Thinking: A Study of Videogames in High School History Classes

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Abstract

This paper answers the question, how do three History teachers implement videogames in the classroom in order to engage students in critical thinking? My essay incorporates a large amount of research that shows the unique benefits of using games as pedagogical tools. I focus on the textual and interactive properties of narratively driven games, and how they differ from more traditional educational resources. The study involved interviews with three different high school history teachers who implement games in different ways to teach historical material.

With the information gathered in my Literature Review and interviews, I explain that games engage students in critical thinking through the agency, simulation, and literacy that they provide. I argue that though other resources can provide these opportunities for students, none offer these different techniques in quite the way that good videogames do.

My essay incorporates philosophical and literary considerations as a means to answering my research question. I also use these critical lenses to respond to certain criticisms regarding the videogame genre.

Key words: Videogames, games, history, critical thinking, analysis, teaching, gaming education, critical pedagogy, literature, literary theory, multiliteracy, critical literacy, narrative, text, art, modern media, medium, philosophy, free will, determinism, agency, choice, decision making, interaction, engagement, cybernetic, simulation, accuracy, authenticity, problem space, film, formalism, procedural rhetoric.
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Chapter 1 - Introduction

I. Background and Interest

“The more complex the mind, the more the need for the simplicity of play.”

- Captain Kirk (Rodenberry, 1966)

Many of us may find the playing of games by intelligent, mature people to be odd. Mr. Spock, Star Trek’s most rational character, dismisses notions of childish play, even though he engages in games of chess. This is not an inconsistency in the show’s writing, because Spock finds value in games that engage in complex thinking or challenging, intellectual processes. The captain of the Enterprise acknowledges, in the quote above, that there must be a link, or relationship, between thoughtful people and play.

I have continued to play videogames into my adulthood. You may ponder, dear reader, why an adult continues to play games. Why do I indulge in “the simplicity of play,” despite my fairly “complex mind” which has undertaken an Honours B.A. in English and Philosophy, an English M.A. in Literature, and a Masters of Teaching? The simple answer is that I view games as legitimate art forms that engage my thinking. Like books and films, videogames have the potential to be texts: complex, in-depth works with literary and philosophical themes. Games can be intellectually engaging from a strategic standpoint, like an electronic board game or brain teaser, akin to Spock’s games of chess. Thus, videogames can engage audiences in thinking both by presenting rich narratives and by providing challenging problems for the player. To think of videogames as a waste of time as many do, including many acquaintances of mine, would be to unfairly diagnose a medium with a great array of genres. To dismiss the play that one engages in during a videogame is to judge the activity without thoroughly studying it for oneself.
As a gamer, I can argue there are videogames that hardly engage players in thinking. Just as there are action movies spat out by today’s film industries with little plot and character development, there exist games that hardly focus on plot or strategy to engage players in thinking. The process of game-making is often a commercial venture, but believing all games are poor products is the equivalent of arguing that every commercial film is of low quality. I hold that a large amount of today’s commercial products do not engage people critically, but there are always important exceptions. Videogames are singled out as time wasting because many of them exclusively focus on amusing players with easy difficulties and visual spectacle.

This paper demonstrates how certain videogames, including profit-making and non-commercial games, engross players in thinking. My study shows that games of the historical genre can help people remember information effectively, but more importantly, that history themed games engage players in higher order, analytical thinking.

Videogames can engage audiences in “critical thinking” because their gameplay and narrative components, like plot and character, may be analyzed for meaning. We can think about game elements through a literary or historical scope. Critical thinking encompasses all fields of study. It entails a reflection and analysis of information, which goes beyond the gathering and memorization of information. Thinking this way is a more active experience – a thought process which gives a person agency – in order to do something with the material she or he has. A more expatiated definition of critical thinking is, as defined by Michael Scriven and Richard Paul,

[T]he intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action. (The Critical Thinking Community, 2013)
A critically thinking player actively contemplates the significance of a game’s story or narrative components, character development, the setting or context, and how these elements can be informed by gameplay mechanics, to give just a few examples. An individual can critically think about the game’s narrative components through the lens of literary analysis, and how her or his choices shape the textual qualities of the game.

Though this paper focuses on narratively driven electronic games, games that are not narratively focused also critically engage players through strategic problem solving. Such games present complex mechanics which focus on managing and executing varieties of multifaceted variables, and require long term planning. In Chapter 2 of this paper, I discuss some games that belong to the strategy genre, albeit with narratives. My research study focuses on how narratively driven games in the historical genre affect thinking in high school history classes. My study could have assessed a different genre of game with respect to another school subject. For the purpose of keeping this study focused, however, I chose to study this discipline.

II. Why Bringing Videogames into the Educational Field is Important

Videogames are becoming an increasingly large part of our mainstream culture. The Pew Internet & American Life Project conducted a study in 2008 which revealed that about “97 percent of teenagers and 81 percent of Americans between the ages of 18 and 29 play video games,” and that “About 60 percent of adults ages 30 to 49 are gamers” (Albanesius, 2008). Taking these statistics into account, it would be careless of us to ignore the medium, or to look at all games, generally, in an exclusively positive or negative light. I believe that we must integrate videogames into curricula, not because of their popularity, but because they can positively affect youth who play them, by making them aware of what they consume.
Even games that are devoid of the agency and historical significance that they advertise can be used as pedagogical pieces, if a teacher explains how to critically assess these products, as one of my participants does. To ignore the potential for teaching about certain games would be like teaching in a vacuum, removed from the exciting possibility of teaching with varieties of mediums. Professor Patrick Allitt states, in his course *The Art of Teaching*, that teachers must be prepared for challenges in the ever-changing teaching discipline (2010). As mentors of children, we must be cognizant of different art forms that are available for study.

Videogames are unique in differing from conventional video, which includes films and shows. Video is often a more passive experience, whereas games must be played in order to be experienced. Even books, generally speaking, engage audiences in a more intellectual way than films, since imagery in novels needs to be conceptualized by readers. This is not to say that all movies are less sophisticated than books, as there are excellent films whose imagery and themes are complex, provocative, and rich. But these films which engage us in thinking – often older, less commercially oriented films – need to be carefully identified and segregated from other modern, mainstream movies. The game genre is similar, because there are select, few pieces which can engage people in critical thought.

A teacher’s duty is to choose works that engage students in thinking. I would have to take the same amount of care in choosing and implementing a game as I would a film or book in a class. A videogame must be relevant to the course and to the specific unit or lesson being taught. To give an example, I would not assign a button mashing, fantasy dungeon-crawler for a history class unless I saw distinct relations to specific content and themes of the course. It would also be unsatisfactory to pick historical games with no specific relevance to course concepts.
If I were teaching on Roman military tactics, for example, I would assign the playing of battles in *Total War: Rome II* (2013). To help students understand the political system of ancient Rome in a certain time period, I could assign a less war focused videogame, like one of the *Civilization* games. Students would engage in problem solving so as to accomplish administrative tasks in certain historical scenarios. In *Rome II*, for example, a student would not only memorize facts about certain Roman military tactics, like the “testudo”. The student would critically apply the tortoise formation when appropriate in the game, in taking into account proper contexts of using the tactic. In so doing, the student would deeply comprehend such pieces of historical information when actively applying them in the simulation.

Another example of an assignment could include students discovering and assessing accuracies and inaccuracies of games with respect to historical sources. Students would make thoughtful gameplay choices based on the historical evidence that they would collect from the games and different secondary resources. Further, students could critique the accuracy of how certain political systems are run in a historical simulator. More broadly, children could also study why a game developer like The Creative Assembly has chosen to make *Total War* games based on certain civilizations and not on others.

I am not, of course, the first person to believe that using videogames in a history class can incite critical thinking in students. Jeremiah McCall, author of *Gaming the Past: Using Video Games to Teach Secondary History* (2011) will be referenced throughout this paper. Part of Dr. McCall’s work is on the use of *Total War* and *Civilization* in high school classes.
My own study is unique because of the sources gathered in my Literature Review and the information from the three interviews, with which I answered my research question. My study is also framed by the literary theory lens and subcategories which I will explain later.

III. Research Question

How do three History teachers implement videogames in the classroom in order to engage students in critical thinking?

My study is centered on this basic question. The information that I gathered in my Literature Review and chapter on Findings prove that games engage students in critical thinking. Chapters 2 and 4 thoroughly detail the different ways in which games can engage students, and people generally, in critical thought.

IV. Introducing Some of the Study’s Theoretical Frameworks

I will focus on the study’s theoretical and conceptual frameworks far more extensively in Chapter 2. As I have already stated, I view good games as texts, or at least as useful intellectual puzzles, brain teasers, or activities of strategy. As such, I will be mainly looking at the impact of games through literacy or literary theory. Literary theory includes “the body of ideas and methods we use in the practical reading of literature” (Brewton, n.d.). Literary theory does not only focus on “the meaning of a work of literature” itself; it can also analyze “the theories that reveal what literature can mean. Literary theory is a description of the underlying principles, one might say the tools, by which we attempt to understand literature” (Brewton). Once we understand these critical tools, we may proceed to investigate what a literary text may signify.
Critical literacy more directly studies the meaning of a literary work. Through this theory, a text is viewed as a “vehicle through which individuals communicate with one another using the codes and conventions of society” (Coffey, n.d.). Critical literacy allows us “to read texts in an active, reflective manner in order to better understand power, inequality, and injustice in human relationships” (Coffey). Some of the key concepts of critical literacy are that “All texts are constructions,” “All texts contain belief and value messages,” “Each person interprets messages differently,” “Texts serve different interests,” and “Each medium develops its own “language” in order to position readers/viewers in certain ways” (The Literacy and Numeracy Secretariat, 2009, p. 2). More straightforwardly, critical literacy is “a stance, mental posture, or emotional and intellectual attitude that readers, listeners, and viewers bring to bear as they interact with texts” (Literacy Gains, 2009, p. 1). Students can engage in critical literacy by having discussions about why certain game developers decide to make games about particular civilizations and not others. Teachers and students could study the political, social, and cultural reasons behind developers’ choices.

Though videogames can be considered texts, they are still a different form of literature when compared to books and films, which is why games fit in the framework of multiliteracy. Through multiliteracy, “Meaning is made in ways that are increasingly multimodal—in which written-linguistic modes of meaning interface with oral, visual, audio, gestural, tactile and spatial patterns of meaning” (Cope and Kalantzis, n.d.). My study aims to show “that we need to extend the range of literacy pedagogy so that it does not unduly privilege alphabetical representations, but brings into the classroom multimodal representations, and particularly those typical of the new, digital media” (Cope and Kalantzis). Multiliteracy entails a “much broader view of literacy
than portrayed by traditional language-based approaches,” which matches “the pragmatics of the working, civic, and private lives of students” (Cazden et al, 1996).

**V. Introducing the Research Approach and its Limitations**

The general research approach of the MTRP is the case study. A case study’s “research involves the study of a case within a real-life, contemporary context or setting” (Creswell, J. 2013, p. 97). My study’s greatest initial difficulty was finding and recruiting three high school History teachers that implement videogames in their classes. The information given by these instructors are interpreted in Chapter 4. A case study is ideally done “over time, through detailed, in-depth data collection involving multiple sources of information” (Creswell, 2013, 97). However, my time was limited due to the courses and practicum placements that I was engaged with during the writing of this paper.

I could not witness how mentors taught with videogames, and how students thought about these games. I instead depended on the anecdotes of my participants, which were their accounts on the success of this pedagogical strategy. Still, my participants were highly credible, objective interlocutors, who spoke in a detached, professional manner.

**VI. Addressing the Concerns of Videogames**

To reiterate my research topic, I studied how three history teachers implement videogames in their classes to engage students in critical thinking. During the study, I always remained a responsible researcher, in making unbiased claims and conclusions based upon my gathered research from secondary sources and the three interviews. I was prepared to change my stance if, for example, one or more of my participants began using games and did not find them to be useful teaching tools. The results, it turned out, were favourable to my position.
As popular as games have become, there remains the notion among some that they are inherently problematic. Certain people make the generalization that all games enforce and create bad psychology and behaviour. Warnings like this are common: “those who begin to play video games excessively may become so engrossed in the virtual fantasy world that they shirk their responsibilities and other interests,” and that “Like teen video game addicts, adult gamers [are] more likely to be socially withdrawn, sacrificing real-life social activities to play video games” (Video game addiction: When video games become more than just games....., n.d.).

My response to these accusations is as follows. Anything can be addictive, including legal drugs like alcohol, cigarettes, and coffee. Additionally, entertainment and recreation can be addictive. Movies and T.V. can be addictive; sports can be addictive; books can be addictive. To label something as potentially addictive does not address the subject’s inherent properties, other than the fact that the indulgent aspect of the item or activity is being abused by the user. Should we condemn movies, shows, sports, and books the way that many people attack games? This is not a rational and fair way to view this medium.

The 2009 futuristic movie Gamer (starring Gerard Butler) presents the most negative views that some hold towards games. The filmmakers maximize these biases to the greatest visceral effect. The stereotypical “gamer” is represented as a morbidly obese slob isolated in a dark room who feeds off of garbage far worse than the raunchiest junk food. As the individual continually misshapes his body with harmful food, he similarly damages his mind through the continual activity, or inactivity, of gameplay. The gamer controls innocently convicted individuals who have been condemned by the world’s unjust, fascist society. This character and other players in the movie sit behind their screens as they force good people into fulfilling their perverted sexual and violent fantasies. The movie is satirizing the players and games of our
society by playing on these negative, generalized portrayals. It argues that games foster negative psychological development, as certain contemporary games are referenced, like *The Sims* series. Through graphic scenes, the movie preaches that games desensitize people, especially youth, to pornography and violence, and expose them to the abhorred conflation of the two. More bluntly, the film argues that games are the ruling elite’s way of controlling people, even the game users.

My response to such game-phobic concerns and oversimplified, one-sided representations is that these types of socio-psychological problems began before the introduction of modern games. For years, many have complained about the violence and pornography contained in different films. The same interrogative attitude also existed towards certain books before the introduction of the video medium, although books are scrutinized to a far lesser extent now. Perhaps many people are concerned about the effects of games because of their interactive aspects, by placing the player in a more active role within the game’s narrative. When the player sees a killing in a game, unlike viewing death in a movie, it is in consequence of a decision that the player makes. This is seen as encouraging bad behavior. Since these concerns are legitimate, is it not more important to have an open ended discussion about the videogame medium? Is it not crucial to view games from a neutral standpoint and look at the negative and positive aspects of them, or to compare different games to one another?

In “Kissing vs. killing: How Shadow of Mordor Fails at Explaining the Difference,” (2014) Zach Gage identifies the problem of the game conflating a loving act (making the protagonist kiss his wife) with a violent procedure (assassinating the orc enemies). Both actions require the same gameplay strategy and button presses; in fact, making the hero kiss his wife is the game’s way of preparing the player to assassinate enemies. Gage argues that the conflation
can be problematic for players who are ignorant of how the game manipulates them in this moment. He believes that,

Designers have an additional tool in games beyond visual representation to make the player feel something. It’s a subtle tool, and that subtlety is exactly what makes it one of the most powerful tools we have at our disposal. That tool is our control over the way players physically interact with a game. (2014)

*Shadow of Mordor* (2014) is a game that is otherwise well made, with good gameplay driven by a strong narrative structure that ties into *The Lord of the Rings* expanded universe. Rather than banning such a game from a course, I would include it in order to discuss with my students this very specific and important problem with the game’s design. This way, I would empower students with the understanding of such careless and problematic developer decisions, in opposition to avoiding the game altogether and hoping that my students understand the games they play without academic investigations.

A more extreme example of violent videogames is the *God of War* saga, which pits the player in the role of demigod Kratos, whose eventual goal is to kill the Gods of Olympus. He accomplishes this end in the most extreme, grizzly ways possible; in *God of War III* (2010) he uses his bare hands to tear off Helios’ head. Despite its extreme violence, many teenagers I have spoken to have played these games. I could ignore discussing this game series in a Classic Civilization class, or another course involving myth, because of its extreme, controversial violence. But if I chose to discuss these games in class, my students and I could deliberate as to why these games are so violent. We could debate about the problematic nature of a game that empowers the player to kill virtual foes.
A class could assess modern entertainment and perhaps by extent, current social values, by using the videogame as an example of popular media. Students could even discuss if the *God of War* series is a good representation of mythical themes and stories, which are often quite violent in nature. We could segue into the debate of whether or not this game series can be considered a work of artistic expression or a commercial piece of kitsch. My students and I could delve deeper, through the tools of literary theory and critical literacy, to determine the genre of the *God of War* series – how it moves away from its original genre of Classicism towards literary movements like Romanticism and even modern philosophical concepts like Nietzsche’s *overman* and nihilism. These are a few ways that even an extremely violent game could be used positively in class, to engage students in different types of thinking.

