty-six minutes long. Except for class discussions that occurred exclusively in class, all instructional activities began in class and continued at home when the students were unable to complete them in class or absent from the class period. Table 5 includes twelve major activities from Iteration One: Novel.

Physical game creation. Once all students submitted both the parent permission form and student assent form, students began historical background research on *Fahrenheit 451* by Ray Bradbury prior to reading the novel. Each activity was designed to have the students continuously read and reread with the novel (i.e. the content) while creating a tabletop role-playing game (i.e. a constructionist pedagogy) and using various technologies (i.e. Chromebooks, Google Docs, and online forum posts) as mandated by the TPACK framework.

Table 5

Iteration One: Novel Instructional Activities Sequence

Activity Number	Instructional activities
Activity 1	Historical and author background research activity
Activity 2	Setting research and description activity
Activity 3	Game board creation activity
Activity 4	Game board group discussion
Activity 5	Book character description
Activity 6	Imaginary character description
Activity 7	Character visual creation
Activity 8	Game board assembly
Activity 9	Game board assembly discussion
Activity 10	Adventure description activity
Activity 11	Rules creation for gameplay
Activity 12	Gameplay

Historical background research. This activity was designed to provide additional

information and to activate students' existing background knowledge (Elbro & Buch-Iversen,

2013). It also met the major mandates of the CCSS, in particular developing students' skills in

providing strong textual evidence in their writing as well as adaptability of working with various

texts and handling a variety of evidence (CCSS, 2010, p. 7). Students were asked to demonstrate

their proficiency in the use of technology and digital media by conducting online research using

various databases such as Google Scholar and Ebsco. For this activity, students researched and

wrote the definition of dystopia, the historical background that inspired the writing of *Fahrenheit*

451, and a possible reason why Bradbury chose a nondescript city in the United States as the

primary setting per the activity instruction. Students shared this only with me not with any other student in the class, so that I could assess research skills and check their manuscript format. The activity included all three components of the TPACK model.

For this section, the students wrote a total of 7,611 words, 132 words on average per student. As was described in Chapter Two and Chapter Three, a typical high school student writes approximately 90 words per week beyond copying notes in class. Seventy percent of the students submitted this assignment (39 out of 56 students). Analysis showed that the students included many online sources, meeting all of the initial objectives of the activity; therefore, it was retained for the next iteration without modification.

Setting description. One of the goals of this activity was for the students to summarize and synthesize what they read and produce a coherent piece of writing to meet the CCSS. Furthermore, the activity required the students to demonstrate their writing skills in using multiple textual evidences. Most importantly, this activity served as a scaffold for game board creation that followed. For this activity, students had to write about several different setting areas in the book. A sample lesson plan for this activity appears in the Appendix Section (See Appendix B). Students collaborated in their small groups in class as well as online.

For this task, students produced 11,768 words, 210 words on average per student. Ninety-one percent of the students (50 out of 56 students) submitted their entries. Analysis of the student writing products for this activity (i.e. their setting description posts and peer feedback) revealed that eighty-six percent of the students (43 out of 50 submitted) included a works-cited section, which contained the books or articles they cited in the text according to the Modern Language Association manuscript requirements to meet the CCSS, and sixty-eight percent of them (34 out of out of 50 submitted) had at least one direct quote from the book. One hundred percent of them

(all 50 submitted) made at least one if not multiple indirect reference to the text, which was required per the assignment instruction. Inclusion of evidence from the book showed that the students met one of the major requirements of the CCSS. I also observed students collaborating with one another in their small groups as they searched for facts from the novel to include in their descriptions.

I chose fourteen random entries from the setting descriptions for further analysis. One hundred percent of them included a works cited section, meeting the CCSS. Although twelve entries included at least one direct quote from the book, only five included three or more direct quotes from the book. Two entries that did not include any direct quote still contained a plenty of details from the book. Student examples contained the evidence of critical thinking as defined in Table 4. In addition, three out of fourteen made at least one reference to other literary works, which is commonly considered as evidence of meeting the critical thinking requirements according to the CCSS. For example, a setting description of Montag's house without a direct quote included the sentence where the house had a "television watching over everything the people do, like *big brother*," which showed that the student was able to *construct* a more complex meaning by connecting two different literary works, i.e. *Fahrenheit 451* by Ray Bradbury and *1984* by George Orwell, on dystopian society. In the same description, the student wrote that all the houses were made of metal including Montag's "plain, colorless, very futuristic looking" house due to it being in a "dystopian" society as opposed to Clarisse's house being the only house that was "lively." Data analysis of the samples showed that the task accomplished the instructional objectives since the students referenced the book multiple times. Students also wrote more complex and longer sentences than they did during background research.

All of the randomly selected entries included at least two or more instances of critical thinking as the students described their rationale for their descriptions. Students frequently used *because* and *since* to indicate their justifications for choices that they made. For example, a student wrote, "I do not think many other people would be outside other than Clarisse *because* they are so busy watching their large televisions" after describing Montag's neighborhood to be filled with "dull houses with no color, plants or decorations." Every randomly selected setting description included various descriptive terms such as *dull*, *lush*, *elaborate*, *staid*, *manicured*, *futuristic*, and *opulent* to describe different areas from the book.

The following entry represents a typical writing product. It included two direct quotes from the book per assignment instruction and the students' personal evaluation of the setting, which was not a part of the activity instruction. Unlike during the historical background research where students did not interact with any other students, the instruction for this assignment stated that they should read others' writing to provide feedback as well as to refer to the historical research, which was aimed at enhancing the students' ability to synthesize information. In the following example, the writer used the pronoun "us" in her description, indicating her understanding of the audience of her peers who were engaged in a similar activity. Furthermore, she added that there was "no longer a reason [for the old lady] to live," which showed her ability to synthesize the information beyond simply describing the setting. Such phrases represented the student's ability to *construct* a new meaning based on the text she read.

> The Old Woman's House
> In the novel *Fahrenheit 451*, Ray Bradbury describes an antique setting involving an old woman hiding large stacks of books in her attic, which is forbidden. Bradbury describes the old woman's house as a vintage like setting with a medieval theme. The old woman's house was a, "flaking three-story house in the ancient part of the city, a century old if it was a day"(Bradbury 34-35) [*sic*]. In my perspective, the old woman's house was filled with collectable antiques covered with spiders and the stench of dust. As the firemen approached her attic, "A fountain of books sprang down upon Montag as he climbed

shuddering up the sheer stairwell" (Bradbury 33) [*sic*] emphasizing the amount of books she owned. *The author provides us with enough information to assume* that the old women has lived long enough to a point where reading books was once permitted, now that *she has forcibly hid her books from society to where there was no longer a reason to live.*

<div align="center">Work Cited[4]</div>

Bradbury, Ray. Fahrenheit 451. New York: Simon and Schuster, 1967. Print. [*sic*].

Unlike the entry on the Old Woman's House above and other locations from the book, many students had trouble finding information on Futuristic St. Louis in the book. Many of the descriptions lacked three required quotes from the book as seen in the example description below. Even though the writer added one direct quote, it lacked the sophistication demonstrated in other examples, which was typical in many descriptions of that particular section.

> Futuristic St. Louis
> The novel *Fahrenheit 451* by Ray Bradbury depicts St. Louis as the city of escape in which civilization can rebuild a new society. Fleeing the electric hound, Faber tells Montag to *"get in touch with me in St. Louis. I'm leaving on the five A.M. bus this morning, to see a retired printer there" (Bradbury 126)* [*sic*]. Faber wants Montag to meet with him in the future in the city of St. Louis in which he plans to print copies of the Bible to start rebuilding a new civilization. The futuristic St. Louis is a very dull city like his hometown. What you see above is the interiors of the building bases under construction. A variety of tall, small, and half demolished buildings make up the scenery. The aroma of tarnished metal lingers in the air and the trains can be viewed from the tops of the bridges.

Although many did not meet one of the explicitly stated objectives for the activity of citing from the text while creating written descriptions, students turned to the Internet to find the information on current day St. Louis, which became evidence when the majority of the game board pieces had the famous arch from current day St. Louis (See Figure 6). The visuals served as an alternative means of evaluating the effectiveness of the model because it showed how the students used additional resources to meet the objectives of the activity. Without the

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[4] All student samples were reported as exactly they were written sans their personal information and work cited section. Also all student examples included in this dissertation had a works cited section. However, for ease of reading, I omitted that information after this first example.

accompanying visuals, the students would not have been able to demonstrate their ability to meet additional standards, making visual creation an important assessment took for a constructionist instructional activity.

Figure 6. Futuristic St. Louis game board pieces photographed by the author

In addition, several students added the symbolic meaning of the river in their written descriptions as shown in the example below. The example demonstrated that the background research acted as a useful scaffold for students to for the setting description, providing the rationale for retaining the background research in the next iteration.

> The River
> Bradbury uses water, which is a symbol of rebirth. As Bradbury said, "And on either side of the river was there a tree of life, which bare twelve manner of fruits, and yielded her fruit every month; and the leaves of the tree were for the healing of the nations" (Bradbury 158) [*sic*]. It could be said that the surrounds and river itself show a rebirth, that even after death, beauty and growth still exist. The river is described in the book as surrounded by many fruit bearing trees on both sides of the river. It is in the middle of a forest. Railroad tracks are near by as well. *The River also symbolizes the Rebirth of Montag.* As soon as he crosses the river, his perspective of the world starts to change. His thoughts are getting clearer and he is now starting to view things the same way as Clarisse. In the beginning of the book their thoughts and perspectives do not add up.

The results showed that both background research and setting description allowed students to use evidence from the book to support their descriptions as well as to develop critical thinking skills. Although the original plan (See Appendix B) combined the background research and setting description under Task 1 Setting Description, I divided the task into Background Research and Setting Description for this iteration after receiving several inquiries from the students who had trouble with the assignment. Unlike an epic poem where the historical information was directly embedded into the poem, a dystopian science fiction novel's plot did not neatly match the author's background and the historical era, necessitating the split for this iteration. This forced me to briefly reconsider the structure of the activity for different genres for Iteration Two: Play. Still, the activity was retained for the next iteration without modification. This activity allowed the students to incorporate the content as they produced writing products using multiple technologies, meeting the mandates of the TPACK framework. Furthermore, the student examples showed that the students were able to construct new meaning as they acquire knowledge from the text.

Game board creation. The goal of this activity was to allow students to tangibly translate and synthesize what they read into a usable visual that demonstrated their visual literacy skills (ACRL, 2007; Bristor & Drake, 1994). Since I did not consider visual literacy development to be critical to the model, I chose to expedite the process via crowdsourcing by assigning one panel of a four-panel board to each student. However, the instructional potential of this activity became apparent as the student-created game board pieces were used to instruct the importance between decoding and reading. It also led to a discussion on cultural diversity and empathy (CCSS, 2010, p. 7), making this activity an emphasis in the next iteration.

Immediately after completing their individual pieces, students engaged in small group discussions about the boards. By carefully observing each other's visuals, students evaluated their reading skills in a meaningful manner thereby developing metacognition and critical thinking skills. To further capitalize on this, a whole-class discussion encouraged the students to evaluate their own mental process of creating a visual based on their readings and to examine each other's thinking process as they compared their drawings. Not surprisingly, different students' visuals looked vastly different (See Figure 7).
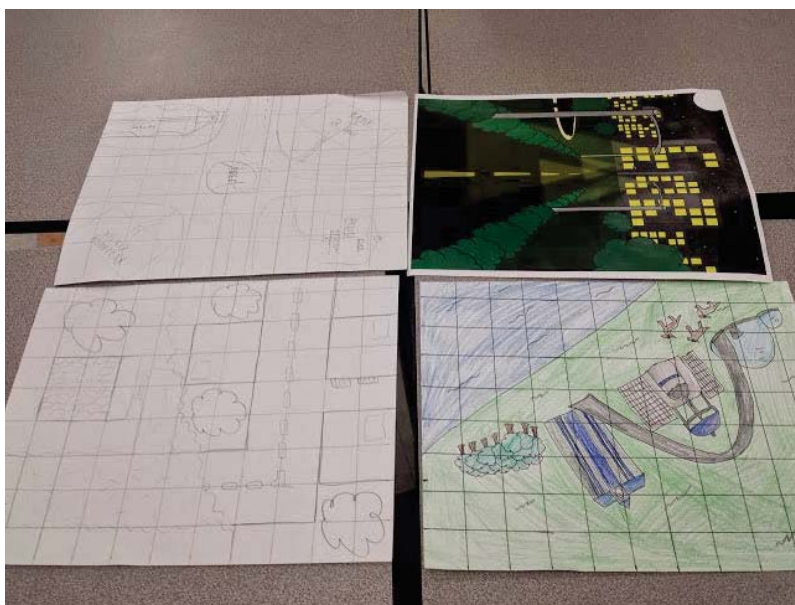
Figure 7. Example board pieces from *Fahrenheit 451* photographed by the author

One of the class discussions (See Appendix F for the full transcript) revealed that the students understood the difference between decoding (i.e. simply reading the words on paper gaining basic information from them) and reading (i.e. understanding through evaluative processes). When questioned whether the board should essentially look the same since they all read the same text, one student replied, "We used our imagination," and another student replied, "[The boards look] different because everyone has a different perspective of what it looks like." Such answers revealed that the students were engaged in an evaluative thinking process as one

way to develop their metacognition skills. The following short exchange also showed that

students began to differentiate decoding from reading.

> Teacher (T): You read the same text. Shouldn't they [pointing to the boards] be exactly the same?
> Student (S): No. Not really going to be. We might have discussed the same thing, but we saw things differently.
> T: Tell me more about that.
> S: *Like say we were talking about houses. They are all lined up on a street. We all understood. We all knew that. But how we draw it is different.*

Later in the discussion, a student brought up an example used while discussing *The Great Gatsby*

by F. Scott Fitzgerald. In a previous class discussion, a student asked whether I watched the new

Gatsby movie that became available recently. I explained that I did not plan to watch the movie

because I had no intention of becoming enslaved to other people's imagination. I talked about

why I often refused to watch movies based on books because I preferred my own mental pictures

that I created while reading instead of yielding to others' ideas about how things should look on

screen. I explained to my students the potential tyrannical nature of visual media. One of my

students brought up that conversation during this discussion.

> Teacher (T) [5]: But let me ask you more. Just understanding different people's point of view, in and of itself, is a benefit?...Think about this. [See a hand raised.] Yes.
> Student 19 (S19): There is an understanding that comes into play in life when you realize how it feels to be in another person's shoes…It makes you more compassionate and understanding.
> T: Compassion? Really? [Spots another student with a hand up.] Yes.
> Student 5 (S5): Student 20 (S20) and I were talking about what we drew. How I drew it was completely different from how she drew it, and when I explained it to her, it seemed like she had a better understanding of what could have been going on in her picture than she could have put down.
> T: Again, my question is why do I care? That you understand what S20 thinks or S20 understands what you think? Why do I care? [Another hand up.] Yes, Student 9 (S9). Go.
> S9: *This is like when we were reading The Great Gatsby, you said you didn't want to see Gatsby how other people saw him. Why?*

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[5] Several lines have been removed from this excerpt. See Appendix G for full transcript of the discussion.

Student 9 made the connection between the discussion that we were having and my argument for developing independent thinking skills while reading. His question moved the discussion towards the concept of empathy and the importance of understanding other perspectives and cultures (CCSS, 2010). It also demonstrated that they student was able to construct new meanings based on what he read, what he learned, and what he knew.

A similar exchange occurred during another class discussion (See Appendix H for the full transcript). Just as the first group of students did, this group argued for the importance of having different opinions. They defined being imaginative as celebrating differences. Once again, a student referenced what I shared with them while we read *The Great Gatsby*. In addition, she made an explicit connection to *Fahrenheit 451* by mentioning one of the characters, Montag's wife Mildred, who watched an oversized television called *the parlor* incessantly and took drugs to numb her mind. In addition, students displayed a sense of playfulness during this exchange.

> Student 8 (S8): Our section [on Professor Faber's house] left a lot to the imagination. Because it said just a house with walls that look the same as him. White walls. Plain. So it gave you a lot of free reign to picture what you think that house would look like from a guy who is a rebel yet trying to stay low key. Just a plain house.
> T: [Sees a hand up from another student.] Go. Student 1 (S1).
> S1: I think it's actually a good thing that he left it more vague. Because then it leaves everybody's experience of reading the book different. He is not... *If I were to say, "Think of your grandma's house," Student 8 is not going to think of the same house as me. Because we have different grandmas and different houses.* [Ss laugh.] If I were trying to draw...
> T: You sure you have different grandmas? Just kidding. [Laughs.]
> S1: [Nods yes.]
> T: [Laughs.] You are pretty sure. I am just checking.
> S1: I am pretty sure unless my family is not telling me something.
> T: [Laughs]
> S1: So yes. I understand why theirs would look so different. Because thinking of an old lady's house, I would think of my grandma's house, and I would try to draw that. My grandma's house in that situation. So it does make sense why they look so different.
> T: Okay. It makes sense is different from whether it is a good thing or not. [Pauses for 3 seconds.] You know what I mean? [Sees a hand up.] Yes.
> Student 5 (S5): I have a question. *When we read The Great Gatsby, you said that you didn't like the movie because that was not the author's perspective of Gatsby.* You said

that you imagined your own Gatsby. You don't like movies because it just shows one way how the director viewed it. So I think what we did was our own version of what we saw.
T: Okay.
S5: And I think it ties something to that.
T: Ties something to it. Okay. How? Explain to me more. Tell me more.
S5: Because it's the way... *literature is more of imagination. It makes everyone unique. If everyone views Gatsby as Leonardo DeCaprio, then we wouldn't have imagination. Therefore, we would be like Montag's wife. We would be just watching TV, planning perfection the same, living life the same. That's what I think.*
All: [Nod in agreement.]
T: [Laughs happily.] Anyone else?
Student 7: That was good.

Such interactions demonstrated a way teachers could leverage game board creation to teach students the importance imagination, empathy, and creativity while reading great classics; therefore, the next iteration included a class discussion. This activity and subsequent class discussions were examples of the power of a constructionist pedagogical model built on the TPACK model where students no only created the artifacts to demonstrate their content knowledge but also *constructed* deeper meaning based on multiple outside sources.

Book character description. Once the setting description section concluded, each student was tasked to describe one book character as a playable character for the final game. One of the goals of this activity was to allow the students to synthesis details from the book once again while using a number of evidence from the text. It also was designed for students to demonstrate their understanding of the roles that various characters *play* in the book in relation to the final game that they were creating. For the first time in the unit, students were explicitly directed to add interpretive statements in the descriptions. As a result, it forced the students to reread the text since the focus of their task was not only to describe a book character but also describe him or her as a playable character for the game with physical, mental, and additional attributes in anticipation of the final gameplay.

This activity required the students to have read at least the first half of the text. However, the activity naturally facilitated the reading of the whole text since many of them could not complete their assignments without reading the remainder of the book. Just as they did during setting descriptions, students reread the book and discussed the facts from the book frequently.

During this activity, I observed and counted the number of times that the students asked each other where certain passages were located. During one 10-minute segment, I observed a group of four students referring back to the novel three different times by asking each other where a certain part of the book was located. After receiving assistance from their group members, each student read two to three different passages in different parts of the book. When none of them in the same group could locate a passage that one of the members thought he needed for his chosen book chapter character, he walked over to another person in another group to ask for help.

In another class, I observed another group of students interacting with each other in a similar fashion. During a 15-minute segment, I saw four students read what he or she wrote about his or her chosen character to the group and asked for feedback. Those students, while writing their own separate descriptions, frequently asked each other whether a particular phrase that they thought of was the most appropriate for the character. I counted at least five instances where one student would verbalize the adjective or phrase he or she intended to use to the small group, and the others in the group would agree or disagree with the choices. Such observations showed that the book character description accomplished the instructional objectives of allowing students to re-read and reference the book in order to engage in evaluative writing processes.

For this task, the students wrote a total of 22,363 words, 399 on average per student, and ninety-three percent of the students (51 out of 56 students) submitted the assignment. Even

though I attempted to evenly distribute the character descriptions by assigning each group of four students one of the major characters (Guy Montag, Clarisse McClellan, Professor Faber, and Captain Beatty) and allowing them to choose an additional character from the remainder of the list characters, a majority of the students chose two major characters. Forty-one percent of the students (20 out of 51 submitted) chose to describe Guy Montag and fifty-three percent of the students (27 of 51 submitted) chose to Clarisse McClelland, who appeared in the beginning of the book. This indicated that nearly half the students did not have to read the text as carefully or completely to complete the assignment. It also meant that those students did not have to distinguish major and minor characters, which was one of the major literature standards this model intended to address. Therefore, I redesigned the assignment to require the students to describe one major character and one minor character for the next iteration.

Analysis of the fourteen randomly chosen book descriptions revealed that students were incorporating more textual evidence into their writing for this activity. Their writing was more sophisticated in terms of the length and complexity as shown in the example below. The following descriptions were from the same student. Her setting description, despite including two quotes from the book, was rather literal with little analysis or evaluation. For her book character description, however, the student used several examples from the book. Furthermore, the student concluded her evaluation of Captain Beatty's physical build based on another character's statement as indicated under item (3) in her description, illustrating her ability to synthesize information and demonstrate her deeper understanding of the text and her chosen character. The book chapter description included the writer's critical thinking skills (CCSS, 2010) as defined in the critical feature of this research (See Table 4).

Setting Description - Professor Faber's House

Professor Faber's house is a small chamber mechanic shop. The walls on the inside of the house are white and there is one bedroom. The light is dimmed so that it makes the air look dusty. Faber has a desktop in his room that has "a litter of machinery and steel tools" (Bradbury 77) [*sic*] spread out everywhere. Small machines, such as "radio transmissions" (Bradbury 86) [*sic*], that don't work properly lay about. The house has old dusty furniture and has a vintage vibe to it. The house mostly smells like metal because of all the machine parts.

Book Character Description - Captain Beatty
(1) Captain Beatty has "Charcoal hair and soot-colored brows and bluish-ash-smeared cheeks" (Bradbury 30) [*sic*]. Montag says that he has never "seen a fireman that *didn't* have black hair, black brows, a fiery face, and a blue-steel shaved but unshaved" (Bradbury 30). Beatty had a close shaven face, but it looked stubby because of the ashes. He wears firemen boots that are black and the fabric is fireproof. He also wears a "black beetle-colored helmet" (Bradbury 2) [*sic*] on his head. Also Beatty wears a "flameproof jacket" (Bradbury 2) [*sic*].
(2) Captain Beatty is book smart, which is ironic because books are supposed to be filled with nothing. Beatty has read books in the past because he quotes them often. An example would be after Montag told Beatty that an old woman said, "Play the man" and "Master Ridley." Beatty says "A man named Latimer said that to a man named Nicholas Ridley, as they were being burnt alive at Oxford, for heresy, on October 16, 1555" (Bradbury 37) [*sic*]. This example shows that Beatty knows things that happened in the past, which he most likely got from a book of some sort. Beatty doesn't read anymore though because he is a strong believer of the system and believes books are evil now.
(3) *Beatty is built and tall. Clarisse McClellan says that "So many people are. Afraid of firemen," (Bradbury 5) [sic]. People aren't going to be scared of a small scrawny fireman, so Beatty must be big and strong.*
(4) Beatty has the ability to tell people the past, in which the world used to be. He has more knowledge then most about what was in books because he has read them before.

Although students had to use their imagination to fill the gap, they were held accountable for the content standards, including the manuscript requirements. The following description received the subsequent reply, which indicated the peer-reviewer's awareness of the manuscript requirements (CCSS, 2010).

Clarisse McClellan
(1) Clarisse McClellan in *Fahrenheit 451* is described by Bradbury to have a face that *"was slender and milk- white."* she is also described to have *"a look, almost, of pale surprise."* McClellan has dark eyes full of curiosity, and she was wearing a white dress. (Bradbury 3). I imagine her to have dark brown hair to match her dark eyes and her shoes to be laced up and dirty because she likes to walk, circle in the leaves. I also picture her to have a petite body figure. (2) Mentally she describes herself as "seventeen and I'm

crazy" (Bradbury 5) [*sic*]. She is also very different from any of the other teenage girls in his city in the way that she tells Montag, "You know, I'm not afraid of you at all" (Bradbury 5) [*sic*]. McClellan also states she likes to watch people, think, "go out and hike around in the forests and watch the birds and collect butterflies" (Bradbury 20) [*sic*]. (3) I think that, physically, she is not very strong. I see her as a small, fragile teenage girl. (4) Clarisse McClellan has the ability to see things in the way other people do not. I also think she has the ability to make others see things differently. I say this because when she begins to talk to Guy Montag, he begins to question his job and has an itch to read books.

Peer Feedback
You did a good job of finding good quotes to explain what she looks like, her mentality etc. *Try to cite the all parts that are in quotation marks though.*

The following description was about a minor character. Although it demonstrated the writer's basic understanding of the character, its peer feedback indicated the peer-reviewer's development of her critical thinking skills as well as metacognition skills. After reading the original author's post regarding the lack of details, the peer-reviewer acknowledged that the author did not include many details on this character. However, she encouraged the original author to consider that as an opportunity to be creative. Such an exchange is an example of one of the benefits of this pedagogical model where students develop a range of skills by interacting with each other by engaging in carefully orchestrated and sequenced writing activities with a clear goal of creating a playable game.

Original Post - Granger
In the book *Fahrenheit 451, Ray Bradbury does not include enough clues about the character's description,* however, I imagine Granger as a tall young person with spectacles hanging around his neck and he along with his companions are mentioned as, "Five old men sitting there dressed in dark blue denim pants and jackets and dark blue shirt" (Bradbury 140) [*sic*]. Granger also adopts an intellectual talent such as patience, confidence and intelligence. These specific traits influence his calm tone of writing, similar to his emotions expressed through his literary work. Granger's work includes his book, *The Fingers in the Glove; the Proper Relationship between the Individual and Society* (Bradbury 143) [*sic*]. The author also includes their physical traits such as their facial hair and mentions that, "Faces around him were bearded, but the beards were clean, neat, and their hands were clean" (Bradbury 140) [*sic*]. This particular description illustrates the physical appearance of the character in the minds of the readers.

Peer Feedback

I also had Granger, but after reading your perspective of him, I can see why you would consider those characteristics. You used quotes and correct MLA format! That's great. However, I would include quotes concerning his grandfather since his grandfather had a huge impact on the person Granger is today. Quotes would be found on page 150 [*sic*]. *I also agree that we were limited to evidence on his appearance, but I would use that as an advantage to describe Granger in greater detail.* Other than those minor errors, I enjoyed reading your description.

The power of peer feedback was evidenced in the following exchange when one of the writers did not include enough details from the book. Two reviewers argued for the writer to add more details from the book.

Original Post - Captain Beatty
In *Fahrenheit 451* by Ray Bradbury Captain Beatty like all other firemen have a smoky affect to him. Bradbury described Captain Beatty to have a "face that has been sunburnt by a thousand real and ten thousand imaginary fires with flushed cheeks and fevered eyes (Bradbury 30). Montag says," a fireman with out black hair, black brows, and a fiery face" was rare to be not seen (Bradbury 30). In *Fahrenheit 451,* Captain Beatty has a fairly good knowledge of books, but does not find them intriguing or any good in them at all.

Feedback from Peer Reviewer 1
I learned Captain Beatty is the complete opposite from Montag, and because of that they will soon faces [*sic*] their differences. You can improve your analysis and put more effort on your description of what Captain Beatty looks like to you. *I would also add more evidences from the text and not use redundancy.*

Feedback from Peer Reviewer 2
I had the same description and used the same examples from the book. I would have to agree with [Peer Reviewer 1] ^ and say that *you can use more evidence from the text when talking about Captain Beatty's knowledge. Talk more about what Beatty thinks mentally and what he thinks about society.*

Analysis of the original posts as well as peer feedback showed that students continued to demonstrate critical thinking skills as well as writing skills. All of the fourteen randomly chosen book character descriptions contained at least one direct quote from the book. All of them contained evidence of critical thinking indicated by the multiple instances of the words *because* or *since*. As they justified their reasons for their descriptions of a character, students expressed strong opinions of the characters beyond the basic descriptions provided in the book. Once again,

the student writing products showed how the students were incorporating the content by constructing artifacts as they continued to add more pieces to their final game as required by the TPACK framework. Specifically, the examples from this activity showed the usefulness of forum posts and subsequent peer feedback facilitated by the use of available technology.

Student writing was more sophisticated and complex. Rather than simply inserting a quote in the middle of a paragraph as many of the students often did, a student wrote, "Beatty has 'charcoal [colored] hair, soot- colored brows and bluish- ash- smeared cheeks where [he] had shaven close' (Bradbury 30) [*sic*]" to show his ability to integrate a quote into his writing. Every single one of the randomly selected entries except one included the writer's opinion regarding the character that the writer described. Therefore, book character description with this instruction was retained for the next iteration with one major modification of requiring students to describe two characters instead one: one major and one minor.

***Imaginary character description*.** The primary goal of this activity was to move students from simply describing characters in the book to creating playable characters for the final gameplay. Students were still required to use textual evidence, and the additional requirements for this activity stayed the same as they were during for the book character description. However, each student was asked to create an imaginary character not included in the book. According to their daily reflections, students cited this as one of their favorite activities during this iteration because of the freedom it afforded them. Although developing student literacy skills still remained central, this activity was designed to usher students into the world of creative writing while grounding them in the text, making this an important turning point of the unit. Students loved the idea of creating *playable* characters for their final game. This activity signaled the break of this model from a traditional literature curriculum in that the students were finally able

to fully move forward into the world of games with their descriptions. As a result, many descriptions included a potential conflict or backstories that could have been useful for the final gameplay. This activity also demonstrated the ultimate power of a constructionist pedagogical model based on the TPACK framework that used tabletop role-playing game creation as its core pedagogy. Student products showed that the students were fluidly incorporating the content knowledge using available technologies while adding additional ideas into their descriptions to be part of the final game in creative ways.

The submission rate for this task was eighty-eight percent and the students wrote 15,247 words, 272 words on average per student. Of all the male characters described for this task, twelve percent was of Mildred Montag's lover, making him one of the most popular male imaginary characters. Prior to assigning the task, I mentioned that Mildred could have had a secret life that led her to be so disconnected from life. Having seen the influence of even a casual remark, I decided to refrain from providing any additional instructions for future iterations. However, all of the students who chose Mildred's lover as their imaginary character used him as the reason that Mildred took pills directly or indirectly, indicating that they were cognizant of the information from the book.

The description below was slightly different from others in that he included a number of similes. Furthermore, he described the lover as the person who attempted to kill Mildred by giving her the pills. This was the first task this student completed on time and fully during the unit. When asked why he chose to complete this assignment, he cited the total freedom that the activity allowed him to have as the reason, indicating the significance of including this activity for the model.

Mildred's lover

Mildred had an affair with the man that Montag stole his first books from. He has auburn hair with eyes *as blue as the sky. His face as majestic as the Yellowstone. His clothes like the dressing of a timely man whose respect for business showed with every step he took.* His build is about of the average man, though is posture poised. He has intelligence beyond knowing, for he has had his books for the longest time, reading them every day, every other day, and so on. The night the man came to Mildred's home was before the morning where she had to have her stomach pumped. Mildred didn't want the man to leave and was trying to keep him there. As a means to escape the man crushed about 30+ sleeping pills and mixed it with some tea, then gave it to Mildred, "whose face was like a snow-covered island upon which rain might fall, but it felt no rain; over which clouds might pass their moving shadows, but she felt no shadow" (Bradbury 11) [*sic*]. When she passed out, the man escaped, and wasn't seen again.

Many students demonstrated a level of sophistication throughout this task by using different literary techniques. One student named his female imaginary character, Ferina Heitz, showing his ability to use a pun. Another student created Lucifer Igneel, also known as the One Who Started It All. The student provided a description with several appropriate quotes form the book.

Lucifer Igneel *(The One Who Started It All)*
The epitome pure death and evil, the incarnate of the devil, Lucifer Igneel is the one who started it all: the burning of books instead of reading, the atomic wars, the many crimes roaming around the streets. Igneel sees life as a bore and a dull place to live, which is why he started havoc everywhere. A very intelligent man, who no one knows the age of, yet he uses his strong mind for the wrong doings. He is a tall, lean, scruffy, and grim man who sees life in a totally different way in which starting the fiery hell within the different parts and regions of *Fahrenheit 451*. Igneel has lengthy arms, able to touch most roofs, for he is about 7'6", and he'll stomp through and on anyone that rebels against his ways. His burning passion for putting books to flames and always starting wars is the reason for Captain Beatty's questioning at first on why the world has come to this, along with Beatty's reason in his rising love for burning and answers to all his questions of life (Bradbury 31) [*sic*]. His dark presence and stare intimidates anyone and anything. When he had first started his burning career, Igneel had burned a small portion of his face and both hands to show his new identity, replacing his burnt skin and his right eye with iron forged to be stronger than regular iron. His presence is so dark and horrid, that his face is covered with shade besides his iron-sided face. He has a Pickelhaube helmet and wears a long, black leather coat, with the bottoms of it tattered and burned itself. The coat has an insignia of a Chinese dragon surrounded by flames, which is why Montag has a salamander on his arm (Bradbury 4) [*sic*], showing that he is the under-leveled. Igneel, as well as his dark stature and evil spirit, ironically, he speaks in Biblical terms, which is where Captain Beatty obtains his choice of words and phrases from, such as, "You've been locked up here for years with a regular damned Tower of Babel" (Bradbury 35)

[*sic*]. No one knows where he disappeared to, but the crimes roaming around are told to be his doings.

He also created the character visual based on his description (See Figure 8).

Figure 8. An imaginary character visual from *Fahrenheit 451* photographed by the author

His written description demonstrated his understanding of the Biblical reference in the book as well as the ability to synthesize information from multiple parts of the book. It is important to point out that the writer of above description had missed submitting several writing assignments prior to participating in this unit. For this iteration, however, he submitted every assignment and wrote more than he usually did for the whole year, demonstrating the power of game-based learning and learner agency (Bandura, 2002, 2006).

Another interesting character was simply named Imaginary Character, demonstrating her creativity. Although the students' description was extremely short, she was able to infuse the theme of good versus evil prevalent in the text by contrasting a dystopian society against a non-dystopian society. She concluded her description by providing a reason for Clarisse's demise, which demonstrated her critical thinking.

An imaginary character known as Imaginary Character
In *Fahrenheit 451,*there is an imaginary character in Clarisse's home, but the character is *not human*. In this dystopian society, all of the homes have televisions that monitor the activity people and watch over what they are doing. In Clarisse's house, there is also a television that tells her what to do and feeds her information about the past, a non-dystopian society. This is why Clarisse is all about the past and also the only reason she is the only one in Montag's neighborhood that has a different house. I believe her being different caused her to be killed.

Analysis of the imaginary character descriptions showed that a vast majority of the students used their imaginary characters to explain the psychological reasons behind other book characters' behaviors, which demonstrated the development of critical thinking skills. Fourteen randomly chosen descriptions contained a plethora of evidence for critical thinking and literacy development. Each example contained two or more *because* or *since* as well as phrases such as *this is why* or *the reason for that was*. The activity allowed students to explain the characters' motives, demonstrating that the activity allowed students to gain several essential skills defined by the CCSS.

Despite it being a character description, many of the students wrote them as if to provide alternative story lines and conflicts for future gameplay. For example, the following description provided the reasons that Captain Beatty was so bitter about his life. The example showed the student's sophistication of incorporating facts from the book while expressing his creativity.

James Beatty - Captain Beatty's son
James Beatty was the son and junior of Captain, James Beatty. Like his father, James has "black hair, black brows, a fiery face, and a blue-steel shaved but unshaved look" (Bradbury 30) [*sic*]. Since he was born, James had wide sense of adventure, curiosity, and a thirst for knowledge and imagination. One day, his fireman father brought home a book, since firemen were allowed to every now and then take a book if returned the next day. James Jr. was so curious and, that night, snuck into his father's room to take the book and spent the night reading. This gave him the desire to read more and more and he began searching and actively collecting books. After years of collecting books and reading, he was caught when one of his mother's friends visited the home. The police were notified and immediately the fire department was sent to the home. Fire was set to the home, but James was too attached to the books and they were so much a part of him that he chose to stay and burn with them. James Jr. was killed as well as his mother who

died because she refused to escape without her son. *This is why Captain Beatty "wanted to die," and why he seemed to allow Montag to kill him (Bradbury 116)* [*sic*]. He hated life and felt guilty for his son's death and felt that he wanted to join his wife and son in death.

With interesting imaginary character descriptions of various playable characters, this activity accomplished the initial goal of combining creative writing and meeting the CCSS as intended and was retained for the next iteration without modification. It also showed that the activity met the demands of the TPACK framework of combining the content, the technology, and the pedagogy in an optimal way. Most importantly, students were able to construct complex personal meanings using their knowledge from their reading as indicated in the above example, demonstrating the utility of a constructionist pedagogical model.

Character visual creation. The goal for this activity was to provide one more opportunity for students to revise their character descriptions. In addition to meeting several mandates of the CCSS (2010, p. 7), it also provided an opportunity for the students to consider which character they would want to choose for the final gameplay and what the character should look like. Finally, this activity was included to develop students' visual literacy skills as they translated the text they read into a visual to convey meaning.

For this iteration, I allowed the students to choose one character, either book or imaginary, that they thought was the best to create the character visual, and displayed them on the classroom wall (See Figure 9). Despite being reminded during each activity, students never voted for their favorite characters online throughout this iteration. Even when their visuals were posted on the wall, students did not want to vote for their favorites. Instead, I had another group of students to vote for their favorites (See Figure 9), which provided opportunities for them to recall facts about *Fahrenheit 451*. I observed many students looking at the displayed visuals and

recalling facts from the book even after the unit concluded; therefore, the character visual display was retained for the next iteration.