The *Star Trek* episode “Shore Leave” criticizes the playing of games in a different manner from the movie *Gamer*. “Shore Leave” is not scrutinizing the potentially addictive or violent aspects of games, but the superfluous and meaningless activity of engaging in artificial representations of reality. Playing, according to the episode, is inherently simplistic. The weakness of this episode is that its argument is self-defeating. For, the show itself is an artificial representation of reality, or truth. Shows, films, and books denote something real. Attacking representational art forms like games is the same as labeling theater and poetry as endeavors that do not help us reach virtue or truth, the way that Plato does in *The Republic* and other works. But even the philosopher’s writings are often cryptic and full of irony, as Plato’s treatises are, after all, literary and dialectic forms of art. So even in Plato’s case, the pedagogy of simulacra is the most common, practical form of reaching knowledge or truth.

Engagement with forms of representation, or art, can be didactic. Even in the episode “Shore Leave,” the Enterprise crew learns the real-life dangers associated with their idealized
fantasies. The romanticized conceptions of Don Juan and the Black Knight became nightmarish when they materialize, one acting as a rapist and the other as a psycho-killer. Captain Kirk’s experience on the planet is cathartic, as he is able to confront a bully and achieve an unfulfilled romance from his past. The episode’s weakness, again, is that the events involving imagined or remembered people are not taken as serious moments of growth for the main characters because the manifested individuals are artificial. The show carelessly neglects the developmental effects that fictional representations have on individuals. We must not mistake the artificiality of pedagogical tools with reality, lest we remain inside “the cave” where people believe the simulacra to be the real, as Plato warns. However, studying simulation in a self-conscious, critical manner, as Jeremiah McCall and others believe, has the potential to teach us different ways to think about something real that we do not have immediate access to. A final response to those who challenge the validity of using art to achieve knowledge is that “true”, non-fictional accounts, like historical texts, are based on subjective versions of reality.

**VII. Final Introductory Remarks**

As a future teacher and gamer, I must present games to my students in a neutral way, so that my pupils and I can determine their positive and negative elements. Whether or not a person, especially an impressionable child, becomes addicted or desensitized to a form of entertainment largely depends on pedagogical habits, and then, armed with the proper knowledge, an informed personal choice on the person’s part. I admit that I enjoy some violent movies, shows, and videogames, but in no way do I feel compelled to inflict violence. I know right from wrong because of the way I was raised by my parents and teachers. Games are perceived as fun forms of entertainment as much as they are known for leading to desensitization and addiction. If neutral discussions about videogames occur, critics may realize that some
games are artworks which ought to be integrated into relevant curricula. On the positive side of the debate, some studies show the constructive effects that games have on learning habits and cognition. Dr. Scott Watter of McMaster University has gathered information that shows how players have a greater ability for problem solving compared to non-gamers. Playing puzzle games and first person shooters make gamers deal with cognitive, verbal, and spatial problems in effective ways (Watter, 2013).

I was first permitted to write on videogames during my Masters of English Literature at the University of Waterloo. Not in public school, not in middle school, not in high school, and not in undergrad did I once have the opportunity to write about games, likely due to the common misconception that games are not legitimate art forms. One of my most intricately researched essays is “The Lord of the Rings: Adapting the Battle of Thermopylae – From History to Book; From Book to Film; From Film to Game,” because it is about a medium that I love. Also, in an independent reading course of my Master of English, I collaborated with a friend to design a videogame based on James Joyce’s *Ulysses* (1922), which included our creation of game instructions, narrative components, and concept art. This beloved platform should be brought more prominently into classes, so that students can engage with curricula in different ways, while critically understanding what they consume.
Chapter 2: The Literature Review

Introduction to the Study’s Theoretical and Conceptual Frameworks

I will define my conceptual and theoretical terms in order to answer my research question, “How do three high school History teachers implement videogames in the classroom in order to engage students in thinking.” This chapter outlines both my approach to studying videogame pedagogy and previous work on the topic that helps me define my own research.

I will begin by defining what I mean by the concept of videogame as it relates to my particular study. A videogame, generally put, is any form of electronic game. This may include games that engage players with interactive narratives, strategy, trivia, puzzles, brain teasers, and a host of other genres. For the purposes of narrowing my study, I will focus on games that fit the historical genre, which fall within the category of being textually or narratively driven. Further, I will mainly focus on the single player modes of certain games.

Narratively structured games fit within the discipline of History whose concern is the critical analysis of textual narratives from the past. History also investigates the stories that other artifacts, such as works of art or objects of utility, may tell us about the people who produced them. A game, therefore, cannot belong to the history genre if it does not present a narrative in any shape or form. That is not to say that only textual or narrative based games, which may be akin to literary works, are worthwhile, since other types of games can be useful intellectual puzzles, brain teasers, or activities that involve strategy. In order to significantly narrow the focus of this study, I examine the educational use of games through a textual or literary scope. I will examine how various historical games are narratively structured in their own unique ways so as to offer differing narrative experiences for the player.
Before getting into the discussions of distinct narrative frameworks, I will first review what I mean by *critical thinking* with respect to this particular study. Critical thinking entails that “value is not just in having information, but also in being able to use it” (Gerber and Scott, 2011, p. 842). Critical thinking is the “generally accepted core set of cognitive skills involved in [...] analysis, interpretation, evaluation, explanation and self-regulation” (Gerber and Scott, 2011, p. 842). As I explained in my first chapter, critical thinking is, broadly, higher order thinking. Memorization – the prominent pedagogical model of many school and university history classes – is also technically thinking; historical dates, places, and names are “thought” of by those who memorize them. But to think of the regurgitation of “facts” as a higher order mental process is wrong, since memorization is not the same as *understanding*.

Higher order thinking, or *analysis*, involves the meaningful arrangement of information. Critical thinking equates to analysis, which is “A detailed examination or study of something so as to determine its nature, structure, or essential features” (Oxford English Dictionary). I will at times use critical thinking to refer to problem solving and strategic thought, as it applies to games that involve tactical planning and execution. Once I identify different game narrative types and how players engage with them, I will go over the main critical thinking, analytical tools under the main umbrella of literary theory, with which students can examine historical games.

**I. Narrative Frameworks**

Many narrative centered games, including those that fall within the historical genre, contain what I define as explicit, implicit, or a mix of both storytelling methods. I ascribe the concept of *explicit narrative* in a game as a narrative that is presented in a direct manner, in a way similar to traditional texts like novels, or even movies. Character, setting, and story are
clearly portrayed to the audience, and the player controls one or a few of the story’s characters. While this is a common conceptual trope for game storytelling, many games, like some historical titles of the *Total War* series, present a general historical context, time frame, or setting. I classify this conceptual mode as a more *implicit narrative* structure.

### i. Implicit Narrative Frameworks

The game *Total War: Shogun 2* (2011) allows the player to take charge of a clan during the Sengoku Jidai (Warring States Period) of Japan. A short video displays the unique historical and militaristic attributes of each clan. After this brief introduction, it is up to the players to decide how they will meet the game objective, to become Shogun of Japan. This type of game is designed to allow players to shape their own version of history within this historical period in a very loose and free manner, within the subtly or implicitly presented historical narrative. Players choose their own viable options to achieve the end goal. Gamers determine their own methods of either trade, all-out war, or a balance of both in becoming Shogun.

A different game mode *Shogun 2* offers, similarly to other *Total War* games, is to reenact historical battles from Japan’s Sengoku Jidai. These scenarios have more clearly presented narratives, with specific, non-fictional settings, years, and characters. In these historical battles, the narrative is explicitly presented as a simulation of real, historical events. The players’ freedom of realizing their own scenario, with the options of also creating and sustaining economic and political systems, is not offered in this mode. While the more *explicit narrative* gameplay option of “reliving” different historical battles presents more direct and conventional ways of storytelling, the more *implicit* game mode of controlling a clan and eventually becoming Shogun allows the player the freedom to engage in political and economic activities.
Somewhat similarly to the Total War saga, the Civilization series of strategy games are played in a top-down, bird’s point of view of a world map. Individual characters have small roles in these games. Even during TW games’ intense, real-time battles, cohorts, rather than individual soldiers, are selected to engage in fighting. The player of a Civilization game may choose a gameplay style centered on creating and maintaining the social, political, philosophical, and religious aspects of a society, in many different environments and time periods. The gamer may choose not to engage in war. Unlike the battle-focused TW saga, Civilization offers even more gameplay varieties. Both of these historical strategy series allow players to shape scenarios by affecting the general factors and actions of societies or civilizations. These games do not, however, provide specific, in-depth character or plot developments in the way that more traditional, explicit narratives do. Civilization and TW are not about individuals’ roles within the grand scheme of historical contexts; rather, the more broad factors – the economic, political, and martial – are under the players’ control and influence.

The single, identifiable person, whose decisions are influential within these games’ settings and political structures, is perhaps the gamer running the simulation, and not a character within the game itself. A player’s actions through diplomacy, trade, or waging war are what directly affect different civilizations in these games. The player of such games assumes a kind of “meta” role by not being identified within the game world with clearly representative avatars or character models. The player is instead an invisible agent who profoundly influences the development or dismantling of civilizations.

The Civilization and Total War “strategy games assign a specific persona to the player, but often this character is defined in the barest of sketches in the game manual, the startup screens, or the initial cinematic sequence” (McCall, 2011, p. 106). The player is neither fully
present nor absent in these kinds of games, as if he or she exists in an odd dimension, both not completely inside or outside the “reality” of the simulation. Thus, Civilization and TW are series which allow players to shape the direction of the narratives and stories of groups of people – societies and civilizations – in what I categorize as an implicit manner of creating the game’s textual and storytelling aspects. The “meta” role of the gamer is, by definition, implicit in relation to the world of the game. This narrative game type is also implicit because the story does not preexist as a clear mise-en-scène for the player to step into and interact within a clear context. Rather, player decisions create implicit texts based on gameplay choices.

ii. Explicit Narrative Frameworks

Strategy games differ significantly from those in the Assassin’s Creed series, for example, which present the player with more direct and immersive understandings of specific characters’ experiences of settings and events. Rather than taking control of a clan, country, or empire, the gamer plays as one fictional person, or sometimes a few characters. The player’s point of view is not top-down, but from a third person view, perceiving an individual character’s experiences from behind the character. We can begin to see how different narrative structures facilitate various kinds of gameplay, and ways that diverse gameplay models serve particular narrative structures.

The Assassin’s Creed games offer equally detailed historical simulations as certain strategy games, although the storytelling is far more explicit. By controlling one character, players are able to have a more intimate, “down to earth” experience of the fictional person’s interactions with the world. As the assassin in each AC game, the audience is able to understand character motivations through close interactions with characters and environments. This is a key
difference between games like AC and most strategy games: the player adopts the role of a fictional, yet clearly defined protagonist. In a conceptual or imaginative sense, the player virtually becomes the main character of the simulation; the character is a virtual avatar or alter ego of the audience. As players in these types of games, we are not as estranged from the storytelling experience by walking the odd narrative line found in strategy games, where we exist in limbo, both within and separate from the game. Games like those in the AC series are much more akin to interactive films, in which story, setting, and character are explicitly presented.

II. How Games Conceptually Differ From Other Genres

i. Player Agency

Videogames differ from films and older textual forms like books in an important conceptual way: videogames are interactive mediums. One may argue that movies and novels are not passive experiences: focused and engaged audience members can critically think about the material they observe. I am not contesting this point, as the foundations of literary theory were developed from studying these traditional art forms. Many videogames, after all, are combinations of these traditional genres. What I am arguing, however, is that quality videogames require a more active participation by their audience in order to be experienced.

The plots of books and films exist independently from the audience perceiving them. For example, Milton’s Satan rebels against heaven, and Game of Thrones’ “Red Wedding” occurs in Martin’s A Storm of Swords (2000), no matter how hard the audience wills these events not to happen. But this is not quite the case with certain games. Chess, for example, may exist as an abstract idea, even if I choose not to play it. But chess – the game – is not truly realized if no one were to play it. To realize the game of chess, one must play it. In this way, games are
necessarily more interactive than other genres, since they need to be played in order to have substance. A game can only exist and be created through the interactive process of player engagement with the game itself. The game, therefore, cannot exist if it is not played.

The act of playing varies from exclusively watching, listening, or reading. Generally speaking, “The fact that in the case of the video game the "viewer" becomes a "player" means that the relationship between the user and the media changes,” since the gamer becomes a participant in the medium (Allison, 2010, p. 183). The fundamental principle of game engagement is decision making. We experience the same novel and movie multiple times; though our experience and analyses of these pieces may alter, the works do not change in and of themselves. When we play a game, however, though the materials used to produce the game precede the playing of the game, the game itself does not come into being until the player does something with these materials. One game of chess varies from other games of chess because of the gameplay choices that each distinct player makes in different contexts.

Series like *Assassin’s Creed* do not only offer strategy, like chess does, because they also present texts, or narratives, which can be experienced in different ways. The end goal is the same, similarly to how *Shogun 2* requires the player to rule Japan. In *AC* the player must find ways to assassinate pivotal characters to the plot – how the gamer reaches each target depends on his or her choices. The player may face guards in direct combat for maximum carnage, but at great risk of being killed, or she may take the time consuming path of scaling buildings to reach the target, avoiding direct conflict and fighting. Patrice Desilets, creative director of the original *Assassin’s Creed* (2008), designed the game to be an “experience [for player] freedom in a narrative structure” (Developer Diary, 2008). Though the end goal is the same, different paths can be taken by players to experience the narrative of *AC* in alternative ways.
Other games, like the science fiction trilogy *Mass Effect*, give the player the ability to make crucial decisions that impact the plot and characters. If players keep certain characters alive in the first game, they may appear in the other two, whereas if players allow these characters to die, they will not be present in important moments of the latter games. As if to answer the criticisms regarding videogame violence, *Mass Effect* encourages players to keep characters alive. This is because certain characters’ presences or absences at key moments in the plot have significant repercussions for the narrative, both in the immediate, microcosmic sense, and in the larger scheme of the macrocosmic narrative. Though *ME* is not of the history genre, it is important to note that this series offers more narrative variety than the *AC* series.

Thus, it is not inconceivable that historical games could exist, with explicit narratives, which offer the variety of the *ME* games. These options give players the freedom to shape narratives to their own, unique experiences of the medium. Games, therefore, have the potential to give players opportunities to create their own versions of the games’ texts, which may differ significantly from other players’ experiences with the same game. Whether a game’s narrative is *explicitly* or *implicitly* presented, its narrative is dependent upon player choices:

Unlike television, books, or any other media that came before them, video games are about a back and forth between reading the game’s meanings and writing back into them.

In effect, games are narrative spaces that the player inscribes with his or her own intent.

(Steinkuehler, 2010, p. 61)

The link between audience and art, player and game, is perhaps more prominent in this media than for any other, due to the dialectical, interactive nature of games. Games conceptually differ from other media because of the audience’s active agency that is needed to realize them. The
textual nature, or narrative structure, of a game cannot exist independently of the audience, since the player engages in processes of creation or recreation by playing the game.

It is also important to study the implications these various storytelling techniques have with respect to player agency. High school history students can ascertain Ubisoft’s reasons for continuing to create its Assassin’s Creed saga with a third person action model, and why Creative Assembly employs the strategy framework for their Total War series. Students can investigate these genres of storytelling to determine whether the narrative structure serves the gameplay model, or if the gameplay framework informs the textual fabric of the game, or if both factors affect one another. History students can critically argue about the different effects implicit versus explicit storytelling has on players. Students can explain why the developers have chosen a certain model, and ask questions such as: what do the narrative and gameplay models tell us about a game’s historical perspective? How accurately do a game’s storytelling and gameplay techniques present the historical content? How would other techniques be used to represent the same historical context in different games? These are but a few questions to get students thinking about videogames in relation to the historical material.

ii. Addressing the Theory of Gaming as a Cybernetic Experience

Not all scholars will agree with my position regarding the importance of player agency. Brendan Keogh argues that in order to properly define how videogames are conceptually distinct from other genres, one must “leave behind the trappings of other media,” for videogames to “be truly special” (2014). Keogh explains the intricacies of player and videogame interaction as a cyclical process between person and machine:
What the videogame outputs as audiovisual representation via the screen, speakers, and rumble motors are taken in through the player’s bodily senses (sight, sound, touch); these senses send messages to the brain that, in turn, determines output from the player’s muscles into the game hardware’s input device. (2014)

Keogh argues that the relationship between audience and videogame is more sophisticated than in other mediums, to the point that the connection is cybernetic. The correlation is so much more active that it forms a symbiotic bond between human and machine.

Keogh’s position is influenced by Giddings and Kennedy, who state that:

Activity and passivity are not opposites in videogame play but fluctuations in the circuit, and thus […] a new conceptual language is needed to attend to both the operations of nonhuman agency and the human pleasures of lack of agency, of being controlled, of being acted upon. (2008, p. 30)

Giddings and Kennedy believe that “By understanding gameplay as cybernetic, issues of interactivity and player agency are recast in terms of networks and flows of energy,” which differs from my view of player and game as two distinct, separate entities (2008, p. 21). For Giddings and Kennedy, passivity and activity between player and game is not distinguished as it is between audience and film, for example. An audience can be completely passive and disengaged when viewing a film by not critically thinking about what happens on screen. But the authors argue that when gamers are in “passive” states of mind, they are still somehow active by virtue of playing the game. For example, if a person plays a game that does not require critical thought and instead presents simplistic gameplay mechanics, the player would be mentally passive while physically active. The gamer would be active only insofar as he or she would be causally linked in a physical way to the game, but not in a mental manner.
I maintain that games ought to promote mental activity, not passivity. Giddings’ and Kennedy’s description of the “human pleasure of lack of agency” is especially troubling. Pleasure should be derived from the critical thinking of engaging in complex problem solving and reflection; people should not be willingly passive beings, controlled by games or other machines. The best games are unique in offering the activity of thoughtful decision making. The game is an inanimate construct that promotes, or ought to instill, thinking in a consciously active, reflective agent; it should not do the thinking of the agent. By not making the distinction between the two, Keogh, Giddings, and Kennedy categorize the player and game as two identical, unthinking things. The player conceptually becomes a causally connected, physical component of a cybernetic unit: machine-like, and robbed of any sense of agency.

If it were true that player and game form an indistinguishable unity, gamers could not reflect on how their actions shape the textual structures of games. Keogh states, the “text that the videogame critic is able to analyze” exists only as “interactivity”. According to his theory,

[T]ext belongs to neither the virtual nor the actual world but to the cybernetic ebb and flow between the player’s body, the videogame hardware, and audiovisual and haptic representation. It is in this circuit where the player has a phenomenological engagement with the videogame that the critic must ground the analysis. The videogame critic must account for the player-and-game as the object of study, as one textual machine. (2014)

Keogh’s analysis of player-game relationships is as fascinating as it is problematic, in psychological and epistemological ways. He explains the link between audience and game feels real “because the player controls the character’s movements, decisions and […] that character’s ultimate fate” (Keogh, 2014). However, he does not identify that the player’s persona is just a
character or avatar that the real player controls. For, if we followed his argument literally, we would have to conclude that the person playing the game is also part of the text of the game.

While games, as I have argued, cannot exist independently from the player who must create and recreate them, the player can exist on her or his own, separate from the game. Players may be indirectly part of a game’s text insofar as their choices shape the game’s narrative structure. Player choice is an agency of the person, and should not be equated as part of the artificial game. Further, a person’s agency should also not to be conflated with the person who possesses the agency. The human subject is not the direct equivalent of its actions, though action is directly tied to its faculties and abilities. In other words, the essence of a thing is not identical to its actions, even though they correlate. It is therefore crucial not to identify the “interactive” link between game and gamer as either the text or person in and of themselves, but rather the agent’s “force” or choices that shapes the text of the game. Thus, we should not literally conceive of the relationship of player and game as something truly cybernetic, or machinelike.

Having challenged the cybernetic argument, I may be presented with a counterargument that could go something like this: I have contradicted my own earlier analysis about how the players of both explicit and implicit narratives form a bond between themselves and the games they play. Someone like Keogh could insert his argument into my analysis by stating that in these instances of play, gamers form cybernetic links to their games. Keogh could argue that in implicit narratives, the cybernetic link is compulsory, precisely because the player’s character is so vaguely defined. It is therefore necessary that players “plug” themselves into character positions in order to have presence within the narrative. Because players integrate themselves so closely into the game narrative, one may hold the position that the link between game and gamer becomes cybernetic. Similarly, in explicit storytelling games, a thinker like Keogh could hold
that the cybernetic bond is even stronger because the player *becomes* the avatar that is represented and being played on screen.

To contest such arguments, I will mainly address the cybernetic position that could be applied toward *implicit* narrative games. I argued, above, that players of such games are not “entirely present nor absent” with respect to the game’s narrative, existing instead in “an odd dimension, both not completely inside or outside the “reality” of the simulation.” So I in fact argue the opposite of the cybernetic, symbiotic position. The connection between the player and medium is quite vague, unclear, and undefined. This is the kind of mindset that players need to have in order to play more strategic games. The critical thinking required to successfully play these games requires a mental engagement that is logical and reflective, in a somewhat distant, removed, metacognitive fashion. These games present and promote this undefined “meta” role for the player to fill, as described earlier, so that that the player can engage in as much critical decision making as possible. The player’s decisions are constrained, insofar as she or he operates within the gameplay and narrative frameworks presented by the game; but the player has the agency or freedom to plan choices with thought processes that involve higher order thinking. Thus, the role of the player is “meta” textual due to the somewhat paradoxical “absent presence” of the player within the game’s text. In this manner, such a game promotes high order, critical thinking, which rises above the mechanics of the game; the game, after all, is only a tool.

Such game models promote thinking that transcends the basic material level of the game, of the “ebb and flow” of the “audiovisual representation via the screen, speakers, and rumble motors” and “the player’s bodily senses” (Keogh, 2014). These games give the player the freedom and responsibility of making critical choices – the ability to be a thinking agent. And, to reiterate my statement about the basic distinction between games and human beings: games
are not thinking things; humans are thinking things; therefore, humans have *agency* while games do not.

I am borrowing Descartes’ argument for the dualism of mind and body to argue my point. Descartes believes that in order for two things to be identical, it means that they are exactly the same. Since the mind is a thinking thing, and the body is not, it follows that they are not identical, but two distinct things (Grim, Lecture 2, 2008). Thinking, especially of the critical kind, is present in the person playing the game, and absent in the game, which is a construct. The connection between the player and game is a very strong one, as I have argued, but the human agency of thought and decision making prevents the relationship between the player and game from being cybernetic. To repeat my position, for the game to exist, it is dependent on the player, but the player is not dependent on the game: the player is the active agent who shapes the narrative of the game. The game may be “active” insofar as it presents the player with tools for critical thinking, and the physical stimuli including images and sounds that engage the player, but the game does not *think*, and so it lacks *agency*.

I will grant that the relationship between players and games might be more akin to a cybernetic bond with games that require less thought and more engagement with spectacle and visual stimulus. These games only satisfy the purely material “ebb and flow” and connection to “the player’s bodily senses.” These are not the types of games that I am interested in for the purposes of education or even entertainment, because I do not believe that they promote analytical, critical thinking, but passivity instead; they control gamers, rather than being controlled by players. The player becomes a far more passive agent in these instances, and so, somewhat like the game itself, the gamer approaches the state of a non-thinking thing.
The argument may be made that in games that present *explicit* narratives, like *AC*, players become passive because the characters and stories are presented more intimately, through a more personal point of view, both textually and by third person gameplay mechanics. Since the “thinking” is already done for us through the explicit nature of the narrative, we do not require our agency to intellectually engage with the piece. However, if explicit storytelling creates a cybernetic symbiosis between the audience and the medium, our relationships to film would also be cybernetic, since movies often present narratives in such a way. I will again grant that movies which engage audiences mostly or exclusively through visual and audial spectacle, like many games do, create a more passive experience for the viewer. Such experiences are often bereft of opportunities for the audience to critically think about the films they watch, as these experiences are dumbed down to stimulus assaults upon the viewers’ senses. Most 3D movies, for example, “engage” audiences by seemingly jumping out at them. In truth, these new techniques are often gimmicky distractions rather than opportunities for the audience to engage with the medium on an intellectually active level. Films and games that mainly serve to stimulate the audience’s senses, which spoon-feed people effects or with stories that are completely self-explanatory, lack the creativity to incite reflection in their audiences. Teachers must educate with materials that actively engage students, which will positively impact their development.

**III. Various Critical Thinking Approaches to Historical Videogames**

i. The Literary Theoretical Framework

I will now transition from types of narratives to explain the critical thinking approach of literary theory. This framework can be used to analyze the complex narrative structure of good historical games. To elaborate on what I mentioned in Chapter 1, literary theory is, generally,
“the field of study concerned with inquiry into the evaluation, analysis, and understanding of literary works and (now also) other texts” (Oxford English Dictionary). We can use this critical lens to understand the meaning of different texts. Literary theory often accomplishes this through consistent argumentation, often with the incorporation of “concepts from other disciplines, such as philosophy, politics, or sociology” (OED). Literary theory includes “the body of ideas and methods we use in the practical reading of literature” (Brewton, n.d.). This theory, like many theoretical frameworks, can encompass different approaches for the analysis of literary works. For example, a literary analysis may focus on the study of “the meaning of a work of literature” itself (Brewton). Literary theory can also include academic examinations of “the theories that reveal what literature can mean” (Brewton). More specifically, literary theory includes “a description of the underlying principles, one might say the tools, by which we attempt to understand literature” (Brewton).

Thus, literary theory is also the study of the methods and frameworks which we use to critically think about texts. Once we understand these “critical tools,” we may proceed to investigate what a literary text may signify. Literary theory is one of the main theoretical frameworks which we can use to study textual games. There are other variations or critical thinking tools that also fall under the main umbrella of this theoretical framework. I will elaborate on some of these variants for the discussion of game analysis. We can use these critical thinking tools to analyze a literary piece in different ways, much as I have done in my Undergraduate degree in English and Philosophy, and especially during my Masters of English Literature. I am going to first give the more conventional example of how a literary work can be critically analyzed, in the traditional sense, before I return to examples of games.
Literary tools can be used to extrapolate the meaning of a poem’s imagery. For example, a poem’s metaphors can be investigated to ascertain if their significance stays within the themes of a literary or symbolic context, or if these motifs extended to particular social, political, or historical examples. The textual properties of games may also be analyzed for meaning using the literary theoretical lens. Like other mediums, videogames can feature complex stories with rich character development and complexly written dialogue. But apart from having good writing, or strictly linguistic or textual properties (i.e. written and spoken dialogue), electronic games can feature meaningful imagery and music in order to communicate a story to the player. Like film, a game can feature visual imagery, audible music, and performative acting which give the audience different ways to experience the narrative not found in purely textual pieces like novels.

ii. Formalist Theoretical Approaches

The literary analysis of texts can extend beyond a narrative’s content, to its structural or formal properties. An author can meaningfully shape content with the form, skeleton, or frame of a text. Meter, onomatopoeia, and alliteration are examples that can heavily signify meaning in works of Shakespeare, for example. The form of a poem, for instance, arranges and presents the language and narrative content to the audience, which cannot be divorced from the text that it shapes. To elaborate, the technical and structural components of a poem, such as its stanzas, rhyme, or meter, are inseparable from its words. If we separated such structural or formative properties, the text becomes prose, and ceases to be a poem. In addition, the formal properties of a text can include its material qualities, and not just the structure of the language itself. For example, a novel could not exist separate from its material medium, whether it is a soft or hard copy. If the physical, structural properties that make a novel are taken away, it ceases to exist.
Despite the inseparable links between these formative qualities and the content they structure, a work’s form can, however, be conceptually separated from its content. A student could analyze, for example, why a poem or play’s line length fluctuates in certain instances. For example, a student may investigate why Hamlet’s last lines in the play, following the short line “O, I die Horatio!” exceed the regular syllabic limit of iambic pentameter (Shakespeare, 1600, V. ii. 4014-4020). Similar analyses can be done on how Satan’s speech deviates from iambic pentameter, and why the stresses of the regular feet shift in this particular line in Book 1 of *Paradise Lost*: “Fall'n Cherube, to be weak is miserable” (1667, l. 157). Thus, the critical thinking tools of literary theory can be used to discover the importance of the formative properties of texts: how content is shaped and given meaning by its form.

Film Studies also have the *formalist* analytical approach, which concerns itself with studying “action, image, decor, gesture, speech, camera movement and placement, cutting, and lighting” (Buckland, 2008). Just as a literary analysis of a poem’s formalist techniques may include the study of meter and rhyme, formalist methods in film may consist in:

- **Mise en scene** or photographic composition, camera movements, editing choices, sound in relation to the image, etc., noting the effect of those techniques on how the viewer perceives the scenes and interprets what they mean. (Jacobs, 2014)

There is a formalist mindset which holds “that there is a sharp distinction between form and content and that only form is aesthetically relevant” to finding meaning in film (Nannicelli, 2008, p. 216). It is often true that film can draw more attention to its own formal qualities and techniques in more explicit ways than older forms of text, due to audio and visual elements of movies. A film’s text literally “speaks” to the viewer through its formal constructions of audible
dialogue, and the script’s described images, including plot, setting, action, and character, which are often visually established.

But it is also crucial to keep in mind that, in the way that content cannot be divorced from form, form cannot be divorced from content. If an audience is presented exclusively with visual and audible stimulus, it can be argued that such media is mere spectacle. Good art is constructed with rich form – but the form of what? Presumably, good form contains and presents good content, and together, they exist in an inseparable, Aristotelian-like *hylomorphic* composite. The formalist or material qualities of a work is like its body, while its content acts like the essence or soul of the piece; yet, each component cannot exist without the other, both making an indistinguishable whole (Aristotle, 350 B.C.E., Book 1).

The Russian Formalists, one of the leading formalist schools, were criticized for not focusing on the meaning of a work, but only on its form or structure, in the way a film is put together and made (Fry, 2009). The content or essence must also be considered when analyzing the form of a piece, especially in the genre of videogames which are criticized by some as being mindless, empty pieces of spectacle. An example of an effective formalist analysis of videogames is Enoch Jacobus’ study of *Bioshock Infinite*’s music (2014). Jacobus describes how the game’s presentation of real songs within the game’s narrative, that are restructured and re-appropriated, subtly signify certain aspects of the game’s science fiction story. Similarly, history students could use formalist approaches to study the abundant music found in different historical games. Students could determine what the style and structure of the musical pieces signify with regard to the historical perspective and mise-en-scène that these games attempt to establish.
The implicit and explicit storytelling techniques mentioned above are formative methods of structuring the narrative content of games. Such frameworks can be defined and established in a classroom, since they may act as tools for students to begin critically thinking about the content of games. As I have explained above, students can ascertain different storytelling techniques in order to analyze how narrative structure and gameplay mechanics can determine or influence the historical content found in particular games. Students would not play historical games for fun and entertainment purposes, but in order to learn how the analysis of any medium, not only videogames, is created “precisely and systematically, and following the rules of logic,” somewhat akin to “scientific reasoning” (Lau, 2011, p. 1). Once students learn the historical content, through different critical thinking processes, they can come “up with new and useful ideas, generating alternative possibilities,” of how they view primary sources and modern mediums that represent history (Lau, 2011 p.1). The different aspects of games can be critically thought about and analyzed by students, in much the same way that historical documents or films can be assessed in assignments.

iii. Critical Literacy

Other theoretical tools, under the umbrella of literary theory, are critical literacy and multiliteracy. Students may apply the critical literacy framework to historical videogames in studying the meaning of literary works with respect to societal contexts. With critical literacy, a text is viewed as a “vehicle through which individuals communicate with one another using the codes and conventions of society” (Coffey, n.d.). Critical literacy allows people “to read texts in an active, reflective manner in order to better understand power, inequality, and injustice in human relationships” (Coffey). This critical method can be used to study how certain games represent historical power systems of certain civilizations. For example, students may
investigate how the Total War games display the hierarchy of economic and military systems in ancient Rome, or why the main targets in the Assassin’s Creed series are usually politicians.