Figure 9. Seniors choosing their favorite character visuals photographed by the author

The submission rate of ninety-eight percent was for this assignment. For this activity, fifty-four percent of all students (29 out of 54 students) used their imaginary characters, which showed students' preference towards imaginary character descriptions. Additional data analysis of the nine randomly selected character visuals revealed that the written descriptions accompanying imaginary characters were much more elaborate and complex than the ones for book characters. Students used more descriptive languages including adjectives that indicated different colors, shades, shapes, and emotions such as *grey eyes filled with profound sadness* or *squared jaw that showed his strong stubbornness*. Overall, students included more quotes from the book, and their diction improved as well in comparison to their earlier writing products. Every single character visual included at least two or more direct quotes, and all students included several multi-syllabic and descriptive words in the written description that accompanied the visual. Therefore, the activity met the established objectives and was retained without modification for the next iteration. For this activity, students used low-tech tools such as paper

and colored pencils just as they did as they created the game board pieces. However, the student

products showed that the activity met the requirements of seamlessly combining three major

components of the TPACK model effectively.

    Game board assembly. Since a single student volunteer created the game board, this

activity was not a part of the pilot but was added to this iteration. The goal for this activity was to

encourage the students to visualize what was missing in the book, making it a useful activity to

transition into adventure description where students were asked to produce additional stories that

were not in the book for the final gameplay. While assembling the board, students discussed the

possible sequence of the game and the starting point of the game, making this an important

activity for the overall unit. Although they did not use any additional technology, the activity

allowed the students to engage in an act of constructing the game board to enhance student

learning.

    Rather than allowing the students to assemble the board immediately after they created

the pieces, which might seem logical to some, I chose to place this activity after both book and

imaginary descriptions to remind the students of the purpose of this unit (i.e. game creation). It

also served as another opportunity for the students to review the overall plot of the story, which

was an important instructional objective for a high school literature class (CDE, 1997; CCSS,

2010).

    Students assembled six large game boards with various game board pieces. Each large

board had seven or eight individual game board pieces that represented different areas in the

book (See Figure 10). What began as a simple activity to create a big board for future gameplay

became an additional opportunity for assessment since the students had to assemble each piece to

demonstrate their understanding of the plot sequence while dealing with the differences in the

physical representation. I observed students arguing over why a certain board piece should be next to another board piece based on the facts from the story. By this time, students read the entire text; however, they had to reread the book as they argued over the finer details from the book. While assembling the board, students also expressed the need for more board pieces to fill the gap, which led to a discussion on understanding and being able to create beyond what was in the book. Such arguments revealed the students' understanding of the plot and served as an additional opportunity for assessment. Furthermore, this activity represented an example of a constructionist instructional activity where students engaged in a meaning-making construction of an artifact despite the lack of digital tools used; therefore, this activity was added to the next iteration without modification.

Figure 10. Fully assembled game boards for *Fahrenheit 451* photographed by the author

Adventure description. Once they finished assembling the large game boards and review

the plot of the book, each student described one possible adventure for the final gameplay. In

addition to the standards-based goals of providing more opportunities for the students to write

more, one of the main objectives of this activity was to encourage students to synthesize

information they gathered thus far and create a coherent, creative story that could be used for the

gameplay. They were allowed to use any of the characters that they encountered during the

character description phase. This activity produced sophisticated student writing products that met the requirements of the TPACK framework.

For this assignment, fifty-five percent of the students submitted the final draft, making this the assignment with the lowest submission rate. Still, students wrote 12,858 words, 1090 more words than the setting description that had a ninety-one percent submission rate, which indicated that the submissions were generally longer as shown in the examples below. Further analysis revealed that the adventure descriptions contained many sophisticated and complex sentences.

Analysis of the adventure descriptions revealed that the students continued to reference the text while adding additional details of their own creation. Ninety-six percent of the submissions (twenty-eight out of thirty submitted) referenced the book directly. Every single description except one had either an imaginary character or an imaginary location. A majority of the students used quotes that were much more focused on the character's physical descriptions while adding additional details of about the other characters. Although the task was called adventure description, students wrote them as if it could have been added to the book.

The following description contained several quotes from the book along with a fictional character. The description centered on Professor Faber's motive for one of the main character's fierce urge to protect the books. The length and complexity of language were typical of most of the adventure descriptions, demonstrating the student's sophisticated writing skills.

> Firehouse Theft
> Not long after books were completely banned did *Winston Faber* have the urge to obtain a book of his own. Winston and his younger brother Professor Faber had heard of the presence of a book hidden somewhere in the city of St. Louis. Ironically, Winston discovered that the book was placed in the fire station to be guarded. On a very cold and quiet night, Winston and the Professor headed to the fire station to steal the book. The air was crisp and nipped at both men's face as it gently breezed by. Of the two, Professor Faber was the least experienced and the most frightened. He had heard of defenses such

as the hounds, which were *"a good rifle that can fetch its own target and guarantees the bull's-eye every time" (Bradbury 25)* [*sic*]. Breaking into the fire station was easy for Winston, who was extremely intelligent and athletic. Once inside, however, the two encountered a hound. While Winston distracted the hound, it was the Professor's job to grab the book. The book, titled *War and Peace*, was placed in a large glass case in the captain's office. As Professor Faber grabbed the book, he wondered why it was worth endangering his and Winston's life. Then he remembered how Winston had told him it was *"because they have quality. And what does the word quality mean? To me it means texture. This book has pores" (Bradbury 79)* [*sic*]. Once the Professor grabbed the book, he and Winston quickly left the station. However, the hound was able to follow them and also called reinforcement hounds. Since the hounds were too fast, Winston made the Professor go on as he fought them off. This sacrifice cost Winston his life, but allowed Professor Faber to protect the book.

Although the following description was missing a couple of direct citations, it showed the writer's understanding of the book and the ending and its hopeful message.

After The War

"Each man had a book he wanted to remember, and did. Then over a period of twenty years or so, we met each other and set out a plan.. And when the war is over, some day, some year, the books can be written again, the people will be called in, one by one, to recite what they know and we'll set it up" (Bradbury 146) [*sic*]. The war ended, one year after the bombing of the city Montag once lived in. It was sunny, with birds chirping happily. Outside a library, were thousands of people being called one by one to enter, "Chapter one: Genesis of the Bible in Los Angeles!" announced Montag through speakers which anyone can hear within miles. People were talking about how the six-old man inside got their title "*The Six Phoenix*." One explained how he remembers that Granger once said, "There was a bird called Phoenix, every few years he built a pyre and burned himself up. *But every time he burnt himself up he sprang out of the ashes, he got himself born all over again" (Bradbury 156)* [*sic*]. The man who memorized Chapter Genesis quickly went up to the entrance. As he entered he immediately saw six old men dressed in all white suits, with snow-white hair and dark thick beards, "were clean, neat. They stood up as if to welcome a guest, and now they sat down again" (Bradbury 140) [*sic*]. They were around a long wooden table, surrounded by empty shelves. They asked him, "Hello we are the Six Phoenixes, can you please write down what you remember of Chapter one: Genesis of the Bible." He began writing, "In the beginning God created the heavens and the earth."

Rules creation for gameplay. Rules creation for gameplay was to provide opportunities for the students to exercise their negotiation skills as they weigh and navigate through the fairness afforded by a set of rules. This activity was central to the unit since the students had to

become ultimately responsible for what happened to their characters. It required the students to pay attention to the overall structure of a student-created tabletop role-playing game while focusing on the minute details such as the number of turns or players required for successful gameplay, meeting the several critical CCSS. Furthermore, this activity pushed the boundaries of the TPACK framework the most as it demanded the students to consider multiple factors from the book, outside sources, and additional skills while engaged in a focused act of constructing a set of rules that was foundational to successful gameplay.

Of all the activities during this iteration, rules creation posed the biggest challenge. Based on the original plan, each period received a basic game rulebook template (See Appendix K). Students also participated in a class discussion to create the rulebooks. However, many students complained during the class discussion as well as in their reflections that they did not know what to do despite having access to a template.

One main point of contention was the lack of definite conflict between two opposing sides in the template. Several students insisted that the game should be a contest between the Saviors (the ones who tried to save books) against the Burners (the ones who attempted to destroy books). Even as they were reminded to focus on the development of co-creation of complex stories during gameplay, students insisted on creating the rules that the players could act as heroes or villains. They also obsessed over declaring a clear winner at the conclusion of the game. Students insisted that there had to be a common gaming feature like a Quick Play section in the rulebook that would allow the players to quickly begin and end the game.

This experience led me to revise and update the rulebook template for the next iteration. I also decided to add a quick lecture on the common features for games as well as the main characteristics of tabletop role-playing games in the next iteration. After two days of rule

creation activity, Spring break began; therefore, no whole-class gameplay occurred for this iteration.

Gameplay. The goal for this activity was to allow the students to experience co-creating narratives and ultimately becoming creative storytellers. In addition, students were allowed to make decisions while adhering to the rules, thereby developing and exercising their independent thinking skills as defined by the CCSS. It also served as an important assessment opportunity since the players could not respond to the challenges without fully understanding the text.

When they were informed of the conclusion of the unit without the gameplay due to the constraints of the school schedule, several students requested to join a voluntary gameplay session during break. Their suggestion indicated a strong presence of learner agency (Bandura, 2002, 2006). Having spent three weeks creating the game, a few students wanted to play it at least once. Initially, twenty-five percent of the students (14 out of 56 students) expressed interest. However, the actual gameplay occurred with 11% of the students, 6 in total with 3 male and 3 female students.

Figure 11. Iteration One: Novel play testing photographed by the author

Initial play testing[6] and game master selection. At the onset of the gameplay (See Figure 11), participating students discussed whether one of the players should take on Montag or not as they chose their characters to play. They argued over whether this could still be considered a game about *Fahrenheit 451* if no one played Montag. They decided that it did not make a difference whether someone played a main character like Montag or Captain Beatty since the game master could fill the roles of the missing characters. The discussion whether the game master could effectively play different characters or not took nearly forty-minutes. Based on the slow pace and the students' struggle, the play testing revealed the need for a quick overview of the role of a game master during the next iteration.

Once everyone chose a character, one of students volunteered to become the game master, citing his extensive experiences in playing digital role-playing games such as *The Elder Scrolls V: Skyrim* and *League of Legends.* Before the game began, I asked the students to describe their chosen characters. Once everyone chose a character, each person also decided how to distribute one hundred points under six categories: health, intelligence, strength, stamina, perception, and agility. Students discussed and chose the categories based on their prior experiences with digital role-playing games and what they thought represented the text the best. Allowing the players to determine the breakdown encouraged the students to discuss their understanding of the characters once again; therefore, it was retained for the next iteration.

When the game began, students discussed how to start the game, which revealed students' unhappiness with one of the locations for the board that I assigned during the setting description. Looking at the board, the students argued that several locations on the board were not useful to create actions to propel the storyline since they were duplicates of other locations.

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[6] Since only a small group of students participated in the gameplay, I called it play testing rather than gameplay.

Based on that feedback, I decided to ask the students to generate a list of settings for the next iteration. After the game master shared that he did not quite know how to begin the game, each player chose a location on the board and explained the reason why he or she was there, which reduced the pressure on the game master to fully control the gameplay. It also allowed the initial conflict to develop. Therefore, this feature was retained for the next iteration.

As instructed by the game master, students rolled a twenty-sided die to determine who would begin the game. They decided that the students with the highest number indicated as Student 1 (S1) would begin the game as the rest of the students took turns clockwise around the table. The first student chose to place her character, Clarisse McClellan, at the Old Lady's house prior to its destruction. Initially, I asked leading questions, but soon other students began adding additional storylines and asking questions. I encouraged the students to provide more details of their characters actions by asking why and how questions. After being asked a couple times to provide the reasons for their initial statements, students began asking each other clarifying questions. Eventually students also took over asking clarifying questions to one another as indicated in the partial transcript below. Students' statements showed a presence of a nice blend of their knowledge of the book (mentioning of the characters and their location) as well as their ability to infuse imagination to demonstrate the power of co-constructed narrative for improving student learning (Dickey, 2006).

> Student 1 (S1): [Puts her game piece in front of the Old Lady's house in the street.] [Clarisse] is right here.
> Teacher (T): In the middle of the street?
> S1: Yes.
> T: What is she doing there? Why would she be in the middle of the street?
> S1: Because *she is curious.*
> T: About what?
> S1: [Clarisse] is one her way the *Old Lady's house since she has all these books.*
> T: Does [Clarisse] know that the Old Lady is there?
> S1: Yes.

T: Oh she knows? How did she figure that out?

S1: Oh no. I didn't think that far.

All (A): [Laugh.]

T: You said she was going to the Old Lady's house. I want to know why she is going there.

Game Master (GM): [Interjects.] We will put that down for you. She is standing outside of… wait. Is the Old Lady one of the playable characters? [Checks the rulebook.]

Student 2 (S2): No.

Student 3 (S3): I will go. I say *Professor Faber and Old Lady are chilling right here in her kitchen.* [Putting the pieces on the board.]

GM: So you guys are saying this scene is before the Old Lady's house burnt down, right?

S1: Yes.

GM: The Old Lady is still there, so it has to be before the house burnt down.

T: So the professor is hanging out with the Old Lady before the house burnt down? Got it.

S3: Yes.

S1: *[Clarisse] was in the firehouse before, talking to Guy. And she was curious about why they are burning books and why they are so bad. And she hears about the Old Lady, so she left to find out about what was good about books.*

GM: [Checks the stats and speaks a bit pretentiously.] Did you say she was using her heighten perception?

A: [Laugh.]

GM: No. Her perception is at 20. That's one of the highest stats. So it is very possible that you could have overheard it from somebody.

S1: Yeah.

T: So did she overhear the firemen talking?

S1: Yes. I mean in the book, she seemed very curious, and she really wants to know why books are bad. She wants to find out.

GM: Captain Beatty. Where are you?

Student 5 (S5): The firehouse.

GM: Where at the firehouse?

S5: *Right by the door. Let's say he stands by the door, waiting for another call. He really loves his job. He likes the rush. He wants to here the sirens go off. He wants to wait by the door, so he can jump in and ready to go as soon as he can.*

GM: [Points to the next student.] How about you?

Student 4 (S4): [Places his game piece in the firehouse.] I am charging.

GM: Are you sure you don't have batteries?

S4: Rechargeable batteries.

GM: Okay.

S3: Or solar powered?

GM: Why not the ashes from the burnt books?

A: That's cool.

Later, one of the students referred back to her adventure description as the inspiration for her backstory, indicating that the scaffolding process worked as a setup for gameplay.

Student 5 (S5): My character Marissa is at Montag's house. *In my adventure description, I put that there is a secret underground basement where Mildred kept her private stuff.* My idea was that Mildred had known all along the history behind the books. So she has this secret place, and she helped the Burners.
Teacher: So Mildred is a spy?
S5: In my description, she was.

Although I asked the game master to issue challenges to propel the gameplay, I noticed that

players enjoyed jumping in and assisting whenever they could. In the beginning of the gameplay,

the game master struggled with a way to get all the characters in one place since everyone was

able to choose where they wanted to start. However, one of the players provided a solution by

adding to the storyline that he remembered from the book. Instead of waiting for his turn, he

simply jumped into the conversation to assist the game master.

Game Master (GM): Okay here is the hard part. [Points to Student 1, who has taken on Clarisse.] So you said you were heading towards the Old Lady's house to meet up with Professor Faber and the Old Lady, right?
Student 1 (S1): Yea.
Student 2 (S2): [Who is playing Professor Faber] No, I don't think she knows I [points to himself] am there.
GM: So she knows the Old Lady is there, though. Hm… this is really tough. Trying to think…
S2: *She got hit by a car.*
All: [Laugh.]
S2: *She is in the middle of the road.*
GM: There is a car flying at you. With your strength, you can roll…but…
Student 4 (S4): *But is it close enough [for everyone] to hear?*
GM: It is in a neighborhood, so if somebody gets hit by a car, someone will call.
S4: *She's all the way over here. How will she hear?*
GM: I got it! If Clarisse gets hit by a car, Faber will run out of the house. And someone will call the firemen. Once they are called, they will have to call her family because that's what has to happen, right? That will get everyone there.

The exchange revealed the importance of allowing a level of flexibility during the gameplay

since it was S1's turn to continue the story yet S2 and S4 added their questions and comments.

Although the player was violating the game rules by interjecting and assisting the game master,

allowing such violations to continue yielded more dynamic and enriching gameplay experiences

for the players; therefore, I chose to continue the practice for the next iteration.

Even after he solved the problem of moving everyone to a single location, the game

master continued to solicit the players' input, and the players continued to contribute to the

gameplay.

> Game Master (GM): Let's see. [Pointing to Student 1.] You see a flying car coming at you, and which categories should I have her roll for?
> Student 2 (S2): Agility.
> Student 4 (S4) and Student 3 (S3): Perception.
> GM: Okay. You have 5 agility. Man. So if you could roll 5 or above on 20-sided die…
> S2: 5? I think it should be higher.
> GM: She has 5 agility, so that's the lowest stats she has.
> S2: So that should be like 10 or above.
> GM: It should be harder to avoid the car.
> S2: Yeah. So 10 or above.
> GM: Hold on, I got mixed up. So let's make it, 18 or above. If you can roll 18 or above, you can avoid the car.
> S2: 18 or above?
> Student 3 (S3): I would make it 10.
> GM: 15 then?
> S4: That's fair.
> GM: Okay. If you roll 15 or above, you can avoid the car. But if you get hit, everyone will find out you got hit.
> S1 (Student 1): Okay. [Rolls the die and gets 13.]
> All (A): [Laugh.]
> GM: Okay you get hit by a car.
> S2: I think she should lose points.
> GM: Okay. Under agility?
> S4: Yes, and intelligence. She was standing in the middle of the street. Who does that?
> A: [Laugh.]
> GM: Okay, but she only has 10 health points.
> S1: Maybe she was in the car.
> S4: Nah.
> GM: *I am taking 2 points from it. Is that okay? I don't want to be unfair here.*
> Student 5 (S5): She got hit by a car. How is she still alive?
> S4: Is it like a smart car?
> S5: It has to be. How fast was it going?

Such a trend continued throughout the gameplay, where the game master asked the players to

help him make the decisions and provide justification, demonstrating the co-creative nature of

tabletop role-playing gameplay. Their interactions provided enriching information regarding their in-depth knowledge of the book.

Summary of Iteration One: Novel – A Unit on *Fahrenheit 451*

The primary goal of the unit was to produce a playable game for all students while encouraging them to write using textual references as they developed additional skills according to the CCSS (See Table 4). Some of the goals were met while others were not, requiring modifications. Each instructional activity also met the requirements of the TPACK framework where students continuously interacted with the novel (i.e. the content) while constructing a tabletop role-playing game (i.e. the pedagogy) as they used various digital and analog tools (i.e. technology).

Although the volume of writing produced was not the primary objective of the unit, the students wrote 143,104 words in total in a three-week period, which meant that each student wrote 851 words per week in comparison to the national average of 90 words per week (Applebee & Langer, 2011). Even if a fraction of the words was high quality, I argue that the unit met one of the objectives of leading the students to write more.

Students expressed their enjoyment in participating in the unit. Data analysis showed that the students expressed their enjoyment more often during or immediately after game board creation, character visual creation, and adventure description where they were allowed more freedom to choose what they could write. They used phrases such as *I liked, it was fun to,* or *this was better than* to indicate their attitude. The existence of such phrases showed that the pedagogical model met one of the objectives included in Chapter Three.

At the conclusion of the unit, the need for a quick lesson on various characteristics of a tabletop role-playing game became apparent as the students requested more information and

complained about not understanding how to play one. The analysis of the daily reflections and student writing products also revealed that the students were developing core skills including critical thinking skills defined by the CCSS as they reflected on and even criticized their own engagement in the instructional activities. In addition to the six categories in the original data analysis plan, *synthesis of background knowledge*, *critical thinking*, *literary terms*, *writing skills*, *literacy development*, *student attitude* (See Table 4 in Chapter Three on page 69), *details from the text* and *CCSS* were added to the codebook. The results illustrated that this pedagogical model was indeed suitable for accomplishing various goals of a typical high school English class of enhancing student reading comprehension as well as meeting the standards as indicated in Chapter Two. Each randomly selected entry contained several items meeting one or more standards if not all them as identified, showing that the pedagogical model was a viable alternative to a traditional lecture or workshop model of teaching literature.

The unit officially concluded with a posttest. The class average was seventy-four percent with the highest score of 46 out of 47 (ninety-nine percent) and the lowest score of 17 out of 47 (thirty-six percent) with 12 students scoring below seventy percent. When the same group of students took another posttest after reading another book without making the tabletop role-playing games, the class average was sixty-one percent with the highest score of 51 out of 53 (ninety-six percent) and the lowest score of 14 out of 53 (twenty-six percent) with 22 students scoring below seventy percent. Although I could not make a claim that the new pedagogical model has helped the students more than my traditional instructional strategies simply based on the above scores, a further investigation into the reasons for such a difference could be useful to satisfy the curiosity of individuals interested in standardized testing scores, which was beyond the scope of this research.

Importance of Gameplay

Although the students play the game that they created for a total of seven days during the pilot testing, I did not think the gameplay was essential for this model. As an English teacher, I focused on improving students writing skills as evidenced in their writing products. Even as I designed the instructional plan for Iteration One: Novel, I considered the gameplay to be ancillary rather than essential to the final model. However, my opinion regarding the gameplay changed drastically during the first iteration.

The importance of gameplay became obvious when the students suggested that I host a gameplay session during spring break. Initially, I was skeptical as to whether anyone would attend. Although there were a small number of students who attended the gameplay, many students expressed regrets via email when I sent a reminder citing prior vacation plans as the reason. On the gameplay day, a student brought a homemade cake because she was so excited about the gameplay. During the gameplay, I observed how much enjoyment the students had. The conversation flowed seamlessly and naturally as they made suggestions to one another as to how to advance the storyline. Most importantly, the students shared so much content knowledge during the gameplay as they navigated their narrative creation process. When one of the students had to leave because her mother called her to come home after four hours of play, the remaining students stayed to help me finalize the rulebook template.

Observing how the students become so invested in the gameplay completely altered my perception of the importance of providing such opportunities, which led me to add more gameplay sessions to the second iteration. Such a realization supports the efficacy of authentic game-based learning in the K-12 environment where *play* occupies the center of the day-to-day instructional practices without compromising the rigor. Through play, the students expressed

their knowledge about the text as they constructed new meanings, making this an authentic and effective constructionist pedagogical model that could meet both the institutional objectives of meeting the content standards and instructional objectives of meeting improving creativity among the students.

Iteration Two: Play – A Unit on *The Importance of Being Earnest*

This iteration used a Victorian comedic play, *The Importance of Being Earnest* by Oscar Wilde with one Advanced Placement English class of 21 seniors. All instructional objectives remained the same for each activity except for the activities newly added. In addition, all activities were designed to blend the three components of the TPACK framework

Each class period was fifty-eight minutes long for the duration of this unit. Except for class discussions that happened exclusively in class, all instructional activities began in class and continued at home when the students were unable to complete them in class or absent from the class period. Table 6 includes fifteen major activities from Iteration Two: Play.

Table 6

Iteration Two: Play Instructional Activities Sequence

Activity Number	Instructional Activities
Activity 1	Author and play background research
Activity 2	A guided discussion on five main features of game
Activity 3	Setting description
Activity 4	Game board piece creation
Activity 5	Book character description
Activity 6	Imaginary character description
Activity 7	Character visual creation
Activity 8	Game board assembly and discussion
Activity 9	Adventure description and discussion
Activity 10	Role of a game master lecture
Activity 11	Game rules small group discussion
Activity 12	Game rules class discussion
Activity 13	Fishbowl gameplay and class discussion
Activity 14	Rulebooks creation
Activity 15	Final gameplay

Overall development. Because several additional activities were added, this unit lasted for 20 instructional days. Table 6 details the sequence of instructional activities of this iteration.

Based on the experience during the previous iteration, additional instructional elements such as a lecture on components of a game and fishbowl gameplay. Additional workdays were also added for students to complete all assignments. This decision was based on several students' written reflections.

One student wrote:

I finished my Algernon description, and I legitimately tried, which is why it upset me when [another student] said, "it's obvious you didn't try" [during a quick class discussion]. Sometimes people can be rude and be so oblivious about it. Anyway, I realized that I am sort of upset about the due dates. *We get two weeks for setting, then one week for major and minor character, and three days for imaginary, all of which are due [tomorrow].* It is especially weird how the time is designated. *Two weeks for setting, but three days to write a scene in a play?* I guarantee there will be more than a few people that either: Forget to post altogether. Or are not able to post three drafts.

He also expressed his frustration regarding the lack of feedback from his peers. However,

he still addressed the main point of the assignment by pointing to the amount of background

research he conducted in his next day's written reflection.

My hypothesis has proven correct. Some people still have not posted an imaginary character, while others, including myself, have not posted other drafts. It frustrates me with the whole waiting for others to give suggestions about drafts. I admit my post was somewhat late, at 11:00 pm. I have waited forty minutes for someone to edit mine, which nobody has, which I attribute to its length (what can I say? I tried). However, [another student] posted hers at 11:30, and seven people have already commented on it. I'm going to give up, I have a very strong suspicion nobody will comment. Note to self: if you post a long post, people will not want to correct it because it appears to long. Honestly, I'm just bitter because [another student]'s post was more of a hit than mine, but I enjoyed creating a character. There is something about creative writing that is different from the typical analysis essays and research essays. *And I realized that this project has gotten me to research more about the Victorian era than I would have otherwise;* I was researching into jobs and universities of the era to make my post as accurate to the era as possible. *I doubt I would have researched what I did otherwise (if we did a typical essay).*

Another student expressed a similar concern when she wrote:

Our character descriptions are due tomorrow, and *I am feeling a bit overwhelmed. The pace of this unit is going by faster than I expected.* This is definitely not a bad thing; it is simply a matter of getting back on track with the pace of the coursework. *Honestly, I expected more time to work on different aspects of this unit, but I also understand that the game needs to be completed as soon as possible.* My goal with the characters is to make them deep enough so that I can work with more material in application to the game.

Since this was a constructionist pedagogical model, responding to student concerns was not only

practical but also imperative. I argue that any teacher attempting to implement this model should

pay attention to student concerns at each activity even as they attempted to follow the final

model.

Physical game creation. As was the case during Iteration One: Novel, this iteration

began with the students building the physical game followed by the gameplay. However, this

iteration included several new elements such as a guided discussion on the components of a

game, fishbowl gameplay, and additional small group gameplay prior to the final gameplay.

A guided discussion on five main components of a game. Based on student reflection

analysis during the previous iteration, where students expressed the desire to gain more

knowledge on games in general, the unit began with a guided discussion on what every game

should have. The objective of the guided discussion was to expand the knowledge base among

the students to reduce frustration experienced by many students.

Students learned about five major elements defined by Charsky (2010) (i.e. competition

and goals, rules, choices, challenges, and fantasy) of a game. Student reflections revealed that the

students also found the rules to be significant in creating a good game. A student remarked:

> What makes a game a game? Many different things come together to create a game, but
> *EVERYTHING is connected to the RULES.* No matter what the game is about, it will
> include rules and the rules establish what else goes on in the game.

Students also disagreed on whether a fantasy was a necessary component of a game or not.

While acknowledging the importance of rules, a student expressed his doubt on fantasy being

one of the required elements.

> *I have honestly never sat down and thought about the basic rules of a game.* Maybe in
> sports it has come up once or twice, but since I technically do not play a "team sport" I
> am not to familiar with it. In track, there are almost no rules besides the one of
> aggression. You just run until you reach the finish and hope no one gets in your way and
> you don't get in someone's way. I also do not play much games of any kind because I
> honestly either spend my time outdoors or binge watching on Netflix, an astounding
> contrast. So today, it was helpful going over the actual logistics of a board game. I finally
> learning that there were five basic components to any game you play. There must be

objectives and rules. There must be also choices. It must be challenging. *But the debatable one is that it contains fantasy.* The top three definitely makes sense and we would have to base our board game on those.

Analysis of the student reflections revealed that the students enjoyed learning and discussing what a game should contain, demonstrating the usefulness as well as necessity of this activity; therefore, it was included in the final model.

   Author and play background research. Students conducted research on the author of the play, Oscar Wilde, and historical background to meet many instructional objectives set for this activity during the previous iteration: developing students' skills in providing strong textual evidence as well as adaptability of working with various texts and handling a variety of evidence (CCSS, 2010, p.7). Analysis of the writing products showed that the students used additional sources and adhered to the appropriate manuscript format mandated by the CCSS. The activity also included all three components of the TPACK framework.

   Seven randomly selected student writing products had three or more outside sources referenced in their writing. All of the randomly selected student writing products included two or more outside sources, indicating that this activity met all the criteria for a standards-based pedagogical model for a high school literature class. The results firmly established this activity as one of the required items in the final model.

   Setting description. One of the goals of this activity was for students to synthesize the information from the play and produce a coherent piece of writing that met the requirements of the CCSS. It required the students to blend the information from the play (i.e. the content) while writing a piece that turned into their tabletop roleplaying game pieces (i.e. pedagogy) as they used online tools to conduct research and post their descriptions (i.e. technology) based on the TPACK framework. Students were also asked to use descriptive language to demonstrate their

writing skills. This activity continued to serve as a scaffold for the game board creation that followed. For this activity, the students had to write about several different setting areas in the play, and they collaborated extensively in their small groups in class as well as online.

After a class discussion on the historical background of the play and the playwright, which aimed to review the information gained from the activities, a class discussion ensued to generate a list of possible settings in the play. Once the list was completed, each student generated a written description of a location and created a board piece (See Figure 12). Students created three drafts and were required to provide feedback to at least two others although many provided feedback to more than two others. In total, the students wrote 17,705 words for this activity, which meant that each student wrote 843 words.

Figure 12. Game board pieces for Jack's Garden in *The Importance of Being Earnest* photographed by the author

Analysis of the setting descriptions revealed that the students conducted additional research beyond what was included in the play. All 21 students added additional information including photos that they found on the Internet or references from another source to justify their descriptions. When there was little evidence from the play or outside sources, their peer reviewers would point out the error, forcing the writer to add more details in subsequent drafts.

The following example showed how the writer had to respond to different peer

reviewers' feedback.

Jack's Country House – First Draft
It being in the 1800s and in the country and with Jack being wealthy, the home is extravagant and large. His home is in Shropshire county (9), so according to *Google Images* there must be an abundance of sheep in the area. I imagine his country home to be grand with a lot of surrounding land since he has fifteen hundred acres (22). *Referring to several images on Google,* this house has a face of aligned windows and looks almost castle-like. The garden blooms with roses and the plant life is abundant.

Peer Reviewer 1 Feedback
When you say the home is extravagant and large, *you should go into detail of what's inside, the different aspects of furniture and the rooms.* Also, when you talk about the surroundings and the acres, talk about what you see and the different details of the landscape.

Peer Reviewer 2 Feedback
I agree with [Peer Reviewer 1] on this... I think *you just need to add more detail* of what you are imagining in your mind when you first read the play. Just write what you saw and how you felt when you "entered the house."

The original writer revised her post as follows with more descriptions, yet a different reviewer

still requested more information from her.

Jack's Country House – Second Draft
The house is large and magnificent, with hundreds of windows along its white paneled exterior. There is a bay window, since this is the Victorian age, looking out into a great land of green grass and tall hedges along a red-bricked sidewalk leading to the front door. It's a double door and through the window you can see a grand chandelier showing owners' wealth. The interior has several rooms, all color-themed according to seasons. There is a parlor with bookcases. In the back of the house there is a huge garden blooming with an abundance of roses and plant life.

Peer Reviewer 3 Feedback
What colors are a part of the seasons in the rooms? What color is the bookcase? In what part of the house is the parlor located from the front door? *I think with more description, this could be an amazing description.* I was starting to picture the house as you added more, but I still don't see all of it.

Several descriptions contained more than just a detailed description, but also reasons for

such a description and a picture. The following example demonstrated a typical structure of a

final setting description. The student made a point to indicate that he used outside resources after having been told to add more in his previous posts. Such examples demonstrated that this activity met the requirements of a constructionist pedagogical model built on the TPACK framework as the students blended multiple contents to demonstrated the critical thinking skills while engaged in the construction of the final artifacts.

> Algernon's Flat Draft One
> Algernon's flat was impressively large, several rooms filled with a lavish extravagance characteristic of the more well off members of Victorian society. The morning room, where guests were received, was rather beautifully furnished with several elegant pieces. The circular tea table was made of old growth mahogany, supported by a single pole which split half way down its length to multiple, claw footed legs, and it was surrounded by elaborately carved chairs. Next to it, the sofa sat proud and elegant, wide enough to seat four, bound in red fabric and framed in dark wood. Additional, chairs were situated in the corner as well, matching the sofa. Rich red curtains draped down and outline the windows. Adjoining the morning room was the music room, where among other decorations and accents, Algernon keeps the piano. It was not uncommon for very expressive music to be heard coming from this room. Elsewhere, the smoking room was situated, ready to serve as a velvet-lined getaway for anyone seeking a cigar or cigarette break from the woes of the world.
>
> *Alright, now for a few footnotes to make certain that the above description was not exclusive pulled from my own bodily orifices.* The rooms explicitly mentioned are all rooms the play itself mentioned the existence of, since I figured those would be the only ones worth using within the context of the game. The "morning-room" is listed in the initial scene description of Act One, and the play also lists it as the setting of Act One. An adjoining room is mentioned is being the source of Jack's "wonderful expression" on the piano, and as Jordan was so kind this room is later given a name as the music room. The smoking room is of course mentioned by Algernon as being where Jack's cigarette case was left. The interior decor is based off my own imagination after being inspired by the following image *[An image included].*

Once one student added a picture in her post, other students followed the example. In the end, all 21 students included at least one extra visual in their posts, and 7 out of 21 students added more than one picture, which indicated that this activity with a highly historical piece encouraged students to engage in additional research activities (CCSS, 2010).

In the following reflection, a student described how much additional research was needed for his setting description.

> Finding a setting of *The Importance of Being Earnest* was initially *somewhat of a hassle,* as I made note of each instance in the play that mentions a room or a table or anything that might be relevant to the setting of Algernon's flat. *I also found researching into the Victorian-style flats of the nineteenth century was also a hassle.*

A lack of information in the text clearly caused a level of discomfort among the students. However, it also led to students thinking more deeply about what they were writing. A student wrote:

> *A lot of us looked up historical context of the play and utilized direct quotes from the play that lead us into thinking a certain location in the play looked a certain way.* Not everything could be cited because sometimes you just felt that something is the way it is. I could not really explain why I thought that that Algernon's flat had 5 rooms, as opposed to my peer, who thought he has 3 rooms in his flat. *The evidence we had to back up our set up was crucial in deciding whose was more accurate.* Although, things like color choice, you can't really explain why. *Trying to envision how the set looked like is like trying to put a puzzle together.*

A student's post in the following summarized that the students have internalized the importance of using textual evidence to support their claims. To another student's suggestion that she should reduce the number of direct quotes in her description, she replied:

> I was going to put Gwendolyn's room upstairs, but I thought that since I couldn't find any proof, I couldn't make the claim. But based on my experience of how floor plans work, bedrooms are typically grouped together. But I don't know if it was like that in the Victorian era. See my dilemma? *And I will find a photograph of Victorian Homes in London and base my description off that, because, evidence. Evidence is life.*

Student reflections and online posts demonstrated that the setting description met the necessary instructional objectives according to the CCSS for this activity to be included in the final model.

Game board creation. The same instructional objectives for this activity set during the previous iteration were used for this activity including developing students' visual literacy, emphasizing cultural diversity, clarifying the difference between decoding and reading, and

promoting empathy. Although some struggled with having to work with colored pencils and paper to create a drawing, many expressed a level of enjoyment for this activity. This activity yielded several examples of learner agency, a typical byproduct of highly engaging instructional activities based on constructionism (Gee, 2007; Kafai, 2006a; Martinez & Stager, 2013; Papert & Harel, 1991).

> The game board was *fun* to make. I realized near the end that the setting in my mind had manifested into this picture, albeit 2D and not as detailed. However, it was still a task that filled me with *satisfaction,* and I am looking forward to playing the game on it. *One thing is for sure, I am positive that out of all the places in the play, I will remember Algernon's apartment the most. But I wish I heard what exactly I was aiming for. Aerial view, side view, detailed, colorful?* Then again, I understand it's how I perceive the setting, but I was really told that either. I don't have a huge problem with it; it's just a thought. I look forward to seeing the other game boards.

Similar to during Iteration One: Novel, analysis of the student reflections revealed the multiple appearances of the words *fun*, *exciting*, *satisfaction*, and *pleased*, indicating student enjoyment and satisfaction of the game board creation. Also evident in the description above, students expressed a level of frustration regarding what they perceived as a lack of a clear set of instructions despite enjoying the creative part of the process. Students wanted to know whether they were required to create an aerial view of the board or a photo view. When informed that they could decide the kind of views that they wanted, a student said:

> *There are too many rules for this board but yet there are absolutely no rules whatsoever…. this is upsetting me so much.* I don't see the point in drawing our setting because *they are all going to be different.* I'm not saying that I reject the idea to color in classes because I personally love coloring. *I just do not enjoy it when rules accompany the project… but yet there are no rules…*

This and many other reflections showed that teachers implementing the final model should both anticipate and prepare to handle a level of frustration from the students since one of the goals of the task was to explore the differences between reading and decoding. The following reflection

summarized the point of this task, which demonstrated that the students met the new CCSS

standards of developing independent thinking skills through evaluative process.

> I believe that this assignment is *positively challenging. In a standardized education system, there is not much room for creativity to be released, which is a heavy loss.* There is a certain beauty in being able to recreate the image of a certain place as you read it into actual words that not only challenges our intellectual abilities but also provides a source of engaging and enjoyable learning

The final analysis showed that the activity met the instructional objectives, making this

an integral part of the final model.

Book character description. Based on the experience during the previous iteration, a new

instructional objective of differentiating major and minor characters (CDE, 1997; CCSS, 2010)

was added for this activity in addition to the original instructional objectives: writing with textual

evidence, describing a book character as a playable character, and writing creatively. Therefore,

students were required to describe one from a list of major characters (John Worthing, Algernon

Moncrieff, Gwendolen Fairfax, Cecily Cardew, and Lady Bracknell) and another from a list of

minor characters (Miss Prism, Reverend Chasuble, Merriman the butler, and Lane the

manservant).

In both their descriptions and reflections, students cited a lack of information as

challenging. However, students still managed to include the textual evidence from the play to

support their own creative assertions rather than simply restating the facts from the play in their

descriptions, indicating the character description as a solid instructional activity. For this activity,

many students used footnotes to justify their choices as shown in the example below.

> Although *there was no description of Gwendolen's physical appearance in the play,* there were plenty of lines said by her and about her to give us readers a hint as to what kind of personality she possesses. Throughout the play you can infer that she is *straight forward*[1]*,* somewhat *intelligent*[2], or at least able to use big words, and not the type of person to use her wealth against someone[3]. As for her strength, I'm not sure how strong she is physically, but by using evidence from the end of the play, I can conclude that she is

headstrong and *ready to hold her ground[4]*. Like almost all women she is highly capable of getting the truth out of someone she sincerely cares about and also *is very serious about her bread and butter.[5]*

> 1. In response to Jack confessing his love for her, "Yes, I am quite well aware of the fact. And I often wish that is public, at any rate, you had been more demonstrative"(Wilde 1944) [*sic*]/ *"Whenever people talk to me about the weather, I always feel quite certain that they mean something else. And that makes me so nervous"(1944)*
> 2. *"...that is clearly a metaphysical speculation, and like most metaphysical speculations has very little reference at all to the actual facts of real life, as we know them"(1945)*
> 3. "Outside the family circle, papa['s wealth], I am glad to say, is entirely unknown. I think that is quite as it should be" (1963)
> 4. *"I am known for the gentleness of my disposition, and the extraordinary sweetness of my nature, but I warn you, Miss Cardew, you may go too far"(1966)*
> 5. *"Gwendolen is devoted to bread and butter"(1939)/*"You have filled my tea with lumps of sugar, and though I asked most distinctly for bread and butter, you have given me cake"(1966)

Despite the lack of physical description from the play, the students described various characters in the play as if they were imaginary while grounding the descriptions in the text. In addition, many students referenced other literary characters or TV actors as their inspirations as shown in the example below, striking a delicate balance of using textual evidence and additional resources. The student products from this activity demonstrated the power of a constructionist pedagogical model based on TPACK that allowed the students to leverage all available technologies while creating artifacts. Students accessed and incorporated additional content using available technological tools.

> As Merriman has almost no lines and pretty much is just there to fill space, *much of what I've written here is a carryover from my exposure to characters such as Alfred Pennyworth [a comic book character] and Mycroft Holmes [a TV character],* as well as my own mental images of what a British Butler looks and acts like. However, I did not pull this description entirely from thin air. Throughout the play, Merriman obeys without question the instructions of those whose employ he is under. When Jack tells him to get the dogcart, he gets it with a simply "Yes sir." When Cecily tells him to tell the dogcart to wait, he does. When Algernon tells him to have the cart come backs next week, he checks for approval from Cecily, then goes with it. *When interacting with other characters, he says very little, and unlike Lane makes no kind of sass, which I interpret as a quiet professionalism on his part.*

By the time they created imaginary characters, students demonstrated their ability to seamlessly blend their historical knowledge with textual evidence. In total, the students wrote a total of 28,161 words for their book characters, and this feature was retained for the final model without modification.

 Imaginary character description. By creating an imaginary character, students were asked to demonstrate more sophisticated literacy skills in addition to meeting the basic instructional objectives of writing with evidence. Once again, demonstrating their creativity while simultaneously focusing on the details from the play became extremely important. For this activity, students wrote 14,399 words. As with the first iteration, this activity yielded examples of the student products that demonstrated the power of a constructionist pedagogical mode built on the TPACK framework. Not only did the students extensively use content from the play, but they also included numerous examples from outside sources using available technological tools. For example, one student described a dog, Edna the Yorkshire Terrier, as her imaginary character. Even as she described her dog, she incorporated additional details from the play and outside sources.

Edna the Yorkshire Terrier – Draft 1

With every *rich lady,* comes the perfect accessory. Edna the Yorkshire Terrier, was just that to *Lady Bracknell.* Accompanying her to the theater, the park, and every other function that was socially appropriate to bring along the furry friend, Edna was there. Small, light, and fluffy with a mix of brown and black medium length dog hair; Edna was the most stylish doggy on the block. Given to Lady Bracknell *by her late husband*; Edna was more of a child that required high maintenance than the young and naïve *Gwendolyn.* Edna is a feisty little dog that is pleased with the attention that she gets from Lady Bracknell and her friends. Most of the time, the conversations she hears are completely foolish and she does not understand why Lady Bracknell is such a spoiled and mean woman. However, the proper care that Edna receives results in her loyalty towards her owner and is a great lap dog when they go out and about. *Edna is a strong and smart Yorkshire who participates in dog shows (an upcoming activity during the Victorian Era)* and has won her fair share of medals and recognitions in the county. *Though she greatly*

respects her owner Lady Bracknell, she can hardly tolerate Gwendolyn and dread the day that she may be passed down to her.
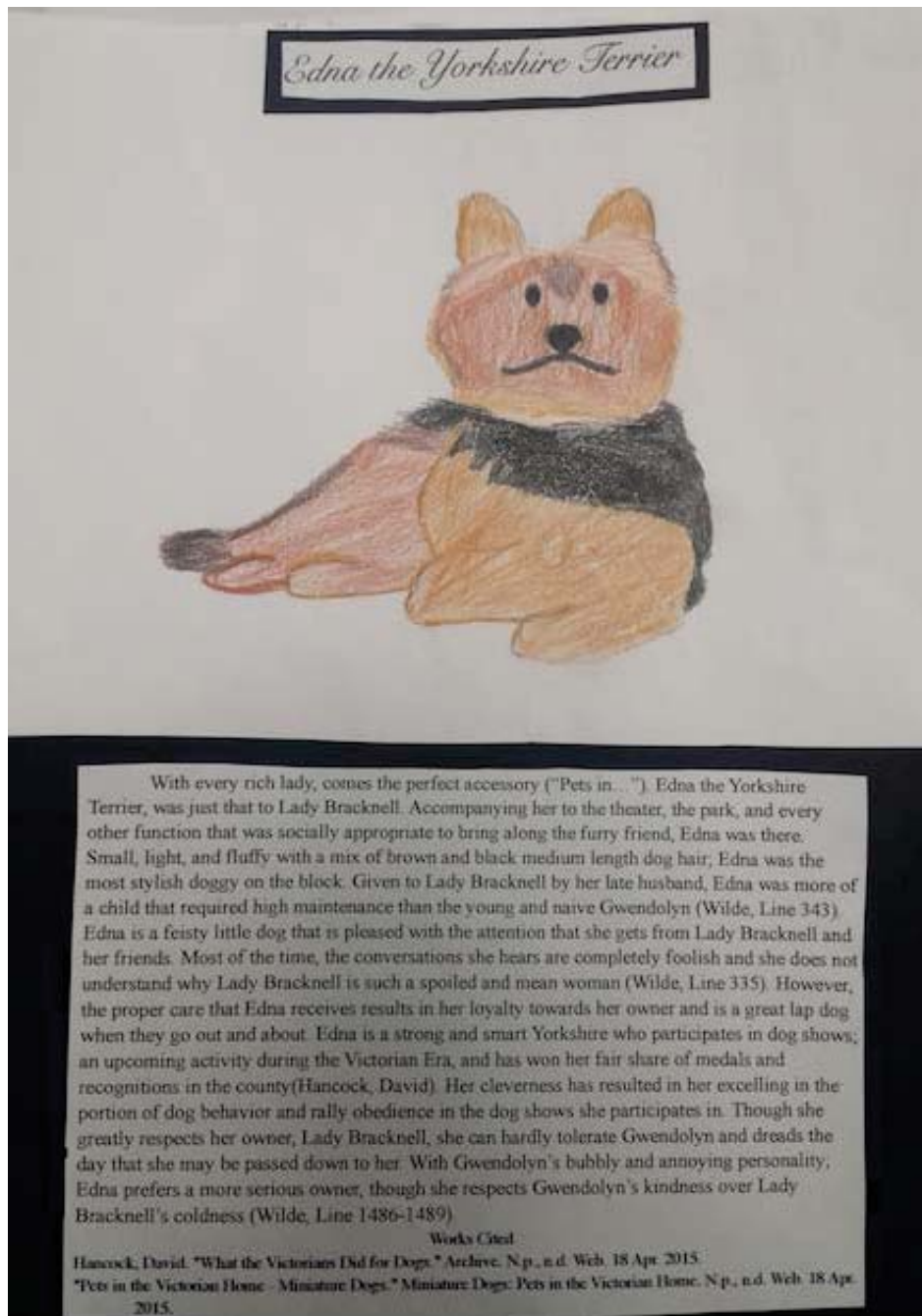

Figure 13. Edna the Yorkshire Terrier Visual photographed by the author

Eventually the student created a visual of her description with additional information from the play and various outside sources (See Figure 13).

In addition to adding quality outside sources, neatness and picture quality seemed to matter more for these students than they did during the previous iteration. Nearly half the students typed their descriptions for their visuals. A student digitally reproduced a picture after initially drawing it by hand (See Figure 14). Such visuals served as evidence that the students were able to leverage their resources and develop digital literacy, thereby meeting the CCSS.
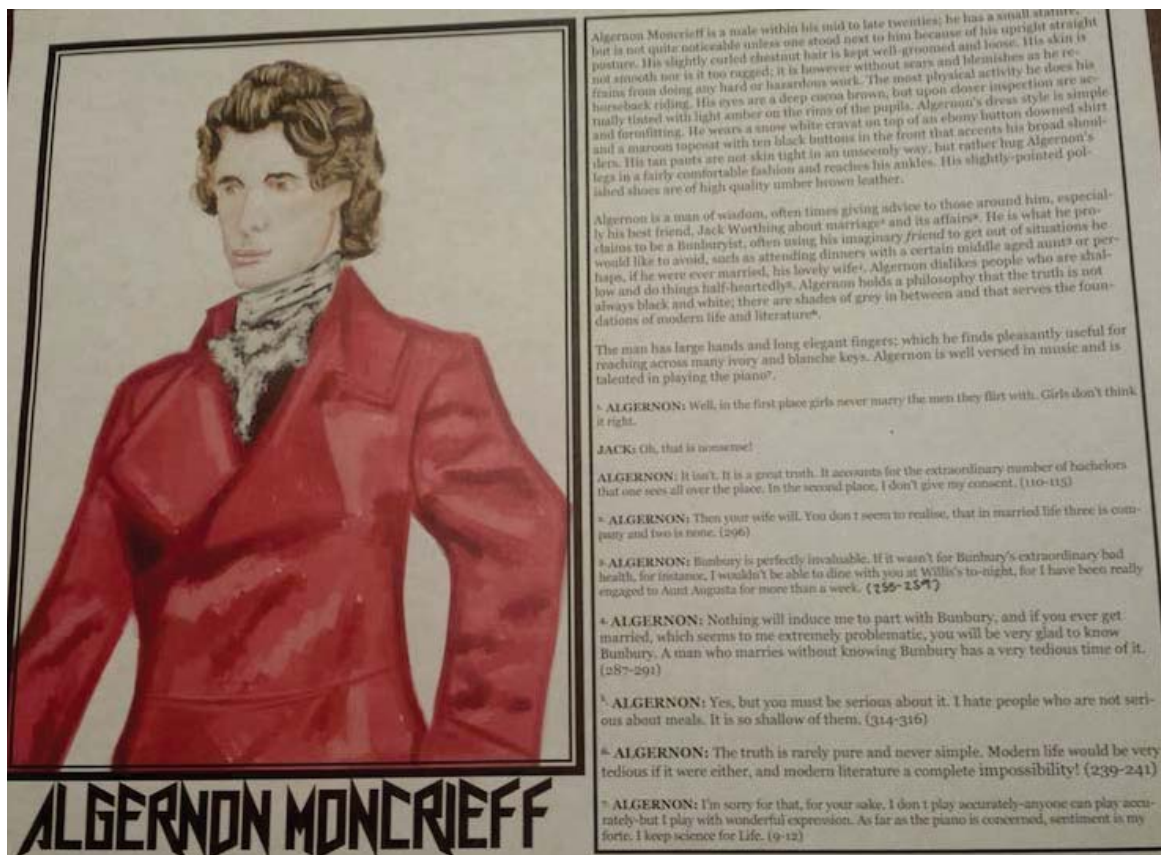
Figure 14. A character visual for *The Importance of Being Earnest* photographed by the author

This activity along with all other instructional activities in this iteration accomplished the additional goal of encouraging the students to read and reread the text several times as one student reflected. Despite having to reread the play, the student reported a positive feeling towards his accomplishments, which was typical in many reflections.

> I just finished my first character description for Miss Gwendolen Fairfax. I think I did a good job describing her physical appearance and a sufficient amount of work for her

personal qualities. *I reread the play today to find every detail I could that gave clues to her personality and I found a lot of examples.* Now I just have to decide what second character to do, which is probably going to be a minor character. *This assignment, at least for me, I felt was very productive and effective because to make sure I didn't miss anything I analyzed the characters speech and quotes to determine her attitude. So, instead of just reading the play for the humor and satire, I was reading to better understand the character I was assigned.*

Other reflections revealed that the students embraced the goals for this activity, evidenced in the example below, confirming its necessity for the final model.

When I first read the instructions to this part of the project, *I thought it was going to be easy, but it was not!* I was actually really hard to describe the character using references from the book and a little imagination. *However, I understand the point of the assignment now. It was to make us students really pay attention to what we are reading.* Majority of students just know the character by name and what he/she did in the story, but we never stop to think or even try to visualize what the character looks like in our heads. *Because of this assignment, I can now visualize what Miss Prism looks like and really engage more into the play as a whole.*

Game board assembly. After creating individual pieces, students assembled two large boards as the students did during the previous iteration (See Figure 15). Once again, this activity was placed just before adventure descriptions as a means to refocus the students' attention on game creation beyond typical activities in an English class. Such an act of construction was central to this constructionist pedagogical model. The finished boards look very different from one another, which elicit additional discussions regarding creativity and individuality, in addition to meeting the instructional objectives set by the CCSS, making this one of the central activities for the final model.

Figure 15. Game boards for *The Importance of Being Earnest* photographed by the author

      Adventure description. According to many student reflections, this task was the students'

absolute favorite for this iteration. Students wrote detailed scenes that could be acted out, which

met several CCSS in particular the adaptability of working with various texts while handling a

variety of evidence. This activity showed the power of this constructionist model for K-12

education since it allowed the students to construct new artifacts while fully grounding and

incorporating the given content and available technological tools that facilitated peer feedback,

which illustrated that this activity met the requirements of the TPACK framework. It also

showed that a play was appropriate for this model. The genre of the text heavily influenced this

task since all 21 students wrote a scene in a play without being asked or required to do so. Online

posts reflected how all students spent hours discussing small details of their scenes. As they

perfected their scene, however, the students became more frustrated not having enough time to

explore their story ideas, necessitating the addition of more instructional days. A student wrote:

> I finished my adventure tonight, and *I never realized quite how difficult it is to write a creative story;* my mind eventually led me to a contest of two fiancés (an idea which I love and am actually surprised I came up with), but after that, I didn't quite know how to end it. What should the contest be? Who should Cecily choose? How should I make it comedic? I eventually settled on how to resolve the conflict, but *I couldn't help wishing that I had more time on my adventure.*

In total, the students wrote 32,800 words for this activity. As with the previous iteration, several

students incorporated their own imaginary characters into their adventure descriptions. In

addition, all scenes were filled with humor and wit. Even writing one of the shortest scenes

below, the writer demonstrated her understanding of the characters as well as the frivolity of the

upper class Oscar Wilde was famous for mocking. Alluding to another British comedic play *My

Fair Lady* by George Bernard Shaw, which we read earlier in the year, she named the

shopkeeper Eliza. This clearly demonstrated her capacity to understand the varying perspectives

and cultures as well as sophisticated writing skills (CCSS, 2010).

> FOURTH ACT - Good day!
> Scene: *Warm day in London. In the town plaza, children are laughing and men and women murmur as they peak in to the store windows. At midday,* JACK *and* GWENDOLEN *go for a stroll in town.*
>
> JACK: What a lovely day it is to-day!
> GWENDOLEN: Do not speak to me of the weather, Jack. You know that displeases me.
> JACK: Forgive me, darling. Are you warm? Need I buy you a hat? An umbrella? Any thing to shade your fair head?
> GWENDOLEN: [*Fans self]* I admit I am warm. [*Looks in to store window and sees blue hat with feathers*]
> JACK: Does that garment please the eye?
> [GWENDOLEN *smiles sweetly.*]
> JACK *enters into store and stands by front counter.*
> (Enters ELIZA, *store worker*)
> JACK: Miss, I pray you could fetch that blue hat to me please? Dear Gwendolen is warm.
> ELIZA: I am afraid I know not who Miss Gwendolen may be, but I am pleased to help you. [*Smiles at Jack*]
> (*Gwendolen is still waiting outside, quietly humming*)
> GWENDOLEN: What takes my love so long? [*Peaks into window, sees Eliza smiling at Jack*] That swine he is! That harlot she is! The nerve!
> (*Gwendolen barges in to the store and heads toward their direction*)
> JACK: My darling! Look what I have gotten you! I pray you adore it; the sun shall reach you no more!
> GWENDOLEN: No Jack! I see you with this young lady! I am dear Gwendolen no more! [*Turns to* ELIZA] What is your name, Miss?
> ELIZA: (*outraged)* Eliza, Miss. I work here and I just sold this hat to this gentleman.
> GWENDOLEN: This gentleman is my fiancé! Need you not look at him as you are! I see skies in your eyes and my fiancé does not see skies in other ladies' eyes!

JACK: Gwendolen! I see skies only in yours. The sun rises and sets on you! I love you!
GWENDOLEN: I love you!
ELIZA: (*terribly confused*) Er?
GWENDOLEN: Good day!
JACK: Thank you, Miss Eliza! Fair well! [sic]
ELIZA: Er, good day?
GWENDOLEN *and* JACK *exit*
ELIZA: How strange! What skies did she see in my eyes? What does that mean?
END

Students also used various literary devices to create scenes that clearly demonstrated their

understanding of the content from the play. Even the feedback was filled with humor and wit as

seen in below.

Fourth Act: Dear Diary...

Scene: Mid-afternoon at the Manor House. Cecily sits on the couch while Cecilia, the housemaid, brings tea and crumpets for a snack.

Cecily:(with an upbeat manner) Oh heaven's sake! I thought I would never see food again! Tell me Cecilia, what must have taken you so long?
Cecilia:(rolls eyes and uses sarcastic tone) My dear Miss Cecily, it takes time to prepare proper food for impatient people.
Cecily: Oh Miss Cecilia, your sarcasm always astounds me, which is why we are such great friends. Tell me, have you heard from your significant other?
Cecilia: No, not since he left for battle at the beginning of the year. I remember the experience all too well. I watched him walk away from our clandestine love affair, but with sure intentions I would see him again. Yet, it has been six months and I have yet to receive any such letter from my beloved.
Cecily: I am very sorry to hear of your misfortune Miss Cecilia. Is it okay if I record your love affair into my diary?
Cecilia: If that is a sure way to keep you occupied and not complain about my food preparations, then by all means….proceed.

Cecily opens her diary and begins to write an exaggeration of Cecilia's love affair.

Cecily:(jotting down sentences rapidly on the paper) My dear love, I cherish thee with all my heart. When I first bestowed my eyes on your glistening eyes, my heart skipped two beats. Days passed and my mind wandered to pictures of you standing before me. I can feel you near me, even though you are not here. At night, I hear your voice, your laugh, and somehow I know all will be better soon because one day I will see you again.

Cecily puts the diary down on the coffee table and retrieves to the garden. Algernon walks in, exhausted from his trek to the Manor house, sits for a minute and then picks up

Cecily's diary. He reads her latest entry and becomes furious over what is written. He puts the diary back on the coffee table and storms out to the garden to comfort Cecily.

Algernon: Cecily!?!
Cecily: Yes, my dearest. How may I be of service to you?
Algernon: Cecily, where have you been today? Did you escape the restraints of this house?
Cecily:(bewildered) Well, I did walk down to the church early today to see Dr. Chasuble and Miss Prism in the morning and then after that, I ventured to the small village store for stationery supplies. Why, did I do something wrong?
Algernon: (walks closer to her and uses a stern voice) By reading excerpts from you [sic] infamous diary, I have confiscated several entries about a fine, mysterious, and might say, handsome man, with whom you have had corresponded with. I am only expressing my feelings to you that I am not jealous of this mysterious gentlemen [sic], but surely you must know that I do take offense to such an affair.
Cecily: (shocked) How could you speak such inappropriate words to my face? You surely must be exaggerating. I have had no correspondence with any mysterious gentlemen. If I did, I would not be engaged to you now would I?
Algernon: I will not be fooled. Cecily, you have crossed the line between lover and hater. How could you partake in such a sinful act? Do you not know how much I have loved you? It has been days and now those days have been disintegrated like dust particles in thin air.
Cecily: (with complete shock and horror) Al-Alygy?? What are you saying? You cannot possibly be his [sic] upset? It was not a love affair that I was involved in but rather Miss Cecilia, the housemaid. She was reminiscing of her past and I was inclined to hear more. After a few minutes, I decided I wanted to record her experience in my diary as part of my intention to start writing a fiction book based on a love affair.
Algernon: (with disappointment in his eyes) I have always held faith in you, my love, but I fear I cannot decipher what is true from what is false. Therefore, I have decided to call off our engagement.

Cecily cries drastically and falls to her knees to beg forgiveness.

Algernon: I cannot bear this burden upon my shoulders anymore. I must leave and I say thee will pray for forgiveness from sin. I am leaving now.
Cecily: (getting up off her feet) Algy! Algy! P-p-please come back! You are all that I have. You are my everything, my whole. How will I move on without your presence near me? You are everything I have ever wanted and more. The first time I saw you a few days ago, I knew you were what I needed. You are the stroke to my pen that keeps my ideas flowing. Please come back!!!
Algernon: Cecily, I will miss thee, but I cannot come back. I will only say goodbye and never farewell.

END SCENE

Peer Reviewer 1

Oh my goodness. I cannot believe you came up with this, [the writer of the scene]! Soooo [sic] much drama, I love it. Great job!

Peer Reviewer 2
Aaaaaaaaand [sic] you turned this play into a tragedy. That takes talent. This is REALLY cheesy though. We're talking soap opera status. Algernon is also WAAAAAAY [sic] more sarcastic than the way you portrayed him. You could have easily had the same scene with a sarcastic Algernon and it would be quite a bit more interesting. Cecilia, while I see the instigation, seems like a throwaway character. Could you give her a bigger role in this?

Peer Reviewer 3
Haha, this was drama-filled! My only suggestion would be, like [Peer Reviewer 2] said, to give Cecilia a bigger role in this scene. It seems as if she is prominent in the beginning, but then you lose her after that. I just think it would be really interesting to see how you write up her reaction to be!

Peer Reviewer 4
I love that last line. It's so intense. I do agree with [Peer Reviewer 2], it is a bit cheesy. I also didn't really see the character of Cecily come through like I would have liked to. With some editing, I think that it can be really good, you are just going to have to cut out some parts that are not needed. I don't think that part with Cecilia talking about remembering the day that her husband left is necessary, for instance. Just a suggestion.

Peer Reviewer 5
This wad [sic] great! I totally pictured the last few lines like an over-exaggerated black and white movie! My only question is, why did Algernon leave so suddenly? Didn't he love Cecily enough to stay and forgive her?

Analysis of the peer feedback revealed that the students had strong opinions of what the characters would do or would not do as well as what would fit into the tone of the play. After reading a scene where Rev. Chasuble's sister, an imaginary character named Charlotte, urged her brother to change his name, a reviewer argued:

I see you went for a more serious approach to this material. I'm not certain of the power of the boundaries of canon in this assignment, but *Chasuble feels extremely out of character. Chasuble, in my mind, is more oblivious to most things.* Though the conversation between the two characters is well heated and interesting I have to say.

Another reviewer added:

As much as a few lines made me laugh, by and large this felt too...straight I guess is the word. *Chasuble was the guy who would use the same sermon for literally every occasion,*

and accidentally blurted out what I'm guessing was the 19th century version of a pick-up line. He was just as much of a joke as everyone else in the play, at least to me, but in this adventure he feels like a little too much of a "straight man" type.

The writer of the scene retorted to their criticism with her own interpretation of the characters:

I am honestly a bit disappointed you found this to be a serious approach, so I'll definitely have to work on making it *humorous* for a wider audience. *However, I disagree with your perception of Chasuble, especially when coupled with my imaginary character. He knew she was, and is still, a harlot. Besides, he seems to be aware of what his and Miss Prism's metaphors really meant.*

In the end, students produced so many amazing and funny scenes that served as inspiration for the final gameplay. Furthermore, this activity more than met the instructional objectives set by the CCSS; therefore, it was added to the final model.

Rules creation. The same objectives set during the previous iteration were used for this activity. For instance, students were encouraged to exercise their negotiation skills while navigating through a variety of details central to making tabletop role-playing games function. Rules creation allowed the students to develop their metacognition skills (Flavell, 1979). Having experienced the most difficulty during the previous iteration, a whole-class brainstorming session (See figure 16) was added prior to rules creation. The objective was to provide additional knowledge for the students to reduce frustration.

A template was provided for the students to modify to expedite the rule creation process. The template aimed to reduce student frustration during this activity. In addition, a small group discussion as a scaffold was added for students to discuss the type of game system that they were familiar with and to share information on their personal knowledge on the tabletop role-playing games. The small group discussion acted as an additional research opportunity to ease student anxiety over having to play tabletop role-playing games.
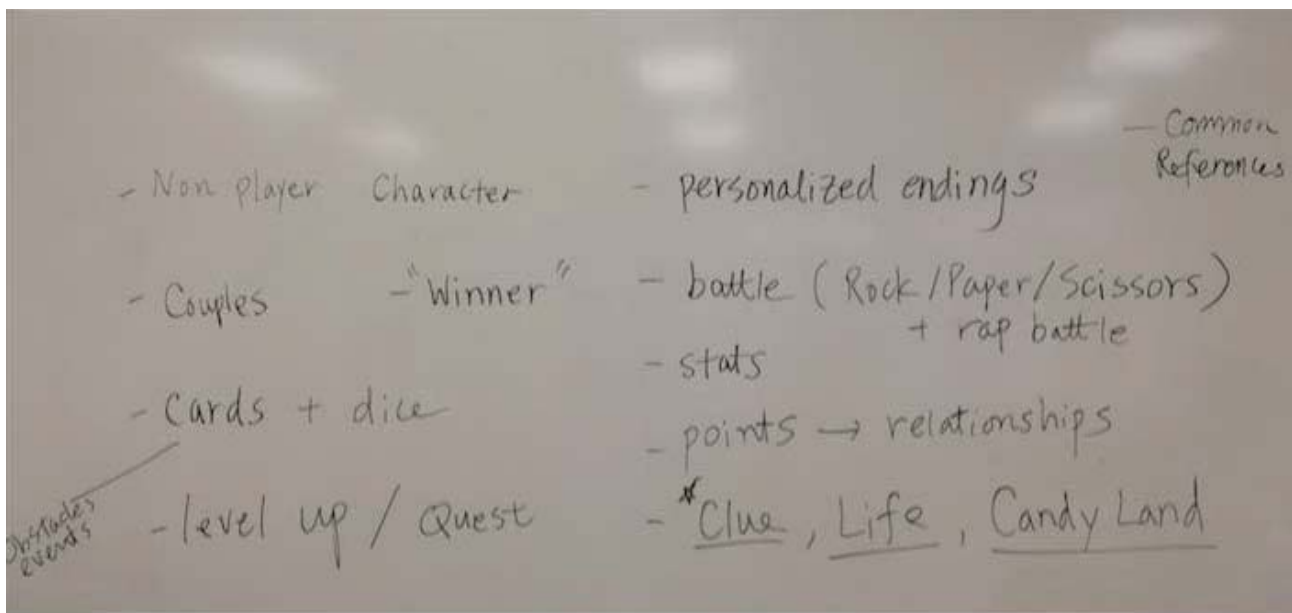
Figure 16. Brainstorming results on the tabletop role-playing game for Iteration Two: Play photographed by the author

Rather than using the preset template, however, the students argued for two different

types of rulebooks: one with a definite winner and one without. Their insistence of having two

different types of games prolonged the process, but also yielded additional learning opportunities

as students engaged in lengthy online discussions. The following exchange showed how deeply

they were thinking about the rules and subsequent gameplay.

> This is [Student 1]. Personally, I believe an indefinite ending would be much more fun and intriguing. As Mrs. Glazer said, RPGs can go on forever, but if we have a definite ending, our RPG cannot. Having an indefinite ending would allow for there to be an ever-evolving storyline, with the *quest being made that the new and fresh each time a player plays a game*. With a definite ending and specific quests, *once a player has played once, that's it*. He/she knows the game and it will always be the same. I also believe many of us simply want a definite end because that is what we are accustomed to. Few of us have played RPGs, so we are used to having a definite end to our games. Popular video games and board games (such as *Monopoly,* which we all have probably played) have definite endings with a clear winner, so most of us can't imagine a game without those mechanics. I say, take a chance and try something new. However, to make the game more related to the play, we could implement trivia to try to determine winners when two players are going against each other.

> [Student 2]: (I *highlighted* [Student 1]'s text above) So a quick question, isn't having a new quest every time the same thing as playing the quest once and not replaying the same

quest? I know this probably doesn't make sense so ask where I can clarify but unless I am not understanding it correctly (very probable) than it sounds like the same thing to me.

The students also created a comparison chart (See Figure 17).

Advantages of Ultimate End	Disadvantages of Ultimate End
• motivated, have ultimate goal • once you hit the skill cap, you can hit the harder quests • encouraging to just finish • Someone wins • high-intensity competition	• One storyline for eight different characters might be necessary.

Indefinite Ending Advantages	Indefinite Ending Disadvantages
• More relevant to life • Ever-evolving storyline that allows different adventures to happen and thus allows more of the play to be expressed in the game	• No winner; but is that really a disadvantage?

Figure 17. A screenshot of two rulebooks comparison charts taken by the author

Students argued continuously on the finer points of the rulebook (See Figure 18). The discussion continued into late hours and occurred among various students, accomplishing this activity's primary goal of encouraging critical thinking skills and metacognition.

Figure 18. A screenshot of students' online discussion of the rulebooks taken by the author

A line from a student's reflection below showed that the students were taking this task extremely seriously.

> Like the past [two] days, today our group discussed important aspects of the game rules. *Never had I had to discuss with a group of people for so long and try to agree on a certain aspect…*

In-class discussions became heated as well over whether there should be winners at the end of the game or not. Eventually, students split into two groups to create two separate rulebooks, indicating the development of strong learner agency (Bandura, 2002, 2006). This activity not only met the mandate set by the CCSS but also proved the power of game-based learning where students voluntarily engaged in highly instructional activities beyond the requirements of the class, making this one of the most important activities for the final model despite its potential challenge for successful execution. Furthermore, it clearly illustrated the power of this constructionist pedagogical model based on the TPACK framework.

Gameplay. Unlike during Iteration One: Novel, I chose to host three types of gameplay to help the students become more comfortable with playing the game that they created and to give them opportunities to refine the rulebooks.

Fishbowl gameplay. The objective of the fishbowl gameplay was to provide the students with the basic knowledge of tabletop role-playing game. However, it met several other mandates set by the CCSS, including providing students' independent thinking, strong content knowledge, comprehension as well as criticism of others' work, and capacity to understand different perspectives and cultures (CCSS, 2010). It also allowed the students to demonstrate their listening and speaking skills (CCSS, 2010).

Figure 19. A screen shot from the video recording of the fishbowl gameplay for *The Importance of Being Earnest* taken by the author

The fishbowl gameplay began with asking for volunteer players from the class (See Figure 19). Students with prior experiences with video games volunteered to play. The class chose the volunteers to play the open-ended game for the fishbowl since more students who worked on the open-ended rulebooks volunteered to play the game. While six students (one game master and five players) played, others watched and documented the game progress using their reflection documents. Unlike the gameplay during the previous iteration, where players acted more like they were being interviewed by the game master rather than acting as one of the characters they played, these students immediately began speaking as their assigned characters. For example, one of the boys who chose to be a female character used a high-pitched female voice the whole game, and all of the students spoke with a British accent. I attributed such behaviors to the genre (i.e. play) of the text used.

The fishbowl gameplay revealed the students' desire to have all nine characters from the play for the final game. Students argued that all players should fully embody their chosen characters and engage each other as the gameplay progressed. The students also expressed that

the game master should be someone who was extremely familiar with the play as well as perceived to be creative. The fishbowl game master was challenged numerous times by one of the players who knew the play better than the game master did, and it impeded the gameplay as the game master struggled to verify the facts from the play. The students reflected that they should have chosen a game master with more knowledge of the play not the game rules since the rules were easier to verify than the lines in the play. The students also commented on how easy it was to spot a player who had not read the play carefully since the player could not answer many questions posed by the game master as well as fellow players, highlighting that the assessment value of the gameplay. Post-fishbowl discussion revealed the value of fishbowl gameplay in informing the students about the crucial elements of tabletop role-playing games and educating students of the quality of a great game master. The fishbowl gameplay proved to be not only useful but also necessary for the successful final gameplay; therefore, it was added to the final model.

Additional gameplay. After seeing the fishbowl gameplay, students played the game that they chose to create to refine the rules. This activity was added for this iteration due to the special circumstance of students wanting to have two different types of rulebooks. Students were asked to defend their decisions as they negotiated the details of the final rules. Analysis of the transcript from the closed-ended group gameplay session (See Appendix I for the full transcript) and subsequent debriefing revealed that the students who were not familiar with tabletop role-playing game felt unsure of becoming the game master. However, it also showed that students were able to weave the content from the play seamlessly during their gameplay, and even gain additional knowledge as a result of participating in the gameplay. They also recognized the importance of becoming earnestly familiar with the text to make the gameplay successful as

evidenced by the following exchange, which indicated the usefulness of additional gameplay

even prior to finalizing the rulebooks.

> S1/GM: So for tomorrow, just study your character. You won't have to read the entire
> play again, but at least study your character well.
> S6/LADY BRACKNELL: *How are you going to do that without reading the whole play?*
> S4/GWENDOLEN: You would have to read the whole play.
> S7/CECILY: Just read it all.
> S2/MISS PRISM: Yes. We should all read the play again.
> S1/GM: Okay, okay. Read it all.

Having such sessions helped students to understand the rules and how to play a tabletop

role-playing game, but revealed a weakness in the model. Without any student who knew how a

typical tabletop role-playing game worked in the group, successful gameplay seemed

challenging. Finally, although additional gameplay helped the groups to refine the rules and met

many of the CCSS, it was added as an optional activity since the demand for both the open-

ended and closed ended game rules was not likely to occur again.

Final gameplay. After the students split into two groups and played the game to refine

their own group's rulebook, students played the game that they designed in two separate groups

(See Figure 20). This time, they chose their game masters based on whom they thought

contributed the most to the rulebook creation and who knew the play extremely well.

Analysis on the transcript of the open-ended game (See Appendix J) revealed that despite

having the completed rulebook, the students generally enjoyed spontaneously contributing to the

development of the story. In the beginning, a couple of students attempted to enforce the rules.

However, as the game developed, all students began adding different challenges and dialogues to

the development of the game without being prompted by anyone. Despite breaking the rules of

the game, the students always grounded their answers in the text, demonstrating the power of the

gameplay as a strong assessment.

Figure 20. Final gameplay of *The Importance of Being Earnest* photographed by the author

Summary of Iteration Two: Play – A Unit on *The Importance of Being Earnest*

For this iteration, 21 students in the class wrote a total of 166,850 words, excluding the words from the visuals and additional comments on various Google Docs, which meant that each student wrote 2,648 per week. It also met the requirements of a constructionist pedagogical model based on the TPACK framework where the students constructed a playable tabletop role-playing game based on the information from the text while using a variety of technological tools.

During this iteration, three different gameplays allowed all students to make and defend their decisions due to the interactive nature of the activity and served as a strong assessment opportunity. Students' statements and decisions during the gameplay revealed the depth of their understanding of the details in the play as well as the characters they were playing. A player was immediately challenged by one of the players or the game master when he or she said or acted in a way that did not match the facts from the play.

Data analysis from this iteration revealed that the most basic role-playing game system that included dice worked for the model. However, students did not adhere to the details in the

game rules despite having worked on them for several days. For instance, grids on the game board became irrelevant during every gameplay due to the lack of rules on movement. Students simply moved their game pieces on the board based on the stories without any regard for the rules in favor of continuous progression of the story during all gameplays. Despite witnessing continuous violations of the rules, I did not force the players to rigidly adhere to the rules since the rules were still evolving as a part of a constructionist pedagogical model.

Throughout this iteration, the submission rate stayed at one hundred percent for every assignment. Furthermore, students voluntarily did more work than they were required to as was evident during rule creation, indicating the development of strong learner agency. One student began making a 3-D game on her own because she was not satisfied with the progress of the game or quality of the board.

Final Model for Using Tabletop Role-Playing Game Creation in Literature Classes

This model was successfully tested with a science fiction novel, *Fahrenheit 451* by Ray Bradbury, and a Victorian comedic play, *The Importance of Being Earnest* by Oscar Wilde, indicating its flexibility and viability for a variety of genres. Therefore, it would be reasonable to argue that the classics frequently used in high school literature classes, such as *The Odyssey* by Homer, *To Kill a Mockingbird* by Harper Lee, or *The Tragedy of Romeo and Juliet* by William Shakespeare, could be used as the source text. For meaningful and robust background research, historical pieces seemed to work the best as was demonstrated during the second iteration. It also showed that a majority of the instructional activities met the CCSS without losing student interest. It is evident that the interest was bolstered by the novelty of creating and playing tabletop role-playing games as students wrote in many different contexts throughout the unit.