Other key concepts of critical literacy include the following: “All texts are constructions,” “All texts contain belief and value messages,” “Each person interprets messages differently,” “Texts serve different interests,” and “Each medium develops its own “language” in order to position readers/viewers in certain ways” (Literacy and Numeracy Secretariat, 2009, p. 2). More straightforwardly, critical literacy is “a stance, mental posture, or emotional and intellectual attitude that readers, listeners, and viewers bring to bear as they interact with texts” (Ontario Ministry of Education, 2009, p. 1).

Critical literacy can be used by students to study the intellectual stances and perspectives that games portray with regard to historical timeframes, settings, events, and characters. An example of critical literacy in the historical videogame context is something I mentioned previously: students could discuss why game developers have decided to make games based on certain civilizations and not on others. Students could determine if there exist social or political reasons behind these creative choices. Students could also ascertain why certain political and religious figureheads in the Assassin’s Creed games are painted as either villains or heroes, as another example. Lorenzo de Medici, Niccolo Machiavelli, and Leonardo Da Vinci are just a few historical individuals who appear in the narrative of Assassin’s Creed II (2009).

Working within a critical literacy framework, Tanine Allison argues that certain action games’ “simulation of history actually better reflects contemporary warfare, providing a representation of the present disguised as the past” (2010, p. 184). Allison’s main point is that certain games, like those in the Call of Duty franchise, “have drawn from and reshaped the
conventional narratives of World War II given to us by cinema, which has been extremely influential in determining how American culture has reconceived the war as the ‘good war’” (p. 185). In my paper mentioned in my introduction, I explained how certain Lord of the Rings games adapted the Peter Jackson films, which were adaptations of J.R.R. Tolkien’s novels. I demonstrated that part of Tolkien’s work, and the film and game adaptations of it, adapts the historical text of Herodotus on the battle of Thermopylae. I argued that, like in the historical Greek text, the Lord of the Rings novels, films, and games displayed Western ideologies of democracy that are contrasted to Eastern stereotypes through simplified representations of tyranny and mysticism (Stamatis, 2013). Thus, we can see how critical literacy may take the approach of analyzing a videogame as an adaptation of other mediums, including film, and how these different genres are representative of cultural values and perspectives.

iv. Multiliteracy

Though certain videogames are texts, they are nonetheless a different form of literature when compared to books and films. It is therefore necessary to include, among the umbrella of literary theory, the framework of multiliteracy. Through multiliteracy, “Meaning is made in ways that are increasingly multimodal—in which written-linguistic modes of meaning interface with oral, visual, audio, gestural, tactile and spatial patterns of meaning” (Cope and Kalantzis, 2013). As I have elaborated above, the videogame differs conceptually from other narrative mediums mainly in its engagement with the audience. Games cannot exist without players: they must be played in order to be created and recreated.

The videogame art form and its important distinctions from other texts drive the main argument and purpose of my study, which is to show “that we need to extend the range of
literacy pedagogy so that it does not unduly privilege alphabetical representations, but brings into the classroom multimodal representations, and particularly those typical of the new, digital media” (Cope and Kalantzis). Thus, multiliteracy entails a “much broader view of literacy than portrayed by traditional language-based approaches” which matches “the pragmatics of the working, civic, and private lives of students” (Cazden et al, 1996). If videogames are implemented into high school curricula, students can engage in critical thinking exercises from the literary theory approach with its engagement of different perspectives.

IV. Videogame Engagement in Classrooms

i. Critical Thinking as Student Engagement

“Watch someone playing a game – particularly a hard one - and what they're doing may look a lot more like work than fun,” says Kurt Squire, Professor at University of Wisconsin (Landsberger, J., 2004, p. 4). Squire believes that “for many games, fun, or engagement is naturally a bi-product of learning,” because “learning things is inherently fun” (p. 4). For Squire, knowledge is attained from “problem-based learning or case-based” activities that promote critical thinking; any game that can provide a difficult challenge to the audience, either designed specifically for educational purposes or commercial release, can count as a critical thinking tool (Landsberger, 2004, p. 5).

Aside from entertainment purposes, games are most often played for the challenges that they offer, sometimes improving a range of player attributes, from hand-eye coordination to puzzle solving skills (Gumulak and Webber, 2011, p. 241). As such, certain games can make for excellent critical thinking tools, which is essential for student learning, given that “critical thinking is fundamental to the mission of formal education, including higher education,” since
“Critical thinking is a cornerstone of liberal arts education” (Gerber and Scott, 2011, p. 842). To recall what I mentioned in the beginning of this chapter, critical thinking entails that “The value is not just in having information, but also in being able to use it” (Gerber and Scott, 2011, p. 842). And to again reiterate a specific definition of critical thinking, it is the “generally accepted core set of cognitive skills involved in […] analysis, interpretation, evaluation, explanation and self-regulation” (Gerber and Scott, 2011, p. 842).

In recent years, the videogame has become slightly more popular as an integral part of primary and high school curricula due to their positive effects on learning. Neil Webster and Dawn Hallybone are teachers of primary school children in Liverpool; the implementation of videogames in their classes has improved student engagement. Videogames are used to engage youth in literacy and math, both in individual and group work periods (Illumina Digital., 2009). Further, Scott and Gerber conducted a study on the “relationship between playing games and critical thinking” and found that “strategy gamers have a greater propensity for actively open-minded thinking than non-strategy gamers” (2011, p. 847). Strategy games, like the Civilization and Total War games, often require a great deal of forethought and foresight into planning and executing decisions in order to meet the games’ objectives.

Sanford and Kurki conducted a “five-year longitudinal study exploring how engagement with videogames influences youths’ literacies and attitudes with respect to their potential for engagement as future citizens” (2014). Sanford and Kurki found that children were able to critically engage with many different types of activities after playing games. The games these children played integrated skills and knowledge in a holistic fashion, which allowed them to engage with the curriculum in a profound manner. Sanford and Kurki argue that this engagement to the games occurred because there was a purpose behind everything that the games
taught: “Literacy learning is not, or should not be, for its own sake. We learn oral, and then written, language to live meaningful lives” (2014). Sanford and Kurki claim that the games’ pedagogical models were so effective for promoting critical thinking that students who played certain games became more morally sensitive and inclined (2014).

In games like Infamous (2009), Mass Effect 2 (2010), and Red Dead Redemption (2010), “Moral choices […] are exaggerated, making the impact of each choice a key connection between the player’s decision and how the game unfolds” (Sanford, K. and Kurki, S.B., 2014). In these types of third person action games, critical thinking may also include literary and philosophical topics relating to ethics, which can act as lenses through which students may analyze historical events and persons. Students can examine why and how they shape a game’s narrative by choosing certain decisions over others. Conceivably, a student playing a historical game could be asked to either justify or explain the actions they took, with respect to the criteria of a moral framework. For example, in grade 10 history class, my classmates and I were asked whether or not the United States was justified in bombing Japan in the Second World War. Students could be presented with such ethical, historical issues and dilemmas, which could be understood by students in a thoughtful way; students would not only read history, but have the agency and thereby the responsibility of shaping the narratives in different historical games. If games can truly engage students in these deep, rich ways, they count as another medium that makes students critically think about history in a variety of ways.

If given the proper tools, students could even build their own games. Anthony Partington, the Director of Studies and teacher of year sevens and eights at Parkside Community College, claims that “There are massive links between videogames and literature; they’re both about language and they’re both about narratives” (Lambent Productions and 4pro, 2006).
Partington and his associates present software that their students use in order to create games that act as interactive narratives. Each level of these student created games is like a chapter of a book. The students are required to use their knowledge of narrative components, such as the climax and resolution, in order to structure their game stories. Further, students must consider text, structure, language, and a particular audience when constructing their games. The mechanics of their games have to fulfill the following criteria: the player’s ability to read and comprehend the game’s narrative, the player’s control and ability to input commands, and the context of the game narrative, i.e. what comes before and after the plot points of the narrative (Lambent Productions and 4pro, 2006).

This exercise, note the teachers in the study, is quite difficult, as it requires significant critical thinking skills: students must create textual markers in order to signify different narrative phases of the game’s overall text. Also, students learn to write and speak in character; their template or criteria are based upon pre-existing character archetypes. Ultimately, the students in this study are made to think about the consequences of player choices and how they impact the game world (Lambent Productions and 4pro, 2006). Pedagogical models like this could be easily applied to history classes, where students would recreate a historical narrative. Students could use different materials, like historical texts and artifacts, in order to create their own story based games that read and play like literary narratives.

ii. The Simulation as Educational Tool Concept

Marcello Simonetta was a major consultant for the story and setting of Assassin’s Creed 2. He explains, with respect to the virtually recreated Rome of the game, that “nothing else can give you the beauty of that kind of breathtaking perspective while walking on the rooftops[.] […]
I've been on Florentine rooftops – not jumping like [the game’s protagonist] – but I've seen them, and also in Rome and Venice” (Hsu, 2010). Simonetta is describing the virtual world of AC2, reconstructed as a simulation of Renaissance Rome in painstaking detail. Geographical areas in the game are modeled to exactly how they appear in reality.

When studying simulations, it is important to take into consideration what a simulation presents and copies. Louise Sauvé states that simulations are modeled on certain aspects of reality. She explains that “Reality is generally defined as an individual’s perception of a system, an event, a person, or an object; perceptions can differ from one individual to another, or have varied interpretations” (2010, p. 9). The virtual “reality described in a simulation represents one or more elements of a more complex real system” (2010, p. 9). A simulation’s validity or accuracy is measured by “the degree of uniformity and coherence of the specifications of the environment with respect to reality” (2010, p. 9). Even though a simulation is a simplified model of an aspect of reality, it “must be accurate because its essential function is to allow a better understanding of reality” (p. 9). Herein lies the theoretical purpose of simulation: to help an audience learn something about the real. Like art, the simulacrum demonstrates truth about the real thing that it is modeled after. Thus, a historical simulation is a recreation which aims to present an accurate model of certain historical systems, artifacts, events, or people. For example, Assassin’s Creed 2 aims at being an accurate simulation, insofar as its setting is an accurate representation – in effect recreation – of Renaissance Rome.

Jeremiah McCall, a high school history teacher who has integrated videogames into his classrooms, is an advocate for the use of simulation games, as they “can model complex real-world relationships and systems in ways that are nearly impossible for static words and images” (2011, p. 1). The interactive nature of games that I have been discussing throughout the chapter
allow for an interesting relationship between player and simulation game, namely, that the player
can to varying degrees control and shape the simulation. Dr. McCall explains that:

One of the assets of a historical simulation game in an educational setting is its potential
to serve as an explanatory model – a system-based explanation of how something in the
real world functions. Simulations provide a set of game systems that suggest, through
analogy, how systems function in the real world. (2011, p. 22-23)

Dr. McCall argues that the simplicity of simulated historical games works positively in a two-
fold way. The straightforwardness of these simulations allows students to grasp certain aspects
of historical civilizations in a clear way, like the economic systems of the Civilization games and
military systems of the Total War games. The simplicity of these games also allows for game-
based assignments like the creation of “character writings [which] is an exercise of historical
imagination that encourages students to go deeper into the thoughts and ideas of a person in the
game world” (McCall, 2011, p. 106). As explained before, these strategy games contain
characters who are purposefully generic, so that players can substitute the figures’ personalities
with their own. What this allows for, with respect to classroom assignments, is “Character
writing exercises [that] invite the student to expand on the limited information about the
character” such as “Letters, speeches, diary entries, treaties, virtually any type of written artifact
that is relevant to the in-game content” (p. 106).

Apart from these critical, creative writing exercises, Dr. McCall also suggest the use of
short research assignments, written essays, and critiques of simulation games. The Total War
and Civilization strategy series can give children plenty of material for undertaking such
assignments. The simulations are simplifications of real world systems, since the developers
also want to make the games entertaining, and not exclusively realistic (McCall, p. 14). As such,
these kinds of game assignments should focus on general or major aspects of the game’s construction and content, rather than on pinpointed details. Dr. McCall claims that “One of the history teacher’s tasks is to help students learn to distinguish between the essential and trivial aspects of a representation of the past” (p. 111). He gives the example that checking the authenticity of military unit names in a Total War game is a waste of time. Instead, “Far better questions are how different units functioned together in battle, how geography influenced the specific development of civilizations, or how trade functioned in a given time and place” (p. 112). In other words, Dr. McCall favours the critical thinking approach to history, which does not prize memorization as an end unto itself, but which emphasizes the importance of synthesizing and assessing the learned data in meaningful ways.

**Final Remarks**

In this chapter, I went over some critical thinking models which were used in my discussions with my three participants, including literary theory and simulation. Bearing in mind these frameworks allowed me to answer my research question in the fourth chapter of this essay. The three teachers’ views for the most part coincided with my own views on how narrative and simulation games incite critical thinking in students. In my paper’s next chapter, I will outline the research methodologies that I implemented in order to recruit my participants, and ultimately answer my research question.
Chapter 3: Research Methodology

Introduction to my Research Methods

This chapter presents my methodology of conducting my research. Before I explain my participant sampling and recruitment methods, I will ease us into the chapter by reviewing my general approaches, data analysis procedures, and data collection instruments. I shall also review the ethical considerations which were pertinent to my study. I will also identify a range of methodological limitations and strengths of my study. Finally, I will give my rationale of key methodological decisions in adherence to my research purpose and questions.

I. Research Approach and Procedures

The second chapter focused on my theoretical and conceptual frameworks and relevant literature and studies on gaming pedagogy. The qualitative study aspect of this paper involved semi-structured interviews with teachers, from which I gathered information based on their firsthand experiences of using videogames to teach.

This study’s qualitative component is important for a number of reasons. For one, this approach gives the credibility of primary, firsthand information, as opposed to solely relying on secondary research. Creswell explains that qualitative researchers gather “multiple forms of data, such as interviews, observations, and documents, rather than rely[ing] on a single data source” (2013, p. 45). This exploratory dimension requires more direct, personal interactions between researchers and their subjects and environments; this contrasts the more detached method of many research essays, which rely solely on textual sources.
Researchers of qualitative studies put themselves into “natural setting[s]” where they directly observe how “participants experience the issue or problem under study” (Creswell, p. 45). Qualitative research requires that the author “gather[s] up-close information by actually talking directly to people and seeing them behave and act within their context” (p. 45). The integration of researcher with subjects and environment may differ from the quantitative research method with its “obsession with numbers” (Nicholls, 2015, p. 3). Quantitative studies “can be misleading because the full picture is not revealed,” in mainly focusing on quantified, numeric data (Nicholls, 2015, p. 3). For a study like mine, a more personal, qualitative approach was required to study the topic of how teaching with games can impact child development.

II. Instruments of Data Collection

The instrument of data collection for my qualitative case study was the semi-structured interview protocol. The interview is “the most commonly-used data source” in qualitative research (Roulston, 2010, p. 199). In accordance to Daniel W. Turner III’s classifications of qualitative interviews, my interview structure most adhered to the “standardized open-ended interview” which is “extremely structured in terms of the wording of the questions” (2010, p. 756). Despite the premade protocol structure, which was designed to effectively answer my inquiries, “the questions [were] open-ended […] [which] allow[ed] the participants to contribute as much detailed information as they desire[d] and it also allow[ed] [me] to ask probing questions as a means of follow-up” (p. 756). I conducted my interview proceedings with “a bit of flexibility,” which allowed the interviewees to answer the questions as comfortably as they could (p. 755). My interviews shaped themselves organically, based on the different responses given by my three different participants. In fact, my first interviewee, Titus Pullo, added the diagram on the player-computer cycle, which I used for my proceeding interviews.
III. Participants

Some limited information on my participants is given below, while remaining within the parameter that the teachers must remain anonymous. The participants and I had the interviews over Skype, since all three reside outside Toronto.

i. Sampling Criteria

I recruited three high school teachers who use games so that I could answer my research question, “How do three high school History teachers implement videogames in the classroom in order to engage students in critical thinking?” As said above, finding these teachers was not easy. One of these teachers is from Canada and the other two reside in the United States. Based on my research, the use of videogames in education seems far less common in Canada than in the United States and the United Kingdom. The History teachers I interviewed were experienced in this form of education; they shared substantial information about gaming pedagogy, which is detailed in my findings chapter. Each teacher has his own method of implementing games: the first crafts games for his classes, the second judges the realism of historical simulators, and the third critiques commercial games using critical literacy. Creswell recommends that case studies ought to have “a maximum variation” of subjects in order to represent “diverse cases”; in this way, the researchers “fully describe multiple perspectives about the cases” they report on (p. 156). My participants shared significant varieties of teaching methods in each interview.

ii. Sampling Procedures/ Recruitment

Charles Teddlie and Fen Yu identify four general methods of sampling: Probability, Purposive, Convenience, and Mixed Methods sampling techniques (2007, p. 78). Probability sampling was not used in this study, as it adheres to quantitative research. I used a mixed
methods technique which incorporated purposive and convenience sampling (Eddlie and Yu, 2007). I implemented the purposive recruitment method to answer my “research study’s questions” (Eddlie and Yu, 2007, p. 77). I also implemented convenience sampling based on how “accessible and willing” the teachers were “to participate in [my] study”; this sampling method entailed the enlisting of volunteers who signed consent forms (p. 78).