Based on two iterations, a final set of fourteen critical tasks for this model is proposed to include: a guided discussion on games, background research, setting description, game board creation, a class discussion on major vs. minor characters, book character description, imaginary character description, character visual creation, game board assembly, adventure description, rules discussion, fishbowl gameplay, game master selection, and final gameplay (see Table 7). The unit would likely unfold over a three-week time frame although additional days would be necessary if the participating students lacked the necessary information on tabletop role-playing games, delaying the rule creation or fishbowl gameplay. Different activities are noted as mandatory (M) or optional (O) based on the data gathered from both iteration cycles. The table also includes alternate activities (A) in case of a lack of digital resources. A few critical components are further explained in the following. The final model is a constructionist pedagogical model built on the TPACK framework intended to enhance literature education in high school English classes.

Table 7

Final Model

Activity Number	In-class activity	Student task	Student created artifacts
Activity 1 – Newly added	Brainstorming and a guided discussion on the components of games (M)	Participate in a brainstorming session (M); generate a list of components for games; take notes on the lecture (M)	Discussion Notes (M); Student Reflections (O)
Activity 2	Background research (M)	Complete the background research (M); create a report (M) and post it online (O)	A report the background (M) and create an online post (O) / handwritten report (A) and share it with a classmate (O) or conduct research in pairs (A)
Activity 3	Setting description (M)	Complete the first draft of the setting description and share with two editors (M); edit two other posts (M); create the final draft (M)	Create a setting description version one (M) and post it online (O); after receiving feedback (M), create the final version (M) and post it online (O) /use handwritten descriptions instead, but still provide and receive feedback from two others in class prior to creating the final draft (A)
Activity 4	Game board creation (M)	Create a section of the game board (M)	Game board pieces (M)

(continued)

Activity Number	In-class activity	Student task	Student created artifacts
Activity 5	Whole class discussion on major vs. minor characters (M)	Participate in the discussion (M); Help create the list of major and minor characters lists (M)	A list of major and minor characters (M)
Activity 6	Book character description (M)	Create two separate descriptions based on the text, one from the list of major characters and one from the list of minor characters (M); read two other descriptions (M) and edit (M); create the final versions (M)	Two book character descriptions (M) and post them online (O); after receiving feedback (M), create the final versions (M) and post them online (O) / use handwritten descriptions instead, but still provide and receive feedback from two others in class prior to creating the final draft (A)
Activity 7	Imaginary character description (M)	Describe one imaginary character (M); read two others' descriptions and provide feedback (M); create the final version (M) after receiving feedback from two others	One imaginary character description (M) and post them online (O); after receiving feedback (M), create the final version (M) and post it online (O) / use handwritten report instead, but still provide and receive feedback from two others in class prior to creating the final draft (A)
Activity 8	Character visual creation (M)	Create a drawing and description a book character or an imaginary character (M)	A drawing and attached written description (M)

(continued)

Activity Number	In-class activity	Student task	Student created artifacts
Activity 9	Game board assembly (M) / game board assembly discussion (O)	Class discussion on decoding vs. reading (O)	Student Reflections (O)
Activity 10	Adventure creation (M) specific to the genre of the text being used i.e. a scene or act for a play and a chapter of a novel	Describe one possible adventure (M) and post it online (O); read 2 others and provide feedback (M); create the final version (M) and post it online (A)	Write one adventure description (M) and post them online (O); after receiving feedback (M), create the final version (M) and post it online (O) / use handwritten descriptions instead, but still provide and receive feedback from two others in class prior to creating the final draft (A)
Activity 11	Small Group Rules Discussion (O)	Participate in a small group discussion on different rules (O)	Written report on various types of role-playing games and different game systems (O)
Activity 12	Rules discussion (M)	Discuss and decide on game rules using the rule books template (M)	Write the rules for the rulebook (M)
Activity 13	Fishbowl gameplay (M)	A small group volunteers to play the game while the class observes and takes notes (M)	Player documents (M) and reflections (M)

(continued)

Activity Number	In-class activity	Student task	Student created artifacts
Activity 14	A short lecture on the qualities of a good game master / game master selection (M)	Create a list of characteristics of a great game master (M); reflect and choose a book character who would be the best to be a game master (A)	Select the game masters (M)
Activity 15	Gameplay and debrief (M)	Play the game (M); reflect on the gameplay (M)	Write the descriptions of the gameplay (M); write final reflections (M)

Physical Board Creation. The final model contained brainstorming and a guided discussion on components of a game based on the second iteration. It acted as a scaffold for successful game rules creation and gameplay by providing the students with necessary knowledge on games. For setting description, the model allowed the students to generate the list of different settings from the text for the board since it further encouraged close reading.

Both book and imaginary character descriptions remained central to the model. However, a distinction between major and minor characters was added for book character description, designed to provide additional opportunities for the students to read the text differently while searching for evidence for characters of different importance. It also provided one more opportunity to review various literary terms required for high school literature education. The separation also increased the number of descriptions for the book character description from one to two while sharply focusing students' attention to details gained from close reading. The imaginary character description continued to provide the freedom for students to engage in more creative writing practices, remaining vital to the final model. Character visualization continued to be important as it provided students an opportunity to work with different media and demonstrate their visual literacy skills; therefore, it was retained for the final model.

Although designated as optional based on the teacher comfort of leading such a discussion, game board assembly discussion was also added to the final model. The discussion emphasizes literacy development that differentiates decoding from reading. Three different transcripts (See Appendix F, G and H) were added as a sample for a teacher wanting to lead a successful class discussion.

Due to the specific genre (i.e. play), writing an adventure description became one of the favorite activities for the students during the second iteration. Both iterations revealed that

adding a genre-specific requirement, such as writing the adventure as a missing chapter or an additional scene in a play, was useful to reinforce student learning for the adventure description session. Furthermore, the complexity and sophistication in their descriptions demonstrated students' writing skills development.

Rules creation changed the most during both iterations. As a result, an optional small group discussion was added to the final model. Prior to engaging the whole-class rulebook creation, however, students should be encouraged to research different tabletop role-playing games if time permits. The second iteration showed that using a collaborative document such as a Google doc became useful for this task. Teachers without access to such a tool should anticipate more difficulty and consider using the final template provided (See Appendix L). Teachers should also consider focusing on the purpose of establishing the rules rather than adhering to the rules too rigidly as indicated by the transcript of the gameplay on *The Importance of Being Earnest* (See Appendix J).

Gameplay. During the gameplay phase, students reported that a brief discussion on the characteristics of a great game master was helpful to them; however, it should be done after the fishbowl gameplay not before since students were generally unsure of the characteristics until after seeing one in action. Furthermore, the final model includes a lecture on the function of a game master. Teachers attempting this model should allow a volunteer game master to run the fishbowl game and debrief to ensure a wise choice for the subsequent gameplay.

Although there was only one gameplay during the first iteration, three different gameplays occurred during the second iteration. It became clear that gameplay highlighted student learning better than some of the other writing activities, and should be mandatory for this model. Solid gameplay acted as a suitable replacement for traditional assessment such as

multiple-choice quizzes, allowing the post assessment to become optional yet still meeting the instructional objectives set by the CCSS.

Chapter Summary

This chapter began with the description of Iteration One: Novel. It included the sequence of activities and data generated from it along with the detailed analysis. The description of the sequence of activities from Iteration Two: Play, along with the data and detailed analysis followed. The chapter concluded with the final model with all the mandatory, optional, and alternative activities and rationales for such designations of various activities.

Chapter Five: Implications and Suggestions for Future Research

A recent conversation with one of my colleagues revealed that game-based learning in K-12 education required more research and additional teacher training. Having learned of my research interest in gaming and game-based learning, he was excited to share that a few of his students used the popular online game *Minecraft* to create a map of the island in *Lord of the Flies* by William Golding. He shared his personal lack of prior knowledge regarding the complexity in the *Minecraft* universe. He also expressed his surprise in the level of student effort. According to the evidence, students spent numerous hours to complete the assignment for the first time in the school year. However, he admitted that he never considered the content standards while creating the assignment. He wanted to focus on the fact that eight out of one hundred twenty three students in his college preparatory sophomore English classes used *Minecraft* rather than articulating the reasons why such a use was relevant or pertinent for his content.

His answer was typical of a teacher who was enamored by the novelty of the project or product without much consideration for the primary objective of meeting the CCSS as a high school teacher. His activity did not address any content-specific instructional objectives not because the activity itself did not contain any but because he lacked a clear understanding of the underlying learning theories or pedagogical implications.

Constructionist Pedagogical Model Built On TPACK for Literature Education

The conversation revealed a fundamental challenge of incorporating any instructional technology into any K-12 classroom. Even when they are using innovative tools, many teachers struggle to articulate the rationale. As a result, the tool often becomes the focus rather than the pedagogy despite its importance in successful integration of tools (Etmer, 2005). Without a solid pedagogical model to leverage its full potential, game-based learning becomes yet another

educational fad that teachers become disenchanted with and fail to see the full benefits of (Fisher, 2006). While game-based learning is an attractive topic for many K-12 educators, it must be connected intentionally and thoughtfully to epistemic frameworks for the specific curricula to be truly effective.

To address the issue, this study focused on designing a practical pedagogical solution based on the TPACK framework (Mishra & Koehler, 2006). The sound pedagogical model that emerged as a result of this study bridged a gap prevalent in K-12 education among different types of knowledge identified in the TPACK framework detailed in Chapter Two. Just as content knowledge is not sufficient by itself, nor pedagogical knowledge without content, so too technical materials and tools do not by themselves provide Deweyian educative experiences, which this model was supposed to provide for all students. The final pedagogical approach provided a constructionist pedagogical model that seamlessly integrated game-based learning into literature education, meeting the mandate of the TPACK framework. The model provided students the opportunities to interact with the content (i.e. different literature genres) while using various educational technology tools (i.e. games and other digital tools) under careful guidance of a teacher using innovative pedagogy (i.e. game creation). Most importantly, the final model met the various mandates of the CCSS, proving to be a superior pedagogical model to address the fundamental goal of literature education.

However, the model's ultimate power resides in its sophistication disguised as a series of enjoyable activities common in many games. While engaged in seemingly familiar instructional activities (i.e. writing and drawing), students constantly interacted with the text and each other to gain fundamental literacy skills. Taking full advantage of the power of game-based learning, the model provides multiple opportunities for students to gain metacognition and complex writing

skills without burdening them with traditional and mundane instructional activities. In short, the model gently coaxed students into learning without making them feel as though they were *forced to* learn, proving the power of game-based learning. It further proved that the model encouraged authentic student engagement often lacking in public education of today (Yazzie-Mintz, 2007).

There were many instances of authentic student engagement throughout the study. For example, students volunteered to show up for the final gameplay at the conclusion of the first iteration without being offered any additional incentives. During the second iteration, students argued for creating two separate rulebooks despite having to do more work than was required. Students voluntarily engaged in online discussions and asked to stay after school to continue playing the game. Students spent hours at home to create beautiful art works featured in this study, which I attribute to the power of game-based learning.

Furthermore, there were many tangential learning opportunities for students participating in the study. For example, when Iteration One: Novel began, I distributed two sets of permission forms (See Appendix E). As I explained the purpose of my research and the concepts of consent and assent from them to my students, they asked why there were two forms. Their questions led to lessons on the famous Stanford Prison Experiment (Zimbardo, 2015) and the Milgram Experiment (McLeod, 2007). I also shared my concerns regarding the impact of the *Hawthorn Effect* (Roethlisberger, Dickson, Wright, & Pforzheimer as cited in Gillespie, 1991), where the subjects of research performed better overall simply because they were under observation, with my students. This led to interesting class discussions on what it meant to be a researcher and write a dissertation to get a doctorate.

While reviewing the forms, several of my students found the term *recovery time* in the parent permission form fascinating, and continued to mention the term even after the unit

concluded. Many of them also found it interesting that the adults were so very concerned about their privacy. As a matter of fact, they wanted to know whether I was going to add their real names to my final draft. When I informed them that I would seriously consider it pending approval from my dissertation committee, they expressed excitement of being a part of research, demonstrating student agency in an unexpected way (Bandura, 2002, 2006).

At the conclusion of Iteration One: Novel, a change in school schedule shortened the class time because it was the day before spring break. Many students were absent on that day, leading me to cancel the whole-class gameplay. Instead, I conducted a class discussion on the lack of diversity represented in their visuals. I asked why there were no African-American characters in any of the visuals despite one of the settings being St. Louis. Students pointed to the passages in the book where Bradbury described Clarisse having "a face as bright as snow in the moonlight" (Bradbury, 1986, p. 7). When asked why there were no African-American imaginary characters, students continued to cite Bradbury's descriptions in the book. However, as the discussion continued, students began expressing their understanding of the danger of unexamined biases in literature and the importance of presenting diverse voices. I have since heard from my students that the class discussion helped them to become aware of the lack of diversity in movies and books, which served an important instructional function of promoting diversity defined by the CCSS.

Additional Reflections

This research certainly challenged me to reexamine my skills as a teacher at every turn as expected. For instance, I considered not using *The Importance of Being Earnest* for Iteration Two: Play as I began to have serious doubts about it during Iteration One: Novel. My committee members raised concerns during my preliminary defense as to whether the particular features of

the play (i.e. lack of serious conflicts and its particular humor) were appropriate for this

pedagogical model. Reading and observing my students' behaviors as they interacted with

Fahrenheit 451, a science fiction novel, I wondered whether I should change the selection from a

play to another novel. During the character as well as adventure creation sessions, I noticed that

the students took advantage of multiple plot elements and different physical settings. In

particular, the students utilized the various descriptions rather than dialogues from the book

when they wrote. I wondered whether a play filled with dialogues would be as effective as the

source document. I seriously considered using *Things Fall Apart* by Chinua Achebe with several

complex characters, rich cultural references, detailed descriptions, and multiple conflicts for the

second iteration. Although I was interested in pushing the boundaries of my model by choosing a

completely different genre, I did not want to frustrate my students by choosing a text that would

not provide enough material to create a good tabletop role-playing game. Unlike a tightly

constructed play intended for a live performance, *Things Fall Apart* contained more characters,

more geographical locations, and complex conflicts, which would have provided my students

more material to write about.

The fact that *The Importance of Being Earnest* was a comedic play also concerned me. I

was not sure whether the gameplay experience would be as enriching since the central conflict

seemed to be somewhat superficial and even frivolous. In comparison to *Beowulf* where a hero

attempted to save a kingdom from a monster and *Fahrenheit 451* where another hero attempted

to save books from barbaric practice of an oppressive government, *The Importance of Being

Earnest* focused on several privileged British upper-class gentlemen and women arguing over

their real names, which led to several couples pairing up. With such concerns, I faced an ethical

dilemma of sticking with a text that I was not completely certain would be successful for my

students as a classroom teacher. Due to my concerns, I even obtained tentative permission from my dissertation chair to change the texts. In the end, I stayed with *The Importance of Being Earnest* despite my reservations. I decided to stay vigilant during the development of the unit and was prepared to make the change if necessary. In the end, the text provided amazing learning opportunities for the students, not only assuaging my all concerns but also affirming my conviction for the power of this pedagogical model.

As wonderful as *The Importance of Being Earnest* turned out to be, it taught me a valuable lesson on the importance of selecting age-appropriate text for the model. When Iteration Two: Play began, my students found controversial information on Oscar Wilde and expressed shock and awe. Many referred to his philandering ways and the subsequent public trial in their posts and reflections, which forced me to address the issue during a class discussion. In the end, the students decided that learning about Oscar Wilde enhanced their understanding of the innuendos and jokes in the play. However, I would caution teachers in choosing a selection that could elicit a controversial discussion on homosexuality and infidelity depending on the kind of class and the age group.

Additional Pedagogical Assumptions for Successful Implementation

While not part of the final model, the model is designed with a set of pedagogical assumptions that are essential to its success. Chief among these are: collaborative class culture, access to digital tools, basic teacher knowledge in gaming and tabletop role-playing games, and specific teacher epistemology and pedagogical expertise.

Established collaborative class culture. A collaborative class culture and the close relationship that I established with my students from the beginning of the school year were essential to success as evidenced by the student participation rate and the honesty in their daily

reflections. Many of them were highly critical of different aspects of the model, which provided rich insights beyond my observations. In addition, an established instructional practice of providing peer feedback aided the development of the model. The students always worked in groups, and providing peer feedback was a routine process for every writing assignment. As a result, students were already familiar with providing productive feedback early in the year. By the time they were engaged in the unit, providing feedback was natural to them as evidenced by the rulebook creation during Iteration Two: Play. Without such a foundation, teachers are not likely to experience the same type of success from using this model.

Access to digital tools. Prior to the iterations, my students were already participating in a Chromebook pilot. As a result, they were already proficient in using many online tools such as Google Docs and an online Learning Management System. Therefore, no additional instruction was necessary for students to become familiar with digital tools. Student competency of Google docs forced me to abandon and alter several requirements.

For instance, initially I planned to have the students write their first draft by hand. However, requiring students to create their first rough drafts in their notebooks slowed the progress since most students could type faster than write their drafts. While students were able to produce a typical paragraph with eight to ten sentences in less than fifteen minutes using digital tools, it took nearly the whole fifty-eight minute period for many students to produce one hand-written paragraph. More importantly, a random selection of fourteen students' first drafts showed that the first handwritten draft and second digitally produced draft were nearly identical, indicating that the students were simply typing the first rough draft without receiving or providing constructive feedback, which failed to meet the instructional objectives of students learning to edit and revise to improve writing. Observation on five different first drafts of setting

description during the first iteration revealed that even when they used their notebooks to write, the students were using their notebooks to take *notes* using bullet points rather than write paragraphs per activity instruction. Therefore, I omitted the requirements for handwritten drafts in favor of digitally produced drafts, which met the CCSS mandates on digital tool use.

Access to such digital tools further augmented the established collaborative class culture where students were comfortable providing productive criticism and pointed feedback. Although the final model included many alternative or optional activities to reduce the impact of the existing students' digital competency, a successful implementation with a similar pace will likely require having access to digital devices such as Chromebooks or computers, digital collaborative tools such as Google Docs and an LMS, and reliable Internet access.

Teacher knowledge on tabletop role-playing games. Every attempt to mitigate its impact among the participants was made, but the lack of knowledge on tabletop role-playing games will continue to be an issue for future implementation. Although the final model included a detailed rulebook template, any teacher unfamiliar with tabletop role-playing games will need more support. To address the issue, teachers should consider connecting to local gaming groups and consulting experienced gamers to gain more information as I did prior to my first pilot. Accessing online articles is another option. Teachers can also watch various YouTube videos of tabletop role-playing gameplay or enlist student volunteers who are familiar with tabletop role-playing games to aid for the rule creation and gameplay processes where the knowledge on tabletop role-playing games becomes critical for success.

For the first pilot and both iterations, I was lucky to have a number of students who were familiar with tabletop role-playing games, which made the process become much more enriching and dynamic. Anticipating such challenges, I was ready to provide additional support whenever

possible as I did during gameplays for both iterations. Teachers attempting to implement this model should acquire basic knowledge to experience success.

Teacher epistemology. A strong epistemological belief of considering knowledge as co-constructed not static (Gill, Ashton, & Algina, 2004) influenced the development of this pedagogical model. All day-to-day class activities were designed based on the philosophy best summarized in the Latin phrase *docendo discimus,*[7] which emphasizes how important it was for students to share what they learned with one another to maximize their own learning.

Focus on productive failures among students for the sake of learning afforded students to make multiple attempts at learning. For example, even when the students struggled to devise the rulebook during Iteration One: Novel and argued for two types of game system during Iteration Two: Play, the progress was not severely hindered since the model's overall success depended on the number and quality of opportunities for student learning rather than the creation of highly sophisticated tabletop role-playing games.

Suggestions for Further Research

Clearly this study focused on developing a fully developed pedagogical model using tabletop role-playing game creation as a core instructional activity. Therefore, further studies are needed to truly determine the effectiveness of the model.

Working with different groups. Working with different teachers and different students will be necessary to prove that the model is a viable model for literature education. In addition, the age group of students involved is an interesting question to consider. I suspect that students as young as fourth graders could benefit from this since they transition from *learning to read* to *reading to learn* with chapter books.

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[7] "By teaching, we learn," (Stone, 2005).

Effects from repetition. The study showed that the pedagogical model yielded several desirable outcomes. However, I could not help but wonder whether the result would be the same if the teachers used the model more than once with the same group of students. On the one hand, I suspect that the novelty of creating games would diminish if the same group of students were to repeat the process using different texts. On the other hand, the students would acquire additional skills such as becoming much more proficient in game creation. Furthermore, teachers could introduce additional digital tools as the students become more proficient in creating games.

Using different texts. Even though it demonstrated great instruction potential based on the use of three vastly different genres of literature, the model should be tested with additional types of literature. For instance, novels such as *The Sound and the Fury* by William Faulkner with vastly different time periods and narrators might not work with the model without considerable adjustments to the steps. Even if a teacher could create the model for such a text, it might be difficult to meet the instructional objectives. However, until the implementation of the full model, there is no way to know whether such a text will be suitable for this model. In addition, there is no way to know other types of role-playing game system such as card-based systems or purely digital platforms will yield similar instructional benefits since only one type of tabletop role-playing game system using dice was used for all three instances.

Expanding to other subject areas. Finally, expanding this research to other domain areas such as history, which seems to be a natural fit, or even mathematics and science, which could be challenging yet interesting, should be considered. Could a science teacher create a tabletop role-playing game of a cell's journey? Could a math teacher allow students to take a role of numbers or shapes to achieve a level of success in the mathematical system while struggling against theorems and postulates? This research used literature as its primary content due to its

imaginative properties. However, the core intent of the research was to develop a constructionist pedagogy using tabletop role-playing game creation, based on sound learning theories that encouraged specific learner behaviors and producing artifacts that demonstrated student learning. Determining whether the power of this strategy could transcend a content domain will be beneficial to the field of the game-based learning.

Closing Thoughts

In her 2012 opinion column in *The New York Times*, Claire Needell Hollander, a middle school English teacher, argued that English teachers should focus more on reading complex literature pieces. Despite *feeling* the importance of literature in the middle school curriculum, she lamented that she had to forego teaching literature due to the pressure of improving standardized test scores. She declared that she was "not able to show that [her] literature class makes a difference in [her] students' test results" (para 9), a tragic yet familiar statement that many literature teachers have uttered as high school English curricula has systemically eliminated lengthy fictions in recent years.

As much as I sympathize with Hollander's sentiment, I argue that literature teachers as professionals should take back the control of our profession by improving our crafts in addition to lamenting our current condition. Simply arguing the value of literature education for value-sake has been utterly insufficient. To be clear, I am not saying that literature teachers are at *fault* for the current learning environment. Over-emphasis on testing and subsequent data that do not illustrate the full array of student skills are clearly problematic, and all literature teachers should do everything we can to combat that. However, admitting that there is no way to know whether an instructional activity such as having the student make a map of the island in *Lord of the Flies,* which clearly teaches the students the value of close reading and digital literacy, can meet

specific instructional objectives or standards is no way to support the value of literature education. Declaring our inability to justify the value of reading complex literature pieces in relation to standardized testing data is also unwise.

Developing an innovative pedagogical model that can expose students to cultural diversity and creativity innate in complex piece of literature is one way to ensure that literature teachers can protect this noble and utterly human endeavor. Just as we literature teachers teach our students to see themselves as Beowulf who bravely slayed Grendel to protect Hrothgar's kingdom, it is time for all literature teachers to work on developing innovative pedagogical models to protect our students from the desolation and destruction that is likely to be caused by literature curriculum lacking complex literature pieces.

REFERENCES

AACTE Committee on Innovation and Technology. (2008). *Handbook of technological pedagogical content knowledge (TPCK) for educators*. New York, NY: Routledge.

Ackermann, E. (2001). Piaget's constructivism, Papert's constructionism: What's the difference? Retrieved from http://learning.media.mit.edu/content/publications/EA.Piaget%20_%20Papert.pdf

Aguilera, M. D., & Méndiz, A. (2003). Video games and education. *Computers in Entertainment, 1*(1), 10. doi:10.1145/950566.950583

Anderson, T., & Shattuck, J. (2012). Design-based research: A decade of progress in education research? *Educational Researcher, 41*(1), 16-25. doi:10.3102/0013189X11428813

Annetta, L. A., & Bronack, S. C. (2011). *Serious educational game assessment: Practical methods and models for educational games, simulations and virtual worlds*. Rotterdam: Sense.

Applebee, A. N. (1996). *Curriculum as conversation: Transforming traditions of teaching and learning*. Chicago, IL: University of Chicago Press.

Applebee, A. (2000). Alternative models of writing development. In R. Indrisano & J. Squire (Eds.), *Perspectives on writing: Research, theory, and practice* (pp. 90–110). Newark, DE: International Reading Association.

Applebee, A. N., & Langer, J. A. (2011). A snapshot of writing instruction in middle schools and high schools. *English Journal*, *100*(6), 14-27. Retrieved from http://serach.proquest.com/docview/875295901?accountid=13159

Applebee, A. N., Langer, J. A., Nystrand, M., & Gamoran, A. (2003). Discussion-based approaches to developing understanding: Classroom instruction and student performance in middle and high School English. *American Educational Research Journal, 40*(3), 685-730. doi:10.3102/00028312040003685

Association of College and Research Library. (1996). ACRL visual literacy competency standards for higher education. Retrieved from http://www.ala.org/acrl/standards/visualliteracy

Association for Educational Communications and Technology. (2007). Definition. In A. Januszewski, & M. Molenda (Eds.), *Educational technology: A definition with commentary* (pp. 1–14). New York, NY: Lawrence Erlbaum Associate.

Azevedo, R. (2009). Theoretical, conceptual, methodological, and instructional issues in research on metacognition and self-regulated learning: A discussion. *Metacognition Learning*, *4*, 87-95. doi:10.1007/s11409-009-0935-7

Azevedo, R., & Jacobson, M. (2008). Advances in scaffolding learning with hypertext and hypermedia: A summary and critical analysis. *Educational Technology Research & Development*, 56(1), 93–100. doi:10.1007/s11423-007-9064-3

Bandura, A. (2006, June). Toward a psychology of human agency. *Perspectives on Psychological Science*, *1*(2), 164-180. doi:10.1111/j.1745-6916.2006.00011.x

Bandura, A. (2002). Social cognitive theory in cultural context. *Applied Psychology: An International Review*, *51*(2), 269-290. doi:10.1111/1464-0597.00092

Bandura, A. (2006). Toward a psychology of human agency. *Perspectives on Psychological Science*, *1*(2), 164-180. doi:10.1111/j.1745-6916.2006.00011.x

Barab, S. A. (2006). Design-based research: A methodological toolkit for the learning sciences. In R. K. Sawyer (Ed.), *The Cambridge handbook of the learning sciences* (pp. 153-160). Cambridge: Cambridge University Press.

Barab, S. A., & Squire, K. (2004). Design-based research: Putting a stake in the ground. *Journal of the Learning Sciences, 13*(1), 1-14. doi:10.1207/s15327809jls1301_1

Baylor, A. L., & Ritchie, D. (2002). What factors facilitate teacher skill, teacher morale, and perceived student learning in technology-using classrooms? *Computers & Education, 39*(4), 395-414. doi:10.1016/S0360-1315(02)00075-1

Beach, R. (1993). *A teacher's introduction to reader-response theories*. Urbana, IL: National Council of Teachers of English.

Benkler, Y. (2006). *The Wealth of Networks*. New Haven, CT: Yale University Press.

Black, R. W. (2008). *Adolescents and online fan fiction*. New York, NY: Peter Lang.

Black, P., & William, D. (1998). Inside the black box: Raising standards through classroom assessment. *Phi Delta Kappan, 92*(1), 81-90. doi:10.1177/003172171009200119

Blau, S. D. (2003). *The literature workshop*. Portsmouth, NH: Heinemann.

Bloom, H. (1998). *Shakespeare: The invention of the human*. New York, NY: Penguin Group.

Bloom, H. (2000). *How to read and why*. New York, NY: Scribner.

Bogost, I. (2007). *Persuasive games: The expressive power of videogames*. Cambridge, MA: MIT Press.

Bogost, I. (2011, August 9). Gamification is bullshit. *The Atlantic*. Retrieved from http://www.theatlantic.com/

Bolter, J. D. (1998). *Handbook of literacy and technology: Transformations in a post-typographic world*. Retrieved from http://bit.ly/14ZBoP7

Bolter, J. D. (2001). *Writing space: Computers, hypertext, and the remediation of print* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum.

Booker, C. (2009). *The seven basic plots: Why we tell stories* (4th ed.). New York, NY: Continuum.

Bowman, R. F. (1982). A Pac-Man theory of motivation. Tactical implications for classroom instruction. *Educational Technology, 22*(9), 14-17. doi:10.1016/j.chb.2014.12.052

Bowman, S. L. (2010). *The functions of role-playing games: how participants create community, solve problems and explore identity*. Jefferson, NC: McFarland & Company, Inc.

Bradbury, R. (1986). *Fahrenheit 451*. New York, NY: Ballantine Books.

Bransford, J. D., Brown, A. L., & Cocking, R. (2000). *How people learn*. Washington DC: National Academy Press.

Bristor, V. J., & Drake, S. V. (1994). Linking the language arts and content area through visual technology. *THE Journal*, *22*(2), 74. Retrieved from http://web.b.ebscohost.com

Brown, A. L. (1992). Design experiments: Theoretical and methodological challenges in creating complex interventions in classroom settings. *Journal of the Learning Sciences, 2*(2), 141-178. doi:10.1207/s15327809jls0202_2

Brown, J. S. (2006). New learning environments for the 21st century: Exploring the edge. *Change: The Magazine of Higher Learning*, 38(5), 18–24. Retrieved from http://www.johnseelybrown.com/newlearning.pdf

Brown, A.L., & Campione, J.C. (1996). Psychological theory and the design of innovative learning environments: On procedures, principles, and systems. In L. Schauble & R. Glaser (Eds.), *Innovations in learning: New environments for education* (pp. 289-325). Mahwah, NJ: Erlbaum.

Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher*, *18*(1), 32-42. doi:10.3102/0013189X018001032

Brown, J. S., Denning, S., Groh, K. & Prusak, L. (2005). *Storytelling in Organizations: Why Storytelling is Transforming 21st century Organization and Knowledge Management*. Oxford: Elsevier.

Brynelson, N. (2005). Expository reading and writing course. Retrieved from https://www.calstate.edu/eap/englishcourse/

Burke, J. (2013). *The English teacher's companion: A completely new guide to classroom, curriculum, and the profession,* (4th ed.). Portsmouth, NH: Heinemann.

California Department of Education. (1997). English language development standards. Retrieved from http://www.cde.ca.gov/be/st/ss/documents/elacontentstnds.pdf

California Department of Education. (2013). School accountability report card (SARC). Retrieved from http://www.cde.ca.gov/ta/ac/sa/

Clark, C. & De Zoysa, S. (2011). *Mapping the interrelationships of reading enjoyment, attitudes, behaviour and attainment: An exploratory investigation.* London: National Literacy Trust.

Cambridge Assessment. (2013). What is literacy? An investigation into definitions of English as a subject and the relationship between English, literacy and 'being literate.' *A Research Report*. Retrieved from http://www.cambridgeassessment.org.uk/Images/130433-what-is-literacy-an-investigation-into-definitions-of-english-as-a-subject-and-the-relationship-between-english-literacy-and-being-literate-.pdf

Campbell, B. (1990). What is literacy? Acquiring and using literacy skills. *Aplis, 3*(3), 149-152. Retrieved from http://web.a.ebscohost.com.lib.pepperdine.edu

Carbonaro, W. J., & Gamoran, A. (2002). The production of achievement inequality in high school English. *American Educational Research Journal, 39*(4), 801-827. doi:10.3102/00028312039004801

Carnes, M. C. (2005). Reacting to the past. *Change: The Magazine of Higher Learning*, 37(2), 6-11. doi:10.3200/CHNG.37.2.6-11

Chai, C. S., Koh, J. H., & Tsai, C. C. (2013). A review of technological pedagogical content knowledge. *Educational Technology & Society, 16*(2), 31-51. Retrieved from http://www.ifets.info/journals/16_2/4.pdf

Charsky, D. (2010). From edutainment to serious games: A change in the use of game Characteristics. *Games and Culture, 5*(2), 177-198. doi:10.1177/1555412009354727

Chen, C. (2008). Why do teachers not practice what they believe regarding technology integration? *The Journal of Educational Research, 102*(1), 65-75. doi:10.3200/JOER.102.1.65-75

Chen, M. (2012). *Leet noobs: The life and death of an expert player group in World of Warcraft.* New York, NY: Peter Lang.

Clark, C., & De Zoysa, S. (2011). *Mapping the interrelationships of reading enjoyment, attitudes, behaviour and attainment: An exploratory investigation.* London: National Literacy Trust. Retrieved from

http://www.literacytrust.org.uk/assets/0001/0025/Attainment_attitudes_behaviour_enj oyment-Final.pdf.

College Entrance Examination Board. (2003). *The neglected "R": The need for a writing revolution.* Report of the National Commission on Writing in America's Schools and Colleges. Retrieved from http://www.collegeboard.com/prod_downloads/writingcom/neglectedr.pdf

Collins, A. (1999). The changing infrastructure of education research, Issues in educational research. In E. C. Lagemann & L. S. Shulman (Eds.), *Issues in education research: Problems and possibilities* (pp. 289-298). San Francisco, CA: Jossey-Bass Publishers.

Collins, A. (2006). Cognitive apprenticeship. In R. K. Sawyer (Ed.), *The Cambridge handbook of the learning sciences* (pp. 47-60). Cambridge: Cambridge University Press.

Collins, A., Brown, J. S., & Newman, S. E. (1989). Cognitive apprenticeship: Teaching the crafts of reading, writing, and mathematics. In L. B. Resnick (Ed.), *Knowing, learning, and instruction: Essays in honor of Robert Glaser* (pp. 453-494). Hillsdale, NJ: Lawrence Erlbaum Associates.

Collins, A., Joseph, D., & Bielaczyc, K. (2004). Design research: Theoretical and methodological issues. *Journal of the Learning Sciences, 13*(1), 15-42. doi:10.1207/s15327809jls1301_2

Common Core State Standards. (2010). English language arts anchor standards. Retrieved from http://www.corestandards.org/assets/CCSSI_ELA%20Standards.pdf.

Cover, J. G. (2010). *The creation of narrative in tabletop role-playing games*. Jefferson, NC: McFarland & Company, Inc.

Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Los Angeles, CA: Sage.

Cuban, L., Kirkpatrick, H., & Peck, C. (2001). High access and low use of technologies in high school classrooms: Explaining an apparent paradox. *American Educational Research Journal, 38*(4), 813-834. doi:10.3102/00028312038004813

Cummiskey, M. (2011). There's an app for that smartphone use in health and physical education. *Journal of Physical Education, Recreation & Dance, 82*(8), 24-30. doi:10.1080/07303084.2011.10598672

Dennen, V. P. (2004). Cognitive apprenticeship in educational practice: Research on scaffolding, modeling, mentoring, and coaching as instructional strategies. In D. H. Jonassen (Ed.), *Handbook of research on educational communications and technology* (pp. 813-828). Mahwah, NJ: Lawrence Erlbaum Associates.

Design-Based Research Collective. (2003). Design-based research: an emerging paradigm for educational inquiry. *Educational Researcher*, *32*(1), 5-8. doi:10.3102/0013189X032001005

Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011, September). *From game design elements to gamefulness: defining "Gamification."* Paper presented at the International Academic MindTrek Conference, Tampere, Finland. Retrieved from http://dl.acm.org/citation.cfm?id=2181037.2181040

Dewey, J. (1938). *Experience and education*. New York, NY: Kappa Delta Pi.

Dickey, M. D. (2006). Game design narrative for learning: appropriating adventure game design narrative devices and techniques for the design of interactive learning environments. *Educational Technology Research and Development*, *54*(3), 245–263. Retrieved from http://dh101.humanities.ucla.edu/DH101Fall12Lab4/archive/files/1d83421eae7a8dc06b5aa855329dd627.pdf

Dillon, S. (2011, March 6). Tight budgets mean squeeze in classrooms. *The New York Times*. Retrieved from http://www.nytimes.com/2011/03/07/education/07classrooms.html

Dinsmore, D. L., Alexander, P. A., & Loughlin, S. M. (2008). Focusing the conceptual lens on metacognition, self-regulation, and self-regulated learning. *Educational Psychology Review*, 20, 391-409. doi:10.1007/s10648-008-9083-6

Drell, L. (2014). Let the gamification begin. *Marketing Health Services*, 24-27. Retrieved from https://www.ama.org/

Dusbiber, D. (2015, June 13). Teacher: Why I don't want to assign Shakespeare anymore (even though he's in the Common Core) [Editorial]. *The Washington Post*. Retrieved from http://www.washingtonpost.com/blogs/answer-sheet/wp/2015/06/13/teacher-why-i-dont-want-to-assign-shakespeare-anymore-even-though-hes-in-the-common-core/

Elkins, D. (1976). *Teaching Literature: Design for Cognitive Development*. Columbus, OH: Charles E. and Merrill Publishing Company.

Earle, R. S. (2002). The integration of instructional technology into public education: Promises and challenges. *ET Magazine, 42*(1), 5-13. Retrieved from http://isites.harvard.edu/fs/docs/icb.topic87187.files/Earle02.pdf

Edelson, D.C., & Joseph, D. M. (2001). Motivating active learning: A design framework for interest riven learning. Retrieved from http://www.designbasedresearch.org/reppubs/edelson-joseph.pdf

Edwards, B. (2012, January 22). 10 educational PC games of the 1980s. Retrieved from http://www.pcmag.com/slideshow/story/293124/10-educational-pc-games-of-the-1980s

Elbro, C., & Buch-Iversen, I. (2013). Activation of background knowledge for inference making: effects on reading comprehension. *Scientific Studies of Reading, 17*(6), 435-452. doi:10.1080/10888438.2013.774005

Engler, J. (2012, June 15). STEM education is the key to the U.S.'s economic future. *U.S. News & World Report*. Retrieved from http://www.usnews.com/

Ertmer, P. A. (1999). Addressing first- and second-order barriers to change: Strategies for technology integration. *Educational Technology Research and Development, 47*(4), 47-61. doi:10.1007/BF02299597

Ertmer, P. A. (2005). Teacher pedagogical beliefs: The final frontier in our quest for technology integration? *Educational Technology Research and Development, 53*(4), 25-39. doi:10.1007/BF02504683

Eshet-Alkalai, Y. (2004). Digital literacy: a conceptual framework for survival skills in the digital era. *Journal of Educational Multimedia and Hypermedia*, *13*(1), 93-106. Retrived from http://www.editlib.org/p/4793/

Etherington, D. (2014, May 6). Google debuts classroom, an education platform for teacher-student communication. Retrieved from http://techcrunch.com/2014/05/06/google-debuts-classroom-an-education-platform-for-teacher-student-communication/

Fernald, A. E. (2014, April 1). Why I'm not afraid of Virginia Woolf - or the 'crisis' in the humanities. *The Christian Science Monitor*. Retrieved from http://www.csmonitor.com/

Fine, G. A. (1983). *Shared fantasy: Role-playing games as social worlds*. Chicago, IL: University of Chicago Press.

Fisher, T. (2006). Educational transformation: Is it like "beauty" in the eye of the beholder, or will we know it when we see it? *Education and Information Technologies*, *11*, 293–303. doi: 10.1007/s10639-006-9009-1

Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive–developmental inquiry. *American Psychologist*, *34*(10), 906-911. doi:10.1037/0003-066X.34.10.906

Fletcher, R. J., & Portalupi, J. (2001). *Writing workshop: The essential guide*. Portsmouth, NH: Heinemann.

Frye, N. (1989). *Northrop Frye on Shakespeare* (R. Sandler, Ed.). Markham, ON: Fitzhenry & Whiteside.

Frye, N. (1964). *The educated imagination*. Bloomington, IN: Indiana University Press.

Gaiman, N. (2013, October 15). Why our future depends on libraries, reading and daydreaming. *The Guardian*. Retrieved from http://www.theguardian.com/

Galbraith, J. K. (1967). *The new industrial state.* Boston, MA: Houghton Mifflin.

Gamoran, A., & Carbonaro, W. J. (2002). High school English: A national portrait. *The High School Journal, 86*(2), 1-13. doi:10.1353/hsj.2002.0021

Gee, J. P. (1998). What is literacy? V. Zamel & R. Spack (Eds.). In *Negotiating academic literacies: Teaching and learning across languages and cultures* (pp. 51-59). Mahwah, NJ: Lawrence Erlbaum Associates.

Gee, J. P. (2004). *Situated language and learning: a critique of traditional schooling*. New York, NY: Routledge.

Gee, J. P. (2007). *What video games have to teach us about learning and literacy* (2nd ed.). New York, NY: Palgrave Macmillan.

Gee, J. P. (2013). *Good video games + good learning: Collected essays on video games, learning, and literacy* (2nd ed.). New York, NY: Peter Lang.

Gernsback, H. (1925). *Ralph 124C 41+: A romance of the year 2660*. Lincoln, NE: Bison Books.

Gill, M. G., Ashton, P. T., & Algina, J. (2004). Changing preservice teachers' epistemological beliefs about teaching and learning in mathematics: An intervention study. *Contemporary Educational Psychology, 29*(2), 164-185. doi:10.1016/j.cedpsych.2004.01.003

Gillespie, R. (1991). *Manufacturing knowledge: A history of the Hawthorne experiments.* Cambridge: Cambridge University Press.

Glazer, K., & Hergenrader, T. (2014). A world filled with darkness, dungeons, and dragons: Using analog role playing game creation to enhance literature and writing instruction in high school English classes. *Games+Learning+Society Conference 10 Proceedings,* 102-108. Retrieved from http://press.etc.cmu.edu/files/GLS10-Proceedings-2014-web.pdf

Glazer, K., & Ng, D. (in press). Teachers as hackers: A new approach to teacher professional development using a hackathon model. In C. Williams (Ed.), *Teacher Pioneers: Visions from the Edge of the Map*. Pittsburgh, PA: ETC Press.

Gleaves, A., Walker, C., & Grey, J. (2008). Using digital and paper diaries for assessment and learning purposes in higher education: A case of critical reflection or constrained compliance? *Assessment and Evaluation in Higher Education*, 33*(3)*, 219–231. doi:10.1007/s10459-011-9298-z

Graham, S. (2013). It all starts here: Fixing our national writing crisis from the foundation. Retrieved from http://www.sapersteinassociate.com

Grandgenett, N. F. (2008). Perhaps a matter of imagination: TPCK in mathematics education. In AACTE Committee on Innovation and Technology (Ed.), *Handbook of technological pedagogical content knowledge (TPCK) for educators* (pp. 87-106). New York, NY: Routledge.

Gray, D. E. (2014). *Doing research in the real world* (3rd ed.). London: Sage.

Gredler, M. E. (1996). Educational games and simulations: A technology in search of a research paradigm. In D. H. Jonassen, (Ed.), *Handbook of research for educational communications and technology* (pp. 521-539). New York, NY: Macmillan Library Reference.

Greeno, J. (2006). Learning in activity. In K. Sawyer (Ed.), *The Cambridge handbook of the learning sciences* (pp. 79-96). New York, NY: Cambridge university press.

Groff, J., & Mouza, C. (2008). A framework for addressing challenges to class- room technology use. *AACE Journal, 16*(1), 21-46. Retrieved from http://www.jengroff.net/pubs_files/i5Framework_GROFF-MOUZA.pdf

Gundlach, R. A. (1981). Is there a writing crisis in the high school? *Momentum*, *12*, 14-16. Retrieved from http://eric.ed.gov/?id=EJ253252

Hagstrom, F. (2006). Formative learning and assessment. *Communication Disorders Quarterly, 28*(1), 24-36. doi:10.1177/15257401060280010301

Harlen, W., & James, M. (2006, Jul 28). Assessment and learning: different relationships between formative and summative assessment. *Assessment in Education: Principles, Policy & Practice*, *4*(3), 365-379. doi:10.1080/0969594970040304

Harris, J., Mishra, P., & Koehler, M. (2009). Teachers' technological pedagogical content knowledge and learning activity types: Curriculum-based technology integration reframed. *Journal of Research on Technology in Education*, *41*(4), 393-416. Retrieved from http://files.eric.ed.gov/fulltext/EJ844273.pdf

Hart Research Associates. (2013). *It takes more than a major: Employer priorities for college learning and student success*. Retrieved from https://aacu.org/sites/default/files/files/LEAP/2013_EmployerSurvey.pdf

Heliö, Satu (2004) Role-playing: A narrative experience and a mindset. In M. Montola, & J. Stenros (Eds), *Beyond Role and Play. Tools Toys and Theories for Harnessing the Imagination*. Vantaa: Ropecon.

Hemingway, E. (1935). *Green hills of Africa*. New York, NY: Scribner.

Hergenrader, T. (2003). *Calypsis: A Hypertext Fiction* (Doctoral dissertation, University of Wisconsin-Milwaukee, 2003). Milwaukee, WI: University of Wisconsin-Milwaukee.

Hergenrader, T. (2011). Gaming, world building, and narrative: Using role-playing games to teach fiction writing. *GLS 7.0 Proceedings. Pittsburgh: ETC Press*, 103-108. Retrieved from http://press.etc.cmu.edu/content/gls-70-conference-proceedings

Hergenrader, T. (2013). The narrative potential of tabletop role-playing games. *GLS 9.0 Proceedings. Pittsburgh: ETC Press*, 168-174. Retrieved from http://press.etc.cmu.edu/files/GLS9.0-Proceedings-2013-web.pdf

Hew, K. F., & Brush, T. (2007). Integrating technology into K-12 teaching and learning: Current knowledge gaps and recommendations for future research. *Educational Technology Research and Development, 55*(3), 223-252. doi:10.1007/s11423-006-9022-5

Hoadley, C. M. (2004). Methodological alignment in design-based research. *Educational Psychologist*, 39(4), 203-212. doi:10.1207/s15326985ep3904_2

Hollander, C. N. (2012, April 21). Teach the books, touch the heart. [Opinion]. *The New York Times.* Retrieved from http://www.nytimes.com/2012/04/22/opinion/sunday/taking-emotions-out-of-our-schools.html

Horowitz, D. (2011, July 17). From technologist to philosopher: Why you should quit your technology job and get a Ph.D. in the humanities. *The Chronicle of Higher Education*. Retrieved from http://chronicle.com/

Hughes, J. E., & Scharber, C. M. (2008). Leveraging the development of English TPCK within the deictic nature of literacy. In AACTE Committee on Innovation and Technology (Ed.), *Handbook of technological pedagogical content knowledge (TPCK) for educators* (pp. 87-106). New York, NY: Routledge.

Humanities funding still in recovery from recession. (2014). Retrieved from http://www.neh.gov/news/humanities-funding-still-in-recovery-recession

Inan, F. A., & Lowther, D. L. (2010). Factors affecting technology integration in K-12 classrooms: A path model. *Educational Technology Research and Development*, 58(2), 137-154. doi: 10.1007/s11423-009-9132-y

Ivers, J. J. (2007). Metacognition and foreign language cultural instruction. *Journal of Transformative Education*, 5(2), 152-162. doi:10.1177/1541344607303618

Ivory, J. D. (2006). Still a man's game: Gender representation in online reviews of video games. *Mass Communication & Society*, 9(1), 103-114. doi:10.1207/s15327825mcs0901_6

Jagoda, P. (2013). Gamification and other forms of play. *Boundary 2*, 40(2), 113-144. doi:10.1215/01903659-2151821

James, M., & Pollard, A. (2011). *Principles for effective pedagogy: International responses to evidence from the UK Teaching & Learning Research Programme*. London: Routledge.

Jay, P. (2014). *The humanities "crisis" and the future of literary studies*. New York, NY: Palgrave Macmillan.

Jenkins, H. (2006). *Convergence culture: where old and new media collide*. Retrieved from www.nypress.org

Jonassen, D. H. (1988). Integrating learning strategies into courseware to facilitate deeper processing. In David H. Jonassen (Ed.), *Instructional Designs for Microcomputer Courseware* (pp. 151-181). Hillsdale, NJ: Erlbaum.

Johnson, L., Becker, S. A., Estrada, V., & Freeman, A. (2014). *NMC Horizon report: 2014 higher education edition*. Retrieved from http://cdn.nmc.org/media/2014-nmc-horizon-report-he-EN-SC.pdf.

Kafai, Y. (2006a). Constructionism. In R. K. Sawyer (Ed.), *The Cambridge handbook of the learning sciences* (pp. 35-46). New York, NY: Cambridge University Press.

Kafai, Y. (2006b). Playing and making games for learning: Instructionist and constructionist perspectives for game studies. *Games and Culture*, *1*(1), 36-40. doi:10.1177/1555412005281767

Keefe, E. B., & Copeland, S. R. (2011). What is literacy? The power of a definition. *Research and Practice for Persons with Severe Disabilities, 36*(3), 92-99. doi:10.2511/027494811800824507

Kell, M., & Kell, P. (2014). What is literacy and why is it important? *Literacy and Language in East Asia Education in the Asia-Pacific Region: Issues, Concerns and Prospects, 24*, 7-13. doi:10.1007/978-981-4451-30-7_2

Kirschner, P. A., & Merriënboer, J. J. (2013). Do learners really know best? Urban Legends in Education. *Educational Psychologist, 48*(3), 169-183. doi:10.1080/00461520.2013.804395

Klimmt, C., Hefner, D., & Vorderer, P. (2009). The video game experience as "true" identification: A theory of enjoyable alterations of players' self-perception. *Communication Theory, 19*(4), 351-373. doi:10.1111/j.1468-2885.2009.01347.x

Koehler, M. J., & Mishra, P. (2005). Teachers learning technology by design. *Journal of Computing in Teacher Education*, 21(3), 94–102. doi:10.1080/10402454.2005.10784518

Koehler, M. J., & Mishra, P. (2009). What is technological pedagogical content knowledge? *Contemporary Issues in Technology and Teacher Education*, *9*(1), 60-70. Retrieved from http://www.citejournal.org/vol9/iss1/general/article1.cfm

Koehler, M. J. & Mishra, P. (2012). The TPACK Image [Online image]. Retrieved from http://www.tpack.org.

Koretz, D. M. (2009). *Measuring up: What educational testing really tells us*. Cambridge, MA: Harvard University Press.

Landriscina, F. (2013). *Simulation and learning: a model-centered approach*. New York, NY: Springer.

Lane, B. (2012). How STEM can save U.S. industry. Retrieved from http://news.thomasnet.com/imt/2012/10/02/how-stem-can-save-u-s-industry

Langer, J. A. (1995). *Envisioning literature: Literary understanding and literature instruction*. New York, NY: Teacher College Press.

Lave, J. (1988). *Cognition in practice: Mind, mathematics, and culture in everyday life*. Cambridge, England: Cambridge University Press.

Lee, J. K. (2008). Toward democracy: Social studies and TPCK. In AACTE Committee on Innovation and Technology (Ed.), *Handbook of technological pedagogical content knowledge (TPCK) for educators* (pp. 87-106). New York, NY: Routledge.

Levin, T., & Wadmany, R. (2008). Teachers' views on factors affecting effective integration of information technology in the classroom: Developmental scenery. *Journal of Technology and Teacher Education, 16*(2), 233-263. Retrieved from http://editlib.org/p/22950/article_22950.pdf

Levitz, J., & Belkin, D. (2013, June 6). Humanities fall from favor: Far fewer Harvard students express interest in field with weak job prospects. *The Wall Street Journal*. Retrieved from www.wsj.com

Lewis, C. (2001). *Literary practices as social acts: Power, status and cultural norms in the classroom*. Mahwah, NJ: L. Erlbaum Associates.

Lim, C. P., & Chai, C. S. (2008). Teachers' pedagogical beliefs and their planning and conduct of computer-mediated classroom lessons. *British Journal of Educational Technology, 39*(5), 807-828. doi:10.1111/j.1467-8535.2007.00774.x

Lynch, M. (2013, October 25). The slow gamification of K-12 classrooms. *Education Week*. Retrieved from http://blogs.edweek.org/

Mackay, D. (2001). *The fantasy role-playing game*. Jefferson, NC: McFaland & Company, Inc.

Mair, C. (2012). Using technology for enhancing reflective writing, metacognition, and learning. *Journal of Further and Higher Education*, *36*(2), 147-167. doi:10.1080/0309877X.2011.590583

Malaby, T. M. (2007, April). Beyond play: A new approach to games. *Games and Culture*, *2*(2), 95-113. doi:10.1177/1555412007299434

Malone, T. W. (1981). Toward a theory of intrinsically motivating instruction. *Cognitive Science, 5*(4), 333-369. doi:10.1207/s15516709cog0504_2

Malone, T. W. & Lepper, M. R. (1987). Making learning fun: A taxonomy of intrinsic motivations for learning. In R. Snow, & M. J. Farr (Eds.), *Aptitude, learning, and instruction* (Vol. 3): *Conative and affective process analyses*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Martinez, S. L., & Stager, G. (2013). *Invent to learn: Making, tinkering, and engineering in the classroom*. Retrieved from www.InventToLearn.com

McMahon, R. (2002). *Thinking about literature: New ideas for high school teachers.* Portsmouth, NH: Heinemann.

McNeil, L. M. (2000). *Contradictions of school reform: Educational costs of standardized testing*. New York, NY: Routledge.

Minnesota Educational Computing Consortium. (2003). *Oregon Trail* [Computer software]. Retrieved from http://www.mecc.co/

Mishra, P., & Koehler, M. J. (2003). Not ''what'' but ''how:'' Becoming design-wise about educational technology. In Y. Zhao (Ed.), W*hat teachers should know about technology: Perspective and practices* (pp. 99–122). Greenwich, CT: Information Age Publishing.

Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record, 108*(6), 1017-1054. doi:10.1111/j.1467-9620.2006.00684.x

Mishra, P., Koehler, M.J., & Zhao, Y. (2007). Communities of designers: A brief history and introduction. In P. Mishra, M.J. Koehler, & Y. Zhao (Eds.), *Faculty development by design: Integrating technology in higher education* (pp. 1-22). Information Age Publishing, Greenwich, CT.

McLeod, S. (2007). Milgram experiment. Retrieved from http://www.simplypsychology.org/milgram.html

Metzger, M. J. (2007). Making sense of credibility on the web: models for evaluating online information and recommendations for future research. *Journal of the American Society for Information Science and Technology*, *58*(13), 2078–2091. doi:10.1002/asi.20672

National Center for Education Statistics. (2012). *The nation's report card: Writing 2011*. Retrieved from http://nationsreportcard.gov/writing_2011/summary.asp

National Center for Education Statistics. (2014). *The Condition of education 2014* (NCES 2014-083), Public School Expenditure. Retrieved from http://nces.ed.gov/fastfacts/display.asp?id=66

Negretti, R. (2012). Metacognition in student academic writing: A longitudinal study of metacognitive awareness and its relation to task perception, self-regulation, and evaluation of performance. *Written Communication*, *29*(2), 142-179. doi:10.1177/0741088312438529

Nelson, H. (2013). Testing more, teaching less: What America's obsession with student testing costs in money and lost instructional time. Retrieved from http://www.aft.org/sites/default/files/news/testingmore2013.pdf

The New Media Consortium and the Consortium for School Networking. (2009). Horizon report: 2009 K-12 edition. Retrieved from http://eskillslearning.net/uploads/2009-Horizon-Report-K12%20with%20summary.pdf

Newkirk, T. (2012). *The art of slow reading*. Portsmouth, NH: Heinemann.

Nystrand, M. (1997). *Opening dialogue: Understanding the dynamics of language and learning in the English classroom.* New York, NY: Teachers College Press.

Olphen, M. V. (2008). TPCK: An integrated framework for educating world language teachers. In AACTE Committee on Innovation and Technology (Ed.), *Handbook of technological pedagogical content knowledge (TPCK) for educators* (pp. 87-106). New York, NY: Routledge.

Painter, S. R. (2001). Issues in the observation and evaluation of technology integration in K-12 classrooms. *Journal of Computing in Teacher Education, 17*(4), 21-25. doi:10.1080/10402454.2001.10784421

Papert, S., & Harel, I. (1991). Situating constructionism. In *Constructionism*. Retrieved from http://www.papert.org/articles/SituatingConstructionism.html

Paul, R., & Elder, L. (2007). Critical thinking competency standards. *The Foundation for Critical Thinking Press.* Retrieved from http://www.criticalthinking.org/files/SAM_Comp%20Stand_07opt.pdf

Petty, K. (2013, April 22). Obama administration commits $3.1 billion to STEM education. *IVN News*. Retrieved from www.ivn.us

Pfeffer, J., & Sutton, R. I. (2000). *The knowing-doing gap: How smart companies turn knowledge into action*. Boston, MA: Harvard Business School Publishing.

Porter, A., McMaken, J., Hwang, J., & Yang, R. (2011). Common core standards: The new US intended curriculum. *Educational Researcher*, *40*(3), 103-116. doi:10.3102/0013189X11405038

Probst, R. E. (2004). *Response & analysis: Teaching literature in secondary school* (2nd ed.). Portsmouth, NH: Heinemann.

Pulver, D. L., Punch, S., Jackson, S., & Hackard, A. (2008). *GURPS basic set*. Austin, TX: Steve Jackson Games.

Raphael, T. E., & McMahon, S. I. (1994). Book club: An alternative framework for reading instruction. *The Reading Teacher*, *48*(2), 102-116. doi:10.1598/RT.48.2.1

Reeves, T. (2006). Design research from a technology perspective. In Van den Akker, K. Gravemeijer, S. McKenney & N. Nieveen (Eds.), *Educational design research* (pp. 52–66). New York: Routledge.

Reiser, R. A. (2001). A history of instructional design and technology: Part I: A history of instructional media. *Educational technology research and development*, *49*(1), 53-64. Retrieved from http://www.capella.edu/idol/historyofidtparti.pdf

Reiser, R. A. (2013). Instructional technology: A history. In R. M. Gagne (Ed.), *Instructional technology: Foundations* (2nd ed., pp. 11-48). New York, NY: Routledge.

Reisz, M. (2011, May 19). Google leads search for humanities PhD graduates. *Times Higher Education*. Retrieved from http://www.timeshighereducation.co.uk/

Richards, J., Stebbins, L., & Moellering, K. (2013). Games for a digital age: K-12 market map and investment analysis. *The Joan Ganz Cooney Center at Sesame Workshop*. Retrieved from http://www.joanganzcooneycenter.org/wp-content/uploads/2013/01/glpc_gamesforadigitalage1.pdf

Robbins, J., & Bauerlein, M. (2013, April 16). The Common Core State Standards: Two views. *National Association of Scholars*. Retrieved from http://www.nas.org/

Roberts, C. M. (2010). *The dissertation journey: A practical and comprehensive guide to planning, writing, and defending your dissertation* (2nd ed.). Thousand Oaks, CA: Corwin.

Rogers, S. (2010). *Level up! The guide to great video game design*. West Sussex: John Wiley & Sons Ltd.

Russell, M., O'dwyer, L., Bebell, D., & Tao, W. (2007). How teachers' uses of technology vary by tenure and longevity. *Journal of Educational Computing Research, 37*(4), 393-417. doi:10.2190/EC.37.4.d

Sainsbury, M., & Schagen, I. (2004). Attitudes to reading at ages nine and eleven. *Journal of Research in Reading, 27*(4), 373-386. doi:10.1111/j.1467-9817.2004.00240.x

Saldaña, J. (2013). *The coding manual for qualitative researchers*. Los Angeles, CA: SAGE Publications.

Sandoval, W. A. (2003). The inquiry paradox: Why doing science doesn't necessarily change ideas about science. In C. P. Constantinou & Z. C. Zacharia (Eds.), *Proceedings of the Sixth Intl. Computer-Based Learning in Science Conference 2003* (pp. 825-834). Nicosia, Cyprus.

Schellings, G. L., Van Hout-Wolters, B. H., Veenman, M. V., & Meijer, J. (2012). Assessing metacognitive activities: The in-depth comparison of a task-specific questionnaire with think-aloud protocols. *European Journal of Psychology of Education*. doi: 10.1007/s10212-012-0149-y

Schmidt, D. A., & Gurbo, M. (2008). TPCK in K-6 literacy education: It's not that elementary. In AACTE Committee on Innovation and Technology (Ed.), *Handbook of technological pedagogical content knowledge (TPCK) for educators* (pp. 87-106). New York, NY: Routledge.

Schwartz, K. (2015, June 5). Could storytelling be the secret sauce to STEM education? Retrieved from http://ww2.kqed.org/mindshift/2015/06/05/could-storytelling-be-the-secret-sauce-to-stem-education/

Selfe, C. L., & Hawisher, G. E. (2007). Introduction: Gaming lives in the twenty-first century. In C. L. Selfe, G. E. Hawisher, & D. V. Ittersum (Eds.), *Gaming lives in the twenty-first century: Literate connections* (pp.1-17). New York, NY: Palgrave Macmillan.

Selfe, C. L., Hawisher, G. E., & Ittersum, D. V. (2007). *Gaming lives in the twenty-first century: Literate connections*. New York, NY: Palgrave Macmillan.

Shaffer, D. W. (2006). *How computer games help children learn*. New York, NY: Palgrave Macmillan.

Sheils, M. (1975, December 8). Why Johnny can't read. *Newsweek*, *92*, 58-65. Retrieved from http://www.newsweek.com/why-johnny-and-joanie-cant-read-187902

Sheldon, K. M., & Biddle, B. J. (1998). Standards, accountability, and school reform: Perils and pitfalls. *Teachers College Record, 100*(1), 164-180. Retrieved from http://www.tcrecord.org

Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, *15*(2), 4. doi:10.2307/1175860

Shulman, L. S. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard educational review*, *57*(1), 1-23. Retrieved from http://people.ucsc.edu/~ktellez/shulman.pdf

Sitzmann, T. (2011). A meta-analytic examination of the instructional effectiveness of computer-based simulation games. *Personnel Psychology, 64*(2), 489-528. doi:10.1111/j.1744-6570.2011.01190.x

Sperling, R. A., Howard, B. C., Staley, R., & Dubois, N. (2004). Metacognition and self-regulated learning constructs. *Educational Research and Evaluation*, *10*(2), 117-139. doi:10.1076/edre.10.2.117.27905

Squire, K. (2003). Video games in education. *International Journal of Intelligent Games & Simulation*, *2*(1), 49-62. Retrieved from http://website.education.wisc.edu/~kdsquire/tenure-files/39-squire-IJIS.pdf

Squire, K. (2006). From content to context: Videogames as designed experience. *Educational Researcher, 35*(8), 19-29. doi:10.3102/0013189X035008019

Squire, K. (2011). *Video games and learning: Teaching and participatory culture in the digital age*. New York, NY: Teachers College Press.

Steinkuehler, C. A. (2006, December). Why game (culture) studies now? *Games and Culture*, *1*(1), 97-102. doi:10.1177/1555412005281911

Stenberg, S., & Lee, A. (2002). Developing pedagogies: Learning the teaching of English. *College English, 64*(3), 326-347. Retrieved from http://www.jstor.org/stable/3250737

Stone, J. R. (2005). *The Routledge dictionary of Latin quotations: The illiterati's guide to Latin maxims, mottoes, proverbs and sayings*. New York, NY: Routledge.

Taras, M. (2009). Summative assessment: The missing link for formative assessment. *Journal of Further and Higher Education, 33*(1), 57-69. doi:10.1080/03098770802638671

Taras, M. (2010). Assessment - summative and formative - some theoretical reflections. *British Journal of Educational Studies*, *53*(4), 466-478. doi:10.1111/j.1467-8527.2005.00307.x

The British Library Board. (2009). *Beowulf.* Retrieved from http://www.bl.uk/onlinegallery/onlineex/englit/beowulf/

The White House. (2011, January 25). *Fact Sheet: the state of the union: President Obama's plan to win the future* [Press release]. Retrieved from The White House Web site: http://www.whitehouse.gov/the-press-office/2011/01/25/fact-sheet-state-union-president-obamas-plan-win-future

Tresca, M. J. (2011). *The evolution of fantasy role-playing games*. Jefferson, NC: McFarland

Truesdale, M. (2015, June 13). Teacher: Why it is ridiculous not to teach Shakespeare in school [Editorial]. *The Washington Post*. Retrieved from http://www.washingtonpost.com/blogs/answer-sheet/wp/2015/06/13/teacher-why-it-is-ridiculous-not-to-teach-shakespeare-in-school/?postshare=6771435492227114

Twain, M. (1898). *From the "London Times" of 1904*. Retrieved from http://www.readbookonline.net/readOnLine/998/

Tychsen, A. (2006). Role playing games: Comparative analysis across two media platforms. In IE '06 Proceedings of the 3rd Australasian conference on Interactive entertainment (pp. 75-82). Australia: Murdoch University.

Tychsen, A., Hitchnes, M., Brolund, T., & Kavakli, M. (2005). The game master. *Proceeding IE '05 Proceedings of the Second Australasian Conference on Interactive Entertainment,* 215-222. Retrieved from http://dl.acm.org/citation.cfm?id=1109214

UNESCO Institute for Statistics. (2008). *International literacy statistics: A review of concepts, methodology, and current data.* Montreal, Canada: UNESCO Institute for Statistics. Retrieved from http://www.unesco.org/education/ild2010/FactSheet2010_Lit_EN.pdf

Van den Akker, J. (2000). Principles and methods of development research. In J. Van den Akker, R. M. Branch, K. Gustafson, N. Nieveen, & T. Plomp (Eds.), *Design approaches and tools in education and training* (pp. 1-14). The Netherlands: Kluwer Academic Publishers.

Van den Akker, J., Gravemeijer, K., McKenney, S., & Nieveen, N. (2006). Introducing educational design research. In J. Van den Akker, K. Gravemeijer, S. McKenney, & N. Nieveen (Eds.), *Educational design research* (pp. 3-7). London: Routledge.

Van Eck, R. (2006). Digital game based learning: It's not just the digital native who are restless. *Educause Review*, *41*, 16-30. Retrieved from http://www.educause.edu/ero/article/digital-game-based-learning-its-not-just-digital-natives-who-are-restless

Wang, F., & Hannafin, M. (2005). Design-based research and technology-enhanced learning environments. *Educational Technology Research and Development*, 53(4), 5-23. Retrieved from http://www.jstor.org/stable/30221206

Wang, H., Shen, C. & Ritterfeld, U. (2009). Enjoyment of digital games: What makes them "seriously" fun? In U.Ritterfeld, M.Cody & P.Vorderer (Eds.), *Serious Games: Mechanisms and Effects*. New York, NY: Routledge.

Whelan, R. (2005). Instructional technology & theory. *Technology*, *49*(1), 53-64. Retrieved from https://eadm820.files.wordpress.com/2012/01/it-trends-and-history.pdf

Whitefield, T. (2012). Pedagogy in the evolving environment: What has changed? *ICICTE 2012 Proceedings*. Retrieved from http://www.icicte.org/Proceedings2012/Papers/07-3-Whitefield.pdf

Williams, D., Martins, N., Consalvo, M., & Ivory, J. D. (2009). The virtual census: Representations of gender, race and age in video games. *New Media & Society*, *11*(5), 815-834. doi:10.1177/1461444809105354

Wouters, P., Nimwegen, C. V., Oostendorp, H. V., & Spek, E. D. (2013). A meta-analysis of the cognitive and motivational effects of serious games. *Journal of Educational Psychology*, *105*(2), 249-265. doi:10.1037/a0031311

Yang, J. C., Ko, H. W., & Chung, I. L. (2005). Web-based interactive writing environment: development and evaluation. *Educational Technology & Society*, *8*(2), 214-220. Retrived from http://www.ifets.info/journals/8_2/20.pdf

Yazzie-Mintz, E. (2007). *Voices of students on engagement: A report on the 2006 High School Survey of Student Engagement*. Bloomington, IN: Center for Evaluation & Educational Policy, Indiana University. Retrieved from http://ceep.indiana.edu/pdf/HSSSE_2006_Report.pdf

Yee, N. (2006). The psychology of massively multi-user online role-playing games: Motivations, emotional investment, relationships and problematic usage. In R. Schroeder & A. Axelsson (Eds.), *Avatars at work and play: Collaboration and interaction in shared virtual environments*. Dordrecht, the Netherlands: Springer

Young, M. F., Slota, S., Cutter, A. B., Jalette, G., Mullin, G., Lai, B., ... Yykhymenko, M. (2012). Our princess is in another castle: a review of trends in serious gaming for education. *Review of Educational Research*, *82*(1), 61-89. doi:10.3102/0034654312436980

Zhao, Y. (Ed.). (2003). *What teachers should know about technology: Perspectives and practices*. Greenwich, CT: Information Age.

Zhao, Y., Pugh, K., Sheldon, S., & Byers, J. L. (2002). Conditions for classroom technology innovations. *Teachers College Record, 104*(3), 482-515. doi:10.1111/1467-9620.00170

Zimbardo, P. G. (2015). Stanford prison experiment. Retrieved from http://www.prisonexp.org/

APPENDIX A

First Pilot Lesson Plan

Role-Playing Game Creation Unit on Beowulf

Lesson Steps

Phase 1: Game Creation
Task 1 – Describe Beowulf's World
Task 2 – Create Visuals
Task 3 – Describe Characters
Task 4 – Describe Adventures
Task 5 – Game Rules Creation

Phase 2: Gameplay
Task 1 – Fishbowl Gameplay
Task 2 – Choose the Game masters
Task 3 – Play the Game
Task 4 – Assessment

Lesson Objectives
1. Content-related objectives:
Students will demonstrate their understanding of the specific literary features of an Anglo-Saxon epic poem including kenning, caesura, and alliteration.
Students will demonstrate their understanding of a hero's journey by connecting the story arc to their own personal story.
Students will demonstrate their knowledge of changes of the English language over time.
2. Skills-related objectives:
Students will engage in an iterative process of writing, receiving feedback, and revising throughout the unit to improve their writing skills to meet the state standards.
Students will engage in both creative writing as well as research writing to demonstrate both their thinking skills.
Students will use digital writing tools to enhance their technical skills.
Students will collaborate with others.
Students will gain and demonstrate additional artistic and visual medium creation skills such as drawing or game-piece production.
Students will practice additional academic skills such as computational skills, leadership skills, and decision-making skills during gameplay.

Standards Covered

Common Core State Standards:
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.11-12.10: By the end of grade 12, read and comprehend literature, including stories, dramas, and poems, at the high end of the grades 11-CCR text complexity band independently and proficiently. / By the end of grade 12, read and comprehend literature, including stories, dramas, and poems, at the high end of the grades 11-CCR text complexity band independently and proficiently.

CCSS.ELA-LITERACY.WHST.11-12.4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

CCSS.ELA-LITERACY.WHST.11-12.5: Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.

CCSS.ELA-LITERACY.WHST.11-12.6: Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.

CCSS.ELA-LITERACY.WHST.11-12.10: Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

California English Language Arts Standards:

Reading: Literary Response and Analysis

3.2 Analyze the way in which the theme or meaning of a selection represents a view or comment on life, using textual evidence to support the claim.

3.3 Analyze the ways in which irony, tone, mood, the author's style, and the "sound" of language achieve specific rhetorical or aesthetic purposes or both.

3.4 Analyze ways in which poets use imagery, personification, figures of speech, and sounds to evoke readers' emotions.

3.5 Analyze recognized works of American literature representing a variety of genres and traditions:

b. Contrast the major periods, themes, styles, and trends and describe how works by members of different cultures relate to one another in each period.

c. Evaluate the philosophical, political, religious, ethical, and social influences of the historical period that shaped the characters, plots, and settings.

3.6 Analyze the way in which authors through the centuries have used archetypes drawn from myth and tradition in literature, film, political speeches, and religious writings (e.g., how the archetypes of banishment from an ideal world may be used to interpret Shakespeare's tragedy Macbeth).

3.7 Analyze recognized works of world literature from a variety of authors:

a. Contrast the major literary forms, techniques, and characteristics of the major literary periods (e.g., Homeric Greece, medieval, romantic, neoclassic, modern).

b. Relate literary works and authors to the major themes and issues of their eras.

c. Evaluate the philosophical, political, religious, ethical, and social influences of the historical period that shaped the characters, plots, and settings.

3.8 Analyze the clarity and consistency of political assumptions in a selection of literary works or essays on a topic (e.g., suffrage, women's role in organized labor). (Political approach)

3.9 Analyze the philosophical arguments presented in literary works to determine whether the authors' positions have contributed to the quality of each work and the credibility of the characters. (Philosophical approach)

Writing Strategies
1.1 Demonstrate an understanding of the elements of discourse (e.g., purpose, speaker, audience, form) when completing narrative, expository, persuasive, or descriptive writing assignments.
1.2 Use point of view, characterization, style (e.g., use of irony), and related elements for specific rhetorical and aesthetic purposes.
1.3 Structure ideas and arguments in a sustained, persuasive, and sophisticated way and support them with precise and relevant examples.
1.4 Enhance meaning by employing rhetorical devices, including the extended use of parallelism, repetition, and analogy; the incorporation of visual aids (e.g., graphs, tables, pictures); and the issuance of a call for action.
1.5 Use language in natural, fresh, and vivid ways to establish a specific tone.

Writing Applications
2.2 Write responses to literature:
a. Demonstrate a comprehensive understanding of the significant ideas in works or passages.
b. Analyze the use of imagery, language, universal themes, and unique aspects of the text.
c. Support important ideas and viewpoints through accurate and detailed references to the text and to other works.
e. Demonstrate an understanding of the author's use of stylistic devices and an appreciation of the effects created.
f. Identify and assess the impact of perceived ambiguities, nuances, and complexities within the text.
2.3 Write reflective compositions:
a. Explore the significance of personal experiences, events, conditions, or concerns by using rhetorical strategies (e.g., narration, description, exposition, persuasion).
b. Draw comparisons between specific incidents and broader themes that illustrate the writer's important beliefs or generalizations about life.
c. Maintain a balance in describing individual incidents and relate those incidents to more general and abstract ideas.

Written and Oral English Language Conventions
1.1 Demonstrate control of grammar, diction, and paragraph and sentence structure and an understanding of English usage.
1.2 Produce legible work that shows accurate spelling and correct punctuation and capitalization.

Listening and Speaking
1.4 Use rhetorical questions, parallel structure, concrete images, figurative language, characterization, irony, and dialogue to achieve clarity, force, and aesthetic effect.
1.6 Use logical, ethical, and emotional appeals that enhance a specific tone and purpose.
1.8 Use effective and interesting language.

APPENDIX B

Lesson Plans

Lesson 1 Setting Description
Research and describe various settings in *Fahrenheit 451* by Ray Bradbury[8].

Step 1: Research and define the term dystopian. Do background research on Ray Bradbury and the reasons why he wrote this book. Be sure to use Google Scholar or Ebsco to find at least three reputable sources to support your assertions.

Post your findings on Haikulearning. Be sure to include, (1) historical background that inspired Bradbury to write the book, (2) a possible reasons for his choice of the setting in the non-descriptive city in the United States,

Step 2: Using your background knowledge, describe one of the following locations in your notebook. Be sure to reference the book whenever possible.

- The city where Montag lives
- Motag's house and his neighborhood including the street where Clarisse was killed
- Old woman's home
- The fire station where Montag works
- Futuristic St. Louise
- A park where Montag met Professor Faber
- Faber's House
- The river

Step 3: Share your written description in your small group and provide feedback. Correct all grammar errors. Identify a topic sentence for each paragraph. Check the manuscript form.

Step 4: Post your edited version on Haikulearning. Read three descriptions that are different from your own and provide feedback. Be sure to add (1) what you learned from reading your peers' descriptions, (2) what they should improve and why, and (3) what you took away from reading their descriptions.

Step 5: Based on the feedback you received online, revise your description and post the 3rd version online. Write a reflection on the setting research process. Be sure to include how the background research informed your decision of the descriptions, and how history and geography might influence an author's decision to choose a certain setting for a story.