I first attempted to use convenience sampling by asking my own community of teacher colleagues and mentors if they knew people relevant to my study, but none of them personally knew such teachers. Researching one’s own “backyard” is convenient, but it “eliminates many obstacles to collecting data, [and] researchers can jeopardize their jobs if they report unfavorable data or if participants disclose private information that might negatively influence the organization or workplace” (Creswell, p. 151). Since none of my acquaintances teach with games, these were not problems I encountered. My recruitment methodology counted as convenience sampling to the extent that my interviewees were willing and able to participate.

The purposive sampling technique was used by finding pertinent teachers through extensive online searching. I proceeded to email each teacher with an overview of my research study. We then conducted the interviews over Skype. I had to approach teachers who fit the necessary criteria, without being able to rely on my teaching network. In a sense, my purposive sampling somewhat relied on “captive samples,” but it was completely the choice of the teachers to participate in my study (Eddlie and Yu, p. 78).

iii. Participant Bios

Each participant was given a pseudonym because of the ethical rules of this study. The first teacher I interviewed, from Canada, uses his personally crafted games to teach his students;
I call him Titus Pullo. The second teacher I recruited, from the United States, has contributed important research to this particular topic, and is a leading expert in the field of historical games for educative purposes; he chose the name Jack Westcott. I named the final interviewee Ash Williams, who teaches in high school and college; he has also written literature in this field.

IV. Data Analysis

My qualitative study took the mixed methods research approach, but was limited to data collection through interviews; as such, it does not have the nuance of larger MMR studies. Many researchers of MMR cases “continuously reexamine the results from one strand of a study compared to the results from another, and make changes both in the design and data collection procedures accordingly” (Denzin and Lincoln, 2005, p. 293). Despite the limitations of the study, I used “a process of coding and condensing the codes, and finally represent[ed] the data in […] discussion” (Creswell, p. 180). The challenging process of coding the information from my interviews involved “[r]elating categories to analytic framework[s] in literature”; I contextualized the information within the literary frameworks mentioned in my second chapter, including critical literacy and multiliteracy (Creswell, p. 181).

Creswell states that the “processes of data collection, data analysis, and report writing are not distinct steps in the process” as they are “interrelated and often go on simultaneously in a research project” (p. 182). For my study, I relied on the quality of my research questions as a first step to determining the value of my research (Kosnik, 2015). The questions that I asked during the interviews were my preemptive interpretive tools of analysis. Throughout my data analysis, I kept “a focus on learning the meaning that the participants h[e]ld about the problem or issue,” rather than what I wanted to “bring to the research” (Creswell, p. 47). For example, a
couple of my participants hold stances that are contrary to some views that I established in my previous chapters, but I remained objective by presenting their opinions in the next chapter.

Once the interviews were fully transcribed, I underwent the arduous coding process to make the data “easily locatable” and meaningful (Creswell, p. 182). As I scanned through the transcripts, I created memos, “short phrases, ideas, or key concepts,” from the vast quantity of information (p. 183). The memos were synthesized into classified, coded themes, which “involve[d] aggregating the text […] into small categories of information” (p. 184). These categories or sub-themes were then put under main categories. The main themes – “broad units of information that consist of several codes aggregated to form a common idea” – were formed to represent the main ideas which persisted throughout all three interviews (p. 186). The culmination of these processes resulted in my interpretation of the data, which “beg[an] with the development of the codes, and then the organization of themes into larger units of abstraction to make sense of the data” (p. 187).

Though the beginning of the coding process was done through “hunches, insights and intuition,” I organized and re-categorized my codes extensively, in order to effectively answer my main research question, and to provide a holistic, objective account of my findings (p. 187). I began by using the InVivo coding method to create subcategories from “what the participant[s]” themselves stated (Saldana, 2009, p. 3). I then implemented both “Descriptive Code, which summarizes the primary topic of the excerpt,” and “Values Coding to capture and label subjective perspectives” of the interviewee (Saldana, p. 3,7). These codes were used to answer my research question in staying true to the information shared by my participants.
V. Ethical Review Procedures

I ensured the comfort and safety of my participants at all times. Collecting quality data and synthesizing substantial research was secondary to the ethical obligations for my interviewees. Creswell demands that a “researcher protects the anonymity of the informants, for example, by assigning numbers or aliases to individuals” (p. 174). My participants were made aware from the very outset of the study that their identities would remain hidden by the use of pseudonyms. They were also told that they could withdraw from the study whenever they wished, even during the interview. As Creswell suggests, in order “to gain support from participants, a qualitative researcher conveys to participants that they are participating in a study, explains the purpose of the study, and does not engage in deception about the nature of the study” (p. 174). Before the interviews were conducted, my study’s aim was made transparent to my subjects; I also explained to my participants that their contributions would benefit them. I made clear to the teachers that the interviews were chances for them to reflect upon their own practices, to hear my own experiences and thoughts on gaming for History classes, and to contribute to the field of research which corresponds to their pedagogical methods.

My interviewees first read “an informed consent form” which explained “that participating in the study [was] voluntary” and that it would “not place the participants at undue risk” (Creswell, p. 57). This consent letter – found in Appendix A – explains that the participant gave his consent to doing the interview and having it recorded. This consent letter provided an overview of the study, addressed ethical implications, and specified expectations of participating in the interview which lasted approximately 45-60 minutes.
Provisions were not needed because the study did not involve sensitive issues or risks to the participants (Creswell, p. 57). There were no dangers of questions triggering negative emotional responses, for example. I also sent my interview questions to my participants before the interviews because of the complexity of some of the questions, so that they could potentially formulate ideas beforehand. I sent my questions only a day before each interview to avoid the possibility of my participants being distracted by prepared answers (Kosnik, 2015). I also told my participants that they could have access to the transcripts of their interview, and one of them received it from me.

Lastly, I notified my participants that all recorded data – the audio copies and transcripts – are stored only on my home PC which is password protected. The transcripts and audio recordings will be destroyed in maximum five years after the interviews are conducted.

VI. Methodological Limitations and Strengths

My MTRP’s purposeful sampling only drew information from interviews and secondary documents, including articles, books, and videos (Creswell). The study did not use direct observation, which details “the history of the case, the chronology of events, or a day-by-day rendering of the activities of the case” (Creswell, 101). I could only rely on the information of three teachers, without being able to observe their students engaging with videogames. The careful, methodical work of day-by-day observation could not be applied to this study. Documenting the accounts of only three teachers also limited the study’s scope to these three perspectives, in addition to my own.

Creswell presents the typologies of “the single instrumental case study, the collective or multiple case study, and the intrinsic case study” (101). I conducted a “collective case study (or
multiple case study)” in having distinct participants (101). If given the choice, I may have conducted a “one bounded case” consisting in the observation of videogame implementation in a classroom (Creswell, 101). Also, “an intrinsic case study” could have allowed me to focus on one pedagogical model in an in-depth, firsthand manner (100). However, this would have limited my study’s scope to one example, as opposed to the three varying accounts. In fact, I originally planned on recruiting only two participants, but expanded it to three so as to incorporate as much variety as possible.

The interview method allowed me to “develop rapport with the participants,” through “relaxed and informal” conversations (Turner III, p. 755). The interviewees shared personal information related to the study in an open manner, despite the brevity of the interviews. As such, my interviewees’ “lived experiences” profoundly “inform[ed] my understandings” of this pedagogical field (Roulston, 2010, p. 203).

Though the gathered information was limited to the testimonies of my participants, they were very reliable and not privy to “incomplete knowledge and faulty memory” (Walford, 2007, p. 147). Generally speaking, interviewees might “only give what they are prepared to reveal about their subjective perceptions of events and opinions. These perceptions and opinions will change over time, and according to circumstance” (Walford, 2007, p. 147). This was not the case with any of my interviewees, who were knowledgeable and objective; they were respectful of some of my opinions that were contrary to their own.

**Conclusion: Brief Overview and What Comes Next**

In this chapter, I explained my methods for recruiting my participants, and the techniques for conducting the interviews and extracting data from the transcripts. My participants were very
knowledgeable and objective, two of them authors in the field of pedagogical gaming. Due to the difficulty of locating relevant teachers for the study, I was unable to solely rely on Convenience Sampling. I used Purposive and Captive Sampling to some degree to reach out to teachers whom I did not know beforehand.

My highest priority during the study was the comfort and safety of my participants, even though I wanted to conduct the best research possible. The teachers did not feel obliged to participate but did so completely of their volition. Pertinent data related to my research paper was sent to the teachers before the interviews, including the consent letter which they signed. Given the limitations of this study, I was very pleased with the interviews’ outcomes. In the next chapter, I report my research findings using the methodologies outlined in this chapter.
Chapter 4: Findings

Introduction to the Study’s Results

The interview participants provided extensive, sophisticated information for answering my research question: “How do three History teachers implement videogames in the classroom in order to engage students in critical thinking?” Many of my participants’ statements directly matched or implicitly adhered to critical, literary, and philosophical frameworks discussed in Chapter 2. Each interviewee also presented his understandings on theory that differed from my own views. Further, the teachers provided new conceptual frameworks on the pedagogy of gaming not found in the Literature Review sources. Since I could not use the real names of my participants, I assigned the following pseudonyms to my interviewees: for the first interview, Titus Pullo, the second, Jack Westcott, and the third, Ash Williams.

This findings chapter is organized into main theme and subtheme headings, based on the relevant categories of information gathered from my wonderful interviewees. The overarching subject of this chapter – of this paper – is how games engage students in critical thinking; I have also made critical thinking one of the separate themes of this section. Regardless, the different themes are highly unified. The main themes are agency, critical thinking, literary theory, simulation, and challenges/problems. Critical thinking, for example, relates to the theme of agency, because, as my interview participants and I discussed, people cannot be thoughtfully engaged in activities that do not require critical decision making or assessment. Similarly, the issue of critical thinking is connected to the free will of engaging with complex, challenging activities. To give a final example of the intersectionality of these themes, the issue of pedagogical challenges can relate to games potentially giving too much agency to students, or in other cases games presenting the illusion of free will while actually determining player actions.
I. Agency

Player agency is a theme which is prevalent in this paper for a number of reasons. Critics may argue that games take away or limit the agency of players by constantly bombarding them with stimuli and control factors. My participants and I respond that while this is true for many games that are designed to be addictive, player engagement and choice are fostered by certain games, which can be used for learning. Addressing the philosophical concept of agency can help us determine whether a game offers free choice versus the illusion of agency. The theme of choice is tied to my thesis of games engaging students in critical thinking, since deep thinking requires the ability to metacognitively reflect, in a free and unhindered way, about the materials or texts one engages with. This is why in both Chapter 2, and here in Chapter 4, I attack Brendan Keogh’s (2014) cybernetic symbiosis argument with respect to the determinism of playing videogames. If Keogh was right about his model fitting all games, I would not be advocating their implementation in the classroom, since they would not provide the rich cognitive opportunities that my participants and I believe they give players. Even games that do not provide players agency can give students the opportunity to critically reflect about them, as my third interview participant argued.

i. Choice

I have differentiated choice from engagement even though the two closely coincide. Choice refers to the different options that games give players when they play a scenario or simulation. The ability to make choices, or to at least enact decisions in games, gives students the ability to be more active rather than passive recipients of information.
The first high school teacher I interviewed, Titus Pullo, holds that through agency, students are able to understand key moments in history. Through choice, Titus claims, students think about history in the most active and self-reflexive manner. This teaching methodology challenges older pedagogical history models still implemented in high schools and universities; the discipline of history has stereotypically required only the memorization of facts. But even history teachers who favour critical thinking models, like some of my associate teachers, do not use electronic games to teach because videogames are not an interest of theirs, or because the task of incorporating robust games is too daunting.

Titus, a Canadian teacher who implements games, encourages his students to make decisions in historical scenarios. Student choice allows for many possibilities not even he can anticipate. Titus claimed that “the openness of games has a potential to fit in really nicely with the focus on the learner, because it forces the educator to respond to the student and where they’re at in the decisions they’re making.” This teacher believes that the freedom to make critical decisions is not only student-centered, but also necessary for the teacher’s adaptability within the classroom community, something I had not considered before in my student-centered approach to this study.

Mr. Pullo’s method is also unique because he designs his own videogames for his classes. He feels many commercial games, with the exception of certain open world games, do not offer the choices that his games do, contrary to Sanford’s and Kurki’s claim that some commercial games, like Mass Effect, offer significant moral choices to the player. Titus believes that a game must engage people in deep thinking by offering complex choices. There are certain intricate games that have simulated systems, like weather, which have nothing to do with players’ critical decision making. One of the games this teacher has created is a simulation of the Battle of
Salamis. His students are not provided with the historical outcomes of the encounter; they are given information on key moments in the battle so that they may come up with plausible decisions that the Greek and Persian armies may have made. After the students make thought-out choices, they are given descriptions of what took place in the battle. They compare their answers and assess why certain outcomes differ and coincide with the historical events.

Jack Westcott, a prominent writer and teacher in the field of History, from the United States, also favours the approach of using games to promote student choice. Jack, unlike Titus, uses commercial games in his classroom, like Civilization and Total War, which I mentioned in my Literature Review. Dr. Westcott views historical games mainly as simulations, or models of real world systems which are assessed by students, as Jeremiah McCall (2011) describes them. Dr. Westcott’s students study the kinds of choices that games offer in order to determine their historical accuracy. Students become highly engaged in this process as they are allowed a variety of options within the parameters of the game models. Students have the agency to participate in higher cognitive abilities like teaching each other how these games work.

According to Jack, making decisions in games can allow players to think about the agency of people in the past and by extension the decision making in their own lives. Dr. Westcott maintains that the agency offered by historical simulators like Civilization makes the player ponder questions like, “where in human societies, if anywhere, does the level of decision making rest?” How does power apply in a political, social, religious, and philosophical way, and what methods does a game use to simulate these aspects?

Jack claimed that Brendan Keogh’s deterministic model of gaming is limited because it does not address brain activity. The inputs and outputs of a game may be affecting the human
brain, but it does not necessarily rob agency and will. Titus Pullo had a similar line of reasoning to Jack Westcott, when he wrote to me, “to impact choices and actions isn’t the same thing as to determine choices and actions.” Both teachers believe that when a game takes away the ability to make choices, it also removes the richness of the learning experience. Educators, according to both thinkers, are responsible for stopping activities that rob agency.

Ash Williams, the third teacher I interviewed, also from the United States and, like Jack, a writer on the subject of educational gaming, believes that people need to critically reflect on the lack of freedom in videogames. Ash takes a different approach to studying games from the other two teachers, because he views games through the theoretical lens of procedural rhetoric. Ian Bogost defines procedural rhetorical as “the practice of authoring arguments through processes [which] […] entails persuasion—to change opinion or action” (2008, p. 125). More specifically, procedural rhetoric’s “arguments are made not through the construction of words or images, but through the authorship of rules of behavior, the construction of dynamic models. In computation, those rules are authored in code, through the practice of programming” (2008, p. 125). The procedural rhetoric in simulations or games – “processes that invoke interpretations of processes in the material world” – persuade us into making decisions (Bogost, 2007, p. 5). Unlike other forms of rhetoric, like linguistic or visual communication, procedural rhetoric’s “computational procedurality places a greater emphasis on the expressive capacity afforded by rules of execution” (Bogost, 2007, p. 5).