Lesson Objectives:

1. Content-related objectives:

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[8] This covers task 1 and 2 in the initial lesson plan.

- Students will demonstrate their understanding of the various elements of a dystopian novel.
- Students will demonstrate their understanding of the historical influences including Totalitarianism or Fascism on a dystopian novel.
- Students will demonstrate their understanding of the factors that influence a writer to choose a particular genre such as a science fiction.
- Students will demonstrate their ability to produce manuscripts using the Modern Language Association (MLA) format.

2. Skills-related objectives:
- Students will engage in an iterative process of writing, receiving feedback, and revising to improve their writing skills to meet the state standards.
- Students will demonstrate their ability to research using reputable online sources.
- Students will use digital writing tools to enhance their technical skills.
- Students will collaborate with others.

Common Core State Standards[9] Addressed:

Key Ideas and Details:
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.

Craft and Structure:
CCSS.ELA-LITERACY.CCRA.R.6 Assess how point of view or purpose shapes the content and style of a text.

Integration of Knowledge and Ideas:
CCSS.ELA-LITERACY.CCRA.R.7 Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.
CCSS.ELA-LITERACY.CCRA.R.9 Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.
CCSS.ELA-LITERACY.RL.11-12.9 Demonstrate knowledge of eighteenth-, nineteenth- and early-twentieth-century foundational works of American literature, including how two or more texts from the same period treat similar themes or topics.

Range of Reading and Level of Text Complexity:
CCSS.ELA-LITERACY.CCRA.R.10 Read and comprehend complex literary and informational texts independently and proficiently.

Text Types and Purposes:

CCSS.ELA-LITERACY.W.11-12.1 Write arguments to support claims in an analysis of

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[9] Since the first pilot, the state has fully adopted CCSS; therefore, this study will use only CCSS instead of the state standards used previously.

substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
CCSS.ELA-LITERACY.W.11-12.1.A Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence.
CCSS.ELA-LITERACY.W.11-12.1.B 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-LITERACY.W.11-12.1.C Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.
CCSS.ELA-LITERACY.W.11-12.1.D Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.
CCSS.ELA-LITERACY.W.11-12.2.B Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.
CCSS.ELA-LITERACY.W.11-12.2.C Use appropriate and varied transitions and syntax to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.
CCSS.ELA-LITERACY.W.11-12.2.D Use precise language, domain-specific vocabulary, and techniques such as metaphor, simile, and analogy to manage the complexity of the topic.
CCSS.ELA-LITERACY.W.11-12.3 Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.
CCSS.ELA-LITERACY.W.11-12.3.A Engage and orient the reader by setting out a problem, situation, or observation and its significance, establishing one or multiple point(s) of view, and introducing a narrator and/or characters; create a smooth progression of experiences or events.
CCSS.ELA-LITERACY.W.11-12.3.B Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, events, and/or characters.
CCSS.ELA-LITERACY.W.11-12.3.C Use a variety of techniques to sequence events so that they build on one another to create a coherent whole and build toward a particular tone and outcome (e.g., a sense of mystery, suspense, growth, or resolution).
CCSS.ELA-LITERACY.W.11-12.3.D Use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters.

Production and Distribution of Writing:
CCSS.ELA-LITERACY.CCRA.W.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
CCSS.ELA-LITERACY.CCRA.W.5 Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
CCSS.ELA-LITERACY.CCRA.W.6 Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

Research to Build and Present Knowledge:
CCSS.ELA-LITERACY.CCRA.W.7 Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.
CCSS.ELA-LITERACY.CCRA.W.8 Gather relevant information from multiple print and digital

sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.

CCSS.ELA-LITERACY.CCRA.W.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.

CCSS.ELA-LITERACY.W.11-12.8 Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.

CCSS.ELA-LITERACY.W.11-12.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.

CCSS.ELA-LITERACY.W.11-12.9.A Apply grades 11-12 Reading standards to literature (e.g., "Demonstrate knowledge of eighteenth-, nineteenth- and early-twentieth-century foundational works of American literature, including how two or more texts from the same period treat similar themes or topics").

Conventions of Standard English:
CCSS.ELA-LITERACY.CCRA.L.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

CCSS.ELA-LITERACY.CCRA.L.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

Knowledge of Language:
CCSS.ELA-LITERACY.CCRA.L.3 Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.

Comprehension and Collaboration:
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.

Comprehension and Collaboration:
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.11-12.1.A: 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.

Lesson 2 Book Character Description
Describe different book characters in *Fahrenheit 451* by Ray Bradbury

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Step 1: Generate a list of characters in your notebook.

Step 2: Describe at least four characters appearing in the book. Your description must include:
(1) A detailed physical description - Starting with the color of his/her hair to what kind of shoes he/she is wearing. If the character is barefoot, describe how their feet look.
(2) A detailed mental description - Is the character intelligent? In what ways? What kind of knowledge would he/she possess? If the character was not very intelligent, why would that be? Based on what?
(3) A detailed physical strength - How strong is the character? Based on what?
(4) Special talent, tool, or abilities - Does the character have any special abilities? If so, what are they?

Your description MUST include 3-5 references from the book. Follow the MLA format whenever possible.

Step 3: Share your writing product with your small group members in class. Be sure to the description form everyone at your table and provide feedback. Check to see whether all of your descriptions have the components listed above. Please pay attention to whether the character descriptions are based on book. Evaluate each other's description and provide written feedback. Correct all grammar errors. Check the manuscript form. Discuss (1) what you liked about the description, and (2) what the author should add or subtract.

Step 4: Post your edited version on Haikulearning. Read a total of four character descriptions, each from a different writer, that you also described and provide feedback. Be sure to add (1) what you learned from reading your peers' descriptions, (2) what they should improve and why, and (3) what you took away from reading their descriptions.

Step 5: Based on the feedback you received, revise your descriptions and post the 3rd version online. Write a reflection on the process. Be sure to include your opinions of why the author described the characters in the way that he did and how that enhanced the meaning of the work as a whole.

Step 6: Use the like button to vote your top 3 choices. Of course, as always, you may vote for yourself!

Lesson Objectives:

1. Content-related objectives:
   - Students will demonstrate their understanding of different types of characters (protagonist, antagonist, major, minor, flat, round, static, or dynamic character) in a novel.
   - Students will demonstrate their understanding of the factors that influence a writer to create different characters.

- Students will demonstrate their understanding of the use of different characters to enhance the meaning of a story.
- Students will demonstrate their understanding of different archetypes and their functions.
- Students will demonstrate their ability to produce manuscripts using the Modern Language Association (MLA) format.

2. Skills-related objectives:
- Students will engage in an iterative process of writing, receiving feedback, and revising to improve their writing skills to meet the state standards.
- Students will demonstrate their ability to fully describe a character in a book using different vocabulary and complex sentences.
- Students will use digital writing tools to enhance their technical skills.
- Students will collaborate with others.

Common Core State Standards Addressed:

Key Ideas and Details:
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.

Craft and Structure:
CCSS.ELA-LITERACY.CCRA.R.6 Assess how point of view or purpose shapes the content and style of a text.
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).

Integration of Knowledge and Ideas:
CCSS.ELA-LITERACY.CCRA.R.7 Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

Range of Reading and Level of Text Complexity:
CCSS.ELA-LITERACY.CCRA.R.10 Read and comprehend complex literary and informational texts independently and proficiently.

Text Types and Purposes:

CCSS.ELA-LITERACY.W.11-12.1 Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
CCSS.ELA-LITERACY.W.11-12.1.A Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence.
CCSS.ELA-LITERACY.W.11-12.1.B 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-LITERACY.W.11-12.1.C Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.
CCSS.ELA-LITERACY.W.11-12.1.D Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.
CCSS.ELA-LITERACY.W.11-12.2.B Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.
CCSS.ELA-LITERACY.W.11-12.2.C Use appropriate and varied transitions and syntax to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.
CCSS.ELA-LITERACY.W.11-12.2.D Use precise language, domain-specific vocabulary, and techniques such as metaphor, simile, and analogy to manage the complexity of the topic.
CCSS.ELA-LITERACY.W.11-12.3 Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.
CCSS.ELA-LITERACY.W.11-12.3.A Engage and orient the reader by setting out a problem, situation, or observation and its significance, establishing one or multiple point(s) of view, and introducing a narrator and/or characters; create a smooth progression of experiences or events.
CCSS.ELA-LITERACY.W.11-12.3.B Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, events, and/or characters.
CCSS.ELA-LITERACY.W.11-12.3.C Use a variety of techniques to sequence events so that they build on one another to create a coherent whole and build toward a particular tone and outcome (e.g., a sense of mystery, suspense, growth, or resolution).
CCSS.ELA-LITERACY.W.11-12.3.D Use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters.

Production and Distribution of Writing:
CCSS.ELA-LITERACY.CCRA.W.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
CCSS.ELA-LITERACY.CCRA.W.5 Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
CCSS.ELA-LITERACY.CCRA.W.6 Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

Research to Build and Present Knowledge:
CCSS.ELA-LITERACY.W.11-12.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.
CCSS.ELA-LITERACY.W.11-12.9.A Apply grades 11-12 Reading standards to literature (e.g., "Demonstrate knowledge of eighteenth-, nineteenth- and early-twentieth-century foundational works of American literature, including how two or more texts from the same period treat similar themes or topics").

Conventions of Standard English:
CCSS.ELA-LITERACY.CCRA.L.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

CCSS.ELA-LITERACY.CCRA.L.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

Knowledge of Language:
CCSS.ELA-LITERACY.CCRA.L.3 Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.

Comprehension and Collaboration:
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

APPENDIX C

Rubrics

Rubric 1: Rubric for Setting Description and Book Character Description

Category	Did not complete the task (0)	Did not meet the standards	Met the standards	Exceeded the standards	Score
Quality of the information.		Student included very little details from the book (1-4).	Student included an adequate amount of information from the book (5-7).	Student included more than enough information from the book (8-10).	/10
Richness of the language.	The student did not complete the task (0).	Student's description of simple and uninspiring. Few details and interesting descriptions were provided (1-4)	Student provided adequately interesting description (5-7).	Student's description of the character was rich and vivid (8-10).	/10
Grammar and Syntax.		There are too many errors (1-2).	There are a few errors, but they did not obscure the meaning of the text (3).	There are few errors, and the writing show a level of competency (4-5)	/5
Manuscript		Student made too many errors in the Modern Language Association (MLA) format (1-2).	Students made a few MLA errors (3).	Student made almost no MLA errors (4-5)	/5
Total					/30

Rubric 2: Rubric for Imaginary Character Description

Category	Did not complete the task (0)	Did not meet the standards	Met the standards	Exceeded the standards	Score
Quality of the information.		Student included very little details from the book (1-4).	Student included an adequate amount of information from the book (5-7).	Student included more than enough information from the book (8-10).	/10
Richness of the language.		Student's description of simple and uninspiring. Few details and interesting descriptions were provided (1-4)	Student provided adequately interesting description (5-7).	Student's description of the character was rich and vivid (8-10).	/10
Creativity	The student did not complete the task (0).	The imaginary character seem generally staid, dull, and unimaginative. It require more work (1-14)	The imaginary character had many interesting and imaginative characteristics (15-17).	The imaginary character was riveting, exciting, and superiorly imaginative (18-20).	/20
Grammar and Syntax.		There are too many errors (1-2).	There are a few errors, but they did not obscure the meaning of the text (3).	There are few errors, and the writing show a level of competency (4-5)	/5
Manuscript		Student made too many errors in the Modern Language Association (MLA) format (1-2).	Students made a few MLA errors (3).	Student made almost no MLA errors (4-5)	/5
Total					/50

APPENDIX D

Written Permission from the Site Principal

dissertation study

Debbie Thompson

To:	Kip Glazer
Cc:	Debbie Thompson

Thursday, January 08, 2015 10:54 AM

- You forwarded this message on 1/8/2015 12:27 PM.

To Whom It May Concern:

As the principal, I approve Kip Glazer to conduct her design-base research at my school site. If you have any question, please contact me.

Debbie Thompson, Ed.D.
Principal
Independence High School
☎ Phone
📠 Fax
✋ Email
✉ Address 8001 Old River Rd. Bakersfield CA 93311
✉ Website http://www.khsd.k12.ca.us/independence/

APPENDIX E

Letter to Parents, Consent Forms

Dear Parents:

I hope this letter finds you well.

This letter is to inform you that I am conducting a curriculum study in your child's classroom for my dissertation. Although many of you have already signed my standard permission letter, this letter informs of the specific scope of my dissertation research and your rights for my dissertation study.

As always, your student's participation is absolutely voluntary. If you would like to opt out, your student will be provided with an alternate assignment. Please let me know.

As for the activity, your student will be engaged in normal classroom activities while creating a game. Eventually they will play the game that they created. I will be collecting data from their classroom activities to find out whether this new approach is helpful for student learning.

If you have any questions, please contact me at any time. I truly appreciate your help.

Thank you very much,

Kip Glazer
English teacher

INFORMED CONSENT FOR PARTICIPATION IN RESEARCH ACTIVITIES

Participant: _____

Principal Investigator: Kip Glazer

Title of Project: Imagining a game-based learning pedagogical model: Using role-playing game creation to teach literature in high school English classes

1. I _____ , agree to participate in the research study being conducted by Kip Glazer under the direction of Dr. Linda Polin.

2. The overall purpose of this research is to develop an innovative pedagogical model to teach literature using role-playing game creation.

3. My participation will involve the following:

       Typical classroom activities including reading, writing, and online forum postings
       Taking quizzes
       Writing essays
       Providing feedback to fellow students verbally and in writing
       Participating in classroom discussions
       Writing reflections
       Creating game board pieces, game pieces, game rules and additional visuals
       Playing student-created role-playing games

4. My participation in the study will last several class periods not exceeding 8 weeks. The study shall be conducted in my English class.

5. I understand that the possible benefits to myself or society from this research to provide useful information to develop an innovative pedagogical model for teaching literature.

6. I understand that the risks and discomforts associated with this research are minimal. Still there are certain risks and discomforts that might be associated with this research. These risks include:

       My work such as writing and visuals may be included in a published dissertation.
       My class testing data will be included in a published dissertation.

7. I understand that there is no estimated expected recovery time after each class period.

8. I understand that I may choose not to participate in this research.

9. I understand that my participation is voluntary and that I may refuse to participate and/or withdraw my consent and discontinue participation in the project or activity at any time without penalty or loss of benefits to which I am otherwise entitled.

10. I understand that the investigator(s) will take all reasonable measures to protect the confidentiality of my records and my identity will not be revealed in any publication that may result from this project. The confidentiality of my records will be maintained in accordance with applicable state and federal laws. Under California law, there are exceptions to confidentiality, including suspicion that a child, elder, or dependent adult is being abused, or if an individual discloses an intent to harm him/herself or others. I understand there is a possibility that my medical record, including identifying information, may be inspected and/or photocopied by officials of the Food and Drug Administration or other federal or state government agencies during the ordinary course of carrying out their functions. If I participate in a sponsored research project, a representative of the sponsor may inspect my research records.

11. I understand that the investigator (Kip Glazer, ███████████████████) is willing to answer any inquiries I may have concerning the research herein described. I understand that I may contact Dr. Linda Polin, ███████████████████ if I have other questions or concerns about this research. If I have questions about my rights as a research participant, I understand that I can contact Dr. ███████████████, Chairperson of the Graduate and Professional Schools IRB, Pepperdine University, ███████████████████.

12. I will be informed of any significant new findings developed during the course of my participation in this research, which may have a bearing on my willingness to continue in the study.

13. I understand that in the event of physical injury resulting from the research procedures in which I am to participate, no form of compensation is available. Medical treatment may be provided at my own expense or at the expense of my health care insurer, which may or may not provide coverage. If I have questions, I should contact my insurer.

14. I understand to my satisfaction the information regarding participation in the research project. All my questions have been answered to my satisfaction. I have received a copy of this informed consent form, which I have read and understand. I hereby consent to participate in the research described above.

_____	_____
Parent or legal guardian's signature on participant's behalf if participant is less than 18 years of age or not legally competent.	Participant's Signature
	_____
	Date
_____	
Date	_____
	Witness
	_____
	Date

I have explained and defined in detail the research procedure in which the subject has consented to participate. Having explained this and answered any questions, I am cosigning this form and accepting this person's consent.

_____   _____
Principal Investigator   Date

Minor Assent Form

February 24, 2015

Study Title: Imagining a Game-Based Pedagogical Model: Using Role Playing Game Creation to Teacher Literature in High School English Classes

Dear Student:

As you know, I am a doctoral student at Pepperdine University. Your parents have given me their permission to speak with you about a study I am conducting on developing a new pedagogical model using role-playing game creation. I would like to invite you to participate in this study if you are interested. Before I explain more about the study, I want you to know that the choice to participate is completely up to you. No one is going to force you to do something you are not interested in doing. Even if you start the study and decide that you are no longer interested in continuing, just let me know and we will discontinue the study.

The study will take approximately 3-4 weeks, and you will be reading and writing on a novel or play while creating a role-playing game. You will also be asked to answer questions during a class discussion, and 3 of your class sessions will be recorded for analysis. I will also make daily observations to see whether the classroom activities are helpful in teaching longer literature pieces. You will also participate in gameplay.

Your participation in this study may not provide information that will be helpful to you, but what is hoped is that what I find out from you may be of help in the future to others who are undergoing a similar experience.

When the results of this study are published or presented to professional audiences, the names of the people who participated in the study will not be revealed.

If you have any questions, you may speak to me during class or email me at
████████████████████ any time.

You may keep a copy of this form if you wish.

_____   _____

Youth's signature   Date

_____   _____

Researcher's signature   Date assent obtained

APPENDIX F

Full Transcript of the Small Group Discussion on the Game Board

Class: Honors Junior English

Student 1 (S1) : I am [Student 1]
Student 2 (S2) : I am [Student 2]
Student 3 (S3) : And I am [Student 3]
S3: Today is the 18th of March, 2015.
S2: And our topic is the futuristic St. Louis. So Leo what you gotta say about your game board? Why is it different from ours?
S1: It's way different from both yours.
S2: As I can see.
S1: You guys' boards are both flat while mine is popped out, I guess. Um..
S2: Looks like yours is 3-dimensional.
S1: Yeah. And
S3: Are those dogs?
S1: Yeah. Mind have the Hounds.
S3: Oh. Yours has the hounds.
S1: Yeah
S3: Is that the forest right there?
S1: Yep. And there is like the little part of the river here.
S3: So you have like the whole scene.
S1: Yeah.
S3: That's cool.
S1: How about your guys'?
S2: Yeah we mad the city a little futuristic with like good, nice streets, prepared and the bank and the police station as the city is full of crime. And the research center, subway, and pretty industrialized. And it's pretty balanced. Symmetric. How about you Keenan?
S3: Okay. I have the country center here. And then there is all these other building in the city. So and this is a tree. You see that?
S2: [Chuckles]
S3: But anyway, and this is like the dirt road that goes out to the river and all the other places, and yeah. That's it.
S2: It's pretty nice.
S3: Yours is nicer than mine, but
S2: So the streets, the streets follow to each
S3: You see the lines?
S2: That's cool. Divides the city into the lanes. So it doesn't cause traffic.
S1 & S2: [Laughs]
S2: I mean that's true. It's pretty good, pretty good.
S3: That's cool that you have like a crossroads.
S2: Yeah. We have like a big circle in the front, in the middle.
S3: Like a turnabout.
S2: Yeah.

S1: Yeah.

S2: So it doesn't cause traffic, you know. It doesn't need a traffic police officer, or somebody who needs to control, or lights.

S3: Exactly.

S2: It's pretty industrialized.

S3: Is that a tree in the middle of it?

S2: Yeah probably.

S1: You can...

S3: Probably? [laughs]

S2: Yeah. We can just name it, we can just name it a [pause] Tree!

S3: Tree!

S2: [chuckles] Tree!

S3: Just right in the middle of it, Tree! [Chuckles]

S1 : Tree!

S2 : Tree! [laughs] Tree!

S3: Alright. I think we are done here. Probably didn't realize any way.

S2: What?

S3: No. Why are you still recording?

S2: So what can we do better?

S1: How'd you guys get the idea of like the design?

S2: I mean like as described in Dungeons and Dragons, like you gotta balance out the board, so it consists of every setting and every little part of what's being like described. And then you gotta balance it. It has to be symmetric to the board. And you can see the girds. 1 inch by 1 inch. You know. And then each

S1: Oh man. I didn't think about that. I just, I just looked up an image of St. Luis.

S3: Wait.

S2: Yeah. I forgot to include the river. I think I am going to do that.

S3: [Ask the teacher] Is it alright if I turn this in [point to a computer-generated picture] instead of this?

Teacher (T) : [Looking at a hand-drawn board piece and a computer-generated board piece] Why are we wanting to replace that [point to the computer-generated piece] with your hand-drawn one?

S3: Because this one looks better than this one.

T: Okay. Alright. What if I told you I have no problem with you using your computer-generated image for your next media assignment? You know what I mean? You are welcome to go home or...

S1: It could be way easier.

T: If you want to do that, I have no problems with that. Cause it's...hand-drawing is not really the point of this assignment, right? So that point is what?

S3: To...

S1: Yeah...

S3: To create a game board to make a game we are all gonna play.

T: Okay. What would be some other reasons?

S3: How we can learn about technology?

T: If that's the case, then I would have said go make a computer-generated image not this.

S3: That's true.

T: So think about it. What is the point of this assignment?

S2: Probably the brainstorming the description of the book.

T: Okay. What...Good [acknowledge the answer]..why would that be relevant?

S1: To give us a better understanding of what the settings are?

T: Okay. Very good. But why? [Pause for 5 seconds to wait for the answer.]

S2: Like it connects to the literature? Yeah? [Seek agreement from his group. Others nod.] Yeah.

T: Okay. Keep going. [Pause for 3 seconds without getting any additional response.] Let me give you a little hint. Look at all these things together. [Pull the boards together.] What do you notice? Let's look at all these, even your computer-generated image. What do you notice about this situation? [3 second pause.]

S3: They are like one big city.

T: Okay.

S2: They have the grid lines?

T: Okay. [Another 3 second pause.] Keep going.

S3: Um each one is different?

T: Yes! High five right there! [High fives the student.] Okay. So didn't you guys read the same book?

All (A): Yeah.

T: How come the pictures are different?

S3: It's what our mental image of the setting is.

T: [Sarcastically]. Oh well then I guess the writer sucks then.

A: [laugh.]

T: Can't he describe the setting the same? What the heck?[Pause for a second] Or [Pause for 5 seconds].

S1: Mmmm...

T: Let me ask this question again. You read the same piece, right?

A: Yes.

T: You are discussing the setting together when you were creating the descriptions, right?

A: Yeah.

T: Yet, all three pictures look completely different.

A: Yeah.

T: Let me ask you a very crude question. Is it okay that it is?

S3: Yeah. In a way.

T: How come?

S3: Because...Um...[Pauses for 3 seconds.]

S2: Cuz we had the same, we had the same knowledge from the book that everybody had, so we could like brainstorm into an actual city

T: Uh huh?

S2: Yeah, so I mean, opinion like values. I mean like everyone had an opinion to share

T: Uh huh.

S2: and to describe, so. I think. Like nobody. We can't be correct because it's like a brainstorming assignment. So I don't know, but probably.

T: Or let me rephrase that. You can't be correct? Or are you correct?

S2: Um. I don't know.

T: So let me ask you another question. Did you guys base your description or the drawing on the book?

S2: Yeah.

T: Did you guys make this up or is it from the book?

S2: We made it up a little bit.

T: But for the most part, you were supposed to... the assignment was to base your drawing...

S2: On the book.

T: On the book, right? So did you do that?

A: Yes.

T: Did you meet that standard?

A: Yeah.

T: Okay. Yet all three of these things look different. So are you right? Or are you wrong? Or is there a different way of looking at what is right? So are you wrong? Is S3 more right than you? Or are you more right than he is? Or what?

S2: Like...I don't know. Cause... like he included the river, and I didn't, so he had basically more knowledge than me. Because he read the book, and then he was more descriptive, so he can be right and I can be wrong. Cause yeah. I can miss out the important parts from the book. Cause

T: Ah. Okay. There is a degree of rightness? Or are you completely wrong?

S2: No. No. No.

T: You sure?

S2: Yeah.

T: You sure?

S2: I am not completely wrong.

T: [Laughs]

S2: Pretty sure I am not completely wrong.

T: But just the fact that he had a river, does it make him more right?

S2: Yeah. Because it's an important part of the book.

T: Of the book?

S2:Yeah.

T: Okay. Well, that's your assessment. [Turn to S1.] How about you? You think S3 is more right than S2 is or what?

S1: I think it's just like, yeah, we did read the same book, but then we still like also had like different images, like mental images. We based mostly off of what's in our head more than the book.

T: And is that okay?

S1: We also had the same idea from the book, too.

T: Kind of a similar idea, right. Is it okay to do that?

S1: Um. I mean.

S3: [To S2.] Be okay.

T: Why?

S3: I mean it's our assignment.

S2: I mean if we were told to like base it off the book, then it's not as okay, but.

T: Okay then, am I wrong? For expecting you guys to expand your knowledge or make stuff up? Or should I have asked you to do it exactly like in the book?

S2: Mmmm. [Pause for 3 seconds.] I think like, I think if we were told to do it exactly like 100% based off the book, it would almost be the same.

T: U-hum. Why didn't I ask you to do that? Wouldn't that be better? If I asked you to do it exactly like it in the book?

S3: We are making a game board.

T: Uh-huh.

S3: So you want diversity.

T: Why would I care about diversity? I want.. I care about you reading the book, don't I?

S3: Yeah. But games are more fun.

T: Ah. Well then. [Laughs]. Or does is there different way of reading? Is reading just one way? Getting the information?

S3: Oh I see what you mean now.

T: What do I mean?

S3: You mean like how we learn about a book by different outputs of... Ah, I don't know how to explain it. It's like you are teaching us different ways to interpret the book. Like how we see different parts of the settings and stuff like that.

T: Why would that be important? Don't I want you to just know what's in the book?

S3: Well. Yes. But. We should also...

T: [Laughs.] There is that famous but right there.

A: [Laugh.]

S3: Exactly.

T: [Continue laughing.] Yes, but. Keep going.

S3: Um...[Pauses for 3 seconds.]

T: You are doing great. Keep talking.

S3: I forgot what I was going to say.

S2: It's a tough question.

S3: Yes. It is a really tough question. Yes.

T: Yes, it is important to know what's in the book, but what?

S3: It's important to know what's in the book, but you have to...[Pauses another 3 seconds.]

T: [To the rest of the group.] Help him out, gentlemen. Come on! He is doing great, isn't he?

S2: Yes, he is.

T: Help him out. It's important to what's in the book. Yes? We all agree? Yes?

S2: Yeah. But then it wouldn't be as fun cause then we wanna...

T: So fun is my goal?

S2: Yeah.

S1: We want to put also our own image along with what's in the book.

T: Why? [Teasingly] Well, you are not that important. What do I have to...just kidding. [Laughs.]

S2: To connect with the author

T: Okay. But why would I care? He is dead! Or is he?

S1: Yes. I think he is. [Everyone pauses for 5 seconds.] Cause it's like our own originality in a way. [Pauses for 3 seconds.] Also inspired by the author's setting.

T: Let's keep think about this, right? What it means to be a reader? What does reading mean? You know what I mean?

A: [Nod.]

T: The purpose of this class? Let's keep talking about this. In front of us, we have 3 pieces of a board, right? Supposedly from the same text, looking very different. Hm..Interesting. Okay?

A: Yeah.

APPENDIX G

Full Transcript of the First Class Discussion on the Game Board

Class: Honors Junior English

Teacher (T) : Let's talk about a couple of things there. I talked to these gentlemen. This group. So I want you guys to close your machines. Close, close, close. Thank you, thank you. Put your boards in the middle. Right? And talk to me about what you noticed. So let me pose this question. Think about this for a second. So did you all read the same book?
Students (Ss): Yes.
T: Are you sure?
All (A): Yes.
T: Did we all read the same book?
A: Yes.
T: Everybody. Pay attention. Did we all read the same book?
A: Yes.
T: What do your pictures look like? What do they look like?
Student 1 (S1) [10]: Similar
Student 2 (S2): Similar but different.
T: Similar but mostly different? What's wrong with your people?
Student 3 (S3): Why?
T: Well, you read the book! Shouldn't they look all the same?
Student 4 (S4): You are right, Mrs. Glazer.
[Several students speak at the same time.]
T: Okay, one at a time, right?
Student 5 (S5): We used our imagination.
T: You use your own imagination? How dare you? [Laughs.]
S5:[Laughs.] My bad.
T: Shhh..There is a hand up, so shh..everybody. Go ahead.
Student 6 (S6): It's different because everyone has a different perspective of what it looks like.
T: That's dangerous. So let's think about what that means. [sees a hand up. Signals for the student to speak.]
Student 7 (S7): Well, [Bradbury] just like. He just doesn't really...I don't know, like you were saying yesterday when I was drawing a bunch of trees. He didn't say that there was a bunch of trees. I just imagined that river would have trees by it. They [pointing to her group members] don't have as many trees as I do, but
T: You mean your friends in your group
S7: Yeah.
T: Don't have as many trees in their drawings, but they still do.
S7: Yeah.
T: Okay.

---

[10] For the audio recording, I chose to number the students for the order that they spoke rather than use the universal code. Although it would have created additional data point, I felt that it was not necessary to track it since the focus of this research was to gain information regarding the characteristics of the pedagogical model rather than individual student achievement.

S7: I imagine mine more like in the middel of like a forest but their's is kinda just like in the middle of

T: In the middle of what? Prairie? Is that what you said?

S7: [Laughs.]

T: A prairie in the middle of St. Luis? [Jokingly.] I don't know. Okay. Anybody else? [Pauses.] So let's think about the concept of reading, right? The definition of reading, yes? I distinguish reading from decoding. We talked about this before, yes?

A: Yes.

T: I would say the evidence of your reading is in front of you. How do you feel about that?

S8: [Tentatively.] Amazing?

T: [Nods.] Because if you are decoding, right? You guys understand what I mean by decoding? [Nods to solicit agreement from the students. Students nod.] If you are decoding, shouldn't the pictures look exactly the same? No? Because you would copy what's in the book onto the paper.

S7: On to the paper, yeah.

T: Or, right? [Acknowledges S7, and pauses for response for a couple seconds. Finally sees hand up, and says] Yes.

Student 8 (S8) : But the book doesn't have visuals or the descriptions for everyone to know or visualize the same thing.

T: So the book is wrong.

Student 9 (S9): [Jumps in immediately.] Yes.

T: [Chuckles.] The book does not give me enough information

S8: No, no. It provides the space for imagination.

T: Ah..[Lowers her voice in a joking tone.] How dare he? Huh?

S8: [Laughs.] I guess.

T: [Continue joking.] Such a terrible writer, man. Why didn't you give me enough description? [Pauses. Ss murmurs both agreements and disagreements over that statement.]

Okay, so let me ask you the other question. In the beginning of your school year, we talked about literature splitting into 3 different genres, yes?

A: Yes.

T: What genre are we in?

A: Fiction.

T: What are reading? Yes, fiction, which is a part of the prose family, yes? Right?

A: Yes.

T: So when you go home or when you are doing your reflections, I want you to really think about this critically. You guys know what I mean by critically?

A: No.

T: Is it a good thing? Is it a bad thing? Is it different from your normal experience? I want you to be really critical because what I noticed from reading your reflections, a lot of you are summarizing the book. What's happening in the book, which is great. You are showing me that you are reading, right? In the book, this happened. And I noticed this. Fantastic! Love it. Having said that, now that we had this experience, right? How could...think about this. You guys were in groups before we split up yesterday, and you were discussing the setting description, did you not? [Nods to the students and students nod back.] I didn't say don't talk to your friends. You just talked to each other and figured it out, together, right? And you guys were looking at the book...together, I am assuming. No?

A: [Nod.]

T: Did we do that?

A: Yes.

T: Like what page did you see that in? What was the line? Yeah? No?

A: [Nod.]

T: Say yes.

A: Yes. [Laugh.]

T: I mean you are nodding. I am just saying... Okay. But yet, you came up, you came away with completely different looking boards. Is that okay?

A: Yes.

T: Why? Why is it okay?

S8: I think it's okay because we all have our own imagination of.

T: How dare you, man? You fail that reading test, didn't you?

S8: A reading test?

T: Reading test. You read the same text. Shouldn't they [pointing to the boards] be exactly the same?

S9: No. Not really going to be. We might have discussed the same thing but we see things differently.

T: Tell me more about that.

S9: Like say we were talking about houses. They are all lined up on a street. We all understood. We all knew that. But how we draw it is different.

T: That's a great example. [Writes the word "house" and "street" on the board.] There is a house on the street, right?

S9: Yes.

T: How you see a house may be very different from how I see a house. Interesting, isn't it?

S9: Yes.

T: And S8 is right. On top of that, the assignment was that you have to draw, right?

A: Yes.

T: Which means what? How I see and whether I can draw it the way I see it are two very different things. True? [Nods.]

A: [Nod.]

T: In my head, I can see this beautiful house. Comes out of my hand...well...[Chuckles.] Right? Stick figures and triangles. Man, right?

A: [Laugh.] Yeah.

T: Just think about it. So when you are writing your reflections tonight. I want you to think about that. What would be the danger of having that distance?

Student 10 (S10): interpreting it wrong?

T: Ah...Talk about it at your table for a second. Is there a danger? Go. [Pause for 3 minutes.]

T: So I asked you where there is a danger of having that distance, right? [Referring back to the board.] The word house, the mental image the house, the ability to generate the image the house. There is that distance. Do we agree that there is a distance?

A: Yes.

T: Yes?

A: Yes.

T: Words to heads to back out. There is that distance. There is that question that I asked. Maybe it was too much of my setting you up. Whether there is a danger? But is there also a benefit?

A: Yes.

T: Chat about that for a second. What is the benefit? Go. [Pause for 3 minutes for small group discussions.]

T: What is dangerous about the distance? [Sees a hand up.] Go.

S8: If you stray too off, then you are not completely understanding the whole book then. Pretty much?

T: Okay. Okay. What else? Any other danger? Go ahead.

Student 11 (S11): It kind of depends on what the person is asking. It could be dangerous if they are saying that it has to be a specific way, and it doesn't come out the way that they wanted it to. Then it could be a danger because then they are not getting why you did that. And they are not getting what they are wanting. Exactly.

T: Communication breakdown.

S11: Hh-um.

T: Right? Very good. It's a real danger. It's not an imaginary danger. [Notices another student in the same group nodding while putting her right hand over her heart with happiness.] Yesh, Student 12 (S12) is like, yeah right. [Laughs.] That's what we talked about. My group rocks, right? [The group giggles, and the rest of the students laugh.] Ohhh. Look at her. [Points to S12 with a smile.] I am so proud of my friend. There you go. [Laughs.] You guys are so cute.

A: [Laugh.]

T: Okay. So...[Notices a student shaking his head.] Don't you think that's cute?

Student 13 (S13): [Rolls eyes.] You went from laughing to serious!

T: [Laughs.] I do that all the time.

S13: [Laughs.] She just did it again!

T: [Laughs.] You guys are too funny.

A:[Laugh.]

T: That's a real danger. That's an imaginary danger. That's not a dismissible danger. The communication breakdown is a huge issue. What about some benefits? [Pauses.] Come on people. Do I need to pull cards? Or are you going to be volun-told or volunteer information? [Notice a student who already provided an answer raising her hand.] Let somebody else have a chance. How about this table? Oh. Mr. S14. Tell us. What is the benefit?

Student 14 (S14): The benefit would like everyone is different.

T: Everyone is different. Why is that good?

S14: If everyone is the same, it would be like robots.

Student 15 (S15) : [Whinnying.] It would be boring.

T: [Laughs.]

A: [Laugh.]

T: [Still laughing.] If everybody is the same, that would be boring? That is dangerous? Boring doesn't sound too dangerous? [Another person from the same group raises a hand.] Yes.

Student 16 (S16): I think he is trying to say that we can all learn from each other. Since we all have different picture, we all explain it a little bit differently. So then after, we all get why we do it that way.

T: So because you have a different perspective, you can understand each other's point of view.

S16: Yeah.

T: But let me ask you more. Just understanding different people's point of view, in and of itself, is a benefit? Couldn't you just live you life like I don't care what you think?

Student 18 (S18): [Murmurs.] You are just saying that.

T: I am dead serious. Why do I care about what you think? You are just a kid. [Sarcastically.] I

don't really care. I mean look at your picture. That doesn't even look like what I think. What's wrong with you?

A: [Laugh.]

T: Think about this. [See a hand raised.] Yes.

Student 19 (S19): There is an understanding that comes into play in life when you realize how it feels to be in another person's shoes.

T: [Jokingly.] Nah...I don't care.

A: [Laugh.]

T: [Rolling eyes.] How does it feel to be in another person's shoes? Why do we care about that?

S19: It makes you more compassionate and understanding.

T: Compassion? Really? [Spots another student with a hand up.] Yes.

S5: [Points to another student.] Student 20 (S20) and I were talking about what we drew. How I drew it was completely different from how she drew it, and when I explained it to her, it seemed like she had a better understanding of what could have been going on in her picture than she could have put down.

T: Again, my question is why do I care? That you understand what S20 thinks or S20 understands what you think? Why do I care? [Another hand up.] Yes, S9. Go.

S9: This is like when we were reading The Great Gatsby, you said you didn't want to see Gatsby how other people saw him. Why?

A: Woooooo

T: Because I am brilliant. [Laughs.] I am just kidding.

A: [Laugh.]

T: I didn't see how other people saw Gatsby. Okay. Well. I am, you know. Cuz I am just better. No? [Laughs.] I am just kidding.

S9: Like why?

T: Yes. That's a very important question. Good. Fireworks right there. [Smiles and nods at the student who made the comment.] Yes. That's important.

S9: But...