Ash’s students study the extent to which game mechanics, including their procedural rhetoric, authentically replicated real world systems. The study of a game’s procedural rhetoric can be likened to the assessment of a piece’s formalistic properties, as described in my second chapter. A text’s structure can shape its content to form meaning, the way game mechanics
influence narrative content, in addition to how players make decisions based on these conventions. Mr. Williams claimed that the understandings gained in studying such mechanics cannot be found in other mediums because of the interactivity of playing a game. With the procedural rhetoric lens, Ash’s students can make responsible decisions regarding the games and other media they consume. For example, Ash has taught with a game that allows his students to reflect about their agency, or the lack of it, as they assume the role of a communist border guard who spots fraudulent passports. Ash said that when students are able to critically engage in the processes required in playing such a game, they are taught “about how banal evil can be.”

Ash, like Titus, thinks that many technically sophisticated games provide players with complex sets of rules and not actual choices. Also, there are games that give players some choice, Ash claimed, but they try to control player decisions by making one option more appealing than the other. For Mr. Williams, free choice while playing most games occurs from a critical understanding of one’s lack of freedom. Upon realising this fundamental truth, one may begin to think independently, outside the ideas or behaviours that a game is trying to advance through its procedural rhetoric.

Ash’s criticisms on the lack of game agency do not apply to all games, however. He believes that as games’ mechanics evolve so too does the complexity of the choices that they offer. Like Mr. Pullo, Mr. Williams thinks that more open world games, like *Minecraft* (2011), give perfect agency because there are no significant restrictions or rules imposed upon players.

### ii. Engagement

Ash Williams holds that the more one is aware of their agency, the more engaged they can become. Ash runs a club which allows players of *Minecraft* to work together on different
projects of their own choosing. Titus Pullo’s implementation of videogames has also created more engagement in his classrooms, since students are allowed to pick civilizations that they want to study. Titus observes that student engagement is heightened from the possibilities of having choice. Titus also thinks that students become more engaged with more current, up to date resources compared to more traditional sources. Like Jack Westcott, Mr. Pullo also finds a joy in activities that allow for collaboration, which cause all students to be engaged. As all three teachers agree, the point of implementing games is not to entertain students, but to engage them in learning, as Kurt Squire argues.

Jack Westcott, who touched on some of Squire’s ideas during the interview, also explained that the playing of a game – the very act – is an engaging and critical thinking experience, as Squire believes. The higher level thinking that results from playing sophisticated games entails greater engagement. The thought processes of Jack’s students, as they teach each other historical material and how to play the historical games, also display high levels of engagement and collaboration not always instigated by other mediums. Games can foster students’ historical imaginations, Jack argued, that allow students to care about history. When history comes alive for them, like in Total War’s enacted battles, it is evidence of strong engagement through the agency that the simulator provides. Dr. Westcott’s students often ask him questions about the material found in certain games: a student, for example, wanted to know about the accuracy of aristocratic family portrayals in Rome Total War.

iii. Matching Multiple Intelligences and Learning Styles Through D.I. and U.D.L.

This brief section is more an offshoot of the previous engagement subtheme, but I differentiate it here by explaining how engagement can be achieved for a variety of students.
For all three teachers, especially Titus Pullo, a game is a form of Universal Design for Learning because it gives his students the option of engaging with different kinds of learning strengths (van Garderen and Whittaker, 2006). While games may tend to appeal to visual learners, given that most of the sensory data is presented visually, they also adhere to digital, reading and writing, and logical learners, who find strategy games like *Civilization* or *Total War* highly appealing. There are even spatial and kinesthetic aspects of games which make players think hard about the map terrain, weather, distance between characters, and more. Ash Williams is not a teacher who often thinks within the multiple intelligences framework, but he believes that games touch upon various learning styles which engage different students.

In contrast, the heart of Jack Westcott’s philosophy of teaching incorporates UDL and Differentiated Instruction. Even when Dr. Westcott’s students are not playing games, they engage in group discussions and individual writing assignments about games. To varying degrees, all three teachers instruct with games to appeal to the multiple intelligences of all students, including kinesthetic learners (van Garderen and Whittaker, 2006).

**II. Critical Thinking**

All three teachers strongly maintain the position that games are excellent tools for fostering critical thinking. Critical thinking, as defined in my Literature Review, is higher order cognition which requires not only an understanding of the subject and piece being studied, but also one’s own metacognitive awareness of oneself in relation to the piece. The concept of agency and free choice is something that coincides with critical thinking processes, since deep thinking is fostered by choice, and likewise, free choice results from critical thinking.
i. Higher Order, Self-reflexive Analysis

Titus Pullo and Jack Westcott explained that when students are actively doing an activity like playing a game, they will remember certain pieces of information very effectively. Engagement with games helps students retain information more easily than students who try to memorize through rote memory, for example, or students that are passive recipients of exclusively lecture styled lessons.

More importantly, games are excellent critical thinking tools because of the engagement and agency they give players. In certain ways, games can engage players more so than other mediums. One of the reasons this may be so, says Titus, is because useful games reward players for deep thinking. For example, in a strategy game, the player who outthinks her or his opponent wins the game. This adheres more to critical thinking as problem solving, which I touch more upon in my next section. But for Titus, a simulation game can engage children in analytical thinking that comes with living, enacting, or simulating history through critical decision making. For Mr. Pullo, a game must give players the agency to engage in thinking, which is often done through choice.

For Jack Westcott, the videogame is another critical thinking tool among a host of other good resources. Jack thinks that a deep historical understanding is necessary not only to create simulations, but also to comprehend their mechanics as a player. A person with a solid historical understanding and foundation can approach a game critically. Through what Ash calls the processes of procedural rhetoric, Jack’s students are able to poke at the simulation models offered by games. The critical assessment of games instills conversations and thinking which can be different and in certain respects deeper than the study of other mediums. Jack told me,
“[O]ften times games will inspire questions in [my students] that they did not otherwise have,” and that games allow an approach or “idea of historical criticism, like criticizing somebody's view of the past.” These insights, on the effectiveness of games to instill critical thinking, were not mentioned in quite the same ways in the sources of my Literature Review. Gathering information found in secondary sources was useful, but speaking to these passionate and experienced teachers allowed me to gain new, crucial insights on gaming pedagogy.

Jack also told me that sophisticated games can contain a lot of critical, historical information. But more importantly, his students must metacognitively think about their critical engagement with the medium. Playing and reflecting on games allows students to engage in evidence based inquiry so as to come up with historical arguments and conclusions. Dr. Westcott explained that his students each have to come up with three questions about real world history from playing a game. Another example of a critical thinking activity that Jack does with his students is, after they read historical sources, they try to locate how many historical concepts they can find in games like Civilization. To bring back the discussion of procedural rhetoric, Jack explained that Civilization’s game mechanics are analysed by students to determine which hinder and which help players achieve their goals. Students judge the authenticity of game mechanics involving the achievement of victory conditions, so as to critique whether or not such choices make sense historically.

Jack wishes his students to have an engagement with the games they play, but also an intellectual distance. He wants students to think about their current, contemporary position in the world in relation to the historical spaces and contexts which are imagined in different sources, including games. Jack requests that his students view games critically, like all other sources of information. He and I maintain that one must have a deep understanding of evidence based
analysis in order to judge the legitimacy and soundness of sources. Jack’s classroom is a space for inquiry; his pupils sometimes conclude that certain games trivialize important historical concepts and ideas. These metacognitive, critical thinking activities are precisely why Dr. Westcott agrees that the Keogh model is limited, not only because it is devoid of agency, but because it neglects the important self-reflexive processing that happens in a person’s mind.

Ash Williams presents games to his students in a critical way as well. Like Jack, Ash wants to make gaming responsible for youth by criticizing games like textbook sources. As stated under the theme of agency, Ash makes his students question the lack of choice found in many games, which allows students to have the free will and critical understanding to judge the mass media they consume. Thus, studying games can develop cognitive processes of deconstruction and analysis for pop culture pieces and other resources. Ash’s approach to criticizing games, which I will also touch upon in the literary theory theme, is quite profound and unlike the approach of many authors cited in Chapter 2. He applies a critical literacy lens, as defined in my Literature Review, with which he criticizes many games.

Ash’s implementation of games isn’t only about negatively judging them. He believes that certain games have authentic game mechanics which are realistic. Such mechanics, like in a game of Roman Monopoly, can allow students to deeply understand historical information on Roman status, economics, and politics. Further, the games that Mr. Williams and his class are critical of are reimagined in ways that would improve them, like altering narrative elements or game mechanics in order to give players agency, as one example. Lastly, Ash believes that games can also improve skills like linguistic abilities. As I explain in Chapter 2, Gumulak and Webber demonstrate the benefits of games on puzzle solving and hand-eye coordination skills.
ii. Problem Solving

Problem solving can be synonymous to, or an offshoot of, critical thinking. Problem solving refers to the engagement necessary to understand and master a game’s rules, like comprehending chess rules in order to be a good chess player. Problem solving in this context can involve the engagement with the procedural rhetoric of a game in order to fulfill its goals. I made the argument of games fostering good critical thinking through problem solving activities in Chapter 2, but this aspect, though extant in the three teachers’ pedagogical models, is not a prominent feature of their teaching methodologies.

Ash Williams does not use games to show his students how to strategically think using historical battle tactics, for example. He implements games like Roman Monopoly, though, to demonstrate for his students a fair analogy of how Roman citizens could rise to the elite class. The games that Titus Pullo creates for his classes incite critical self-reflexivity and problem solving. This problem solving differs from a game like chess or Total War, where strategizing is responsive to opponent actions. Mr. Pullo’s game models are unusual ways of implementing strategic and critical thinking; some of his games allow for significant verbal collaboration between students who try to solve problems of strategic decision making, which is not found in many games.

Jack Westcott starts his critical inquiries of games by looking at the virtual environment or milieu of a game as a “problem space.” Jeremiah McCall, who I have discussed in my Literature Review, is a high school teacher who uses simulators like Civilization and Total War to engage youth in critical thinking. Dr. McCall describes problem spaces as virtual settings that allow “Player/agents [to] have choices and strategies” in order to fulfill “motives and goals” for
solving the game’s objective (2012). Such problem spaces serve as the platform for problem solving exercises and other critical thinking engagements. Dr. Westcott claims, interestingly, that the objectives of the game are not always clear, and part of the problem solving that players have to engage in involves figuring out what the objectives of the problem space are. This is where critical reflection outside of only fulfilling the game parameters start to happen for thoughtful gamers. Dr. Westcott explains that when his students “start to do what I want them to do which is think about how and why things in the past happened the way they did, and how do we know,” they begin to critically assess the problem space in relation to other historical sources. Students move beyond the procedural rhetoric of the game in order to evaluate the legitimacy of its value as a text and simulator.

III. Literary Theory

As explained in my first two chapters, I have narrowed the scope of the category of games that I am studying into interactive or playable narratives, in addition to simulation games. Many games incorporate both categories, often one genre more prominently than the other. For example, the Total War games focus more on battle simulation and historical context, rather than on delivering a clear story: this kind of game, I described in the second chapter, has implicit storytelling. Other historical games, like Assassin’s Creed, focus on the details of simulating real historical environments and spaces, but it is a much more narratively focused franchise than the TW or Civilization games. Here I will focus more on the narrative, or textual aspects of games, through the broad scope of literary theory, as discussed in the Literature Review.
i. Game Narratives (Implicit Versus Explicit)

All three teachers believe that many games have narrative properties similar to genres like books or films, but they also hold that game narratives are different precisely because they are interactive. Jack Westcott and I talked about the difference between games like Assassin’s Creed and Total War with respect to the more explicit versus implicit style of storytelling. The storytelling or narrative style of a game can be highly dependent on its gameplay mechanics, and the same is true of the reverse. As stated in Chapter 2, AC gives players the avatar of an assassin to play as – a developed character who is part of the game’s narrative, who directly interacts with other characters. This clear narrative and character can be restrictive to player agency, however, because the gamer does not have options that impact the premade story and character development. Being an agent in a battle simulator with an implicit narrative, like a TW game, on the other hand, gives the player the “non-presence” discussed in Chapter 2, which puts the gamer in a strange, almost limbo-like state of being absent and present within the narrative. As Jeremiah McCall describes, the assumed identity of players in such games is purposefully left vague, and there is no avatar that represents the player’s presence within the game’s world or problem space, like the assassins in AC. This vague designation of the player’s character is liberating because it allows the gamer to essentially play as him or herself within the historical context. It is as if the freedom of not being a particular character in the game, but being oneself, is reflected in the mechanics of strategy-simulators like the TW games.

Titus Pullo and I discussed the unique narrative properties of certain games which, unlike most media, require that the player puts chunks of the story together cohesively, in the proper order. Mr. Pullo explained that such activities allow players to understand narrative in a deeper manner compared to only reading narratives. The interactive quality of piecing together
narrative relates back to the important issues of engaged agency, which allows students to think about history in a very insightful way. Also, unlike more traditional texts, human interaction, interpretation, and agency can at times shape the text of a game. As Steinkuehler (2010) claims, the narrative, textual qualities of games are unlike other mediums, because player choice affects the unfolding of the story. If we recall the example of Titus’ simulation game of the Battle of Salamis, his students make decisions that affect the narrative of the battle they construct. This example coincides with the work of Partington and his associates at Parkside Community College (2006), who give their students programs with which they create interactive narratives.

One may argue that what Mr. Pullo’s pupils engage in is fanciful, creative storytelling that has nothing to do with the realities of history. To respond to such an argument, firstly, history itself consists in constructed stories or narratives. Secondly, the “inaccurate” version of history that the students come up with will help them not only remember the “true” historical events in a more effective manner, but it will also allow them understand why and how the agents in a historical context made the choices that they did. Students are able to judge their own narratives – of what they would have done in the same context – against the story of what may have actually happened. In this way, the students gain a richer meaning of the historical narrative, as they are able to situate themselves both outside and inside the historical context. Titus’ impressive methodology on using games for metacognitive activities differs, to some extent, from other sources in ways that I had not anticipated.

ii. Multiliteracy – the Game as Text

If games are narratives, only in a non-traditional medium, they are texts. Titus Pullo believes that different textual forms are as legitimate as any other. For Titus, it is the uniquely
malleable, textual properties of games that allow for the agency of the player to flourish, which leads into other positive developments for students, like engagement and critical thinking.

Unlike Titus and Ash, Jack is highly cautious about ascribing the term “text” to games. This is because he follows research that shows the authoritative views that students have of texts like textbooks. Like Titus, Ash, and myself, Jack believes that games should be criticized for their legitimacy as reliable sources of “truth” or historical accuracy, but again, Jack avoids calling games “texts” because of the wrong ideas his students may get by designating games as such. Like the other teachers, Jack maintains that traditional texts do not give the agency of game narratives, which allow people to put themselves in positions of a character, time, and place.

Ash Williams, on the other hand, strongly pushes the position that games are texts, and that they should be considered as cultural products. This is why he does not shy away from bringing them into the classroom, whereas other educators, he rightfully claims, ignore the importance of acknowledging games as legitimate cultural pieces. To reiterate, Ash believes that procedural rhetoric gives games a unique literary property unlike other media. One can, for example, think about how games like Grand Theft Auto V (2013) give players the agency to enact hard satirical scenarios rather than to only read or observe the genre of satire. Many would find the violent GTAV game too graphic and controversial to discuss within the context of the classroom, but Ash holds that “I would rather [my students] make responsible historical decisions about what they are consuming, rather than ignore it.” Understanding the procedural rhetoric and “authentic game mechanics,” whose fulfillment can mimic something real, is crucial for students’ assessment of the cultural products they consume. Such self-reflexivity, Ash maintains, cannot be reproduced in other textual mediums. Thus, like the other teachers, Mr. Williams feels obliged to deal with the issue of treating games as authoritative texts. By
studying the textual nature of games, youth can make responsible decisions about what they consume, as opposed to them remaining uninformed and uncritical of what they are exposed to.

iii. Critical Literacy

The lens of critical literacy, as described in my Literature Review, allows for the critical assessment of text. Titus Pullo believes that the construction and reconstruction of game narrative can engage students in critical literacy. Since Jack Westcott challenges the authority of any source he uses, he also concurred that games can be studied through a critical literacy lens. Both he and the other teachers challenge what certain students see as the authoritative information of certain historical games. Dr. Westcott makes students aware of their own preconceptions and the biases presented in certain games, in order to push the children away from accepting presented information as “fact”. Jack uses games to “approach this idea of historical criticism, like criticizing somebody's view of the past” in order to make his students inquirers that ask important questions. Though he is a strong advocate for the uses of games for historical inquiry, Jack believes that all representations of history are somehow simplifications, and his ultimate aim is to have students realise this important skeptical view. When students begin to spot the simplifications of real world systems presented in games, they start to question and shift their views on the legitimacy and authority of all sources.

As stated above, Ash Williams studies the textual nature of games in challenging the authority and information present in different textual sources. Ash believes that students must deconstruct texts, especially realistic games, in order to address issues of violence in media, rather than ignore such problems because they are supposedly only found in games. Ash is so critical of games which appear to be positive models that nurture thinking, that he even
challenges some of the *Total War* games. Ash claims that such games may appear to give the player a lot of free choice, but they might also have a preoccupation with promoting a fetishization of militarism, which is shared among many History teachers. Thus, such games that have painstaking historical details on the surface may not, at their core, be proper reflections of history. I am glad that Ash brought this point up during our talk, because this is another insight that I had not considered with respect to these strategy games.

Ash and I further discussed the assessment of videogame violence through a critical literacy lens. We talked about how *Assassin’s Creed*’s main theme is murder, but it is sugar coated in the trappings of realistic historical simulation. Ash does not want to ignore discussions about these issues because, he claimed, it is far easier to be critical of texts today than it was many years ago. Children should be encouraged to criticize games like *AC* in order to see how lacking these products are in historical depth, because some students treat these games as legitimate historical representations. Titus was also skeptical about using a game like *AC* as a historical source because of the fantasy elements contained in the narrative that stray from telling a good, historically themed story; he suggested that the games would be far better if they only involved walking through the cities that are recreated in meticulously accurate detail.

I explained to Ash the point made by Zach Gage (2014), mentioned in Chapter 1, about how an *Assassin’s Creed* rip-off set in Middle Earth called *Shadow of Mordor* teaches its players how to kill orcs; the mechanic for murdering is first practiced by having the protagonist kiss his wife. This is another instance, Ash agreed, where procedural rhetoric must be properly assessed and discussed in a classroom setting, since many children play these games without reflecting on them. Such a criticism, about a mechanic which needs to be enacted by gamers, cannot exist in other media like films. Observing a violent narrative is less impactful than having the audience
enact simulated violence by playing a game, which is why Ash has such critical literacy discussions with his students. The issue of physical violence is one of many that Ash discusses with his students, amongst others including implicit racism in Role Playing Games that give players options to choose from different “races”, some with more strength and less intelligence, and vice versa. I greatly appreciated Ash’s critical stance, because it is perhaps the most in-depth implementation of critical literacy with regard to games that I encountered, as his views are very objective. He neither completely condemns nor absolutely praises most games – he is critical of many of them, but still uses them to instill critical thinking in his classrooms.

IV. Simulation

As explained above, a historical game can be perceived as more than a narrative; history games are special because they tend to simulate something real, something authentic. Even if such games are highly stylized or veer off from historical accounts, they are still considered historical by simulating something of the past, at the very least in a counterfactual way. All games, in a manner, simulate something real: chess simulates war tactics in a simplified manner, and fantasy videogames simulate our world to some extent, but in exaggerated fashions. The historical game genre is unique because it attempts to remain true to the realities that it simulates.

i. Realism and Accuracy

Mr. Titus Pullo explained that the more realistic the simulation, the more “reality” it creates for the player. Mr. Ash Williams finds certain detailed simulations that students can create in Minecraft, like an intricate model of the Parthenon, are positive, critical learning experiences. But an “accurate” game does not need to have complex visuals as in highly budgeted commercial games. Titus’ games are in many ways more accurate than popular games
because of their authentic game mechanics, and because of their ability to engage youth in analytical thinking. Mr. Pullo claimed that the narrative aspects of games, like his historical imagining games, are simulations, which is something I had not considered before. I had always maintained that games could have both narrative and simulation elements, but not that a narrative could be a simulation, or that a simulation could be a narrative, as two interchangeable things.

Dr. Jack Westcott’s experience of teaching and writing in the field of educational gaming has included the creation of his own simulations as well. However, Jack’s position on commercial games differs from Titus’: Jack thinks that games like Civilization III (2001) are good simulators because they contain accurate historical information and systems in regard to governance and military strategy. As previously mentioned, Jack has his students determine whether or not a game is historically accurate or authentic by playing it. Again, Jack does not want to view games as texts, but as historical problem space simulations, or models of historical causation, that can be tinkered with in order to increase one’s critical understanding of history. For example, students’ analyses of Civilization’s mechanics can allow them to see how elements of the game hinder and help them achieve the goals of the problem space. Another example of a critical question given by Dr. Westcott, is how well do a Roman-themed game’s mechanics fit with the history of senatorial behaviour in Ancient Rome? For Jack, the possibilities of studying the accuracy and realism of simulators are a never ending endeavour.

**ii. Reliving History and Making it Come Alive**

Titus Pullo explained to me that the realism and accuracy of games makes them “come alive” for children. Games can present a multitude of authentic game mechanics in order to produce genuine critical tasks. Many students become mentally alert, Titus explains, and think,
“This is a real problem! How do I deal with this?” If a simulation does its job properly, it can make history relevant because it seems real to students engaged with the material.

Jack Westcott believes that simulations, by design, are always limited in some way, a fact that I discussed in the second chapter. Though, Jack claims, this does not prevent simulations from feeling authentic, and from bringing history to life for students. A simulation, Jack and I believe, is not the thing that it represents, which is why it differs and is lacking compared to the real thing it emulates. The important aspect of the simulation is that it allows decision making when engaging in historical imagination; and in this way, students may care about the history that they study. Jack’s focus is not so much on interactive narratives, but on simulations that offer options that other texts cannot, in giving people the agency to make decisions.

Ash Williams has a very critical stance towards games that I have gone over above, but despite this, he believes that the unique, authentic game mechanics of select games can bring history to life for students, if a game’s procedural rhetoric allows for true agency. A game like Roman Monopoly, for example, allows students to understand the workings of the Roman regime and helps them see the similarities and differences to our own civilization, which has the potential to make history something relevant for students.

V. Pedagogical Challenges and Problems

The problems of implementing games in the classroom is not a section that I addressed in my Literature Review, but I thought it was important to ask these experienced teachers their thoughts on this very practical topic. In this final section, I will review some limitations of using games in the classroom – real and potential – and I will explore ways in which these teachers continue to cope and overcome some of these problems.
i. Technological Issues

Titus Pullo explained that while using games has the wonderful benefits listed throughout this chapter, the need to be technologically prepared for games is both a strength and a weakness of implementing them in classes. Games require technological setup before class, which can be time consuming. Additionally, creating games takes Titus a long time, which is difficult for a teacher who must implement many other activities and assignments from the History curriculum.

For Jack Westcott, technology can be a great gateway into using rich media sources, but he admits that he teaches in an unusually technologically rich school where students are given tablets to work with. In other words, his school is not the norm in being so technologically provided for. Jack also stated that he is constantly trying to find ways to revise his use of technology so that his resources flow together, the one from the other. He feels that the transition from one medium to another, like book to game, can be a bit choppy. Jack works on ways to make such transitions smoother, to increase the ease of access for varieties of sources.

Finally, Ash Williams said that many teachers are technologically restricted from using games. I told him about my practicum experiences, and just how limited some of the schools in Ontario are. He was not surprised to discover these conditions are common, because the conditions are very similar in the United States. Also, Ash believes that technology should not be implemented only for the sake of using new mediums: technology should be used for rich learning opportunities. Interestingly, Ash believes that many educational games do not instill critical thinking opportunities, which is why he uses commercial games for his classes.
ii. Resistance From Parents, Boards, and Students

What I found very surprising about all three teachers’ experiences is that not a single one of them has had any significant difficulty or resistance from other people in implementing games into their curriculum. Parents have not complained to any of these teachers about the subject matter. In fact, reactions have been positive from parents and colleagues who appreciate the engagement that these teachers have nurtured in their students by using games.

There are still problems that Titus thinks could potentially arise, like the fact that many people judge games as mindless endeavours, or that many parents think that only older forms of pedagogy are legitimate. Titus thinks these biases must be overcome by pushing forth the position that games are better in certain ways than other learning tools. There are also difficulties of using certain games successfully in classes, says Titus, due to the uninhibited freedom they give students; sometimes games give too much freedom and take the class and curriculum in directions the teacher does not want them to go in. In addition, there is a practical limitation of having to split the technological and narrative aspects of games between classes.

Jack Westcott stated that teachers have to put a lot of time into finding good supporting resources in order to implement games. In addition, it is very difficult for students to get the time to talk about and reflect on the games they play, which is a crucial part to their critical development. There is also the practical limitation of Jack needing to teach the game mechanics so that students can effectively play the games. Dr. Westcott also explained that some students have negative biases towards games, which prevents these children from enjoying them. On the other end of the spectrum, there are many boys who are too positively predisposed to enjoying games without critically thinking about them. Jack wants to overcome the gender bias that only
boys are gamers, and the stereotype that some teachers use games just because they are “fun”. But Jack has had students and parents realize that, even if a game is a poor model of historical information, his students have learned about history by confirming the game is not an effective example of certain historical concepts. Further, an initial challenge that Jack overcame was making games fit into the curriculum by having them demonstrate big historical ideas.

For Ash Williams, the initial challenge he tackles with respect to implementing games is having his students overcome their need for “right answers” which involves them critiquing the pseudo-authoritative qualities of secondary sources. Like Jack, Ash has his students let go of their “entertainment” biases by demonstrating to them that not all games are casual, mindless activities. There are people, Ash claims, who do not properly grasp the complexity of good games, and his initial job is to prove otherwise. On the other hand, he has to also challenge the non-critical biases of some students who are gamers, who only view games in positive ways.

iii. Overcoming Previous Problems with Technology

Despite technological limitations, and the potential pushback from people outside and inside the classroom, there are certain benefits to implementing new technologies. All three teachers believe that technology overcomes limitations of the past, like the need of resource acquisition not possible before the internet age. With respect to games, teachers like Titus believe that critical activities can be undertaken that are otherwise impossible without modern technology. Titus stated that engagement and critical thinking are more positively affected by technology in History than in any other subject. As Jack maintains, simulation games allow for problems otherwise impossible to engage in without the existence of problem spaces, and the procedural rhetoric that Ash mentioned in the other interview. There exist technological
limitations in running brand new, high end games with sophisticated graphics, but there are many older games with excellent simulation systems.

In fact, Ash thinks that any game can be part of the classroom without actually playing it, but by showing gameplay clips and then having discussions on the recordings. Ash claims that games, like any other legitimate medium or resource, allow us to view history in unique ways. It is our duty, he says, to stay current with changing media trends. Games are texts, Ash believes, and it is important to bring them into the classroom and to deconstruct them in a responsible manner. By continuing to bring games into the class, Ash, Jack, and Titus show the impact that games can have on children’s educational experiences and development.

**Conclusion of Findings**

I will review some of the main points gathered from each interviewee, by beginning with the theme of agency. I was aware that games could give students agency through decision making opportunities, but I did not know that it was possible to give students “too much” choice, as Titus described it. It is important for new teachers who want to implement videogames to realise that games can take the curriculum into unforeseen, and sometimes unwanted, directions. I also did not think of commercial games, which appear to give players agency, in quite the skeptical way that Ash does. His critical attitude towards games is a very healthy way to approach discussions on them, especially for those of us who count gaming as a hobby, who may be positively biased towards games. A question that I have with respect to agency is whether or not games with fewer options, or less freedom, are more effective pedagogical tools, because they limit player choice, which may give teachers more control over the classroom direction.
Regarding the theme of critical thinking, I was taken aback by Titus’ game designs that seem straightforward compared to commercial games, but which actually foster a lot more critical thinking opportunities compared to many other games. A question that I wish I asked my interviewees, with respect to the theme of critical thinking, is whether or not they believe that games that do not offer choices can engage players in critical thinking. What about a game with a wonderfully complex narrative and characters without options, like *Bioshock Infinite* (2013)? If such videogames cannot engage students in thinking, surely, neither can movies or books.

I did not expect to get so much rich information from one of my interviewees on the critical literacy lens. Ash is a person who, like me, loves playing certain games, but he is far more critical of the intentions behind certain games. At first, his criticisms about the lack of agency and abundant violence in commercial games gave me pause as to whether or not I should continue to advocate for their implementation. But even if I fully agreed with Ash’s argument, I would have to include discussions in my classrooms about commercial games so as to raise a critical awareness for my students who play these games, as he does. Additionally, I find Titus’ use of flexible text as a fun and original way of approaching historical themes like counterfactual history in a way not quite described by many sources in this discipline.

Jack Westcott explained the significance of simulations as problem spaces – environments that emulate something real, that involve problem solving that present historically themed issues, whose solutions can make history come alive for students. My other takeaway from the simulation theme is that simulations and narratives can potentially be one and the same thing. Game narratives can simulate historical conditions, and simulations can be narrative experiences of historical themes, according to Titus. It is also worth considering, as Titus explains, that a game simulation does not have to look realistic in order to encapsulate something
real – in other words to *feel* real for people. Games can give enough information to allow students to engage in historical imagination, which can perhaps be an even more powerful experience than playing games with highly detailed graphics.

Finally, in the challenges and problems section, I did not expect for all three participants never to have had a single complaint from a parent. This makes me have a more optimistic outlook on the implementation of games, because it shows that if games are used responsibly, parents, and hopefully other educators, will begin to see the importance of games in the education space.

In my next chapter, I will begin by recounting a condensed version of my findings. I shall explain areas of further research with respect to this topic. I will then explain how the study will impact my own practice as a teacher, and how the paper might potentially affect this research field.
Chapter 5: Conclusion of the Study

Introduction

In this final chapter of the Master of Teaching Research Paper, I will first review the key findings of my research study, which relate to themes in my Literature Review. Each topic of my fourth chapter acts as an argument which supports my central position, that videogames are excellent pedagogical tools which engage students in thinking. The second section of this chapter details the implications of my research results, on how the implementation of games can, broadly speaking, shape the way that educators teach, and how their use will define my own teaching methodology. I will then transition into the third section with my own recommendations about how a teacher can go about implementing games to teach. I shall then touch upon further areas of research with respect to this field. The conclusion of this chapter – of the entire MTRP – will be capped off by some final remarks and reflections.

I. Overview of Key Findings and Their Significance

My interviews yielded excellent results in answering my research question: “How do three high school history teachers implement videogames in the classroom to engage students in critical thinking?” The first theme of Chapter 4 is agency, and its first subtheme is choice. My participants claimed that the choices which games offer players are unlike other mediums like films, because game mechanics are designed to be acted upon by players. Jack Westcott argues that the choices offered by games allow players to reflect upon historical outcomes, and ultimately their own agency. Titus Pullo believes in the importance of historical decision making to the point that he designs interactive games for his students, whose outcomes are based on their choices. Ash Williams is the most skeptical of my three interviewees about games
offering players free choice, but he holds that studying games can reveal how players are manipulated into making certain decisions. Regardless, Ash believes that certain games give players agency, like the open and flexible *Minecraft*.

The sub-theme of engagement follows from the topic of choice. Mr. Pullo and Dr. Westcott claimed that because games offer choice, it follows that students are engaged with the interactive medium. Dr. Westcott states that his students become so engaged with the videogames they study that they question the games’ historical accuracy. His students also teach one another how the games work, which results in a highly collaborative class environment. This higher level of engagement also entails that games can interest students with different learning styles, since these tools offer information in visual, acoustic, written, and spatial ways.