T: You do know that I am just pushing you to think about this, right? Yes? And let me give you some words. I hope you guys...I am sort of herding you through it. But one of the things that we learn from reading a great piece of literature, I hope that you guys are learning, is what? What exactly you [Turn to S19 who mentioned compassion.] were talking about, right? There is actually a term for that. What do we call that? Beyond compassion. Being in someone else's shoes. What is that called? [Pauses while students whisper to each other.] Honor students. Can't come up with a term! [Smiles teasingly.]

A: [Laugh.]

T: It's different from sympathy.

A: Empathy.

T: There you go. What is empathy? [Pauses while students murmur to each other.] That is exactly what S19 talked about, right? Being in someone else's shoes. I want you to think about that. So when you are writing your reflections today, I really need you to think about all that we talked about right now, right?

Should all the boards look different? Is it a good thing? Is it a bad thing? Not so black and white. I want you to think about it. This is what smart people do, right? Is there a danger? Real danger? Yes? But the question really is, does the benefit outweigh the danger?

S8: Absolutely!

T: That's your opinion. Maybe someone else might say, [rolling eyes, waiving one hand with an attitude] please. Heck no. I just want you to think about it.

APPENDIX H

Full Transcript of the Second Class Discussion on the Game Board

Class: Honors Junior English

Teacher (T): [Holds up 4 different boards] All four of these sections are supposed to be the old lady's house, yet you see how different they look? [Pauses for 3 seconds while students look.] You guys see it? How are these even the same house? Especially all these four. Look at these. Okay? So I want you to take a few moments n your group, and think about this. Look at your own. You have them in front of you. And think about what that means for you. Should they all look the same? Or is it okay that they look different? Okay? Talk about it for a second. In your groups. Go. [Pauses for 2 minutes while students discuss. Unlike in the other class where all students had vastly different drawings, T notices that 2 out of 8 groups have similar drawings.]
T: The question is. Actually, let me set it up. We all read the same book, true?
All (A): Yes.
T: Even the same version of it, right? Page numbers are the same. And in your small groups, you read the same section. You were asked to describe the same place. True? Yet for the most part, although I am very interested in talking these 2 groups that have similar drawings and we are going to table that discussion for later, but for the most part, I see that your drawings look very different, right? Yes, true? Do we agree? Yes? [Pauses for 2 seconds.] What's wrong with the picture? Or is there something wrong with this picture? [Pauses for another 3 seconds.] So this group said, [Points to one group with 3 different drawings.] he described the industrialized part of the city, I did the downtown, and she did the suburbs. And then after they said that initially, then they changed to he was describing what it looked like before the city was complete, and she was doing in the middle of the construction, and then mine was after the building of the city. [Pauses 1 second.] What the heck? We read the same exact section, and how come 3 very different pictures? [Noticed a hand up from a group with very similar pictures. Points to that student.] Yes. Student 1.
Student 1 (S1): I think I have an explanation for why ours were all pretty much the same?
T: Okay. Go for it.
S1: I think it's because last week, we all had the same setting. and we had to read it in the book. And we had to talk about what the setting was going to be. So our group discussed pretty in-depth what the city was going to look like. We even went back and forth talking about how I would have interpreted it. For the most part ours look the same because we discussed it, and that influenced how we were going to draw it.
T: Okay.
S1: I think ours would have been a lot more different if we had drawn this before we did the setting description.
T: Interesting. [Turn to the other group that had similar pictures.] Okay. What about you? Your group?
Student 2 (S2): A river isn't that hard to get like different pictures. The description in the book seemed to say that it had willow trees, so most of us draw the trees that drag to the floor. And it mentioned that there was a train track. So it's not that hard to. It's not that weird we all have the same pictures.
T: Got it. So the description in the book dictated your illustrations.

S2: And we did about it.

Student 3 (S3) : Yes. We used the same page. We looked at the page 133, and we described what we thought. And then we just ended up drawing the same.

T: Okay. [Turn to two students with vastly different pictures.] What about you two? What happened there?

Student 4 (S4): So much about what every else was saying about discussing it and using the examples. Because it is a fire station. So we just thought. One thing that was strange about was that we both put the same quote without talking about it.

T: Interesting. Okay. They still look different. [Turn to the class.] So the question is. If I give you a set of instructions, right? They are pretty clear cut, right? We talked about this before. If I bothered to write them down, you better know what you are doing kind of conversation. So the instruction was there. And then you went off and went crazy on me, man. [Jokingly.] Except for these two groups, right? Or did you? What was the point? [Pauses for 3 seconds.] Was it good? Good as in quotes sort of way. In that the old woman's house drawings look different from four of these people. [Point to the group.] Come on. Defend it. Come on. It's your group. I am calling you out. Student 5? What do you have to say for your group?

Student 5 (S5): Student 6 focused on how it looked outside. And I really focused on what the inside looked like. So if you connect it, [Putting both pictures together.] you can tell that the house connects to the inside.

T: Oh. So you wanted to give a bigger picture of it.

S5: Yes.

T: You went the division of labor route. Okay. But why?

S5: Why? Because that's how I saw the house. I didn't want to focus on the out side, because there was nothing important about the outside of the house. I just focused on how the book described the house as big and medieval from the ancient times. So I just focus the house from this era, which is more like my grandma's house, and I just drew it.

T: You just called your grandma ancient and medieval? [Laughs. Ss laugh, too.] You better not tell her that one. She might not like it. Or she might be ancient. I don't know. Okay. [Notice a hand from another student whose group described Professor Faber's house.] Yes.

Student 7 (S7): I feel like it's different from describing a river or outside the street. A house is different because it didn't really give us a detailed description, so we had to come up with what we thought about the way the house looked.

T: So fill in the blank.

S7: Yes.

T: So it's the author's fault.

S7:No.

T: He didn't give me enough information. Jerk. Is that what it is?[Laughs.]

Student 8 (S8): Our section [Professor Faber's house] left a lot to the imagination. Because it said just a house with walls that look the same as him. White walls. Plain. So it gave you a lot of free reign to picture what you think that house would look like from a guy who is a rebel yet trying to stay low key. Just a plain house.

T: [Sees a hand up from another student.] Go. S1.

S1: I think it's actually a good thing that he left it more vague. Because then it leaves everybody's experience of reading the book different. He is not... If I were to say, "Think of your grandma's house. " Student 8 is not going to think of the same house as me. Because we have different grandmas and different houses. [Ss laugh.] If I were trying to draw...

T: You sure you have different grandmas? Just kidding. [Laughs.]

S1:[Nods yes.]

T: {Laughs.] You are pretty sure. I am just checking.

S1: I am pretty sure unless my family is not telling me something.

T: [Laughs]

S1: So yes. I understand why theirs would look so different. Because thinking of an old lady's house, I would think of my grandma's house, and I would try to draw that. My grandma's house in that situation. So it does make sense why they look so different.

T: Okay. It makes sense is different from whether it is a good thing or not. [Pauses for 3 seconds.] You know what I mean? [Sees a hand up.] Yes.

S5: I have a question. When we read The Great Gatsby, you said that you didn't like the movie because that was not the author's perspective of Gatsby. You said that you imagined your own Gatsby. You don't like movies because it just shows one way how the director viewed it. So I think what we did was our own version of what we saw.

T: Okay.

S5: And I think it ties something to that.

T: Ties something to it. Okay. How? Explain to me more. Tell me more.

S5: Because it's the way... literature is more of imagination. It makes everyone unique. If everyone views Gatsby as Leonardo DeCaprio, then we wouldn't have imagination. Therefore, we would be like Montag's wife. We would be just watching TV, planning perfection the same, living life the same. That's what I think.

A: [Nod in agreement.]

T: [Laughs happily.] Anyone else?

Student 7: That was good.

T: [Claps.] Woo hoo! S5, go S5! Yes! [Ss clap.] Hang on. We are not done yet. [Laughs. Ss laugh, too.] If we are done with that, then this wouldn't be my class, right? Then you said, everyone is unique, right? Is that a good thing? [Pauses for 3 seconds.] So let me ask this question. [Writes the words River and Willow Tree on the board.] So river. Willow tree. [Points to the group that did the river drawing.] That's what the said. They had the same description, right? And they manage to imagine the river, the same sort of way. Right? Is there a benefit to being able to say river and know that somebody else imagines it the same ways as you do? What would be the benefit of that? Being able to rely on my origination of communication as something, and know for sure how it is going to be received? Is there a benefit? Why don't we talk about it in your small group just a minute? Go. [Pauses for 3 minutes.]

T: The question was. Is there a benefit to being able to rely on someone else receiving your communication exactly the way that you originated it? [Pauses for 3 seconds.] Do I need to pull cards? Or are you going to volunteer to speak?

S3: Say it again?

T: Whatever you guys talked about. What did you just talk about just now?

Student 6 (S6): We just talked about how communicating... how you said it would be the same when you gave us all the same section, but we didn't discuss how we were going to draw it all the same. We just talked about it made us draw the same.

S2: To understand, we looked at all the same page, and we pictured it the same. So it makes understanding what you reading unconfused.

T: So there is a benefit. There is that common understanding, which is what S1 was talking about. What about your group? [Points to another group.] Do you think there is a benefit? Come

on you can speak, too.

Student 7 (S7): No. [A student shakes his head no.]

T: There is no benefit?

S7: No.

T: When I say river, you know exactly what you were thinking.

S7: No. Because everybody should see things differently. I wouldn't see how there is a benefit.

T: If I say river, and you picture a black river and I picture a blue river. So I can't count on you understanding anything. And then how would we communicate? [Pauses for 3 seconds.] There is no benefit for having common understanding?

S7: Anyone can see things differently, so.

T: It would be chaotic. Everybody is talking about a house, yet you won't be able to rely on what they mean. Like a house should have a roof, man, but how would I know that's what you mean? No? I want you to think a little more about that. Anybody else?

Student 8 (S8): We said like what that group said [points to the first group] the benefit is that if the author or someone is trying to portray a message with that, than it helps that the person is on the same page or in the same setting. It helps to explain whatever the theme or the message that he is trying to get across.

S7: I think of a general picture. A river you picture water. The details are different.

T: So is that a good thing or a bad thing? [Pauses for 5 seconds.]

S1: I think that would be a good thing. Because the benefit is having that same general idea. I say river, I am thinking of water, and you are thinking water. But at the same time I am picturing maybe trees around, and maybe you are not. If we were thinking exactly the same thing, then anything I were to write or draw about that river would be exactly the same. So what's the point of doing more than one.

T: [Sees another hand, and acknowledges.] Yes.

Student 9 (S9): I feel like it would be beneficial depending on the context it is in. Let's say that the river doesn't have any significance, and then it doesn't matter when he says, "There is a river there." You can imagine it however you want to because it won't play a part in the story. It just a river. It's a backdrop. That doesn't really matter. But if the river holds significance, and if he wanted to symbolize it to be something like, "the Society is crap. Everything is actually bad." Then he would probably make the river dark and bad. I feel like that's the only way that would be beneficial because if he wanted it to be a certain way, then he would have described it more.

T: So let me rephrase that. I don't want to put words in your mouth, but what I hear you saying is that the lack of description gives you an understanding that there might be a deeper meaning or less of a meaning. Am I understanding you correctly?

S9: [Nods yes.]

T: Interesting. [Jokingly.] Jerk. Why didn't he give us more descriptions? Man. I don't know. Should he have given your more descriptions? [Notices a student nodding.] Why are you nodding?

Student 10 (S10): Let's say here is a chemistry book, you wouldn't say here is a book. It's a chemistry book. Details matter. So you wouldn't know what it was if you don't say it's a chemistry book. Saying it's a book just gives you a good general description.

T: Details always matter?

S10: Not always, but sometimes it does. In this case, it does. Because you have to know what the river looks like to draw it out. If you just say river. Your interpretation.

T: So are you in agreement with S9 when she said the context matters?

S10: Yes. We need some types of before descriptions of how...let's just say the city is bad and sad, so it would be dark, right? There should be some description that says that before the river was mentioned. That gives you an idea of how the river would be like. Because there is a connection between the city and the river. That's just my idea.

T: So there is a benefit. If I put up the word river, there should be a generalized agreement as to what I mean, right?

A: Yes.

T: Let me ask you this other question. What is the benefit of having different interpretation of the same word? As S5 mentioned of Gatsby. Is that a good thing? Talk about it just a second, and let's come back to it.

[3 minutes pause]

T: Let me repeat the question. A unique interpretation of the same text. Are there any benefits is the question. Okay. Go.

Student 11 (S11): I would say yes there are benefits because seeing other people's interpretations helps you expand your knowledge. Because other people may see a part of the book that you didn't see before, and they can help you to learn something else.

T: [Jokingly.] But my opinion is always the most important. What if I don't care about your opinion?

A: [Laugh.].

T: I am just kidding. You know what I mean? If someone were to say that, how would you answer back to that?

S11: Even if it's an opinion, it could be like... I am trying to think of an example to use.

T: Somebody help him out. He is not the only one with an opinion, right? Anybody else? Go for it.

Student 12 (S12): I just thought that if we were to look at everything differently and encourage some type of discussion, then it will actually help. Why would you discuss anything about anything if everyone thought the same thing, right? Then there would be no ideas different form anything else. For example, you say river, and that guy says river, and this guy says river. And it wouldn't be a discussion. It would be that everyone thinks the same thing. But if it was different, it would be like, alright, I think it's a black river. No, it's a blue river. No, that's an orange river. That's a discussion going around, and there is some ideas going around.

T: Wait. Are you promoting fights?

S12: No. No. No. Discussions.

T: So there is a difference?

S12: Yes. There is a difference.

T: For what? You are just sitting around and arguing about the color of the same river.

Student 13 (S13): Life would be boring without it.

T: Okay. So boredom is bad? That's the only benefit?

S12: No, like he said [Points to S11], discussion would help to build people's knowledge about everything. It can help you be more concrete or general. Not general. You can mix opinions. you know that, right?

T: Can we? I don't know.

A: [Laugh.]

S12: We can. If everyone agreed, it would be great, too.

T: How about you? Ms. Student 13? Is it good that your group had 3 different boards?

Student 13 (S13): I think it's good. We are talking about different interpretations, right? So if you

have plans or something and each person had different interpretations of that plan, and then you can take the best things out of each plan. And make a great one big thing.

T: If I may summarize what has been said, generally speaking, adding knowledge to make things more texturized and enriching is better. Is that the only benefit? Are there any other benefits? Student 14, can you think of any other benefits?

Student 14 (S14): S13 basically said what I meant to say.

Student 15 (S15): I have a quick question. What was the purpose of separating us?

T: Good question. What do think it was?

S15: So we could have different perspectives?

T: You think that's what it was? I wanted you to have different perspectives?

S15: Yes.

T: If so, why is that good is my question.

S15: I don't know.

T: You don't know? I am just curious. Why would I want you to be separated and have different mental pictures? I wonder. Yes.

S12: Okay. So if you hadn't separated us, and my group were to draw the city, chances are likely we would have had almost exactly the same identical drawings because I would be looking at his to see what he was adding that I could add. Something I was forgetting. Since you separated us, that's what led to this whole discussion as to why ours were so similar and somebody else's were so different. You were just seeing how we interpreted the book.

T: Okay then. Why would I care about that?

A: [Talking all at the same time.]

T: What is the point? If the point of reading is to clearly communicate with one another, then we failed, didn't we? Except for your two groups. Even then, theirs don't look identical. Did we fail?

A: No.

T: Why not?

S13: Because we all read the book.

A: [Laugh.]

T: [Laughs] We read it; we proved it.

S14: And we tried it.

T: What is the point? Having different perspectives, having different pictures. What is the point? Is there a point? Should you have different mental pictures? If so, why is that good?

S13: I have a question.

T: Yes.

S13: Are we talking about only on the book or are you asking where it is beneficial in life?

T: Both. Macro and micro levels.

S9: If everyone thought exactly the same, I feel like that. It makes you not weak, but it makes you vulnerable or susceptible to control. If no one thinks differently or nobody has any idea how to do anything. If you all do everything the same, It's.

Student 16 (S16): You can't argue your point.

S9: Yes. It's a weird society. People think differently for a reason.

T: But having too many different opinions, isn't that bad?

S9: No. Everybody thinking the same bad opinion would lead something not good.

T: Interesting.

S13: But what is bad and what is good then?

T: Yes. Exactly. What is good and what is bad?

A: [Speak all at the same time]
T: Time out! What I want you guys to do tonight is write this in your reflections, please? Yes?
[Bell rings.]

APPENDIX I

Full Transcript of the Test Gameplay for *The Importance of Being Earnest*

Class: Advanced Placement Senior English

Student 1(S1): We have the three 6-sided dice.
Teacher (T): Three 6-sided. Here they are.
Student 2 (S2): We should probably just use 20-sided dice.
T: There are plenty here if you want 6-sided ones.
S2: That's the one rule we are going to change. The dice.
T: Why?
S2: The 20-sided dice is more efficient.
T: I like it for this purpose, but you can choose what you want. It's your game.
S1: So how many do we need?
S2: I think we changed the rule to 2. It dictates where we move.
T: Who is running this game? Who's the game master?
Student 3 (S3): Not me.
T: You have to decide if not, you could roll a dice.
Student 4(S4): I thought [a student who is not in class] was going to.
S1: She had to do something for ASB.
Student 5 (S5): I really don't want to be the GM.
S1: Okay, I will do it.
S2: You don't know the play well enough.
Student 6 (S6): You didn't even know who Cecily was marrying!
S1: I did! I had Cecily for my character description.
S2: Dude. You were wondering why she was marrying Jack!
S1: I thought we were just making stories up! We were playing a game! I was playing!
S4: [Glazer] said we had to stick to the facts of the play.
S3: Student 7 (S7), just be the GM, please.
S7: I don't know the play well enough or the rules.
S2: I thought you watched the movie. Wasn't that on your SnapChat?
S7: That was Jane Eyre.
S2: Okay. Just roll between you two. Guys, come on! It's you, S7.
S7: Wait. I don't really remember much about that one Reverend guy.
S4: But you read the play, right? The whole thing?
S7: Yes, but I forgot what he was really like.
S6: He just flirts with Miss Prism.
S7: That's all he does? I just feel like I never really understood him.
S1: Let's just play.
S4: We don't know how to.
S6: We may understand the story, but we have never played the game before.
S2: It's fine.
S1: Everyone. One dice roll. One dice roll. Ready?
S2: We are rolling for turns.

S6: We are doing both?

S2: No just one. Okay. I will go first. Shoot, we don't have characters.

S7: Hold on. I have to keep track. How did we do it yesterday?

S6: You are game master. You have to create a document to keep track of what everyone is doing. You pay attention to everyone.

S1: What did [S5] get?

S6: The rule says it's clockwise from S2.

S2/MISS PRISM: I will take Miss Prism again.

S1/CECILY: Oh god. Reverend Chasuble's stats are all OP.

S3/ALGERNON: I will take Algernon.

S1/CECILY: I will take Cecily.

S6: Again? Are you sure?

S1/CECILY: Does anyone else know her well enough to play?

S7: Do you know her?

S1/CECILY: YES!

S3: You didn't seem so sure her yesterday.

S1/CECILY: I didn't know I wasn't supposed to change the play facts!

S5: Who did you want?

S4/GWENDOLEN: I want Gwendolen.

S5/CHASUBLE: I wanted Miss Prism, but I will take the Reverend.

S6/LADY BRACKNELL: I guess I will do Lady Bracknell. We need pieces.

S7/GM: Just use extra dice. What am I supposed to do now?

S6/LADY BRACKNELL: You are going to place us somewhere. You have to place us wherever you want us. Here is the garden, Jack's place, the park, and the Algernon's apartment. Reverend Chasuble would go to the part with Miss Prims.

S7/GM: Okay. But do we have Jack or Algernon?

S3/ALGERNON: I am Algernon.

S7/GM: So no Jack?

S6/LADY BRACKNELL: No.

S5/CHASUBLE: Why don't we have Jack?

S2/MISS PRISM: You can be Jack if you want.

S7/GM: Jack is complicated. He has issues.

S2/MISS PRISM: I thought we deleted the character attributes. Are we ready?

S6/LADY BRACKNELL: So S7/GM said Prism and Chasuble to be in the part.

S7/GM: Yes. You two can be in the park.

S2/MISS PRISM: Together?

S5/CHASUBLE: Would you go to prom with me?

S2/MISS PRISM: Where?

S6/LADY BRACKNELL: What time line?

S7/GM: Well, it could be after the play.

S2/MISS PRISM: It's fine. Just be decisive with it. So it's after the play. We are not going to question you. You are GM. You are basically God right now.

S1/CECILY: Yes. Just continue.

S4/GWENDOLEN: You got this.

S7/GM: Wait I have to place everyone, right? Okay. I will have Cecily at Jack's home. And Lady Bracknell, you can be in Algernon's house with Gwendolen.

S6/LADY BRACKNELL: Not my house? That's Algernon's house.

S7/GM: No, no. You can be in your house. Yes. That's better.

S3/ALGERNON: What about me?

S7/GM: Oh, I am sorry. You can go to your house.

S6/LADY BRACKNELL: We are going to talk about you.

S2/MISS PRISM: So what's happening?

S1/CECILY: Hold on. Let's think of a turn system first. It gets hectic really fast. Since S2/MISS PRISM rolled the highest, he would go first.

S2/MISS PRISM: But what's happening?

S1/CECILY: Which character are you? Miss Prism?

S7/GM: Miss Prism is Cecily's teacher, right?

S1/CECILY: Yes. So right now Miss Prism and Rev. Chasuble are in the park. So you have to come up with a story for them first.

S7/GM: I guess they could be talking about the whole engagement and the identity stuff that happened with Jack and Algernon. I am not sure.

S1/CECILY: Why don't you two talk about your secret relationship? Okay? Why don't you do that?

S2/MISS PRISM: But how are we distributing the quest?

S1/CECILY: Let's see. Why don't you two get into an argument about your relationship? Would they get into an argument about their relationship? About keeping it a secret?

S5/CHASUBLE: Yes. Because in the play, Miss Prism was very defensive when they got back from the walk. She said the primitive church is the only church that still believes that you can't marry, and that why that church isn't even here any more. So it seems like she was mad, so they would argue.

S1/CECILY: So go off that.

S2/MISS PRISM: But how are we distributing the quest? Because that's the way that we level up.

S1/CECILY: So whoever wins that argument…

S2/MISS PRISM: We have to figure out how we are going to distribute the quest.

S7/GM: I didn't understand what was going on yesterday.

S1/CECILY: It's okay S7/GM. Take a breath. So the quest is an objective that you have to have. You have to complete it.

S7/GM: Oh.

S1/CECILY: So the quest can be solving their relationship problem or ending it. So S5/CHASUBLE, think about what you would say to S2/MISS PRISM. And you both will roll to see who wins that argument.

S6/LADY BRACKNELL: But doesn't whoever wins the argument win the points?

S7/GM: Yes.

S6/LADY BRACKNELL: Then why are they rolling?

S7/GM: Like yesterday, when there was an argument about who was drunk, one of them roll to see who won. So I think that's how we should decide who wins. By the rolling of the dice.

S1/CECILY: Yes, but S7/GM has to make sure their characters are always on track. They don't just rant.

S7/GM: But I don't know the Reverend well enough!

S2/MISS PRISM: You will be fine.

S5/CHASUBLE: I know him. He was one of my characters.

S1/CECILY: So keep track of S2/MISS PRISM. S5/CHASUBLE will take care of himself.

S2/MISS PRISM: So it's my turn, so this is my quest?

S1/CECILY: Yours and hers. Because they are together right now.

S2/MISS PRISM: It makes no sense. It's my turn.

S6/LADY BRACKNELL: It's your quest, but [S5/CHASUBLE] has the ability to take your points.

S1/CECILY: And she has the ability to level up because you are in the same location and having an argument with each other. So if you two can come up with a conversation, we will be able to keep this going.

S2/MISS PRISM: Got it. When do we determine the end of the turn?

S1/CECILY: S7/GM should time it.

S7/GM: Okay. I will time their argument, and at the end of that argument, they will roll the dice.

S2/MISS PRISM: Will all quests be dialogue-based then?

S6/LADY BRACKNELL: Yes.

S2/MISS PRISM: Let's decide that, then. All quests will be dialogue-based, and.

S7/GM: They are going to be timed.

S1/CECILY: And the GM will time each turn. 45 seconds or whatever.

S7/GM: 45 seconds sound good.

S2/MISS PRISM: What's the goal for mine again?

S1/CECILY: To win the argument.

S2/MISS PRISM: About what?

S1/CECILY: You two are fighting right now because

S5/CHASUBLE: Of the secret.

S2/MISS PRISM: I don't want it to be a secret?

S5/CHASUBLE: Yes, but I do.

S1/CECILY: Good job, guys!

S7/GM: Yes. After 45 seconds, you will roll, and whoever has the highest will win as long as you are in character.

S1/CECILY: Yes, because at the end of the play, no one knows what happened to the relationship between Miss Prism and Reverend Chasuble. So you can go anywhere with this. So complicated!

S6/LADY BRACKNELL: Okay, ready? Go.

S2/MISS PRISM: Hello.

S5/CHASUBLE: Hello dear Miss Prism.

S2/MISS PRISM: I don't want any more secrecy.

S5/CHASUBLE: Why is that?

S2/MISS PRISM: Because it's obsolete?

S5/CHASUBLE: You know the primitive church doesn't allow us to marry.

S2/MISS PRISM: Then leave the primitive church!

S5/CHASUBLE: As a man of God, I don't think I ever could!

S2/MISS PRISM: You are a dying breed!

S7/GM: She wouldn't say that!

S6/LADY BRACKNELL: Times up!

S1/CECILY: Now you two should roll. Chasuble won. So you get to keep it a secret.

S6/LADY BRACKNELL: So S2/MISS PRISM gets the points, right? What would go up?

S7/GM: Will power.

S2/MISS PRISM: How many points?
S7/GM: We will do 5 points.
S2/MISS PRISM: It's there to judge the performance of it, so 3 ½, 5, or 10 points.
S7/GM: I say 5.
S1/CECILY: Let's not to ½ points.
S2/MISS PRISM: So 5? I thought we agreed on 10.
S7/GM: Did we?
S2/MISS PRISM: We agreed on 10 for max points.
S7/GM: So 10 to the…
S1/CECILY: 10 to the will power of Reverend Chasuble. That's what you will say.
S6/LADY BRACKNELL: So now you have 30.
S5/CHASUBLE: Woo hoo!
S1/CECILY: Now they stay there. On the next go around, you are going to come up with a whole new set of locations for those guys.
S7/GM: Okay.
S1/CECILY: I mean they will separate at some point, but for now, they can be together. Now it's S3/ALGERNON's turn.
S6/LADY BRACKNELL: You are Algernon, right? You have to give him a quest to do.
S1/CECILY: Since he is sitting at his house by himself, you should send him somewhere.
S7/GM: I think he should go to Lady Bracknell's house.
S6/LADY BRACKNELL: We invited him over for dinner.
S3/ALGERNON: Is Lane not at my place?
S7/GM: No one is Lane.
S3/ALGERNON: But you can be.
S6/LADY BRACKNELL: Yes.
S1/CECILY: You can be an NPC. I thought character attributes were in the rulebook.
S6/LADY BRACKNELL: They got taken out.
S1/CECILY: Well, they didn't make sense anyway. If you want, I can come up with a story.
S7/GM: Go ahead.
S1/CECILY: Lady Bracknell invites Algernon over for dinner with her and Gwendolen to discuss his future marriage.
S2/MISS PRISM: With?
S1/CECILY: With Cecily.
S6/LADY BRACKNELL: Wouldn't that be my quest? I am Lady Bracknell, and I would be inviting him?
S5/CHASUBLE: It could be his because he is the one who has to be all smooth.
S6/LADY BRACKNELL: That's true. Okay.
S1/CECILY: So you arrive and you are sitting with Lady Bracknell and Gwendolen.
S3/ALGERNON: And I say what?
S1/CECILY: You discuss with her whether you want to go through with the marriage or not. And Lady Bracknell asks you a series of questions regarding your relationship with Cecily as Gwendolen listens.
S6/LADY BRACKNELL: She just listens?
S5/CHASUBLE: S4/GWENDOLEN, you cannot mess this up, okay? It's really a big deal.
S6/LADY BRACKNELL: Okay are you ready?
S3/ALGERNON: Yes.

S6/LADY BRACKNELL: Why are you marrying this girl? She is too young for you.

S3/ALGERNON: Because she is hot.

All (A): No!

S1/CECILY: S7/GM, you have to interfere when he says something so out of character.

S2/MISS PRISM: You don't HAVE to right this second, but whenever a player gets out of character, you should.

S7/GM: Is there a penalty for someone being out of character?

S5/CHASUBLE: Yes.

S2/MISS PRISM: You have to roll. You challenge it, and that's when the dice comes in. But for now, keep going.

S6/LADY BRACKNELL: You've met her for one day, and you decided to do this. And it's not even with your real name!

S3/ALGERNON: You know they say…

S6/LADY BRACKNELL: His time is up!

S3/ALGERNON: What?

S1/CECILY: Could we add 45 more seconds?

S2/MISS PRISM: We should just abolish the time limit. I say the GM just stops whenever it is necessary.

S7/GM: But we have an ending.

S3/ALGERNON: Yes. How are we going to have a definite ending?

S7/GM: How about a minute and a half? If we are going to keep the time limit, we should extend it a bit.

S2/MISS PRISM: I say we leave it open because you can tell when a conversation is over.

S1/CECILY: Just ask him questions.

S6/LADY BRACKNELL: I am waiting for his response.

S2/MISS PRISM: Just have a dialogue.

S3/ALGERNON: Love at first sight.

S6/LADY BRACKNELL: So why did you lie about your name? Your name was so wonderful to begin with.

S3/ALGERNON: I don't know.

S2/MISS PRISM: A man goes mad when he is in love! You should be dramatic and flirty. That's what Algernon does.

S5/CHASUBLE: Question his parentage.

S6/LADY BRACKNELL: I am still waiting for his response.

S2/MISS PRISM: Just ask more questions.

S1/CECILY: If this happens, the GM needs to step in. So watch. Now that Lady Bracknell questions your relationship, who do you want to give up if any?

S2/MISS PRISM: What?

S5/CHASUBLE: Well, she doesn't agree, so now the story can be that he has to choose either his family or the girl he loves.

S6/LADY BRACKNELL: I don't like Cecily. She is too dumb for you.

S4/GWENDOLEN: How so?

S6/LADY BRACKNELL: She is an airhead.

S2/MISS PRISM: It doesn't have to be like that. S3/ALGERNON failed his quest because he couldn't answer back. We just have to be systematic about it.

S5/CHASUBLE: S3/ALGERNON failed?

S6/LADY BRACKNELL: Sucks to be you! I am just better than you!
S2/MISS PRISM: I get it now. Let me try being the game master.
S1/CECILY: I can be the game master. I should be the game master.
S2/MISS PRISM: Clearly, you want to be one, so go ahead.
S1/CECILY: Okay, S7, can you take over for Cecily?
S6/LADY BRACKNELL: Wait! I won the quest. How many points do I get?
S1/CECILY: You get 10 under wisdom.
S6/LADY BRACKNELL: Woo hoo!
S1/GM: Now I am the GM, okay? So the dinner is finished. Now Gwendolen goes to Jack's estate to tell Cecily about what happened.
S7/CECILY: Was Gwendolen at the dinner?
S6/LADY BRACKNELL: Yes. She was just sitting at the table, saying nothing.
S1/GM: Yes. Go Gwendolen knows what happened at the dinner the night before.
S2/MISS PRISM: But no one's playing, Jack.
S6/LADY BRACKNELL: No. But they are at Jack's house.
S1/GM: So Cecily and Gwendolen discuss what happened at the dinner table, and Algernon's…
S5/CHASUBLE: Dilemma.
S1/GM: Yes. Dilemma. And his unspeakable…
S5/CHASUBLE: That's it! That's it!
S1/GM: Okay, we will just play.
S2/MISS PRISM: So what's the challenge?
S5/CHASUBLE: The challenge is to stay in character.
S1/GM: So Cecily must now come to a decision whether or not…
S5/CHASUBLE: Make Jack choose.
S4/GWENDOLEN: Algernon.
S1/GM: Make Algernon choose.
S5/CHASUBLE: So are you ready? One, two, three, go!
S4/GWENDOLEN: They weren't speaking well of you last night, Cecily.
S7/CECILY: What were they saying?
S4/GWENDOLEN: Your arrangement with Algernon is questionable.
S7/CECILY: What is questionable about it? He was the one to propose!
S4/GWENDOLEN: Perhaps you are not a suitable match for Algernon. And Lady Bracknell might not approve of you.
S7/CECILY: Perhaps I may not approve of Lady Bracknell.
S4/GWENDOLEN: So what are you to do then?
S1/GM: So are you going to make Algernon choose?
S4/GWENDOLEN: Cecily, should he choose you or his family?
S7/CECILY: I think that he was the one to propose, so he should not listen to Lady Bracknell.
S5/CHASUBLE: I feel like she wouldn't say that though.
S7/CECILY: I feel like she is a realistic character. She gets annoyed by the childish behavior.
S6/LADY BRACKNELL: But I feel like Cecily is childish herself because she writes down everything that happens, and she already broke off an engagement once!
S5/CHASUBLE: I also feel like…
S3/ALGERNON: I feel like, I feel like.
S4/GWENDOLEN: Feelings don't county in this.
S3/ALGERNON: Say you believe.

S7/CECILY: I guess I will call off the engagement again since I already did it once.
S5/CHASUBLE: You guess?
S2/MISS PRISM: But would she?
S7/CECILY: Yes. She is indecisive.
S1/GM: That was great, now…
S4/GWENDOLEN: Wait. Who gets the points?
S1/GM: Um…
S4/GWENDOLEN: I should. I was great.
S2/MISS PRISM: At what?
S1/GM: I award you 10 points for charisma because you had the guts to go tell Cecily the truth.
S2/MISS PRISM: That's too subjective! Here is another thing I noticed. There has to be specific goals for each quest for one character. If you are the GM, and you are calling the quests, you have to set a specific goal for each character. Just now, there wasn't a specific goal for the quest, so we don't know…
S1/GM: Okay, okay. So a goal for S4/GWENDOLEN was that you had to tell Cecily what happened. So you could have rolled on that.
S4/GWENDOLEN: I see.
S6/LADY BRACKNELL: It makes sense now.
S1/GM: And S7/CECILY gets no points for being indecisive.
S7/CECILY: No points? Story of my life.
S2/MISS PRISM: I think if we fixed the quest thing, it will be good.
S3/ALGERNON: How can we fix the quest thing?
S6/LADY BRACKNELL: That we each have one quest.
S1/GM: If we are all in the same spot.
S6/LADY BRACKNELL: But we are not. You moved Gwendolen quite a bit. And you moved Algernon.
S7/CECILY: Someone should just have a party and put all the characters together.
S2/MISS PRISM: You could do that as the GM. You could start with all the characters together. So the first quest was good. I had to convince Chasuble to go public. So that was good. I failed therefore I didn't get any points, but we knew where to give me points. Correct?
S1/GM: So we need more quests like that.
S2/MISS PRISM: So do we tell the other characters that they are battling against?
S5/CHASUBLE: What do you mean?
S2/MISS PRISM: Do I tell Chasuble what my goal is?
S7/CECILY: No. Then it's hard for you.
S2/MISS PRISM: So there has to be way that Chasuble does not know what my goal is.
S5/CHASUBLE: I see what you are saying.
S2/MISS PRISM: That's why a dialogue-based quest is not good.
S5/CHASUBLE: But then what can we do?
S2/MISS PRISM: Never mind.
S1/GM: And honestly there aren't enough pieces on the board to come up with interactions.
S2/MISS PRISM: I was thinking about what's going on at the park.
S6/LADY BRACKNELL: But none of the other characters are at the park.
S7/CECILY: Maybe when we start the game, all of the characters should be together.
S2/MISS PRISM: We should do that.
S6/LADY BRACKNELL: And then we all go our separate ways? So should we start over?

S2/MISS PRISM: No, there is no time. But at least we know how we are going to do things next time.

S1/GM: Or we could fast-forward to where all the characters are in the church as Cecily and Algernon are getting married.

S2/MISS PRISM: As the GM, you could do that.

S1/GM: So I make sure everyone is in the same place. Or we could take the party scenario where everyone is talking to each other.

S2/MISS PRISM: So each character has a goal for a quest that the other character doesn't know. Quests are dialogue-based. And we start…

S6/LADY BRACKNELL: Are you writing this down?

S7/CECILY: Yes.

S5/CHASUBLE: So should we do a hangout? So the GM can tell the character, "You are going to do this," so the other character doesn't know what the goal is?

S1/GM: That's not a bad idea.

S5/CHASUBLE: Instead of whispering loudly across the table.

S2/MISS PRISM: At least, we now know what to do. Don't forget we start at the same place. And the GM decides how to story goes, but the players do the dialogues.

S1/GM: And don't forget the dice.

S2/MISS PRISM: In retrospect, this is simpler than what we were originally thinking of.

S1/GM: And if two people get into a situation, roll to resolve it.

S2/MISS PRISM: It should be way better tomorrow.

S1/GM: So for tomorrow, just study your character. You won't have to read the entire play again, but at least study your character well.

S6/LADY BRACKNELL: How are you going to do that without reading the whole play?

S4/GWENDOLEN: You would have to read the whole play.

S7/CECILY: Just read it all.

S2/MISS PRISM: Yes. We should all read the play again.

S1/GM: Okay, okay. Read it all.

APPENDIX J

Full Transcript of the Gameplay for *The Importance of Being Earnest*

Class: Advanced Placement Senior English

Student 1(S1): Okay, we are deciding GM now.

Student 2(S2) :The first qualification is somebody who doesn't want the job. Because if they wanted the job, they'd be mad with power.

Student 3 (S3): So all of us.

S2: All of us are equally pure of heart.

Student 4 (S4): Either that or we are equally afraid.

S1: Let's take nominations.

Student 5 (S5): I nominate [Student 3].

S3: Why?

S5: Because you seem to know what's going on.

Student 6 (S6): We just want to nominate people?

S2: Who here do we think knows the play the best?

Student 7 (S7): I think [Student 1] knows the play the best.

S9: In my opinion, S1 does.

S3: Me, too.