The fourth chapter transitioned from agency into the theme of critical thinking, the central crux of my paper. Games can engage students on an intellectual level by offering them opportunities to freely interact with the games’ mechanics. Games are not like books or films – they are not static platforms of information, but are instead models designed to be constantly revisited and assessed. As such, Jack explained that many of his students ask questions about historical perspectives that they may not have brought up with less interactive resources. My three participants do not focus on using games as problem solving activities, but more as models that may offer historical insights with authentic mechanics. Critical thinking, as Titus, Jack, and Ash explained, should involve critiquing the games that students play, in order to assess the games for certain biases and perspectives that the developers may promulgate. Mr. Williams explained that he has his students study the procedural rhetoric – the arguments put forth through the models and mechanics – that games engage players in (Bogost, 2008, p. 125).
Mr. Williams categorized games as texts, through the theoretical framework of literary theory, the next theme of my findings section. Presenting games as legitimate texts, not only pieces sharing in limited literary conventions, is an important aspect of this research paper. Since games are a different genre under literature, they can be designated under the multiliteracy lens. There are those who view games as mindless activities that waste people’s time, devoid of any sophisticated substance. Not only do I draw from my own experiences of playing games to counter such assumptions, but from a Literature Review which connects to the experiences of my three high school teacher participants, who have successfully implemented games in their teaching, as tools of critical pedagogy. Game narratives can engage players in new ways compared to other literary texts, argued Titus Pullo; he gave the example of games that require their narratives to be restructured, that allow students to think about texts in new ways that are distinct from other literature. Mr. Williams uses games as a means of critiquing our culture: the critical literacy approach of studying how media portrays history to modern audiences. Jack Westcott, however, was hesitant to label games as texts; he believes that they are narratives, but worries that if students view games as texts, they may mistakenly treat them as sources of authority, as many of them do textbooks.

Dr. Westcott is more comfortable in designating historical games as simulations, the following theme of my findings chapter, and as models that can be tinkered and played with. Jack and Titus believe that the realism and accuracy that games can offer students allow for greater engagement and historical understanding. Students begin to see the relevance of their learning when they interact with simulations that make them feel as if they are a part of history, these teachers claim.
But games cannot be brought into the classroom if the technology is not available, as outlined in my final findings section on the pedagogical issues of implementing games. My participants stated that they find themselves in unusual circumstances, with their schools offering their students individuated technology such as tablets and laptops. This is highly uncommon for most schools due to budgetary limitations. Even in schools that have a lot of technology, it is unlikely that computers can run newer games with higher technical specifications. What I find surprising about my participants’ experiences is that parents and other teachers are not resistant to children being taught with videogames. Not a single one of the teachers I interviewed reported significant issues related to criticism towards their use of games.

II. Implications

The results of my interviews yield some important implications regarding this field. The finding, that people are becoming less resistant to educational gaming, suggests a wider acceptance of videogames as a legitimate art form, likely due to the growing sophistication of the genre. In the past, games were regarded by many as the platform that taught “you to associate pleasure from human death and suffering,” which would “reward you for killing people” (Media Educational Foundation and Huntemann, 2002, p. 2). Parents and scholars alike worried for children’s wellbeing, as they feared that games would “take healthy play and turn it on its head” (p. 2). Now that these negative biases are being gradually dispelled, we can focus on real, beneficial implications that games have for the educational field, both broadly and personally.

i. Broad Implications: The Educational Research Community

Even if games were more detrimental than beneficial to children’s development, they would still need to be discussed in the classroom because of how abundantly played they are by
youth. As Ash Williams emphasized, it is very important to be critical of the resources one uses for the history classroom, especially videogames. This mindset allows students to become critical towards the information put out in commercial products; playing games and discussing them in class is a way for students to be mindful of what they consume. When youth become cognizant of these issues, they gain the ability to make informed, free choices.

Implementing games into high school curricula can be a way to give students more agency. Many educational programs’ philosophies are becoming more focused on students than on teachers. More than ever, there is a greater push for student collaboration and freedom which replaces the worn model of the instructor as “sage on the stage.” This shift is one that I agree with, as it allows students to take ownership of their learning by understanding the fundamental processes of analytical and metacognitive thinking, or the methodology of being critical thinkers. As teachers, we must realize that the methods of inquiry are far more important than the exclusively content-driven approach of old, dated pedagogical systems. Students are able to access information more easily than before, with the push of a few buttons. What children must learn, apart from course content, is how to investigate and judge each source’s pieces of information, which is especially important in the field of history.

Historical primary sources and artifacts are often pieces of a lost or incomplete narrative. Secondary sources are usually the attempts of historians to explain the significance of each primary source, in offering a more complete, overarching story which situates and contextualizes the source or item. This license – the filling in of narrative gaps, is one of the reasons why children should learn how to question sources, especially those of a secondary nature. Too often, as Jack Westcott maintained, students are taught that the textbook is fact. Some historical games do not present themselves as authorial texts in quite the way that textbooks do, because they are
advertised as commercial, entertainment products. Regardless, teachers like Ash Williams have students who believe games like *Assassin’s Creed* present accurate information. By using games in the classroom, teachers like Ash are able to show their students that all sources are perspectives, rather than objective truths. My three participants claimed that with games, the teacher has the advantage of teaching this important point about all sources, because students tend not to think of games as wrote truth in quite the same way that they initially do textbooks.

Classrooms that properly implement quality games are spaces which invite students to participate in critical decision making not found with other mediums. It follows that videogames can allow students to understand history in ways that differ from other genres. As educators, we can show our students how games manipulate players into making certain decisions, and how procedural rhetoric can be ascertained and critiqued, as another way to make children critical thinkers. Even videogames that do not offer players choices, but which give instead a straight narrative play-through experience, can still have the potential to be excellent resources that children can analyze and write about, like other secondary texts.

Thus, games can be excellent teaching tools which serve as exemplary sources for students to engage with history. Historical simulators can give students chances to shape narratives while critically reflecting on their subject matter through lenses like critical literacy.

**ii. Narrow Implications: My Professional Identity and Practice**

I am a strong proponent of the implementation of games in the history classroom because of the wonderful learning opportunities they provide students. If the appropriate technology is available where I teach, I will implement the playing of games as part of class time activities. Mr. Ash Williams’ critical literacy approach does not involve his students playing games in
class, as he prefers to show clips from games to his students. I would also use this method if I lacked the means to have students play in class, which is a probable teaching scenario.

If however I were able to have my students play games, I would take Dr. Jack Westcott’s approach. I believe that interacting with the gaming medium is precisely what sets it apart from other narrative genres, which are more static and less interactive. Showing students video clips of games is not a poor approach, bearing in mind that it may be a teacher’s only available method, but it renders a game into a video segment, not much different from film. Jack creates a learning community in his classroom by having students assess games together and teach each other how the game mechanics work. This is one of the pedagogical models that I would like to employ in my own classroom spaces, in order to foster an interactive and inquiry driven atmosphere where all of my students are engaged.

I also believe that Mr. Titus Pullo’s method of creating his own games is excellent, as it allows entire class participation through collaborations of trying to solve historical problems. Mr. Pullo’s methodology is arguably the most difficult to implement, because he creates his own games for his classes. This is a very time consuming activity, given how much preparation is regularly needed for lesson planning. Still, creating my own games would be a challenging and fruitful venue of exploration as a developing teacher, given the great benefits that Titus describes. The playing of games in class, as an entire class, is a task that most students are likely unfamiliar with, which can make them even more interested in their learning.

I will implement games in my own classroom because of the great potential that they have to engage students. If I were limited technologically, I would still find other ways to bring discussions of games into the classroom, given how commonly they are played by students.
III. Recommendations

I recommend that teachers who like videogames should try using them to teach. When students detect an instructor’s passion for subject matter, they may become more engaged in what they are learning. Gaming is something that many teenagers enjoy, so bringing it in the classroom may be another way to make their learning more appealing and enjoyable.

Some teachers should realize that games match our continuously more interactive, activity based pedagogy. Even if a teacher does not feel comfortable teaching with games, he or she can allow students to write about the games they like, or to create projects using Minecraft, for example, which has become a popular tool for school projects. I recommend that teachers try games for themselves as a means to leave their comfort zones, to incorporate something new for their students. Even if a teacher does not enjoy playing games, she or he can still show video clips in the classroom as a means for students to learn about multiple or critical literacies.

How teachers choose to implement games ultimately depends on two things: their own interests and the technology available to them. Teachers who do not have access to any technology in their classrooms, even a digital projector, will have a difficulty in implementing games. But those who have some electronic access can find different ways to use videogames, either by having their students play the games, or by showing clips.

If teachers choose to incorporate games in their classrooms in one form or another, they must be conscious of time. Titus and Jack explained that planning, implementing, assessing, and evaluating with games is very time consuming. That being said, all three educators find that the payoff of their efforts is very high, because of the level of thinking and achievement that their students reach as a result of using games.
IV. Areas for further research

More research on games has been done in the United States and United Kingdom, as shown in my Literature Review. Canada needs to follow suit by having more educators use games, by supporting more research in the field. The fact that two out of three of my participants reside in the United States may point to the scarcity of available practitioners in Canada.

I was originally planning on including the topic of counterfactual history in this study. The genre of counterfactuals is a great way for students to think about history in a non-linear, non-deterministic way, which would further allow students to explore historical and personal agency. Creative writing tasks could easily be implemented by history teachers who like to teach using the counterfactual genre, since the genre is concerned with historical “what if’s,” like what kind of society would we live in if North America had not been colonized by Europeans, or if the Nazis had not lost in WW2? Given the counterfactual nature of many games, including the Bioshock and Total War series, this could be a venue for further research.

Most important and exciting of all is the fact that the vast variety of games can fit many different subjects, especially English. I was torn between writing a paper focusing on the use of games in history classes versus English classes, and ultimately settled on the former. English is another discipline that could implement games easily, given the textual nature of many narratively driven games. As mentioned in my second chapter, Partington, the Director of Studies and middle school teacher of Parkside Community College, allows his English students to create their own narrative driven games. But English and History are two of many subjects in which games could benefit children. Math, Social Sciences, and Sciences are other disciplines in which teachers can use narrative and simulation games to instruct.
Concluding Comments

I hope, dear reader, you have enjoyed this journey into the exploration of how videogames can be used to teach as much as I have. We began this voyage with my personal history and relationship to games, and how generalizations and biases about gaming, like in the film *Gamer* (2009), and even in *Star Trek* (1966), ought to be challenged. Certain games are designed to be addicting, mindless pieces of entertainment. We should discuss videogames with our students, so that they may develop or deepen their critical understanding of the media they consume. It is equally important to allow students to engage in “play” that engages their critical thinking skills, activities that can make students think about subject matter in different ways from other sources.

This paper has allowed me to solidify my own convictions regarding useful, game-based pedagogy, in discovering what other scholars have written about the topic, and by speaking with three outstanding educators who use games to engage their students in higher order thinking. The evidence for the usefulness of videogames, and their legitimacy as unique artistic pieces, far outweighs the criticism and adverse attitudes that some towards them. Research has shown, and will continue to demonstrate, that games are complex works which make for excellent educational tools.

Thus ends our practical and theoretical examination of the possibilities of using games in the classroom. Our task now is to begin or to continue, depending on your experience, our adventure by going into the field and helping our students, by providing them with the best education that we can. Our pedagogy should center on challenging our students with tools, like games, which can allow them to take charge of their learning and decision making.
Works Cited

Retrieved from http://www.pcmag.com/article2/0,2817,2336392,00.asp


http://wwwstatic.kern.org/filer/blogWrite44ManilaWebsite/paul/articles/A_Pedagogy_of_Multiliteracies_Designing_Social_Futures.htm#11


http://newlearningonline.com/multiliteracies


Yale Courses. Retrieved from https://www.youtube.com/watch?v=11_oVlwf2M


_Techtrends_, 48(4), 4-7.


Retrieved from http://gamingthepast.net/


Retrieved from http://gamingthepast.net/


Stamatis, Athanasios. (2013). *The Lord of the Rings: Adapting the battle of Thermopylae – From history to book; From book to film; From film to game*. Unpublished manuscript, Department of Graduate English, University of Waterloo, Waterloo, Canada.


Stamatis, 105

Methods Research (1) 77.

Copyright ©2013 Foundation for Critical Thinking. Retrieved from
http://www.criticalthinking.org/pages/defining-critical-thinking/766

Retrieved from
http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/critical_literacy.pdf

investigators. The Qualitative Report, 15(3), 754-760.

Ubisoft Monreal.

Ubisoft Montreal.


McMaster UTV. Retrieved from https://www.youtube.com/watch?v=b249MFHf_K0

from: <http://simplelink.library.utoronto.ca/url.cfm/110705>
Appendices

Appendix A: Consent Letter

Date:

Dear _______________________________,

My Name is Athanasios Stamatis, and I am a student in the Master of Teaching program at the Ontario Institute for Studies in Education at the University of Toronto (OISE/UT). A component of this degree program involves conducting a small-scale qualitative research study. My research will focus on answering the question: how do two high school History teachers implement videogames to engage students in thinking. I am interested in interviewing teachers who teach history and have used videogames in some way for a class or classes: either in-class or for assignments. I think that your knowledge and experience will provide insights into this topic.

Your participation in this research will involve one 45-60 minute interview, which will be transcribed and audio-recorded. I would be grateful if you would allow me to interview you at a place and time convenient for you, outside of school time. The contents of this interview will be used for my research project, which will include a final paper, as well as informal presentations to my classmates and/or potentially at a research conference or publication. You will be assigned a pseudonym to maintain your anonymity and I will not use your name or any other content that might identify you in my written work, oral presentations, or publications. This information will remain confidential. This data will be stored on my password-protected computer and the only people who will have access to the research data will be me and my course instructor Professor Arlo Kempf. You are free to change your mind about your participation at any time, and to withdraw even after you have conceded to participate. You may also choose to decline to answer any specific question. I will destroy the audio recording after the paper has been presented and/or published, which may take up to a maximum of five years after the data has been collected. There are no known risks to participation, though you may benefit from the interviews, as they are a chance for you to reflect upon your teaching practices, to hear my own experiences and thoughts on gaming for History classes, and to contribute to the
field of research which corresponds to your pedagogical methods. I will share with you a copy of the transcript to ensure accuracy.

Please sign this consent form, if you agree to be interviewed. The second copy is for your records. I am very grateful for your participation.

Sincerely,

Athanasios Stamatis

416 787 0782
thanasi.stamatis@mail.utoronto.ca

Course Instructor’s Name: Dr. Arlo Kempf

Contact Info: arlo.kempf@utoronto.ca

Consent Form

I acknowledge that the topic of this interview has been explained to me and that any questions that I have asked have been answered to my satisfaction. I understand that I can withdraw from this research study at any time without penalty.

I have read the letter provided to me by ______________ and agree to participate in an interview for the purposes described. I agree to have the interview audio-recorded.

Signature: ____________________________________________

Name: (printed) ____________________________________________

Date: ___________________________________________
Appendix B: Interview Protocol

1) Where are you currently teaching, and what are you teaching at the moment?

2) How different were your previous teaching experiences in terms of what subjects and students you taught?

3) Do you have a favorite period or subject in History that you enjoy teaching?

4) Do you personally believe that technology has provided certain advantages or differences in lesson planning and lesson structure, in particular to the subject of history?

5) What main reason or reasons prompted you into using historical videogames in a history classroom?

6) How did you know or anticipate that games would play an integral part of teaching history?

7) In your experience, how do students respond to the incorporation of videogames in a subject?

8) Does using games create or strengthen a learning community in the classroom?

9) How do videogames engage students with respect to multiple intelligences, differentiated instruction, and other variations in historical studies?

10) In your view, what developmental or academic benefits can students gain from using games compared to other resources like textbooks?

11) We hear the term “Critical Thinking” a lot in education today: “Your assignments should engage students in critical thinking.” How would you say games can engage kids in critical thinking in a way, or ways, that differ from more traditional educational tools?

12) Are there certain games that can be used more effectively to teach than others? For example, can the subject matter or type of game (real-time-strategy, role-playing-game, third-person-action) make a difference in the effectiveness of students’ learning experiences?

13) Should a History teacher which implements games treat them more as narrative texts worthy of literary analysis, as insightful simulations, or perhaps a bit of both?
14) Do you believe that games give players the agency to make choices not provided by other mediums, like books or films? What kinds of implications – if any – do you think the aspect of *agency* might have on teaching and student development?

15) Some argue that the relationship between player and game is a *cybernetic symbiosis*. The argument goes that players input actions into the machine which then physically stimulates the player’s senses, who then makes more choices based on these stimuli, in what is essentially this circular, deterministic model of player and game. I find this model troubling, because it discounts the significance of player agency (in essence, ‘rising above’ the materiality of the machine), not to mention student learning.

→ As an educator, do you perhaps see a justification for this model that I have maybe failed to recognize, or should we view the relationship between game and person – videogame and student – differently?

16) Have you faced obstacles or challenges to using games?

17) What kind of feedback have you had from people outside the classroom regarding your practice of using games as a pedagogical approach?

18) What advice would you give a beginning teacher or a teacher who wants to begin using games in the classroom?

19) What long term goals do you have regarding the use of games in class?