Student 8 (S8): You don't want to do it?

S2: No one wants to do it.

S1: I could totally do it, but...

Student 9 (S9): We don't want to force you to do anything.

S6: S8. Why do you want him to do it?

S8: Because the last time we were playing, he seemed to know what was going on.

S3: He wasn't here last time we were playing.

S8: What?

S4: He wasn't.

S5: You mean during the fishbowl?

S8: Yes?

S4: He wasn't playing during the fishbowl, either.

S8: What the heck? Have you ever played?

S1: No.

S4: Neither have I.

S2: He has never played.

S8: [Laughs.] Maybe I want to see what he's got! Well, never mind.

S4: I am not GM. I haven't played before either.

S7: I don't want to put people on the spot, but I nominate S3.

S4: I second that.

Student 10 (S10): I want S3.

S5: I already said that.

S7: I think S3 is really intellectual and I think she is really smart, so..

S8: But S3, do you want to do it?

S3: No one wants to do it.

S1: I think I am the only one who is perfectly okay with doing it, but I just don't think...

S8: Then you should do it, if you are okay with it. We don't want to make anyone do it if they don't want to.

S3: If no one wants to do it, I will do it. But if someone really wants to...

S4:I think we need an effective GM who has played the game before, and S1 has not.

S5: So who has played game?

S1: Everyone at this table except me and S4.

S3: We all played the open game, right? So we can probably figure this out.

S2: Someone grab the board while we figure this out?

S3: Where are the pieces?

S9: So who is the game master?

S7: I personally think S3 is very intellectual, and she seems to have experience, and I really like her, so I nominate S3.

S3: Thanks.

S4: I like that she is creative, so I think she will be good at coming up with challenges.

S3: [Sarcastically.] Sure, I am creative.

S4: You really are.

S7: You really are.

S9: I like that how she is opinionated as well. So I think she will be great at it.

S5: I know that she is very neutral, so she would abuse her power as game master.

S9: So at this point, let's just say S3 as the game master?

S7: Yay! Congratulations!

S5: You are our game master.

S3/GM: Okay. Let's make the game pieces.

[Students began making game pieces with character names on them using small pieces of paper and stickers.]

S10: Should [S3/GM] sit in the center?

S3/GM: I am okay here. It's like I am in the middle.

S8: Wait, I want to pick first.

S6: We don't have any names on [the game pieces.]

S3/GM: We should put character names [on the game pieces], right?

S6: No, players' names.

S3/GM: I say we put both.

S1: I told you to people to put the characters names!

S8: I want Algernon. No one pick that, please.

S10: I call Jack.

S7: Aren't we supposed to roll the dice first?

S8: Yes, but sometimes like the last game, we said, 'Can you please not take the character we want?' and people didn't.

S2: I see nothing wrong with not taking a character.

S10: Can you please not take Jack?

S9: You want Jack?

S10: Yes. I know him the best.

S8: I want stickers.

S6: You guys can draw something. Be creative.

S2: Nah. I want a foot sticker.

S4: Just draw a foot on your piece.

S8: Be original and draw something else.

S4: Where is the dice?

S6: Glazer has them over there.

[A few minutes of arguing over what color dice each wants. Laughing and joking about who deserves to get which color. Each student roll a dice at GM's urging. Various numbers get called out.]

S5: I get to pick!

Teacher (T): What are you doing right now?

All (A): Picking out characters.

T: Okay once you pick your characters, copy down the attribute breakdown on your piece of paper, and you have to write a paragraph of your understanding of that character. Something important. For example, Miss Prism is a German teaching...

S1: aspiring novelist.

T: Yes.

S1: Write out character sheets!

S6/MISS PRISM: I want Miss Prism.

T: Who is the game master?

S4: [S3/GM] is.

T: Okay good.

S4/ LADY BRACKNELL: I want to be Lady Bracknell.

S1/MERRIMAN: I will be Merriman.

S7: I don't know which one is a good one.

S9: I will be Merriman.

S1: Merriman's taken and also it's not your turn to pick.

S5: S10. It's your turn to pick.

S10/JACK: [Pauses for a moment.] I choose Jack.

S8: [Laughs.] Why? You thought about it? You said you wanted Jack.

S7: Okay...hm...Who's taken?

S5: S6 is Miss Prism.

S7: [Points to S4/LADY BRACKNELL] Who did you pick?

S4/LADY BRACKNELL: Lady Bracknell.

S7/CECILY: Okay, I will be Cecily.

S8/ALGERNON: I will be Algernon.

S2: What do we have left?

S5: We have Lane, Gwendolen, and Rev. Chasuble.

S9/LANE: I guess I will do Lane.

S2: Fuh...

S5/CHASUBLE: I will do Causable.

S2: No!

A: [Laugh.]

S5: Sorry S1.

S2/GWENDOLEN: I get Gwendolen! Ugh.

S3/GM: Write folks. Write. You guys all have special characteristics. And you are supposed to act like the character you picked.

S6/MISS PRISM: We are writing one paragraph of what?

T: A description of who you are and what you care about.

S6/MISS PRISM: Okay. I care about education.

S2/GWENDOLEN: Novels. Don't forget novels. 3-volume novels specifically.

S6/MISS PRISM: Yes. Writing. Does she read novels?

S2/GWENDOLEN: She defended other novels. When Gwendolen started bag on them, she was like don't talk crap about 3-volume novels.

S3/GM: Worry about your character.

S2/GWENDOLEN: I know. Sorry. 15 Gah. I got nothing to work with. Will power....

[Students quietly write for a few moments.]

S1/MERRIMAN: [Looking at the board.] Where is Jack Worthing's house in the country?

S10/JACK: What are we supposed to write about? Just what we believe?

S1/MERRIMAN: [Place his character piece on the board.] I am here.

S7/CECILY: What your character is all about and stuff.

S10/JACK: What would you say about Jack?

S1/MERRIMAN: Are we in character?

S6/MISS PRISM: Are we going to do the inventory thing?

S2/GWENDOLEN: Yes and no. If the GM says, pick up a book, you gotta write that down.

S3/GM: Definitely keep track of them.

S2/GWENDOLEN: I don't think I have anything.

S5/CHASUBLE: Who is engaged to whom?

S2: I don't know.

S4/LADY BRACKNELL: That's your decision.

S2/GWENDOLEN: Where are we in the play?

S6/MISS PRISM: Make sure you are engaged. You know who you are engaged to.

S2/GWENDOLEN: I know, but where are we time-wise?

S3/GM: I am going to stick with... hm...

S1/MERRIMAN: Are we beginning the game?

T: So S3/GM, when the game begins, make them explain where they are and why.

S5/CHASUBLE: S3/GM, where are the characters? Are you still deciding?

S10/JACK: Who is the mom?

S7/CECILY: Lady Bracknell.

S10/JACK: No, that's Gwendolen's mom. I mean who's Jack's mom?

S1/MERRIMAN: What?

S2/GWENDOLEN: Jack's mom is Algernon's mom.

S7/CECILY: [With a British accent.] Now let's get started.

S3/GM: So it's after the play, so tell me where you all are.

S4/LADY BRACKNELL: Right after the play? So the play closed?

S1/MERRIMAN: Where are we? I am at Jack's house. And I am currently getting ready to serve a big dinner for all the people who are getting married. I think.

S3/GM: Right now?

S1/MERRIMAN: Yes.

S3/GM: So the wedding is happening right now.

S1/MERRIMAN: Yes.

S3/GM: Why?

S1/MERRIMAN: I would think it's about a week later.

S3/GM: So you are saying it's a week later.

S1/MERRIMAN: It's late 19 century. They did weddings differently back then.

S4/LADY BRACKNELL: So it's a week after the play.

S8/ALGERNON: Who are you?

S1/MERRIMAN: I am Merriman.

S4/LADY BRACKNELL: So who are we starting with?

S2/GWENDOLEN: He just started apparently.

S4/LADY BRACKNELL: Okay, I am at my house. I am here. overseeing all the details of the wedding.

S3/GM: Okay.

T: How are you feeling right now?

S4/LADY BRACKNELL: [With a British accent.] I am feeling quite excited, and anticipating my daughter's wedding. I am still not sure of her suitor. I am going to see if everything is under control. If everything is okay.

T: Is that a correct representation of who Lady Bracknell is? Lady Bracknell doesn't seem to be a happy camper all the time especially with this wedding business. [Pointing to the GM.] You should call her out.

S4/LADY BRACKNELL: That's why I am there. I am going to make sure everything is under control.

S3/GM: You are saying it's Gwendolen's wedding, then?

S4/LADY BRACKNELL: Yes.

S8/ALGERNON: Wait. I am sorry. Who is Gwendolen?

S4/LADY BRACKNELL: [Points to S2]. My daughter. My beautiful lovely daughter.

S8/ALGERNON: We are married again?

S2/GWENDOLEN: No, you are Algernon. We are not married.

S3/GM: If it's Gwendolen's wedding, why are you guys at Jack's country house?

S1/MERRIMAN: Well, he offered.

S5/CHASUBLE: But I thought the last time we were having the wedding at Lady's Bracknell's house.

S6/MISS PRISM: [Laughs.] We are not continuing with that game.

S5/CHASUBLE: [Laughs.] I know. I was just kidding.

S2/GWENDOLEN: Oh God. We are experiencing a time warp in the middle of a wedding!

A: [Laugh.]

S3/GM: [To S4/LADY BRACKNELL.] So do you want to answer or do you want to punt it?

S4/LADY BRACKNELL: Punt.

S3/GM: To?

S4/LADY BRACKNELL: I want to punt it to Gwendolen. Why are we having the wedding at Jack's country house? Gwendolen!

S6/MISS PRISM: Wait. Can we get all in characters on the map first?

S1/MERRIMAN: We are doing it.

S3/GM: I thought that what we are doing.

[All answer yes.]

S3/GM: So Gwendolen, why are we having the wedding at Jack's? Why?

S2/GWENDOLEN: Because the church burnt down.

S3/GM: How?

S2/GWENDOLEN: I don't know. Miss Prism went over there. She and Rev. Chasuble both came back.

S6/MISS PRISM: It got really hot in there because we were doing some stuff.

A: [Laugh.]

S6/MISS PRISM: We were doing some stuff together. It got really hot.

S4/LADY BRACKNELL: [Chastising.] Chasuble. Wow.

T: Okay. Make sure you get into your character once you place yourselves on the map.

S4/LADY BRACKNELL: So where are you, Miss Prism?

S6/MISS PRISM: The Rev. and I are taking a stroll in the park. [Places her character piece in the garden.]

S2/GWENDOLEN: That's not the park.

S6/MISS PRISM: In the park! [Moves her piece to the right location.]

S5/CHASUBLE: But he just said you ran back to the house.

S2/GWENDOLEN: No, that was a while ago.

S5/CHASUBLE: Okay. I am just making sure.

S2/GWENDOLEN: The reason why we are having the wedding here

S9: And I can say that I heard that you two [Points to Rev. and Miss Prism] were messing around. I am Lane, and I hear everything.

A: Woo...

S2/GWENDOLEN: You only hear what's in the city.

S1: You are not the game master S2/GWENDOLEN. [Points to S3/GM.] She decides that.

S9/LANE: I am in the park as well, spying.

S5/CHASUBLE: Would Lane be one to spy, though?

S4/LADY BRACKNELL: Yes. Would Lane be the one to spy?

S5/CHASUBLE: I think he would mind his own business.

S1: Lane works for Scotland Yard.

S8/ALGERNON: My fiancé and I are also walking at the park because we are so in love.

S7/CECILY: And I have my diary, and I am taking notes on how I feel about the wedding.

S8/ALGERNON: She is reading excerpts to me. From her diary. That's me and Cecily.

S7/CECILY: Yay! [Places the characters pieces in the pond.]

S9/LANE: You are in the water?

S5/CHASUBLE: What are you doing at the park, Lane? You are being creepy.

S8/ALGERNON: [Moves Lane's piece into the pond.] He has the snorkel and the goggles.

A: [Laugh.]

S1/MERRIMAN: Okay. Jack. Where are you?

S3/GM: Hey, Jack. Where are you?

S5/CHASUBLE: Yea, Jack. Where are you?

S10/JACK: Yes, sir.

S3/GM: Where?

S10/JACK: I am at Lady Bracknell's house getting ready for our wedding, Gwendolen.

S2/GWENDOLEN: In town?

S6/MISS PRISM: Why?

S4/LADY BRACKNELL: But the wedding is happening at your house!

S5/CHASUBLE: Wedding is at your house!

S2/GWENDOLEN: Wedding is at your house, dearest. Don't look at me.

A: [Laugh.]

S3/GM: I am going to back track to Lane. Who exactly are you spying on?

S9/LANE: Um... I eavesdrop. Man.

S3/GM: Isn't that just in the city?

S9/Lane: That's true. Dang it. I need to move.

S5/CHASUBLE: You should go to Algernon's house. That's where you work.

S9: Okay. I am moving. [Moves his piece to Algernon's house.]

S2/GWENDOLEN: [To S10/JACK.] Why are you at Lady Bracknell's house? The wedding at your house!

S9: Here. [Places his piece in Algernon's house next to the piano.] I play the piano.

S8/ALGERNON: No, you don't.

S3/GM: I didn't know you play the piano!

S9/LANE: [To S8/ALGERNON.] How do you know I don't play the piano?

S1/MERRIMAN: Algernon plays the piano.

S8/ALGERNON: [Sarcastically.] When I was playing the piano, you didn't seem to know what I was doing!

A: [Laugh.] Woo...

S2/GWENDOLEN: That is classic Algernon. That is so Algernon.

S4/LADY BRACKNELL: Miss Prism.

S3/GM: I am taking points away from you, Lane, for not knowing what you can or cannot do.

S8/ALGERNON: Yeah. I had you as my servant since I was 3. You don't play the piano.

S1/MERRIMAN: Okay now.

S9/LANE: I have been playing it in secret.

S8/ALGERNON: No, you haven't.

S6/MISS PRISM: What are we supposed to be doing now?

S3/GM: Miss Prism had the highest roll. So what are you doing?

S6/MISS PRISM: Who's the Reverend?

S5/CHASUBLE: I am. [With a deep voice.] How are you doing, Miss Prism?

S2/GWENDOLEN: We are officially in character.

S6/MISS PRISM: Hi Reverend. So. Reverend and I are strolling together, hand-in-hand in the park.

S10/JACK: Gwendolen, dear. Where are you?

S7/CECILY: Well, Algernon and I are getting in a fight because when Algernon revealed that his name was not Earnest, I wrote that in my diary, and I started to read that out loud. And…

S8/ALGERNON: Wait, I changed my name. I already got christened.

S7/CECILY: No. The Reverend never christened you. You said you were going to, but you never did. And reading my diary, I remembered it.

S8/ALGERNON: I got christened.

S7/CECILY: No, you didn't.

S8/ALGERNON: Yes. I did. It already happened.

S1: Okay. Could we have a battle to see if he actually got christened or not?

S8/ALGERNON: You were there, Reverend. [Points to Rev. Chasuble.] Wait did you Christen me or not?

S7/CECILY: He was with Miss Prism.

S3/GM: I say we roll.

S1: We roll. We roll. We roll. The game master declares a roll.

S8/ALGERNON: Wait S3/GM. Are you requiring it? This is your call, S3/GM. Sorry I am out of character now. But are you requiring a roll?

S10/JACK: Can I say something?

S8/ALGERNON: The Reverend will back me up. I was christened. I would have never asked

your hand in marriage if I didn't.
S5/CHASUBLE: No, I won't.
S7/CECILY: No. You were not.
S10/JACK: Algernon, please stop.
[Everyone begins to speak at once.]
S1/MERRIMAN: Come on. Roll.
S6/MISS PRISM: Hey! Listen to the game master.
S3/GM: Algernon, weren't you little too busy being found out not being Earnest?
S8/ALGERNON: No.
S7/CECILY: Exactly. Exactly, honey. This is what I am talking about!
S1/MERRIMAN: I thought we were rolling. You two should roll.
S8/ALGERNON: No. I am doing whatever she wants. I love her.
S9/LANE: Yes. Sounds about right.
S3/GM: So are you challenging the GM?
S8/ALGERNON: No.
S3/GM: No? Why not?
S8/ALGERNON: Because I am trying to make my fiancé happy. Okay? If she says I didn't get christened, I will do it again. It's fine. Not a problem.
S7/CECILY: That's better.
S3/GM: Alright, Prism and Chasuble see this happening. How do you feel about that?
S5/CHASUBLE: Avoid tension and keep walking in the park. Keep walking, Prism.
S8/ALGERNON: So now I need to go to the church to get christened.
S1: No, the church burnt down.
S8/ALGERNON: Reverend. Can you christen me in the park?
S3/GM: So Algernon has approached Chasuble, who has been trying to avoid this problem. So how do you respond to Algernon's request to be christened in the park?
S5/CHASUBLE: It's nowhere to be christened! I would only do it in my church, so you should have to wait until it's rebuild.
S7/CECILY: If that happens, I will separate from him. If he doesn't get christened, I am leaving him.
S3/GM: Moving to Jack's country house. How's Gwendolen's wedding come along?
S2/GWENDOLEN: I thought it was happening!
S1/MERRIMAN   : No, we are getting ready for it.
S8/ALGERNON: Wait, before Jack came into the house, I saw him with some other female. Who was that, brother?
A: Woo....
S10/JACK: [Sarcastically.] Did you now, Algy?
S8/ALGERNON: Yes.
S10/JACK: Because I am pretty sure I saw you with another woman.
A: Whoa!
S7/CECILY: What?
S10/JACK: I saw you on your way to be christened since you have not been christened yet. I mean.
S8/ALGERNON: How is that possible if I was with the Reverend the whole time? How would you have seen me with another woman?
S3/GM: Wait how are you talking if you two are in two different places?

S10/JACK: The park is not that far!

S2/GWENDOLEN: But you are nowhere near the park!

S10/JACK: The Reverend was with Miss Prism!

S5/CHASUBLE: I feel like Algernon needs to have a word with me.

S2/GWENDOLEN: I need to go be with my fiancé.

S4/LADY BRACKNELL: I disapprove you leaving Jack's house to be with him.

S3/GM: Let's have you two [Points to Lady Bracknell and Gwendolen] roll for it.

S2/GWENDOLEN: Is she rolling for will?

S3/GM: Yes.

S4/LADY BRACKNELL: So I roll? I got 20!

A: [Laugh.]

S4/LADY BRACKNELL: You are staying at the house, Gwendolen.

S10/JACK: You could not have seen me with another woman.

S2/GWENDOLEN: You can't talk to them. Algernon is at the park, and you are at your house!

S10/JACK: Okay, but how are you talking to me?

S5/CHASUBLE: I feel like Algernon is lying to Cecily.

S3/GM: Were you gossiping to other people about Jack, Algernon?

S8/ALGERNON: Yes. To my fiancé.

S5/CHASUBLE: Lying is a sin, Algernon.

S7/CECILY: So you came back to me from the church after your christening?

S8/ALGERNON: I never left you! You came with me!

S7/CECILY: I did?

S8/ALGERNON: YES!

S7/CECILY: So Reverend.

S5/CHASUBLE: You don't seem to remember going somewhere with your other half. You had to be reminded by reading your diary. So are you sure you remember everything? Nevertheless, I am not going to christen Algernon unless it's in a church.

S7/CECILY: Why can't you just build another church?

S8/ALGERNON: It's has to be in a church?

S5/CHASUBLE: I want another church. Yes. I am not doing it in the park.

S8/ALGERNON: Can I find another new reverend?

S7/CECILY: Yes, can we get a new reverend?

S6/MISS PRISM: Absolutely not! There is only one reverend in this town!

A: [Laugh.]

S5/CHASUBLE: Yes. You are going to have to wait until the new church is built.

S3/GM: Wait. It's up to you two now. Would you like to go to the city and see if there is another reverend?

S7/CECILY: I think we should. We have to save our relationship.

S1: So who is going to the city then?

S2/GWENDOLEN: Everyone in the park, apparently.

A: [Laugh.]

S4/LADY BRACKNELL: Now Lane can hear everything.

S2/GWENDOLEN: Now Lane knows everything!

S9/LANE: Yes.

S2/GWENDOLEN: Train station first!

S8/ALGERNON: I will only be christened by the best reverend. I will not take just any reverend.

A: [Laugh.]

T: Is she Algernon? He would say stuff like that.

S3/GM: Yes, and those two were bickering. It was pretty impressive.

S7/CECILY: Algernon, get a hold of yourself! You are lucky you have found me.

S8/ALGERNON: You are the one who was writing, drooling all over me and writing in your diary.

S7/CECILY: Who's the one who changed his entire personality to pursue me?

S8/ALGERNON: I only changed my name! Chill out.

S3/GM: You haven't changed it yet, though. And you lied about that.

S8/ALGERNON: Well, exactly, so what are you talking about?

A: [Laugh.]

S2/GWENDOLEN: Everything is wrong! It's all wrong! It's horrible.

S4/LADY BRACKNELL: What's wrong, my dear daughter?

S1/MERRIMAN: Wait. How are you talking to her?

S2/GWENDOLEN: She followed me.

S8/ALGERNON: Where are you?

S5/CHASUBLE: Everyone else is at the train station now.

S4/LADY BRACKNELL: What's the matter, darling, Gwendolen?

S2/GWENDOLEN: The food isn't ready yet, and none of the other guests are here. And my dress looks awful, and I can't even find Jack.

S4/LADY BRACKNELL: Darling. darling, darling.

S1: Miss, would you like me to go and retrieve everybody? I believe they all went to the train station.

S2/GWENDOLEN: Please, Merriman.

S8/ALGERNON: I am still going to the city. I need to get christened!

S5/CHASUBLE: So I am running this wedding, right?

S7/CECILY: Wait. I want to go to Gwendolen's wedding and help her out because she is obviously a better support than my own husband.

A: Dang.

S8/ALGERNON: Where are we going now? We are going to get me christened! This is how often change your mind, Cecily. You just can't make up your mind! Okay? We are going!

S1/MERRIMAN: Ladies and gentlemen. Miss Gwendolen would like you all to come to Jack's house! She needs comfort.

S7/CECILY: If [Algernon] goes, I am not going! I would only go by myself.

S8/ALGERNON: Then you are forcing me to delay my christening, so I need you to stop talking about it. Forever.

S3/GM: There needs to be roll between those two.

S8/ALGERNON: About christening?

S3/GM: No, whether you will separate or not.

[Roll.]

S2/GWENDOLEN: Don't forget to add your stats!

S6/MISS PRISM: Yes. Stats!

S7/CECILY: What is that?

S6/MISS PRISM: Every five points you have...

S2/GWENDOLEN: Divide your skills by 5, and that's how much you add to your roll.

S7/CECILY: Wait, I need the chart. So I add everything?

S6/MISS PRISM: You see how many points you had?
S3/GM: You add five.
S7/CECILY: Five? For will power? Okay. So fifteen?
S8/ALGERNON: Can someone tell me how to do it?
S2/GWENDOLEN: You add 3 to your roll.
S7/CECILY: So fifteen, sixteen... you've got to be kidding me.
S8/ALGERNON: So I have eighteen?
S7/CECILY: Yes. You have more.
S8/ALGERNON: Eighteen?
S7/CECILY: No, you don't have eighteen, honey. You have sixteen cuz you rolled thirteen.
S3/GM: Do you not have the chart?
S8/ALGERNON: So add three? Woohoo!
S7/CECILY: Okay. I guess we are going to get christened. Thanks for making me miss Gwendolen's wedding.
S1: Should I go inform the lady at Jack's house?
S8/ALGERNON: Merriman, could you please find me a new reverend? If we can at least do that?
S1/MERRIMAN: Yes, sir.
S7/CECILY: He is trying to organize a wedding, honey. Stop thinking about yourself!
S3/GM: Wait, why would Merriman listen to Algernon as opposed to Cecily?
S1/MERRIMAN: I am a very loyal man. I only listen to others.
S3/GM: But Cecily is in Jack's house who [Merriman] has been listening to.
S1/MERRIMAN: Cecily is not in Jack's house. Cecily moved out.
S3/GM: No, Cecily lived in Jack's house. Because Merriman was a servant, wouldn't you listen to Cecily?
S1: But [Algernon] told me to go somewhere.
S3/GM: So? Gwendolen asked you to do something, too.
S1/MERRIMAN: Okay then. I guess I am going back to Jack's house.
S8/ALGERNON: Wait. Who is going to get me a reverend?
S3/GM: You are going to have to go the city to find one yourself.
S10/JACK: Where is Lane?
S2/GWENDOLEN: Lane is probably getting drunk off his butt right now.
S8/ALGERNON: Can Lane find me a reverend?
S3/GM: Hang on. You are not at your apartment yet.
S8/ALGERNON: Now I am. Lane. Find me a reverend!
S9: Yes, sir. I will, sir.
S8/ALGERNON: I swear. These servants are not good for anything!
S1/MERRIMAN: What just happened?
S5/CHASUBLE: They all decided to go to the city, right?
S3/GM: Yes. Everyone except Lady Bracknell, Gwendolen and Merriman.
S9/LANE: Then can I also go to the train stain to look for a reverend now?
S6/MISS PRISM: Oh Lane. Don't ask, just go!
S8/ALGERNON: Wait. My butler is smarter than that!
S6/MISS PRISM: He is not a butler. He is a man servant.
S9/LANE: Whatever. I want to go to the train station! I am going to find a reverend for my master at the train station.

S8/ALGERNON: Lane. I told you not just any reverend. A good one!

T: What makes a good reverend?

S8/ALGERNON: Qualified. Not some random guy at a train station. You need to go to a church and find me a good reverend, Lane.

S7/CECILY: Yes, Lane. Do it.

S9/LANE: I found one.

S6/MISS PRISM: Wait. How did the new reverend get his divinity license? Reverend Doctor Chasuble is a Reverend and a Doctor.

S8/ALGERNON: Has the new reverend been touched by the Christ?

S9: Yes, sir. He has been touched most by the Christ.

S8/ALGERNON: Okay, well...

A: [Laugh.]

S1/MERRIMAN: Where?

S8/ALGERNON: What do you mean where?

S6/MISS PRISM: Where as in a geographical location.

A: O- ho!

S5/CHASUBLE: [Sarcastically.] Sure!

S8/ALGERNON: Where exactly?

S6/MISS PRISM: Down south.

S2/GWENDOLEN: Down south? Seriously?

A: [Laugh.]

S3/GM: So now that's settled, everyone is at the train station.

S8/ALGERNON: What now?

S2/GWENDOLEN: Merriman!

S1/MERIMAN: Yes, Miss.

S2/GWENDOLEN: Where is my Cecily? Where is everyone?

S1: They all decided to go to the city for a christening.

S4/LADY BRACKNELL: Are you kidding me? What kind of servant are you? Go back there and get them

S1/MERRIMAN: Yes, ma'am.

S2/GWENDOLEN: Mother. The wedding is falling apart. We have to postpone it.

S4/LADY BRACKNELL: We cannot postpone the wedding, dear.

S2/GWENDOLEN: But mother!

S4/LADY BRACKNELL: It will be okay. I am going to go to the city and fetch everyone. You will see! While I am at it, I will procure a more fashionable dress for you.

S2/GWENDOLEN: Thank you, mother.

S4/LADY BRACKNELL: I am rich. I can do that.

S2/Gwendolen: I was beginning to fear that I won't be able to marry Jack.

S1/MERRIMAN: So Lady Bracknell, you demanded that I go get everyone.

S4/LADY BRACKNELL: Yes.

S1: But you are going to city any way.

S4/LADY BRACKNELL: I will be at the train station, shortly. You go ahead first.

S3/GM: Where Lady Bracknell is having a little meltdown at the moment, so she is not thinking straight.

S1: Okay, everyone. Lady Bracknell herself told me to tell you that you all need to get back to Jack's house where Gwendolen's wedding will happen.

S8/ALGERNON: I will as soon as someone gets me a reverend!

S9/LANE: Shall I go, too?

S8/ALGERNON: Lane, what are you doing right now?

S9/LANE: I just found you this reverend Chuck-Yee Cheese.

S7/CECILY: Can we get on with this? I have to see Gwendolen.

S8/ALGERNON: Am I christened?

S3/GM: Roll your dice. If you get 10 or higher, you will be christened.

S8/ALGERNON: 12! Call me Earnest!

S3/GM: Okay. Finally. Now everyone needs to get back to Jack's house for the wedding.

S1/MERRIMAN: Lady Bracknell. Let me take the dress.

S8/ALGERNON: Before we leave the train station, can I make up with my wife now?

S7/CECILY: You have to make a big show.

S8/ALGERNON: I am sorry, Cecily. Now I am your Earnest. Can you love me now?

S7/CECILY: Well, as long as you are Earnest, I will love you.

S8/ALGERNON: I love you, Cecily.

S7/CECILY: I love you, too, Algernon.

S1: We are all going back to Jack's house, correct?

S6/MISS PRISM: Reverend and I would like to have a private moment in the garden.

S5/CHASUBLE: What will we be doing in the garden?

S9/LANE: I just happened to be cutting the hedges in the garden.

S3/GM: Why would you do that to Jack's garden?

S1/MERRIMAN: Hold on, Lane. This is my job! I will not have you taking over my job!

S8/ALGERNON: Lane, you are embarrassing me. What are you doing? Spying on them? This is why we can't have nice things!

S9: I am sorry. I will get back immediately.

A: Butler fight! Butler fight! Butler fight! Butler fight! Butler fight! Butler fight!

S9/LANE: Not again! Not again!

S4/LADY BRACKNELL: Not again?

S9/LANE: You do not want to know what I have been through.

S3/GM: Roll for it!

S1/MERRIMAN: What is the stats? I got a 2, so I got 6. So he won.

S3/GM: That means you got fired.

S1/MERRIMAN: Wait. What does Jack have to say about Lane taking over my job? What does my master have to say about that?

S10/JACK: Am I your master?

S1/MERRIMAN: Yes, of course!

A: [Laugh.]

S9: He won't care as long as the job is getting done.

S10/JACK: Lane, you are our guest at my manor house. Since Merriman is my servant at my manor house, you cannot take over for my butler.

S8/ALGERNON: Are you being abusive to my butler? Your own butler is not enough for you? Are you kidding me now? This is why we don't get along. I am embarrassed to call you my brother.

S10/JACK: Dear, Algy. Whose house are you at? Who is your older brother?

S8/ALGERNON: I am your older brother.

A: No, you are not!

S10/JACK: Who should you show respect? You need to show me respect.

S8/ALGERNON: We are pretty even right now.

S5/CHASUBLE: I say you kick him out.

S10/JACK: Lane. As a suitable host, I should ask you refrain from cutting the hedges, doing the job of my servant. Merriman. Please go ahead cut your bushes.

T: Are you guys going in order or just jumping around?

S3/GM: We are just jumping in!

S1/MERRIMAN: I see Lady Bracknell finally showing up at the house!

S4/LADY BRACKNELL: With the new dress!!! Here Gwendolen, I picked it out for you.

S2/GWENDOLEN: Oh mother, it's lovely. Jack, don't look at me.

A: [Laugh.]

S2/GWENDOLEN: Someone get him out of here. I want Cecily.

S7/CECILY: I am right here! And this is my inner thought. Gwendolen got her new dress, and it's absolutely hideous on her, but I am gonna pretend it's wonderful.

S3/GM: Cecily. How come you weren't getting married fist of all.

S7/CECILY: Because

S3/GM: Was that the christening?

S7/CECILY: We had a fight, and that sort of delay the whole thing.

S10/JACK: Oh, look what I found. I have Cecily's diary.

S3/GM: How did you lose your diary, Cecily?

S10/JACK: Are you saying that my fiancé's dress is ugly on her?

S7/CECILY: You weren't supposed to look at her.

S2/GWENDOLEN: Someone get my fiancé out of the room before he sees me.

S10/JACK: I just saw the dress as Lady Bracknell was bringing it in.

S1/MERRIMAN: Lady Bracknell has ordered me to get you to the garden, Mr. Worthing.

S8/ALGERNON: Lane what are you doing here? You are so fired!

S9/LANE: No, please. I will do anything.

S3/GM: Hang on. Do you really think Algernon would be so quick to fire Lane?

S8/ALGERNON: Yes.

S3/GM: Why?

S8/ALGERNON: He is replaceable. He's the help.

A: Wow.

S3/GM: Hasn't Lane been pretty loyal to you?

S8/ALGERNON: I mean he is an alcoholic, so.

S1/MERRIMAN: Lady Bracknell approves.

S3/GM: Is he? Lane, are you an alcoholic?

S9/LANE: No, I am not.

S6/MISS PRISM: Alcoholics don't know that they are alcoholics.

S9/LANE: But I have seen Mr. Algernon take a few shots from time to time.

S4/LADY BRACKNELL: It's okay for a gentleman to have a few drinks.

S3/GM: You have been accused of being an alcoholic, and you disagree. So let's roll for it.

T: Sorry guys. We have to pack this up.

A: Noooo.

S2: We are not done!

S4: We have to play it again!

S3: Can we stay longer?

APPENDIX K

Basic Game Rulebook Template

1. Introduction
This section is used to introduce the game. Describe what the game is about. This section should include many of the historical facts that you found.

2. General rules and structure of the game
This section includes the rules of the game. It should include the number of characters, how the game begins, how to take turns, how the conflict in the game will be resolved, and the role and responsibilities of the game master.

You should use your knowledge of the book, especially the plot.

3. Characters
This section includes the characters and attributes that make them who they are. You should use various character descriptions that you created.

4. Supplies needed
This section includes the things that you need to make the gameplay possible such as the type of dice, cards if any, or game piece along with the game board.

APPENDIX L

Final Game Rulebook Template

1. Overview of the Game

This section describes the overall storyline and structure of the game. Include the main conflict, major characters, and the objective of the game.

For example, in the world of *Fahrenheit 451,* where books are rare, those who choose to join the secret society of book collectors are the only ones who are truly sane. The other people from here have been "permanently" brain-washed to believe that books damage the human brain and are forced to feel things they don't want to feel. This secret society must try to protect the books that are dispersed while the others must try to take, find, or burn as many as possible. Characters such as Guy, Faber, Clarisse, and Granger would be part of the secret society. The other characters such as Mildred, Marissa, and Captain Beatty would be against the books.

2. Role and power of the gamemaster

This section includes what a gamemaster can and cannot do that are not included in the General Rules section.

For example, the game master (GM) will run the game by issuing challenges to the characters and creating adventures for characters to participate in.

3. General Rules

This section includes general rules. Possible items are: (1) number of players, (2) rules on dice rolling, (3) types of dice and required game pieces, (4) ways to level up, (5) how to take turns, and (6) other restrictions and special rules.

4. Character Attributes

This section includes the categories of attributes specific to each character. Possible categories include intelligence, strength, stamina, perception, agility, will power, charisma, wisdom and wit. Students are only allowed to choose 5 from above categories, and must distribute 100 points to each character as appropriate during rulebook creation activity.

For example, for *The Importance of Being Earnest*, students chose the following categories and distributed the points to one of the main character as follow.

	Intelligence (INT)	Willpower (WILL)	Charisma (CHR)	Wisdom (WIS)	Wit (WIT)
Algernon Moncrieff	20	15	30	15	20

5. Character Skills

This section includes the explanation for the points distribution for each character attributes. Each character description should accurately represent the information from the text.

Again, see the example from *The Importance of Being Earnest* below.

	Skill Name	Description
Lady Bracknell	Victorian Values	Lady Bracknell can pass judgments on things she finds to be improper. If her willpower (WILL) attribute is higher than her target's when she performs a wisdom (WIS) roll. A total of 1-11 means she is ignored, 12-18 means characters must try to appease her in some way before proceeding, and 19 or 20 means the improper efforts are derailed entirely.

APPENDIX M

Institutional Review Board Approval Notice

PEPPERDINE UNIVERSITY

Graduate & Professional Schools Institutional Review Board

February 26, 2015

Kip Glazer

████████████████

████████████████

Protocol #: E0215D03

Project Title: Imagining a Game-Based Pedagogical Model: Using Role Playing Game Creation to Teacher Literature in High School English Classes

Dear Ms. Glazer,

Thank you for submitting your application, *Imagining a Game-Based Pedagogical Model: Using Role Playing Game Creation to Teacher Literature in High School English Classes,* for exempt review to Pepperdine University's Graduate and Professional Schools Institutional Review Board (GPS IRB). The IRB appreciates the work you and your faculty advisor, Dr. Polin, have done on the proposal. The IRB has reviewed your submitted IRB application and all ancillary materials. Upon review, the IRB has determined that the above entitled project meets the requirements for exemption under the federal regulations (45 CFR 46 - http://www.nihtraining.com/ohsrsite/guidelines/45cfr46.html) that govern the protections of human subjects. Specifically, section 45 CFR 46.101(b)(2) states:

(b) Unless otherwise required by Department or Agency heads, research activities in which the only involvement of human subjects will be in one or more of the following categories are exempt from this policy:

Category (2) of 45 CFR 46.101, research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: a) Information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and b) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Your research must be conducted according to the proposal that was submitted to the IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit a **Request for Modification Form** to the GPS IRB. Because your study falls under exemption, there is no requirement for continuing IRB review of your project. Please be aware that changes to your protocol may prevent the research from qualifying for exemption from 45 CFR 46.101 and require submission of a new IRB application or other materials to the GPS IRB.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite our best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the GPS IRB as soon as possible. We will ask for a complete explanation of the event and your response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the GPS IRB and the appropriate form to be used to report this information can be found in the *Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual* (see link to "policy material" at http://www.pepperdine.edu/irb/graduate/).

Please refer to the protocol number denoted above in all further communication or correspondence related to this approval. Should you have additional questions, please contact Kevin Collins, Manager of the Institutional Review Board (IRB) at gpsirb@peppderdine.edu. On behalf of the GPS IRB, I wish you success in this scholarly pursuit.

Sincerely,

Thema Bryant-Davis, Ph.D.

Chair, Graduate and Professional Schools IRB

cc: Dr. Lee Kats, Vice Provost for Research and Strategic
        Initiatives Mr. Brett Leach, Compliance Attorney
      Dr. Linda Polin, Faculty Advisor